

**ILLUMINATING COMMUNITY RESILIENCE
FROM AN INDIGENOUS PERSPECTIVE:
INSIGHTS FROM A QUALITATIVE STUDY
WITH DAGARA COMMUNITIES
OF LAWRA DISTRICT, GHANA**

BY

DAVID G. FLETCHER (B.A.SC.; M.AD.ED.)

(UDS/DED/0032/10)

THESIS SUBMITTED TO THE DEPARTMENT OF AFRICAN AND GENERAL
STUDIES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
DOCTOR OF PHILOSOPHY DEGREE IN ENDOGENOUS DEVELOPMENT



MARCH 2018

Student

I hereby declare that this dissertation/thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere:

Candidate's Signature:..... Date:.....

Name:

Supervisors'

I hereby declare that the preparation and presentation of the dissertation/thesis was supervised in accordance with the guidelines on supervision of dissertation/thesis laid down by the University for Development Studies.

Principal Supervisor's Signature:..... Date:.....

Name:

Co-Supervisor's Signature (if any)..... Date:.....

Name:



This thesis draws on the wisdom of Dagara people in Lawra District, Ghana and illuminates the resilience of their community, describes their strategies to build community resilience, and explores how Dagara indigenous knowledge contributes to community resilience. The research is based on a qualitative case study that was carried out by the principal researcher with a Dagara woman and man as research assistants. Philosophically, the research subscribes to an indigenous research paradigm.

Dagara women, men, girls and boys interviewed shared that in considering community resilience the important factors were the sense of community, the chronic environment of risk people face, the capacities they can draw upon to respond to risk, and the processes and strategies they use. They articulated the “the hand of resilience” which consists of five fingers/strategies for building community resilience: (i) revitalizing culture and spirituality, (ii) healing the ecological system, (iii) enhancing sustainable livelihoods, (iv) remembering the strengths and values of women and men and (v) taking action to overcome challenges. These strategies are based on a conceptual understanding of community resilience from the Dagara world view perspective that combines *kanyir* (courage and patience), *longta* (belongingness) and *nolang* (unity and togetherness). Learning from this research helped to articulate a transdisciplinary conceptual framework for community resilience and to propose a new model of community resilience informed by Dagara wisdom. During a time when resilience is getting much attention in the development literature this transdisciplinary study encourages people to consider learning from the Dagara and other indigenous people about their own conception of resilience, and their own strategies for ensuring resilience, so that the conceptualization and approach to building community resilience does not become another colonizing concept.



This final document took a long time in coming. I want to acknowledge and give thanks to many, many special souls who made it possible, and to everyone whose paths I have crossed on this journey – thank you for your patience!

First of all, I want to thank the Dagara people I interacted with in Lawra District, Ghana for sharing their insights and wisdom, the generosity that so many people offered in meeting with me two, three and four times and answering my many questions. I particularly want to thank Dan, Uncle BB, Rebecca and your extended family who supported me in so many ways during my visits to Lawra. Vida and Zuma you were stellar research assistants, and none of this would have been possible without you! The richness of the findings are a tribute to your cultural capacity – any mistakes of interpretation are mine. Thanks for your flexibility, perseverance and willingness to take risks and try something a little bit different. Your role in helping me understand what we were hearing and learning from others was much appreciated. I look forward to discussing with you again, and just asking a few more questions!

A big, big thank you goes out to my two supervisors Prof. David Millar and Prof. A. Atia Apusigah. Your writings inspired me early on to begin this journey, your willingness to sit on my initial ad-hoc field research committee helped keep me grounded, and your willingness to adopt me as a PhD student and see me through the challenges, my silent spaces, and the ups and downs of various chapters was a humbling experience. You are true elders and wise ones and I owe much of this work to your guidance. Prof Millar thanks for working so diligently and constructively through the original seven draft chapters so that I could compose something that could be shared with others who had not been through the experience. Prof Apusigah, thanks for your critical eye, your help in polishing pieces, and your insightful questions to make this document the best it could be. I also want to thank my big brother, Bernard Yangmadome Guri, who contributed to the crystallization of this whole enterprise, and walked along the path with me from beginning to end. Bern your dedication and commitment to indigenous knowledge and endogenous development was one of the things that kept me going when I felt like it was time to call it quits. Gratitude as well to co-facilitators and participants in courses in Building



Resilient Communities at the Coady Institute the past few years. Being able to bounce some ideas around with you, that were sometimes only half thought through, was very helpful.

My colleagues and friends at the Coady Institute and St. Francis Xavier University deserve special thanks for support and for asking, year after year, “how’s the thesis going David?”, and for knowing when it was not appropriate to ask me anything about the thesis. Thanks to Ndawona Mulfulirwa, Portia Bansa and many others for help with transcriptions and other things. Also to others on the PhD journey in parallel with mine (you know who you are) – your success made me know it was possible. Hugs to my sisters, Jennifer and Diane, who continued to encourage me through all the things we’ve been through, to my Brahma Kumari family in Halifax and around the world, and to other friends who stuck by me through it all.

During the period of time, I journeyed with this research project a number of loved ones passed on. Each of them are close to me and each of them contributed to this work in special ways. I want to acknowledge their support and encouragement when they were here and appreciate that they were looking down on me and urging me on since they’ve been gone. Thanks Vernon Castle, Tsegaye Kassa, Lynn Irlam, Thomas Mark Turay and especially my Mom and Dad, Joan Fletcher and Frank Fletcher.

Finally, I want to offer my deepest love and thanks to my partner, housemate, chef-par-excellence, motivator, discussant and editor-extraordinaire for being available and at my side as all the various pieces of this project surfaced, retreated, resurfaced and finally reached completion. Debbie, your true angelic nature was a shining light through the whole experience. Let’s do it again some time!

In remembrance of God,

David



This work is dedicated to those who have gone before, our wise ancestors, who created diverse lifeways to survive and thrive in a harmonious relationship with our blessed earth. May we have as much strength, and leave as much natural beauty, love and happiness for those who come behind.



Chapter One – Why Illuminate Community Resilience?

1.0 Introduction: Global challenges need local wisdom	1
1.1 Purpose of Research, Research Questions and Objectives	9
1.2 Key Underpinning Concepts	10
1.2.1 An Indigenous Knowledges Paradigm	11
1.2.2 Endogenous Development	11
1.2.3 Resilience and Community Resilience	16
1.3 Limitations	20
1.4 Organization of Thesis	20

Chapter 2 – Community Resilience: A Review of the Literature and a Transdisciplinary Conceptual Framework

2.0 Introduction	25
2.1 Community Resilience: A Review of the Literature	27
2.1.1 Personal and Collective Resilience as a Psychological Concept	28
2.1.1.1 Learning about individual resilience: child psychology and development	28
2.1.1.2 Learning about collective resilience: community psychology and community health	32
2.1.2 Socio-Ecological Resilience as an Ecosystem Concept	36
2.1.2.1 Learning from Ecological Resilience	36
2.1.3 Community Resilience from a Community Development / Development Studies Perspective	45
2.1.3.1 Learning from community development	45
2.1.3.2 Learning from development studies	50
2.1.4 Community Resilience in the African Context	57
2.1.4.1 Stories of survival	58
2.1.4.2 A historical and holistic conceptualization of community Resilience	62
2.2 A Transdisciplinary Conceptual Framework of Community Resilience.....	65
2.2.1 Sense of Community	65



2.2.2 An Environment of Risk or Disturbance for Communities	68
2.2.2.1 Major acute disturbance	68
2.2.2.2 Chronic oppressive conditions	69
2.2.2.3 Internal disturbances, fractures of loss of diversity	71
2.2.2.4 Combined Risks	72
2.2.3 Processes of and Capacities for Response	73
2.2.3.1 Processes of Community Resilience	73
2.2.3.2 Capacities for Community Resilience	78
2.2.4 Outcomes of Processes of Response	83
2.2.5 Insights and Limitations	86
2.2.6 Summary: Proposing a Transdisciplinary Definition and Conceptual Framework	88

Chapter 3 – Methodology, Research Design and Monitoring Power Relations

3.0 Introduction	90
3.1 Ontological, Epistemological and Ethical Perspective	90
3.1.1 An Evolving Decolonizing Indigenous Knowledges Perspective	92
3.1.2 My Location and Gaze	98
3.2 The Methodological Approach: A Qualitative Case Study	100
3.2.1 Validity, Relational Accountability and Limitations	106
3.2.2 Initial Profile of Study Community – Lawra District, UWR, Ghana ..	109
3.2.2.1 The ecosystem	110
3.2.2.2 The economy	110
3.2.2.3 Social and Cultural Background	111
3.3 Research Design	114
3.3.1 Research Initiation and Planning	115
3.3.2 Phase 1 – Literature Review and Preliminary Study	116
3.3.3 Phase 2 – Establishing and Empowering the Research Assistants	118
3.3.3.1 The Research Assistants	118
3.3.3.2 Field Study Advisory Committee	121
3.3.3.3 Identification of Communities / Participants in the Study ..	121
3.3.4 Phase 3 – Engaging and Interacting with the Community	125
3.3.4.1 Individual in-depth interviews	125
3.3.4.2 Focus Group Discussions	128
3.3.4.3 Participant Observation and Reflective Activities	132
3.3.5 Phase 4 – Participatory Analysis and Community Validation	135
3.3.5.1 Analysis and Interpretation	135
3.3.5.2 Community Validation	138



3.3.6 Phase 5 – Final Articulation of Case Study	140
3.4 Ethical Vigilance: Monitoring Power in Researcher-Researchee Relationships.	140
3.4.1 Monitoring power from a pragmatic lens	141
3.4.2 Monitoring power from an empathetic lens	143
3.4.3 Monitoring power from a lens of negotiation	147
3.5 Summary of Methodology Chapter	150
 Chapter 4 Findings And Discussion – Dagara Voices On Community Resilience	
4.0 Introduction	151
4.1 Dimensions of Community Resilience Relevant to Dagara People	152
4.1.1 Resilience, community, and community resilience from the Dagara .	153
4.1.2 Life in an Environment of Challenges and Risks	160
4.1.3 Dagara Responses to Challenges and Risks	172
4.1.4 Emerging Insights	175
4.2 Strategies of Dagara People to Ensure their Resilience as Communities	176
4.2.0 Introducing the hand of resilience: strategies to respond challenges ..	176
4.2.1 First finger – Revitalizing Dagara culture and spirituality	177
4.2.1.1 Dagara voices	177
4.2.1.2 Interpretations	185
4.2.2 Second finger – Healing the ecological system	193
4.2.2.1 Dagara voices	193
4.2.2.2 Interpretations	197
4.2.3 Third finger – Enhancing sustainable livelihoods	201
4.2.3.1 Dagara voices	201
4.2.3.2 Interpretations	210
4.2.4 Fourth finger – Remembering the strengths and values of women and men	215
4.2.4.1 Dagara voices	215
4.2.4.2 Interpretations	219
4.2.5 Fifth finger – Taking action to overcome challenges	224
4.2.5.1 Dagara voices	224
4.2.5.2 Interpretations	234
4.2.6 Emerging Insights from the Dagara Hand of Resilience	239
4.3 Honouring / Challenging Dagara Indigenous Knowledge that Sustains / Constrains Community Resilience and Well-being	243



4.3.1 Indigenous Knowledge, External Knowledge and Interfacing	243
4.3.2 Dagara Knowledge that sustains / constrains community resilience..	244
4.3.3 Emerging Insights	251
4.4 Overview of Findings and Discussion	251

Chapter 5 – Summary of Learning, Conclusions, And Recommendations

5.1 What is community resilience?	253
5.1.1 Summary – a community resilience model and lifeway	253
5.1.1.1 A new model of community resilience informed by Dagara wisdom	253
5.1.1.2 The Dagara lifeway as a resilient community system?	260
5.1.2 Conclusions and Recommendations	268
5.2 How do you ensure the resilience of a community?	269
5.2.1 Learning about cultivating powers for community resilience.....	269
5.2.1.1 Power-to live one's lifeway	269
5.2.1.2 Power-with the ecosystem	271
5.2.1.3 Power-with others	273
5.2.1.4 Power-to use individual and collective capacities	274
5.2.1.5 Power-within	275
5.2.1.6 Powers for community resilience	276
5.2.2 Conclusions and recommendations	277
5.3 How does Dagara Indigenous knowledge sustain community resilience?	
5.3.1 Summary of Learning.....	280
5.3.1.1 Learning from a holistic cosmovision perspective	281
5.3.1.2 Interwoven relationships and sense of community	283
5.3.1.3 Exposing, interrogating and celebrating gendered and generational differences	285
5.3.2 Conclusions and recommendations	288
5.4 Reflections and experiences on the research journey	290
5.4.1 Myself – revisiting my location and gaze	290
5.4.2 Research Assistants	295
5.4.3 Other development practitioners	296
5.4.4 For people in the research study communities	297
5.4.5 For academic discourse on development	297



REFERENCES	www.udsspace.uds.edu.gh 299
-------------------------	--

APPENDICES	331
-------------------------	------------

A- Synopsis of the conceptual framework of community resilience	331
B- Tentative timeframe for field research	332
C- List of full dataset	334
D- Protocol guide for focus group interview	337
E- Outline for community validation session	343
F- Examples of how the quality of the research was enhanced with relational accountability	345





Figure 2.1 Disciplinary and transdisciplinary view of community resilience	26
Figure 2.2 Socio-ecological perspective on resilient systems	37
Figure 2.3 Useful technical but apolitical actions suggested by FAO	52
Figure 2.4 A model of community resilience	74
Figure 3.1 Map of research location	109
Figure 3.2 Background indicators on research area	113
Figure 3.3 The five phases of the research initiative	116
Figure 3.4 Breakdown of People interviewed by gender, generations, interaction..	122
Figure 3.5 Discussions in district headquarters showing multiple interactions	131
Figure 3.6 Discussions in village B showing multiple interactions	131
Figure 3.7 Map of participant observation relationships	135
Figure 4.1 Constellation of terms related to resilience in the Dagare Language	155
Figure 4.2 Challenges in Lawra District Illuminated in the 7 Constellations of the Dagara worldview	166
Figure 4.3 Spotlight on identity and aspects of culture and spirituality	186
Figure 4.4 Spotlight on healing the ecological system showing things that ensure or inhibit community resilience	198
Figure 4.5 The virtuous cycle of sustainable rain fed agriculture	211
Figure 4.6 The vicious cycle of inappropriate schooling and exogenous farming systems	212
Figure 4.7 Spotlight on strengths of women and men	220
Figure 4.8 Spotlight on actions to overcome challenges	235
Figure 4.1 An endogenous approach for interfacing knowledges	244
Figure 5.1 A new model of community resilience informed by Dagara wisdom ...	255

Table 2.1 Key to Figure 2.4	74
Table 3.1 Proposed characteristics of an indigenous research paradigm	97
Table 4.1 Dagare Vocabulary: Characteristics of men and women re:resilience.....	153
Table 4.2 Dagare Concepts of community and community resilience	156
Table 4.3 Summary of things Dagara people are proud of about their community.	158
Table 4.4 Dagare Vocabulary: Common challenges	161
Table 4.5 Summary of challenges and risks	161
Table 4.6 Dagare Processes of responding to challenges or difficulties	172
Table 4.7 Dagara worldview and belief systems that sustain/constrain community resilience	245
Table 4.8 Dagara technical knowledge and practices that sustain/constrain community resilience	247
Table 4.9 Dagara leadership knowledge and practices that sustain / constrain community resilience	249
Table 4.10 Dagara artistic expression that sustain/constrain community resilience.	250



LIST OF ACRONYMS

3 P-T - Protection, Prevention, Promotion and Transformation

BKWSU – Brahma Kumaris World Spiritual University

CAPTURED – Capacity and Theory Building for Universities and Research Centres in Endogenous Development

CIKOD – Centre for Indigenous Knowledge and Organizational Development

COMPAS – Comparing and Supporting Endogenous Development Network

DFID – Department for International Development, Government of United Kingdom

FAO – Food and Agriculture Organization

IDS – Institute of Development Studies

IFRCRC – International Federation of Red Cross and Red Crescent

ISDR - International Strategy for Disaster Reduction

ICUN - International Union for the Conservation of Nature

MOFA – Ministry of Food and Agriculture, Government of Ghana

NGO(s) – Non-governmental organization(s)

PAR – Participatory Action Research

TQM – Total Quality Management

WHO – World Health Organization

WWF – World Wildlife Fund

WFP-MOFA – World Food Program / Ministry of Food and Agriculture

UDS – University for Development Studies

UNDP – United Nations Development Programme

USAID – United States Agency for International Development

UWR – Upper West Region (of Ghana)



WHY ILLUMINATE COMMUNITY RESILIENCE?

1.0 Introduction: Global Challenges Need Local Wisdom

In this chapter the motivation for this exploratory study of community resilience is introduced. The purpose of the research, research questions and objectives are explained and the three underpinning concepts are introduced: an indigenous knowledges paradigm, endogenous development and community resilience. Limitations of the study are articulated and the organization of the thesis is outlined.

People on this planet have different world views, different values and aspirations, unique historical and environmental contexts, and different ways of managing their livelihoods and being in the world. As Davis (2011:1) contends, “the world in which you are born is just one model of reality. Other cultures are not failed attempts at being you, they are unique manifestations of the human spirit.” People have lived for generations in diverse ways and accumulated wisdom that enables them to survive and thrive in ever changing environments. Unfortunately, in this time of run-away globalization, it appears, as a human civilization, we are moving towards a single paradigm of how to be and how to succeed in the world. This corporate globalization has not led to a utopia, but a world still enmeshed in problems, war and conflict, disparities between rich and poor, and accelerating challenges brought upon us by climate change. How do we respond? Perhaps, like ecologist Benyus (1997) challenges us, we can take a lesson from nature where biodiversity is a strength for survival, and we can innovatively respond to change in multiple ways. Perhaps, we can look to the future with a diversity of wisdom traditions, world views and ways of being to create the world(s) we want. Perhaps, it is through an honoring and nurturing of bio-cultural diversity and the particularities





www.udsspace.uds.edu.gh

of knowledges developed in specific times and places, that will provide us with the insights to be resilient, and to continue to live on this planet. That is the big concept behind this research. On a more immediate scale, I ask you as the reader to accompany me as I walk multiple pathways to illuminate community resilience, focusing specifically on explorations with people from Dagara communities in the Lawra District of Ghana.

This journey, of looking at bio-cultural diversity and exploring community resilience, was inspired by experiences working as a practitioner of community development with marginalized and indigenous people on the African continent and in Canada over the past 30 years. The explorations and intimate learnings with Dagara communities began serendipitously, and then evolved into systematic investigation on and participatory engagement with Dagara community discourse about the concept of community resilience.

Prior to initiating this study, my experience told me that communities were dynamic and constantly in a state of change. The internal dynamics and external fluctuations in communities' contextual environments demand people engage in ongoing processes of adaptation and the re-creation of community. Whether it was changes to ecological and natural systems, new political realities, or social and economic upheavals I noticed that some communities grew stronger in these chaotic environments. These communities enhanced their health and well-being, consolidated cultural ways of being, and not only survived, but thrived and helped inspire the positive transformations of their neighbors and networks. My personal experience with South Africans in the anti-apartheid struggle in the late 1980s illustrated this. Unfortunately, I also witnessed other communities who got mired in conflict, and their internal integrity was compromised. The latter communities spiraled into dysfunction following struggles to respond to external challenges, and fell into ongoing negativity and hopelessness that often seeped into the broader society. I can think of rural communities in northern Nigeria



www.udsspace.uds.edu.gh

that I worked with that found themselves in this situation, and isolated Innu communities I visited on the Labrador coast in Canada that fell into similar difficulties. I started to ask myself, what are the internal and external dynamics that enable communities to be resilient and respond to changing environments? How can people revitalize their ways of being and learn new abilities and strategies to enhance their collective resiliency? Are these abilities and strategies different for males and females of different generations that make up a community?

During the same time period I began to question conventional models of community development starting with a needs assessment and problem diagnosis (Biddle & Biddle, 1965; Coover, Deacon, Esser, Moore, 1985; Pretty, Gujit, Thompson, Scoones, 1995) as I found them inappropriate for inspiring the kind of change that was necessary to overcome the trauma and inertia attributed to seemingly uncontrollable external factors. I also found that the positive inspiration that could be encouraged by forward looking visioning, mission building and values explorations (Castle, 1993; Korten, 1990) could fall flat and appear unrealistic in the context of a daily struggle to survive and resist certain forms of systemic, external oppressions. Gradually, I became exposed to strength-based, capacity building models of community economic development (Kretzmann & McKnight, 1993), work in cultural protection and revitalization (Bopp & Bopp, 2001), learning-oriented organizational change work (Senge, 1990) and constructive, targeted advocacy work for policy influence (Boyd & Meyers, 1988). What I discovered was common in many of these approaches, and what resonated with my own experience, was that many of these approaches were not only people-centered from a process perspective, but the best actually started with the cultural values, spirituality and belief systems of people themselves (Verhelst, 1990). As I began this study, met some people in Ghana during another project (Fletcher, 2005) and re-engaged with the academic literature, I learned that an alternative development approach was being nurtured that privileged culture and worldviews.

This approach, championed by networks such as the COMPAS Network (Haverkort, van't Hooft & Hiemstra, 2003), has been called endogenous development. It seemed to me there must be some synergy between this approach and finding the answers to my questions about community resilience.

The development discourse in recent years has taken great interest in resilience and community resilience (Adger, 2000; Berkes & Ross, 2013; Kirmayer, Sehdev, Whitley, Dandeneau, Isaac, 2009; Kulig, Edge, Townshend, Lightfoot, Reimer, 2013; Norris, Stevens, Pfefferbaum, Wyche, Pfefferbaum, 2008; Pelling, 2011; Walker & Salt, 2006; Wilson, 2012). Many authors from diverse disciplines such as community development (Colussi, 2000), ecological systems (Gunderson & Holling, 2002), sustainable rural development (Pretty, 2005), disaster management (Norris et al, 2008), vulnerability studies (Eakin & Luers, 2006), community psychology (Ungar, Clark, Kwong, Makhnach, Cameron, 2006) and community health (Kulig, Edge & Joyce, 2008) are using resilience terminologies. Conceptual definitions, measurement systems, models and metaphors vary broadly. One way I have tried to simplify the concept of community resilience is: the ability of a community to respond to challenges in its natural, human and spiritual environment in a way that can strengthen the communities' ability to respond positively in the future. All communities would demonstrate some ability to respond to challenges, to cope with and adapt to difficulties and reduce their vulnerabilities.

On a global scale, climate change, environmental destruction, vulnerable livelihoods, increasing social and economic disparities, the penetrating influence of the media, and language loss are all components of this particularly difficult time in human civilization. Some scholar activists say the changes and shocks imminent at this time are only equal in magnitude to the agricultural revolution and the industrial revolution (Korten, 2006; Macy, 2000). They call this the time of the great turning - a time when communities have to respond to these



destructive tendencies and shift our trajectory from destruction towards a life sustaining future. Macy and Johnstone (2012) for example, speak of three stories of our time: business as usual, the great unraveling and the great turning. Business as usual refers to an entrenched worldview that says, “economic growth is essential for prosperity, nature is a commodity to be used for human purposes, promoting consumption is good for the economy, the central plot is about getting ahead, and the problems of other peoples, nations and species are not our concern” (p.16). The great unraveling is a strong critique of the business as usual paradigm, and is characterized by “economic decline, resource depletion, climate change, social division and war, and mass extinction of species” (p.17). What inspires Macy and Johnstone (2012) and what gives them hope is the story of the great turning which has three exciting dimensions, “holding actions, such as campaigns in defense of life on earth, life sustaining systems and practices such as developing new economic and social structures, and shifts in consciousness, such as changes in our perceptions, thinking and values” (p.32). They argue that there is an uncoordinated movement afoot that is working diligently to create this new pathway of change for peoples of the world and their urgent optimism is shared by many others (Hawken, 2007; McKibben, 2010; Moore Lappe, 2011; Korten, 2006; Shiva, 2005; Starhawk, 2004; Wheatley, 2002). I see within this great turning another potential form of resilience being exhibited by the global community, as they attempt to alter the current trajectory and bounce back to a more life sustaining way of being.

For this study, the particularities of the African context are important to understand if we think their community resilience can be influenced by the reclaiming of their own African-centered knowledges, values and development.

Africa is a dynamic continent of many nation states, diverse peoples, cultures, ethnicities and histories. There is no single description of Africa, or African knowledge or



worldview that is all encompassing. To put forward such a description would be essentializing or potentially romanticizing, complex sets of beliefs, values, practices and ways of being that have been denied a just hearing in academic discourse. To claim the space for a more productive discourse, African scholars are sharing African knowledges and worldviews from the particularities of specific ethno-linguistic groups, and the commonalities between them (Avoseh, 2001; Dei, 2000; Guri, 2007; Millar, 2007; Some, 1995; Turay, 2000; Wane, 2000; Wangoola, 2000). They are also searching for synergies across the continent, however, to reclaim solidarity for African knowledges, sciences and worldviews.

Across the diversity of the African continent, there is generally an ontology, or cosmovision, that emphasizes the interplay between human, natural and spiritual spheres of existence. One's well-being is defined by satisfaction with the harmony and balance achieved between these three spheres (Dei, 2000, 2010; Millar, 2007; Wangoola, 2000). Human beings are viewed as part of the natural world, and being in flow with this world is important, as humans are considered the most vulnerable link (Some, 1995; Wangoola, 2000). Land, water and plants have an independent significance of their own, humans, however, need these elements to survive. Human to human relationships are also extremely important and African cultures are predominantly communal and values of mutuality, bonding, reciprocity, social responsibility, generosity, tolerance, patience and compassion are cultivated (Dei, 2000; Gyekye, 1997; Turay, 2000). The community accepts people as having gained wisdom when they reach a certain age and thus listens and gives them respect. Privilege exists, and there can be disempowerment for women and minorities, yet there is still an inclusive mentality of seeing all as part of the whole (Dei, 2000). Harmony with the spiritual sphere is at the core of African existence (Tedla in Turay, 2000:259.)



Secret societies, as higher institutions of learning, have an intellectual, judicial, moral or metaphysical focus and give their members power to develop themselves and their communities (Avoseh, 2001; Turay, 2000). Women have a significant role to play in African knowledges (Apusigah, 2006; Tedla, 1995; Wane, 2000). Women are often the custodians of proverbs, idioms and songs by which values are transmitted. Women help maintain identity by knowing lineages and bond social relations with food and reciprocal relationships. As major producers and processors of food, women are knowledgeable about relations with the land.

The process of reclaiming these extensive African knowledges is not a simple one. Many factors over centuries have denied the value of these knowledges, relegated them to the primitive and exotic and established institutional norms which confirmed their inferiority. Reclaiming these knowledges must include an explication of their silencing over the generations due to slavery, colonialism, modernization, globalization and other forms of structural violence.

Slavery and colonization did systemic damage to African people physically, socially, economically, culturally and psychologically (Dei, 2000; Some, 1995). Indigenous African knowledge was harmed in many ways by changing sustainable, scientific African agricultural practices towards exporting a surplus and redeploying resources from the periphery to the centre (Guri, 2007). As Wangoola (2000: 269) explains, “sustainable African agricultural practices became subsistence farming, African medicine became witchcraft, and African religion became animism”.

Education became the cornerstone of the modernization enterprise. Inherited colonial education systems have changed little after independence up to today. They are a new colonialism, formal schooling and foreign knowledge in books became the only knowledge



that was respected (Wane, 2000). Globalization has become the latest trend that oppresses African knowledges and worldviews.

[Globalization] is a way of superimposing the values, aspirations, tastes, standards and colors of the powerful and strong communities on poor, weak and vulnerable communities of the world. It is a negation of the values of traditional African society especially as they relate to the extended family system. Globalization is supposed to be an enlarged version of the extended family system except that the powerful and well to do of the global family want other members of the family to be appendixes to them.

(Avoseh, 2001: 484)

Globalization is seen as another relationship with the natural world that is extractive and polluting, that does not value diversity and makes Africans more vulnerable (Guri, 2007). It is an exogenous form of development that has high transaction and management costs and is therefore unsustainable (Millar, 2005).

What must be cultivated in the African context, is an endogenous form of development: development from within that includes an integration of bio-physical, socio-cultural and spiritual dimensions (Guri, 2007; Millar, 2005; Wangoola, 2000). This development must be based on locally available resources (but not exclusive of support and links to the outside), must be more community-owned and sustainable, and must retain benefits locally.

Millar (2004, 2006, 2012) provides some specific insights into Ghanaian and Dagara science. He states there is a science intimately linked with the cosmovision of the Dagara people which sees resources not only for economic benefit, but as blessings from God. Millar writes of this cosmovision, and of the essence, ancestors and tools that are important elements to understand as regards Dagara science. Millar (2006: 59) describes ancestors as the, “apex of the ontological ladder...all knowledges and wisdoms emanate from here and are created and recreated by them; the development of knowledge is guided by the spiritual influences of the ancestors”. This Dagara science will help to illuminate community resilience.



Therefore, I invite the reader to take a journey with me to learn a perspective on community resilience from the Dagara people of Ghana. It is possible that at this very local level we will encounter wisdom and insights that may inspire the resilience of our own communities in the future.

1.1 Purpose of Research, Research Questions and Objectives

The purpose of this research is to explore community resilience in the context of the Dagara people of the Lawra District in Ghana, and learn what strengthens or limits their resilience as communities. I am particularly interested in how indigenous knowledges and practices sustain or constrain community resilience and well-being. I understand community resilience broadly as the ability of a community to respond to challenges in its environment (natural, human and spiritual) in a way that can strengthen the communities' ability to respond positively in the future.

A review of the community resilience literature (Fletcher, 2006) and a preliminary study conducted in the Dagara area of Ghana (Fletcher, 2008) led to the articulation of three questions to focus this inquiry:

1. What is community resilience from the worldview and in the context of the Dagara people?
2. What is the experience held within Dagara communities that ensures or inhibits their resilience as communities?
3. How does Dagara indigenous knowledge and practice sustain or constrain community resilience and well-being?

Additional issues worthy of exploration were identified in preliminary field work. The issues included: how do male and female members of different generations in Dagara communities describe and understand the internal and external aspects of their communities'



resilience?; knowing of the symbiotic relationship between the Dagara people and their ecosystem, what are the opportunities and threats related to community resilience in their complex, dynamic socio-ecological system?; and, what do Dagara communities perceive as the role of spirituality in their resilience?

I challenged myself with the objectives below for this study. The fourth objective is added because the study is conducted under the auspices of a PHD program in endogenous development, so a connection to that discourse is important. This objective is considered in Chapter 5. I take up the challenge of the first three objectives throughout the study.

1. To reconstruct a rich description of dimensions of “community resilience” relevant to the Dagara people of the Lawra District for future dialogue.
2. To identify and re-present strategies to Dagara people of Dagara experiences that ensure or inhibit their resilience as communities for their possible action.
3. To honor and validate Dagara indigenous knowledge and practice that sustains community resilience and well-being; and challenge Dagara indigenous knowledge and practice that constrains community resilience and well-being.
4. To contribute to the emerging dialogue in Ghana and internationally on endogenous development.

1.2 Key Underpinning Concepts

Key underpinning concepts inform the philosophical and theoretical space for this study. These three concepts are introduced below: an indigenous knowledge paradigm, endogenous development, resilience and community resilience.



1.2.1 An Indigenous Knowledges Paradigm

I frame the study within an interpretivist philosophical orientation, and claim an evolving decolonizing indigenous knowledges paradigm. This paradigm, explained in more detail in the methodology chapter, is a complex, multifaceted approach to knowledge inquiry that draws on the accumulated wisdom of indigenous people in their specific place at particular times. This approach challenges the conventional hegemony of positivist, academic knowledge creation (Battiste, 2000; Dei, 2000; Smith, 2001). Some of the key features of this alternative paradigm are: (i) it is partially defined as reaction against mainstream colonizing approaches, (ii) it recognizes and respects a diversity of perspectives, (iii) it is a kind of renaissance of knowing and being, (iv) it has an explicit value based approach, (v) it is pragmatic, and (vi) it is relational.

1.2.2 Endogenous Development

I approach this work within the context of endogenous development, development from-within, which is centered in the cultures of people and starts with their world views, beliefs and values. Endogenous development begins with peoples' own strategies and own resources for change, and is explicitly in contrast to exogenous models of development, mainstream neo-liberal models of development that give primacy to economic growth and relegate culture to the sidelines.

Proponents of international development practice and discourse have been advocating for clearer approaches and principles in working in people-centered ways and specifically with indigenous and marginalized people for more than 25 years (Chambers, 1983; Fals Borda & Rahman, 1991). Some of the early voices in this discourse called for specifically looking at the knowledges and knowledge systems of people that brought meaning and drove their



www.udsspace.uds.edu.gh

development work (Chambers, 1995; Fals Borda and Rahman, 1991; Maguire, 1987). These messages have not always been heeded, however, and in mainstream development theory and practice the marginalization of belief systems, particularly of indigenous people, continues (Hughes, 2003). Much may have been done to listen to marginalized people and involve them in development processes, but most often this is done within the framework of a preconceived development paradigm that is materially based. Social and cultural aspects of development only occasionally get attention (Edwards & Sen, 2001; Hughes, 2003; Korten, 1995). Even, when participatory, people-centered approaches do reach indigenous peoples, their underlying worldviews, knowledges and values are often neglected (Dei, 1996, 2000, 2010). Many of the most respected examples of participatory approaches still apply a western paradigm of development and change that carries with it a whole set of taken-for-granted assumptions and underpinning values. There are exceptions, in health, agriculture, and natural resource management, for example, (Pottier, Bicker and Sillitoe, 2003), yet often indigenous knowledge is used as input for achieving preset project objectives, or at worst the traditional technical knowledge is exploited for others' gain. The situation of neglect is real, and it is rare to reassess the worldviews, ontologies and epistemologies guiding development work and to take an active stance in support of revitalizing indigenous knowledges (Dei, 2000).



One alternative to this conventional model that has inspired me is an endogenous development approach championed by the COMPAS Network (Haverkort, van't Hooft and Hiemstra, 2003). This model has been maturing in the past 15 years and provides an alternative to mainstream, and an enhancement to people-centered, development approaches (Apusigah, 2011; Boonzaaijer & Apusigah, 2008; COMPAS, 2007; Guri, 2007; Haverkort, van't Hooft and Hiemstra, 2003; Millar, Kendie, Apusigah and Haverkort, 2006). This endogenous development approach is centered in the cultures of people and starts with their world views,



www.udsspace.uds.edu.gh

beliefs and values. Sidelining culture, world views and belief systems is like sidelining people themselves, since it is through culture that people claim their identity, give their lives meaning, and define who they are. Endogenous development returns people and their well-being to the center of what development is about. As Jenkins (2000: 301) states, endogenous development is about, “the role of traditional cultures for a rural development process which is economically, socially and environmentally sustainable ... [the] revalorization of cultural resources can provide local actors with strategic capacity for endogenous development”.

Endogenous development has grown out of a critique of the western-biased, modernist development paradigm and its emphasis on economic mechanisms, consumerism, science and technology. This modernist paradigm is critiqued for its failures to produce equitable economic, social and political impacts on peoples and cultures around the world, and for its ideological and psychological implications. According to numerous researchers (Apusigah, 2006; Dei, 2000) the modernist paradigm included a knowledge colonization that was deliberate and has had a more profound impact on the African continent than physical colonization. As Emeagwali (2003:1) explains:

The fact is that Africa in the 20th century was afflicted by 2 major externally derived economic models of exploitation, namely, the colonial model of exploitation and neo-colonial models aimed at recolonization. The economic and epistemological or knowledge oriented aspects of those models were aimed at exploitation and mal-development. Built into those models were negative and unwholesome presuppositions about race, gender and segregationist policies, and discriminatory modes of allocation of space, resources and infrastructure prevailed. Export-oriented growth, monoculture, and outward-bound programs for the export of first stage mineral and agricultural extraction, were the dominant trends in most parts of the continent.

Even the everyday practices of progressive development initiatives reinforce this attitude and produce at best a naïve indifference to local peoples’ knowledges. As Analcati pointed out, “People in Africa are rarely asked what kind of development they want... They have always been the ones who others would like to see changed, whether through Christianity,



www.udsspace.uds.edu.gh

civilization, research or development projects” (quoted in Millar & Hiemstra, 2008: 23).

Colonial education systems certainly reinforced this view by teaching that everything good comes from the west and everything local is bad, and primitive. This understanding of the colonization of the mind has led advocates of endogenous development to insist for the unlearning of western biases and the “need to free ourselves of the known conventional approaches in order to appreciate other realities and worldviews” (Guri, 2009: 6).

Endogenous development as a framework for development and development research is transdisciplinary and holistic in its approach, and can be a counterpoint to the hegemony and continued proliferation of western sciences and technologies that are specialist, isolating and reductionist in nature (Smith, 2001). This does not mean that endogenous development isolates itself in a new disciplinary-style focus from the mainstream discourse, but, as a truly transdisciplinary and holistic approach makes effort to engage in conversation at the interface between and across western and other knowledge systems. Knowledge systems are dynamic and changing and may cross-fertilize each other with the globalized communications of today, but the endogenous development frame will privilege and initiate conversations from an appreciation of indigenous, African or other knowledge systems to ensure they are on an equal footing with western sciences, while remaining critical of their own systems. As Boozaaijer and Apusigah (2008: 9) state, “Endogenous development is inward looking but not in a negative way ... it works to minimize and even eliminate [modernist development’s] tendencies of disorienting, undermining, compromising and even annihilating indigenous or traditional systems”.

A fundamental part of endogenous development and endogenous development research is looking at knowledge systems, how knowledge is constructed and sciences are understood. Ground breaking work has been done by the COMPAS Network for Endogenous Development

looking generally at traditional knowledge systems across Africa (Millar, Kendie, Apusigah & Haverkort, 2006), in India and Sri Lanka (Balasubramanian & Devi, 2006), and with various indigenous peoples' of South America (Delgado & Mariscal, 2006). Their research continues with specific groups of people around the world (Subramanian, Verschuuren, Hiemstra, 2014). It is out of these knowledge systems that the transdisciplinary and holistic nature of endogenous development has been affirmed. The holistic dimension is significant in that it acknowledges that many knowledge systems look broadly at the three spheres of natural, human and spiritual worlds where people live their lives. It is the various interrelationships and constellations between these spheres that give people meaning and the kind of balanced, holistic well-being that people crave. Within the modernization paradigm there is often a bias towards material and economic well-being exclusively and the assumption that benefits in that sphere will enable people to fulfill other aspirations as well. The holistic view recognizes peoples' spiritual lives, and validates the importance of the relationship between spirit, people, the earth, and its diversity. It is out of this wisdom from other knowledge systems, that is now being "discovered" from other disciplinary perspectives of western sciences (International Union for the Conservation of Nature, 2010), that the valuing of bio-cultural diversity has become so central to the endogenous development approach.



Endogenous development is also grounded in daily life, and the realities of that world and not abstracted into categories or disciplines determined from outside, or from sophisticated theoretical orientations brought from other realities. As Guri (2009: 4) states, two things important in endogenous development are to have respect for, and understanding of the daily life (culture and spirituality) of the communities involved, their values and beliefs, and to reclaim, revitalize and use their existing indigenous institutions, structures and resources. CAPTURED, which is the acronym for an international program on capacity and theory

building for universities and research centers on endogenous development, provides a comprehensive list of components for understanding and operationalizing endogenous development. The components they list are, “build on locally felt needs, enhancing local knowledge and practices, local control, identifying development niches, selective use of external resources, retention of benefits in the local area, exchange and learning between cultures, training and capacity building, networking and strategic partnership, understanding, systems of knowing, learning and experimenting” (CAPTURED, 2011:1).

In considering exploring community resilience, as a strength based approach for dealing with how communities respond to acute events and chronic stresses in their lives, endogenous development resonates as an approach that can foster great insights and should help satisfy the demands for community resilience research.

1.2.3 Resilience and Community Resilience

The concepts of resilience and community resilience, as drawn from the evolving multidisciplinary fields of socio-ecological systems, community development and community psychology, also helped set the parameters around this work. These are explored in detail in the literature review chapter. Based on this exploration I have been working with a concept of community resilience as the ability of a community to respond to an acute crisis and / or chronic stress in its environment in a positive way through processes that will enhance its ability to respond positively in the future by (i) altering the environmental conditions that led to the crisis/stress, (ii) negotiating for change and support with / from the environment, and by (iii) building its own assets, capacities, and competencies. Concepts of community and resilience are therefore fundamental.

Community. “Community” can be understood in a number of different ways. Community can be defined geographically, such as the community of Cheticamp, Nova Scotia,





www.udsspace.uds.edu.gh

or the neighborhood of Bole, in Addis Ababa, Ethiopia. Such a community can be outlined on a map (Burkey, 1993). Community can also be defined by a set of common interests, such as the “international development community” or as a population group with similar characteristics, such as the “African-Canadian community” (Bopp & Bopp, 2001). Researchers suggest that a self-defined perception of community, i.e., some shared values and beliefs, a sense of belonging or identity, continuity in time, and connections between groups that create a social system are necessary defining characteristics of community (Breton, 2001; Checkoway, 1995; Kulig, 2000; Sonn & Fisher, 1998).

This is not to suggest communities are homogeneous. Extensive work has shown that communities are, by their nature, heterogeneous, dynamic systems that are constantly being created and recreated. Power differentials exist within and between groups of people, but when an ability to negotiate and find a balance between groups and individuals is nurtured for the purpose of living together, community is constructed (Burkey, 1993). Peck (1987: 70) identified this as “the ability to fight gracefully,” one defining characteristics of community. The heterogeneity and diversity in community is considered by some to be an asset for communities (Breton, 2001; Putnam, 2000). Additionally, for the purposes of this paper, community is considered a “unit of solution in society... a process through which people take initiative to act collectively” (Checkoway, 1995: 4) or as Bopp and Bopp (2001: 13) state, “community refers to any groupings of human beings who enter into a sustained relationship with each other for the purpose of improving themselves and the world within which they live”. All of these concepts are incorporated in the definition of “community” used in this paper.

Resilience. “Resilience” is defined in the Oxford English Dictionary as a derivative of the adjective resilient, and means to “able to recover quickly from difficult conditions, or able



www.udsspace.uds.edu.gh

to recoil or spring back into shape after bending, stretching, or being compressed” (Soanes, 2002).

Resilience is a concept that has been applied extensively in the field of child development to identify “unexpectedly positive outcomes in the face of negative predictors for child development” (Sloop, 2002: 346). Embedded in this concept is the idea of risk factors and predictive factors and an assumption of a trajectory of predictable development outcomes for children. As Rauh (2005: 394) explains, “the ‘at-risk’ concept lies at the heart of developmental and clinical psychology. Children are considered developmentally ‘at risk’ when biopsychological characteristics, or social factors, or both, suggest that they will, with high probability, develop into maladapted unsuccessful adolescents or adults”. The concept of resilience developed when researchers found that significant numbers of children developed to be healthy and capable in spite of being “at-risk.”

Resilience research has since blossomed to look at the characteristics, the protective factors (including cultural and social resources), and the mechanisms that lead to positive outcomes for at-risk children. Waller (2001: 290) argues that the eco-systemic context of adaptation is essential to an understanding of resilience. He speaks of human development as “the product of continuous transactions between individuals and the physical, social, class and cultural environments in which they grow”.

Resilience also has been applied in ecology. Here, resilience refers to the functioning of an organism or a system, and has been defined as “the buffer capacity or the ability to absorb perturbations, ... or the speed of recovery from a disturbance” (Adger, 2000: 349). In *The Dictionary of Ecology, Evolution and Systematics* Lincoln, Boxshall, and Clark (1998: 261) define resilience as “the ability of a community (i.e. biological species / ecosystem) to return to a former state after an environmental disturbance; the capacity to continue functioning after



perturbation". Holling's work www.udsspace.uds.edu.gh linking physical, biological and social phenomena across geography and time has elevated the concept of resilience from a primarily ecological concept to greater and greater application in the field of sustainable development. In this context, resilience is described as:

the magnitude of disturbance that can be absorbed or accommodated before the system changes its structure by changing the variables and processes that control system behavior...this ecological resilience is significant for large scale systems over long periods...the focus is on persistence, change and unpredictability – attributes embraced by an adaptive management philosophy. (Holling & Meffe, 1996: 328)

Resilience has also recently been discussed in the community development literature (Colussi, 2000; Magis, 2010; Wilding, 2011). Resilience has been discussed as associated with assets, agency and social capital, and is specifically mentioned for communities in the context of change although there does not seem to be one accepted definition of what resilience is. In the development studies literature resilience has become a popular buzz word. Some authors are critiquing the concept (Bene, Wood, Newsham, Davies, 2012; Crane, 2010) as being too technical and apolitical, while others argue for the technical approach (Food Agriculture Organization, 2013; Frankenberger, 2012; Montpellier Panel, 2012; World Bank, 2013). Bene et al's (2012) and Wilson's (2012) work discusses community resilience within community systems, that are in turn within global systems. These works are particularly provocative and demonstrate how much can be learned about resilience from this stream of literature.

These concepts are explained in more detail in the literature review, and in later sections of this study as I explore a transdisciplinary concept of *community* resilience. However, as a starting point resilience can be defined as the ability to, and the process of, bouncing back and achieving a positive outcome, in a life context of identified risks or after experiencing particular disturbances in the environment.

1.3 Limitations

Community resilience is a complex, multifaceted phenomenon deeply ingrained within the practices and worldviews of Dagara women and men. To try and understand and articulate that wisdom and then capture it in another language was a daunting task. The knowledge and experience of the men, women and youth interviewed, and the research assistants who were assembled to conduct the study, were varied and diverse and there is obviously much more that can be learned in-depth. The real and perceived willingness and openness of interviewees to share with an outsider also biased the results. This study was based on intensive and extensive engagement with Dagara communities and individuals over a three-year period. The majority of the time spent in the field was during March and June of each year. However, different results may have surfaced if the research was conducted during other seasons of the year. As principal researcher, I do not speak Dagare and relied on translations and interpretations of key points brought forward by the research assistants. This would have influenced the results in particular ways. As an outsider, I may also have had a positive influence on the quality of the findings, however, as my naivety about certain aspects of Dagara life and my lack of Dagare language skills forced people to reflect and to explain and articulate concepts they were using in detail. As an outsider, my identity and multiple locations also influenced the co-construction of knowledge in complex ways. This influence is discussed in the methodology chapter. I am confident, however, the qualitative case study methodology, carried out in cooperation with two Dagara research assistants, and based on an indigenous research paradigm, helped to mitigate these limitations.

1.4 Organization of Thesis

In *Chapter 1* of this study, *Why Illuminate Community Resilience?* I introduce the topic and justify this study. The purpose of the research, research questions and objectives are



articulated, and three key concepts underpinning the research are introduced: an evolving indigenous research paradigm, endogenous development, and community resilience. Limitations of the study are discussed, and a brief introduction to each of the remaining four chapters is provided.

In *Chapter 2 Community Resilience: Review of the Literature and a Transdisciplinary Conceptual Framework*, I review the academic and professional literature on resilience and community resilience. There has recently been a burgeoning literature related to these concepts, from three different disciplinary perspectives (1) psychology and community psychology, (2) ecology and environmental management and (3) community development and development studies. I supplement these disciplinary perspectives with African perspectives on community resilience and then present a transdisciplinary conceptual framework for this study to take the work forward. This conceptual framework includes endowments, sense of community, dimensions of risk and disturbance, processes of and capacities for response, and outcomes.

Chapter 3 Methodology, Research Design, and Profile of Study Area has four distinct sections. I start with a philosophical discussion of a transdisciplinary indigenous knowledges paradigm, the ontological and epistemological orientation that guided this study. Here I claim both critical and interpretivist understandings based on a reaction to cognitive imperialism and against the Eurocentric nature of academic discourse, while at the same time celebrating a space for holistic, participatory, multi-voiced and diverse understandings. This transdisciplinary approach is based on an axiology of appreciation, restoring, renewing, love, and empathy not conventionally articulated in research work. I also explicate my location in relation to the study as that has a profound influence on the research.



Second, the approach and methodology of a qualitative case study is introduced and justified. This includes a brief profile of the chosen study area. Third, the research design is described including in-depth interviews, focus groups and participatory observation or listening in on the community discourse. The importance of the Dagara research assistants, data collection tools, analysis and community validation is outlined and I provide some of my own reflection and assessment on validity (credibility, trustworthiness, authenticity, criticality and integrity), relational accountability and limitations of the design. Finally, I introduced practices I put in place for ethical vigilance, for monitoring power in the researcher-researchee relationships from pragmatic, empathetic and negotiation lenses.

In *Chapter 4, Findings and Interpretations – Dagara Voices on Community Resilience and Constructed Interpretations and Insights* I discuss the findings of the research. I first provide an authentic voice to the study, establish a conceptual space, and ground later chapters by sharing concepts related to community resilience in the language of the Dagara. Drawing on Dagare conceptual vocabulary for resilience, resilience as a characteristic of Dagara people, resilience as a process of responding to challenges, and the meaning of community resilience are elaborated.

Then I provide rich descriptions of the dimensions of community resilience for the Dagara people. The findings are presented in three major sections relating to the objectives of this study. The first section is about acknowledging endowments and resources and is based on peoples' responses to the question; "what are the things you are proud of?" It also includes findings related to challenges and the environment of risk and disturbance and looks at chronic and acute challenges in the natural, social (households; women and men) and spiritual worlds.

The next section, provides an overview of how people face and respond to these challenges, and introduces the "hand of resilience" a metaphor developed for use in the community validation process to capture the complex and multifaceted nature of responding to



challenges. This section also describes that there is not one strategy to respond to challenges, but a combination of elements such as (i) revitalizing culture and spirituality, (ii) strengthening the ecological environment, (iii) enhancing sustainable livelihood strategies, (iv) remembering strengths and values of women and men, and (v) overcoming challenges individually and collectively that can make a community resilient.

The final section looks at Dagara indigenous knowledge specifically and how it sustains or constrains community resilience. Each of the sections of findings is followed with my interpretations and insights developed from a reflective analysis within the study. I discuss the interwoven relationships and *sense of community* of the Dagara people and expose, interrogate and celebrate gendered and generational differences. I also describe the changing capacities of communities, or the enabling environments, and discuss meaning and purpose driven change. Finally, I lay out the process and pathways of response: synergies or fractures with ecosystem chaos and change, communities' managing, communities spiraling towards dysfunction, and communities' building resilience.

In the first section of *Chapter 5 Summary, Conclusions, Research benefits and Recommendations*, I introduce a new model of community resilience informed by Dagara wisdom. I then demonstrate how Dagara wisdom shows us three alternative forms of power, power-to, power-with, and power-within, to build community resilience in an endogenous way. I celebrate the Dagara power-to live and thrive in the realm of the everyday, as a proud exercise of agency; transcending the judgements that change people into victims. I then describe how useful it can be to transform the power-to in an environment of risk and disturbance, by nurturing the power-with to live harmoniously with the spirit, and complex systems of the natural environment. Next I describe the Dagara ways of harvesting and revitalizing the power-with from relationships, and community networks to build vibrant communities. Finally, I



elaborate on how protecting and planting the seeds of the power-within for inner strength and metaphysical collaboration in sustaining a way of life creates another pathway for resilience.

In the remaining sections of chapter 5, I articulate the research benefits and implications, for communities, research assistants and myself, and for the academic and practice discourse on community resilience. Finally, I discuss a number of recommendations and propositions to provide a synthesis leading to responses to “so what for development?”. I share recommendations that tease out issues and bring concepts together, such as community resilience as a tool for endogenous development; and how values, meaning and spirituality are a required element of resilience. I conclude with insights that have been illuminated, remaining challenges, and challenges to readers, and gratitude for the knowledges shared by Dagara communities.



COMMUNITY RESILIENCE: A REVIEW OF THE LITERATURE AND A TRANSDISCIPLINARY CONCEPTUAL FRAMEWORK

2.0 Introduction

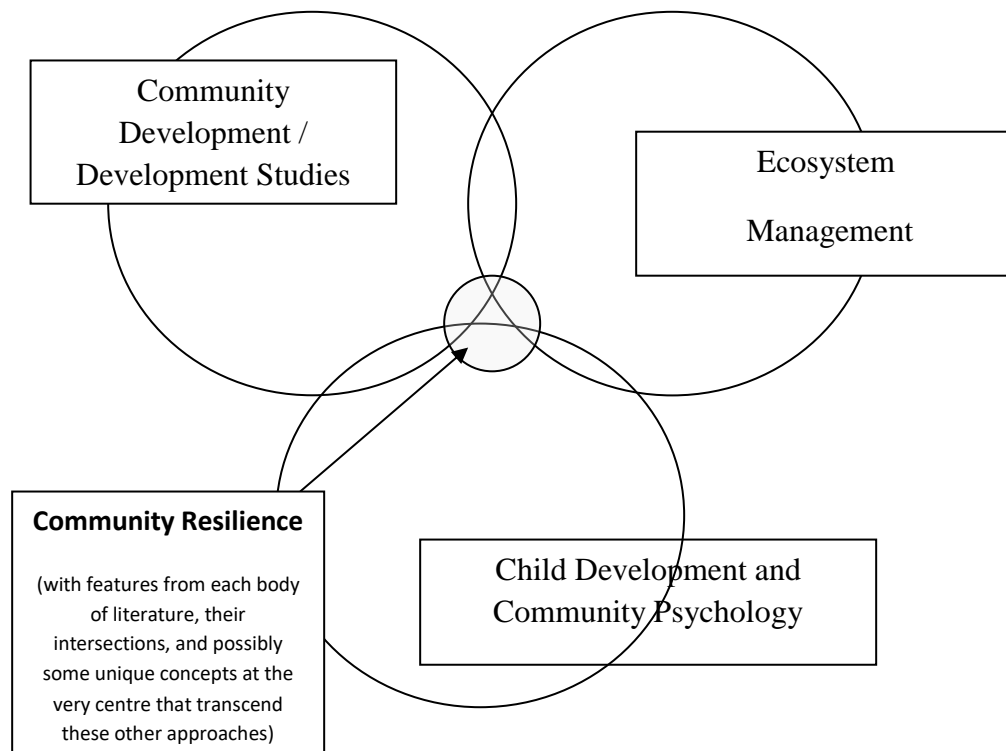
This chapter guides the reader into the academic and professional literature related to community resilience. Learnings from this literature influenced the framing of the questions for this study, as well as the understandings and interpretations articulated by myself and Dagara colleagues later. Exploring the literature broadened perspectives on resilience and community resilience, and provided insights into the various direct impacts, subtle influences, and unconscious biases that are always part of the co-creation of knowledge.

As I explored the literature on resilience and community resilience I discovered there was a body of scholarly work to be digested, but that it was fragmented and had roots in multiple disciplinary traditions. I found people writing in the literature who had been developing ideas around community resilience in isolation from each other in three different streams: (1) child development and community psychology, (2) ecosystem management and (3) community development / development studies.

Figure 2.1 diagrammatically represents these streams of literature. Each is complex and has its own history and ongoing discourse. Within each area are sub-disciplines with a deep knowledge and evidence base in their own right, and each area is linked to broader “basic” disciplines (e.g., biology, geology, philosophy, psychology, sociology) that have well-established systems of epistemology and ontology (Miller, 1997: 3).



Figure 2.1 A Disciplinary and Transdisciplinary View of Community Resilience



Source: Author, 2017

Each of the three streams is vast and complex. There are overlaps between them, yet each also has its own disciplinary boundaries and core assumptions. These boundaries can be the creative spaces that help in the understanding of phenomena in the world. Rodgers, Booth, and Eveline (2003) outline how the politics of disciplinary advantage can hinder dealing with the challenges of our times and advocate for challenging the hegemony of disciplinary work.

“Community resilience” is a complex, holistic phenomenon, any effort to understand it can not only be in the context of a particular disciplinary perspective. Multidisciplinary views that add understandings from two or more disciplines together are valuable. Interdisciplinary views that look where disciplines intersect and adopt the epistemology of one discipline to either accept or reject insights from another discipline can provide useful learning. These



approaches, however, are still limited (Holistic Education Network, 2006; Miller, 1997; Nicolescu, 1997). In a holistic view, “the sum is greater than the parts” and the non-disciplinary or undisciplined space between and beyond disciplines where, as Capra (1983:14) notes, “paradox, mystery and contradictions are embraced” may be where insights about phenomena will ultimately be learned. Therefore, a focus on the phenomena, in this case “community resilience” from a transdisciplinary perspective, will allow learning from, within, and beyond disciplinary boundaries. As Miller (1997: 4) points out:

Transdisciplinary approaches involve articulated conceptual frameworks which claim to transcend the narrow scope of disciplinary world views and metaphorically encompass the several parts of the material field which are handled separately by the individualized specialized disciplines. These overarching thought models are holistic in intent.

This means, as Figure 2.1 illustrates, community resilience can be understood by learning from individual and sub-disciplines, from their intersections, and from the spaces in-between by specifically focusing on the phenomena itself. In this chapter, I will start by exploring resilience and community resilience from the three disciplinary perspectives and then will come back to seek a transdisciplinary conceptualization of community resilience to take forward into this study.

2.1 Community Resilience: a Review of the Literature

This review of the academic and professional literature is divided into four sections: personal and collective resilience as a psychological concept, Socio-ecological resilience as an ecosystem concept, community resilience from a community development / development studies perspective and community resilience in the African context.



2.1.1 Personal and Collective Resilience As A Psychological Concept

One stream of literature related to community resilience is community psychology and community health. Both of these are specific sub-disciplines that spring from an understanding that an exclusive, individually-focused, bio-physiological interpretation of health is severely limiting. Both concepts have much to offer to an understanding of community resilience. The community psychology perspective evolves out of child psychology and development. Community health is part of the broader discipline of public health.

2.1.1.1 Learning about individual resilience: child psychology and development.

Resilience is first encountered in the broad fields of psychology and health in the special area of child development. A major concept in child development (the sense that children develop in predictable stages in their formative years) is that of “at-risk” children, and it is out of this concept that the construct of resilience grew in the early 1980’s (Allen, 2006). Children are considered at risk, for example, during warfare or natural disasters. There may be individual pathways to development, but psychological research uses “at risk” to characterize persons with limited personal, health, social, or cultural resources. Risk factors (both biological and social) are influences that alter the resources available for development, and these factors often translate into psychological dysfunction. Resilience, on the other hand, was first conceptualized as normal development *in spite* of the presence of numerous risk factors. Impetus for the study of resilience was work such as that by Werner and Smith (1982), Garmezy (1985), and Rutter (1987) that found that numerous children identified as at-risk, actually developed normally in the context of adversity. Early interpretations saw resilient children as “superkids” who possessed some unique trait or personality characteristic. More recently, however, resilience has been shown to be a fairly common phenomenon (Masten, 2001).





www.udsspace.uds.edu.gh

Strength focus. Even if resilience is ordinary, it is still significant because it has helped turn around many of the deficit-focused models of children growing up in adversity (i.e., problems to be fixed) and has helped to overcome many negative assumptions (i.e., they are bad because they grew up in a bad neighbourhood). This strength focus is one of the major defining features of resilience. It helps separate the concept from much of the pathologizing of the medical system, psychology, and child development (Masten, 2001; Waller, 2001). As Ungar (2005: 6) states, “when we investigate what makes someone strong instead of what causes weakness we are more likely to identify that which bolsters health”. Hope and optimism (Seligman and Csikszentmihalyi, 2000) and an understanding of consciousness and how mastery over one’s thoughts and mind shape one’s reality (Kelley, 2003; Mills, 2001) are strengths that can lead to well-being.

Yet, a strength focus can also have its drawbacks. If certain individuals are identified as surviving and even thriving, in spite of being “at risk”, popular media and policy makers can revert to blame the victim mentality, perhaps thinking if one individual could overcome risks, everyone should be able to do so. This attitude often covers a blindness to, and an unwillingness to deal with structural issues that may be at the root of the risks in the first place. It can even, more sinisterly, hide a proactive stance in the dominant culture to get anyone who is different to conform. Ungar (2005:13) cites Martineau, who argues that “obscured behind the well-meaning intentions of teaching resilience is a call for disadvantaged children and youth to conform to behavioral norms of the dominant society”.

Interactive process of change. As work around the conceptualization of resilience evolved, the issues of the context and of environmental factors have become more prominent. Whereas in much of the early literature resilience was seen as a personal trait, it is now recognized as a process, or an outcome of successful adaptation. It has both individual and

environmental elements and captures the complex interaction of a young person with their environment (Luthar, Cicchetti, Becker, 2000; Masten, 2001; Waller, 2001). This eco-systemic model is described by Waller (2001: 290):

Eco-systemic: a way of thinking and organizing knowledge that emphasizes the interrelatedness and interdependency between individuals and social systems. ... human development does not happen in a vacuum but rather is the product of continuous transactions between individuals and the physical social class and cultural environments in which they grow.

This dynamic process of change and adaptation has three aspects: (a) the original risk / asset environment, (b) the mechanisms of response, and (c) the outcomes.

Risk and assets. Risk is usually perceived in one of two ways: as a significant life event that triggers disorders (i.e., natural disasters, death of a family member) or chronic adversity (i.e., poverty, violence, structural inequities, marginalization, and discrimination due to gender, race, sexual orientation, ability). Research has determined that risks are usually cumulative and persuasive (one factor may have little influence on a young person, but each additional factor usually has multiple affects not simply additive affects). Boyden and Mann (2000: 12) argue:

Of those children who suffer serious or prolonged psychological distress in conflict zones, a significant portion have not experienced a major misfortune, but less dramatic circumstances that are more deleterious or unfulfilling than catastrophic. Sometimes the most devastating situations are those involving insidious hardships and deprivations, such as constant humiliation, social isolation or poverty related to loss of livelihood sources and long term unemployment.

Mechanisms of response and adaptation. Masten (2001) has shown that most research on resilience as a dynamic developmental process has either used a variable focused approach, utilizing statistical analysis, or a person-focused approach of primarily longitudinal studies. Variable-focused studies identify individual or environmental factors which predict positive or



negative outcomes for children. The outcomes themselves are captured as other variables such as school completion or intelligence quotient (IQ) tests. More advanced studies use a mediation model where factors (which can be threats or assets) are mediated through adaptive systems or mechanisms. It is these mechanisms that are the most important.

Very little evidence has emerged from these studies to indicate that severe adversity has major or lasting effects on adaptive behaviors in the environment unless important adaptive systems, such as cognition and parenting are compromised prior to or as a result of adversity. (Masten, 2001: 232)

Person-focused research studies look at patterns of adaptability as they naturally occur. In longitudinal studies youth are observed in their life context and, often 30 years or more later, their individual pathways of development are described. As Masten (2001: 233) explains:

To date, much of the discussion of resilient pathways has drawn upon case examples of individuals...These anecdotes suggest that opportunities and choices at critical junctures play an important role in the life course of resilient individuals who find mentors, enter the military, find a new or deeper faith, marry healthy partners, leave deviant peer groups, or in other ways take action that has positive consequences for their life course.

Assumed in these approaches to resilience is that change and adaptation is inevitable and it is the opportunities and choices at critical junctures that determine whether a youth will be resilient or not.

Outcomes. The outcomes of a resilient process can be to promote competence as well as prevent or ameliorate symptoms and problems, enhance assets, reduce risks, and enhance a positive psychological makeup (Masten, 2001). Alternately, Richardson, Neiger, Dunn, Ross (1996) name the desired outcome as a bio-psycho-spiritual homeostasis—or balancing point. They demonstrate that sometimes a disruption can even be beneficial and can improve skills and abilities for the future.



Culture and context. Recent discussions in the literature have emphasized how resilience is cultural and context dependent (Blackstock & Trocme, 2005; Boyden & Mann, 2000; Ungar, 2005; Waller, 2001). Boyden and Mann (2000) challenge researchers to think about the importance of culture in the distinctions they draw between biomedicine and other models of mental well-being. They describe biomedicine as individual-focused; a system that scientifically separates the mental and physical, and identifies a child as a victim. The child's perspective is minimized. Other world views of mental health, however, are holistic, see inseparable links between mind and body and value an individual's connection to human, natural, and spiritual worlds. In this view, adversity, and well-being may be vulnerable to powerful social and supernatural agents. They propose that a child with such a perspective will have a profound effect on their experience of resilience and coping.

Ungar et al (2006) argue strongly for considering resilience to be primarily contextual and that the concept must go beyond "beating the odds". They think of resilience as interactional, pluralistic, ecological and cultural – and specifically influenced by nature, and the challenges faced. Positive adaptation is achieved when individuals negotiate for resources in culturally meaningful ways – according to gender, race and ethnicity – that enable them to overcome difficulties. The focus here, however, is still primarily on individual resilience.

2.1.1.2 Learning about collective resilience: community psychology and

community health. The term community resilience is beginning to be used in the community psychology literature. In situations where violence is being experienced as a risk factor, for example, in low socio-economic neighbourhoods of South Africa (Ahmed, Seedat, Van Niekerk, Bulbulia, 2004), with American-Latino and Mexican youth (Clauss-Ehlers & Levi, 2002), and in Lebanon (Kimhi & Shamai, 2004), researchers are collecting evidence that demonstrates how factors outside the individual build individual and community resilience.



The focus in these studies is not on how individuals respond to adversity, but how communities as a whole respond. Ahmed et al. (2004) describe how certain factors such as neighbourhood cohesion and community hope were found to support resilience in different communities, while other factors such as leadership and business ownership influenced different communities in complex and sometimes opposite ways. Clauss-Ehlers and Levi (2002) discuss context vulnerability that affects a community as a whole, and cultural-community values (extended family, respect for elders, the value of relationships as interactions) that buffer the impact of context vulnerability. Kimhi and Shamai (2004: 449) discuss how the perception of the community as resilient helps individual ability to resist stressors. They argue “helping communities to create a narrative that focuses on past success in coping with stressors, as well as seeking strength to cope with them in the present, may lead to increased perceived community resilience”. Sonn and Fisher (1998: 461) describe research with coloured South African and Anglo-Indians and how they use resistance and “alternative activity settings” to integrate with the dominant culture while maintaining and reproducing tradition and their own “life world”. Tse and Liew (2004) describe work with Asian minority communities in New Zealand and how a sense of belonging, sense of community, self-help, and family support aid in resilience. Clauss-Ehlers (2010: 324) speaks of cultural resilience, “how cultural background (cultural values, languages, customs, norms) helps individuals and communities overcome adversity”. Her research has shown positive emotions about one’s culture, ethnicity and gender contribute to resilience. She emphasizes the importance of understanding the context of someone else’s worldview – what they value and who they want to become. According to her work, ethnic identity leads to more resilience: there is benefit to learning history, traditions, and customs, being active in social groups, talking to others about identity, and participating in cultural practices.



Kulig and her colleagues (1996, 2000, 2008, 2013) were one of the first groups to begin looking at the resilience of communities. Their work led to the recognition that some important factors that support resilience are: 1) pride and sense of belonging, and 2) the interactions in community as a collective unit. When this “sense of community” is strong it leads to community action, and ultimately to resilience. Seccombe (2002) argued that we should not only look at personal coping, but that structural issues must also be investigated. She recommended the inquiry should go beyond just beating the odds, to “changing the odds”, and in her context this could only be done with a change in national economic policy. Other structural threats include: 1) systemic discrimination, 2) Eurocentric values (e.g. an exploitative ecological psyche and spiritual and cultural belief systems imposed on people of other cultural backgrounds).

The process of adaptation for collective resilience therefore demands solidarity and cohesion to resist oppression (Sonn & Fisher, 1998). This solidarity and cohesion is often the ‘soul’ of a community. Some researchers call this ‘cultural resilience’ and insist that pride and revitalization of language, values and world view help to overcome adversity (Clauss-Ehlers, 2002). There is a caution, however, that these outcomes of revitalization can be romanticized, and truly rejecting the dominant system will only be achieved with radical social change that goes beyond resilience.

Fleming and Ledogar (2008) have added to the discussion by looking at resilience specifically in the context of indigenous people. They found that one of the major threats to indigenous communities was having their relational world view (that has physical, mental, and spiritual components) marginalized, and a systematic privileging of economic issues over environmental issues. This threat was the root cause of much trauma and grief. The process of adaptation is to strengthen cultural heritage to promote broad resilience of indigenous



people. Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum (2008), in consolidating and synthesizing much research, take the discussion of collective resilience further. They write about community resilience as including community competence, problem solving, taking collective actions and decisions, and showing collective efficacy. They insist we must get beyond seeing threats as acute onset emergencies only, and must recognize chronic conditions, and put the cultural context, at the center of resilience discussions. It is often structural and systemic issues that lead to dysfunction. They acknowledge the importance of bonding, a sense of trust, belonging, and place attachment as all leading to people under threat becoming stronger and transforming situations for the future.

Community health is part of the much broader public health discipline and is closely associated with the social determinants of health, primary health care, and population health. A critical component of the primary health care model articulated by the World Health Organization (WHO) in 1978 was participation and decision making by communities in the planning of interventions to protect, prevent and promote their health (Fletcher, 1995). One particular element of this broad discipline that is of relevance for this discussion of community resilience is an understanding of “community” as an essential determinant of health. Much evidence has shown that “the community’s formal and informal networks and support systems, community norms and cultural nuances, and community institutions, politics and belief systems” all help determine health (Hamilton & Bhatti, 1996).

Within the framework of the 1986 Ottawa Charter for Health Promotion much has been done to create the conditions for communities to achieve their own sense of well-being and to promote community health (Hamilton & Bhatti, 1996). This framework informed Kulig’s (1996, 2004, 2008, 2013) work over the past 15 years on community resilience, which has focused on resilience at a community level by adding insights from the community health



perspective. Researchers have also worked in Australia with impoverished and indigenous communities and argue for a structural analysis of the context of dis-empowered communities as the only way to capture the issues of power, access to resources, and injustice that are the underlying causes of ill health in these communities (Larson & Saggars, 2002).

This first stream of literature has much to offer an understanding of community resilience, however, there were other scholars doing synergistic work at the same time in other fields so it is important to look at two other streams of literature.

2.1.2 Socio-Ecological Resilience As An Ecosystem Concept

One other stream of literature that is very relevant to concepts of resilience and community resilience is ecological systems. This literature reaches from ecology to natural resource management and disaster management and bridges to rural sociology. At the risk of oversimplifying this field, its defining characteristic is the study of ecosystems, sometimes over long time scales and including all living things within them, *and* the study of people who live their lives in close connection with an ecosystem such as a landscape or seascape.

2.1.2.1 Learning from ecological resilience. Some of the key contributions from this literature are about resilience itself, ecological systems, people within those environmental systems, socio-ecological resilience, and socio-ecological resilience and climate change.

Resilience. The ecological concept of resilience started from researchers studying nature, and observing how natural systems respond to stress and crisis. Holling (1973), an influential author from this perspective, originally defined the concept of resilience as the ability of a system to return to equilibrium after undergoing stress. Early adopters of this concept developed a kind of mathematical engineering approach to resilience for maintaining equilibrium within ecosystems. Holling's ongoing research in the field of natural resource

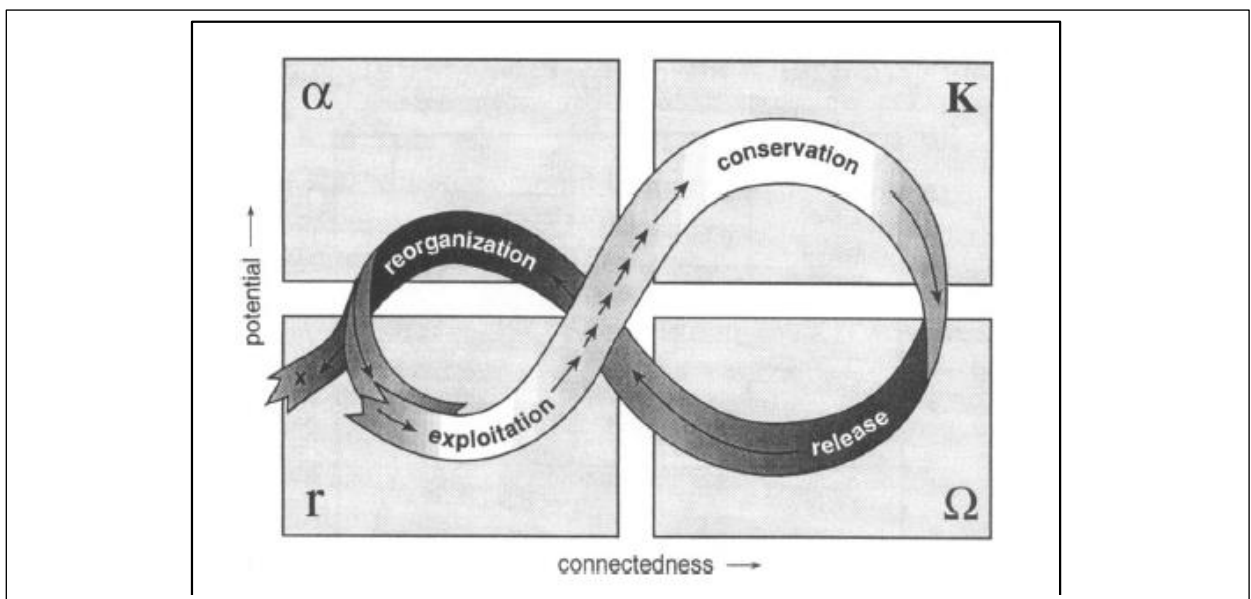




management showed, however, that we cannot command and control natural systems based on reductionist science, but must learn to understand them and observe natural systems over long periods of time and on multiple scales. This approach to ecological resilience became more sophisticated over time and had a major influence on conservation science.

Systems. Ultimately Holling and others' observations in the field led to the articulation of 'panarchy' (Gunderson and Holling 2002; Holling 2001) which envisioned resilience linked to adaptive cycles and systems of growth, accumulation, restructuring and renewal as illustrated in the diagram below. All four of these periods are important within adaptive cycles. There can be long periods of slow accumulation from exploitation to conservation, followed by short periods of innovation, release, and creative destruction leading to renewal in all systems as illustrated in Figure 2.2. Knowing where the system is, within these cycles of adaptation, is important. Adaptation does not always happen slowly, but sometimes there are dramatic shifts when an ecosystem reaches a particular threshold. This can result in a regime shift in which the ecosystem continues, but there is a different combination of species.

Figure 2.2 Socio-ecological Perspective on Resilient Systems.



Source: Reproduced from Holling, 2001: 394.

www.udsspace.uds.edu.gh

It is also important to always consider systems as “nested hierarchies” and at multiple spatial and temporal scales (at least three) to understand how these cycles work. Any system can only be understood if we consider the systems above and below it (i.e. Understanding an apple, a tree and a forest as three independent, but connected living systems). To know where we may be in these loops of 30 – 50 years or more (Olsson, Gunderson, Carpenter, Ryan, Lebel, Folke & Holling 2006) is about understanding transformation, not about incremental changes in efficiencies.

Holling and Meffe (1996: 330) stated emphatically that command and control natural resource management is a pathology and causes a loss of resilience in systems:

When the range of natural variation in a system is reduced the system loses resilience. That is a system in which natural levels of variation have been reduced through command and control activities will be less resilient than an unaltered system when subsequently faced with external perturbations either of a natural (storms, fires, floods) or human induced (social or institutional) origin. We believe this principle applies beyond ecosystems and is particularly relevant at the intersection of ecological, social and economic systems.

Understanding the complexity of systems and cycles in these ways thus became essential in resilience thinking.

Broader concerns: ecosystems and people. During the same time frame that Holling’s

work evolved, Nobel Laureate Amartya Sen (1981) introduced the terms *endowment* (owned assets and personal capacities) and *entitlement* (relationships through which one gains access to food) based on his work in analyzing famine. These concepts influenced extensive work on vulnerability, recovery, and coping skills related to famine, and on understanding how rural people interact with their environment not only as an ecosystem, but as social, economic, and political systems as well. Chambers’ (1983) work on rural poverty recognized people’s links





www.udsspace.uds.edu.gh

to their ecosystems and also identified factors of deprivation and disadvantage (poverty, social inferiority, isolation, physical weakness, vulnerability, seasonality, powerlessness, and humiliation). He demonstrated how complicated people's lives are in rural areas (Chambers, 1995).

The World Commission on Environment and Development (WCED) addressed issues at a global scale and commented on the relationships between the human world and the environment that sustains it (WCED, 1987). They noted the profound environmental degradation taking place at the hands of human beings and defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Chapter 2, Section I). The environment was seen as “natural capital” that must be maintained or renewed, and sustainability was broadly interpreted to be a process of economic, political, and social change that does not necessarily include growth, industrial development, and the exploitation of natural resources. The Bruntland Commission gave much impetus to those working in ecology and conservation, and fueled the environmental movement.

These seminal works (WCED, 1987; Chambers, 1983, 1995; Sen, 1981) contributed to the growth of the concept of “sustainable rural livelihoods.” The Institute of Development Studies at the University of Sussex has been instrumental in the articulation of this concept. Scoones (1998: 5) provides their definition of livelihood:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.

One of the key elements in this definition is natural resource-based sustainability, i.e., “the ability of a system to maintain productivity when subject to disturbing forces whether a stress (a small, regular, predictable disturbance with a cumulative effect) or a shock (a large infrequent unpredictable disturbance with immediate impact)” (Scoones, 1998: 6). Davies (1996: 25) examined adaptable livelihoods in the Sahel region of Africa and defined resilience as “ease and rapidity of a system’s recovery from stress” and sensitivity as “the degree to which a given land system undergoes changes due to natural forces, following human interference”. She made the effort to distinguish between systems based on natural resources and those based on livelihoods. For Davies (1996: 28) “livelihood systems are not based on some natural equilibrium, but are a function of how humans interact with environmental, socio-economic and political factors in order to subsist”. These elements within sustainable livelihoods were adapted from parallel work being done in ecosystems, and was the forerunner of socio-ecological resilience.

Also, during this time period, Berkes (1999) was taking some of Holling’s concepts and broadening them from a purely scientific ecology perspective to a stronger socio-ecological perspective inclusive of ethical, social and spiritual aspects. He recognized in taking a systems-view, human beings are still part of the system. Therefore, human beings relationship with the land and the broader ecosystem; how the ecosystem is managed and cared for; as well as the kinds of ceremonies performed are important. Berkes and Folke (1998) stated that human systems are unique as compared to other ecosystems with living species because humans have the abilities of foresight, intention, communication and technology. Others recommended an analysis of the range of formal and informal institutional factors that influence sustainable livelihood outcomes (McAslan, 2002; Scoones, 1998), and linkages to human rights and identity (Redclift, 2002). These are referred to as social and human capital, and, combined with





www.udsspace.uds.edu.gh

natural and economic capital, are the assets that one must have some access and control over for a sustainable livelihood (Sconnes, 1998).

Adger, in a very influential paper, uses a case study of conservation management of mangroves in northern Vietnam to illustrate the importance of both social resilience (which was compromised by a change in property rights that decreased cooperative management) and ecological resilience (seen as the ability of fish stocks to recover following major impacts on their ecosystem). Adger (2000: 354) concludes “resilience depends on the diversity of the ecosystem as well as the institutional rules which govern the social systems”. He commented on the critical social components of exclusion, marginalization, social capital and the question of resilience versus vulnerability, and maintained an appreciation of the ecosystems approach developed from observing natural systems.

Disaster management is another field that contributed to resilience thinking in the decades on either side of 2000. Disaster management, (Blaike, 2002, Cernea, 2002, International Federation of Red Cross and Red Crescent, 2004) is concerned with people’s responses to disturbances in their natural environment such as earthquakes, volcanoes, floods, and drought and human-made issues such as war, displacement, and other emergencies. Blaike (2002), for example, wrote on the “crunch factor” wherein people experience a crunch between root causes, dynamic pressures, unsafe conditions and natural environmental hazards. Root causes include unequal assets, population growth, migration, debt crisis, and environmental degradation. Dynamic pressures include such issues as class, gender, and ethnicity; unsafe conditions are determined by low preparedness, poor health, and livelihood disruption. This is much more than an ecological understanding of resilience.

Socio-Ecological Resilience. Gradually there was sufficient cross-fertilization and the concept of ecological resilience was broadened to socio-ecological resilience. Within this new



www.udsspace.uds.edu.gh

conceptualization institutional governance was considered essential because there were often conflicts over resource use. Berkes and Folke (1998), argue that in ecosystems it is important not to use a reductionist approach to these conflicts but rather to appreciate the need to flow with nature and learn from knowledge of the ecological system. Their fundamental lessons were to learn to live with uncertainty, nurture diversity, combine knowledges, and self-organize. Berkes later found the breakdown of traditional authority during times of rapid technological and socioeconomic change, that led communities to integrate into non-local economic systems, also leads to instability, and potentially less resilience (Berkes and Sexias, 2005). Jones, Ludi and Levine (2010) contributed to this dialogue with ideas around decision making, governance, fostering innovation and experimentation, and considering the structure of institutions.

Other research building on this socio-ecological perspective reminds us to celebrate diversity and ecological variability, and recognize the value of ecosystem services that have slow variables and tight feedback loops, and that are organized modularly, so they can stand on their own when necessary. Redundancy in a system is positive, because if one element of a system fails, other elements provide the needed services (Walker and Salt, 2006). This systems approach also means we have to recognize the inadequacy of efficiency-driven models, and include fairness, equity and humility, as we consider resilience. Walker and Salt (2012) reminded us to understand resilience can be happening on different scales, at different times (nested hierarchies), and to be appreciative of self-organizing, thresholds and adaptive cycles, as part of adaptation and transformation processes.

In a socio-ecological systems approach, we put ourselves in danger whenever we try to emphasize the social over the ecological or vice versa. Miller, Osbahr, Boyd, Thomalla, Bharwani, Ziervogel & Rockstrom (2010) emphasize both the processes and dynamics of the

system, and the actors and agency within the system as part of ecosystem stewardship and a way of looking at governance. They considered the ecological/biophysical system on one side, and the social political system on the other. They added to the ecological systems understanding the importance of world views, values, culture and agency. Adger had made this point earlier:

The philosophical basis of managing the environment is determined by world-views of nature where people managing resources conceive of the environment as either benign, balanced or, indeed, resilient and able to reorganize itself. (Adger, 2000: 350).

Thomas, Twyman, Osbahr and Hewitson (2007) give a specific example that people's world view and perceptions of things like risk vary, with people often not viewing themselves as victims.

For all of these coping and adapting strategies, however, what stood out was that farmers were not victims. As the authors state, "rather than being trapped in perennial cycles of destitution and impoverishment at the mercy of climate events, our data illustrate that rural farmers in Africa recognize even subtle changes in climate parameters, and take steps to respond to these changes" (Thomas, Twyman and Osbahr, Hewitson, 2007: 318).

These perceptions and strategies of farmers must be appreciated, whereas re-victimizing people using fear, which some disaster management approaches emphasizing preparation seem to do, reduces resilience.

Socio-ecological resilience and climate change. Many scholars and practitioners

working in the environment and development sectors have been writing about socio-ecological resilience and climate change (Osbaht, Twyman, Adger, Thomas, 2008; Pettengell, 2010; Van Der Geest, 2004; Wongtschowski, Verburg, Waters-Bayer, 2009). Much of this work provides advice on appropriate technical interventions in specific landscapes (Van Der Geest, 2004) or utilizes a sophisticated macro-analysis of global policy and governance issues. Community



level leadership for climate change adaptation and transformation is often neglected. Pelling's work (2011) is significant in terms of socio-political governance and climate change because he questions the values that drive inequities. Pelling argues that climate adaptation is not technical, but the result of choices that have been made that prioritize economy over ecology and culture. According to his analysis, the problem is not climate change, but the power asymmetries in the world and the multiple risks this brings to well-being. He challenges the notion of resilience, as a bounce back to equilibrium, because maintaining the status quo in an unjust system may suppress the deeper changes that are necessary. Resilience thinking may silence the social learning that is really necessary so people don't only survive, but actually work to making systems more just. Pelling argues we have to go beyond resilience to think about transitions, a process of incremental change, and transformation which is more radical. This analysis forces us to think about socio-ecological resilience differently. Pelling's point is to achieve the deeper changes necessary, we need solidarity and collective actions that fundamentally change our consciousness in regards to our relationship with ecology.

More recently, Berkes and Ross (2013) have attempted to bring the streams of socio-ecological resilience and individual psychological resilience together. From the socio-ecological side they see systems thinking, unpredictable change, cycles of renewal and disturbance, and the important role of learning institutions. From developmental psychology and community psychology, they appreciate the value in recognizing people have strengths, that there are strengths in collective processes, and therefore it is important to reaffirm the values and behaviors that bond communities and cultures. This greater focus at the community level beyond the individual, and at a different scale than the global socio-ecological system, can also be informed by the third stream of literature.



2.1.3 Community Resilience As A Community Development/Development Studies Concept

The third stream of disciplinary literature related to community resilience is community development, and international development studies. Community development came to prominence in the 1970s and 1980s and has continued to be a powerful way for organizing for social change. Development studies, as an academic discipline, grew out of sociology and political science during the 1980s and 1990s and has now reached maturity (Fletcher, 1993). Both community development and development studies – one at the meso or group level and one stretching beyond to the macro level – have in recent years entered the discourse on community resilience.

2.1.3.1 Learning from community development. Within the community development literature, terms such as community organizing, people-centered and participatory development, community economic development and social action are common. These terms have roots in work such as the Antigonish Movement (Coady, 1945), Friarian Conscientization (Friere, 1970), Highlander (Gaventa & Horton, 1981), small is beautiful (Schumacher, 1973), Ujamaa (Nyerere, 1973), and organizing (Alinsky, 1971).

There are various theories and approaches within this literature on understanding community and community change (Welton, 1991). Bopp and Bopp (2001) for example, identify seven approaches to community development: liberation, therapeutic, issues organizing, community organization, economic development, cultural-spiritual, and ecological systems. Checkoway (1995) and Weil and Gamble (2002) distinguish slightly different lists of strategies for community change and practice. For Fletcher (1993) and Korten (1990), the various approaches can be put on a continuum from approaches that emphasize material-centred growth, to approaches that emphasize people-centered transformation. What is



common in all the approaches is that emphasis is the meso or group level. Neither the micro, individual level issues, nor the macro, societal level issues are the focus. The micro and macro level issues impact on community, but the meso level of community is the unit for focus and analysis. It is the issues, problems, and capacities at the group level and the process of change experienced and / or initiated by groups that demand attention. As I have articulated elsewhere:

Community development is a process in which groups of people work together to understand and to transform themselves and change external factors that influence their lives, in order to achieve their vision of a healthy and sustainable future. The goal of community development is the continual strengthening and valuing of a people-centered process in order to enable individuals and groups to live in harmony with each other and the world. (Fletcher, 1993: 12)

In relation to community resilience, this stream of literature is significant because it offers much to the understanding of community processes and responses to change. Much literature in this stream addresses variations of a process that includes the following steps: identify problems, investigate human and material needs, locate resources and assets, analyze local and global power structures, explore options for change, make collective decisions and strategic plans based on problems/needs and resources/assets, implement interventions, monitor progress, reflect on successes and obstacles, and begin the process again from a new place.

Asset-based. The processes named above vary from a strong problem orientation to a relatively more recent asset focus (Kretzman & McKnight, 1993). The asset focus is an empowering one as it encourages people to look at the assets or resources they have – whether those are physical, environmental, financial, social, - and look for opportunities for change based on those assets rather than beginning with a problem orientation. This asset orientation was taken forward by Department for International Development (DFID) with their influential sustainable livelihood framework. This approach is empowering and inspiring because it unleashes positive energy for change, rather than asking community people to always focus



their energy on naming, unpacking and analyzing problems, which can build a sense of negativity. Kretzman and McKnight (1993) focus on finding and mobilizing community assets. Their work is significant in making the connections to the concept of community resilience because it is their efforts that motivated individuals to focus on community development as a strength-based approach to change rather than just a problem-solving approach based on local resources that happened to be available. Mathie and Cunningham (2003, 2005, 2009) have also done extensive work in this area and developed mechanisms to apply this thinking to global south contexts.

Social Capital. A significant element connected to the literature on community development is social capital. Woolcock (1998) was one of the first researchers to write on the importance of social capital inclusive of trust, reciprocity, fairness, cooperation, and responding to situations using, community capacity, community vitality and community resilience. His work used a dominant Eurocentric lens, and saw social capital as purely transactional relationships; he had no space for power-within that influences relationship, but nevertheless his work had an important impact. Social capital, and the importance of groups, organizations, neighbourhoods and networks was popularized in Putnam's (2000) book, *Bowling Alone*. He describes the root of problems experienced in late twentieth century America being a result of the breakdown of community.

Social capital studies blossomed in the 2000s (Ledogar, Fleming, 2008; Lochner, Kawachi, Kennedy, 1999; McAslan, 2002; Mignone, O'Neil, 2005) as people looked at how the relations between people in communities, and nurturing those relations and groups, was a strength for change. Ideas grew with social capital becoming subdivided into bonding, bridging and linking social capital. Bonding social capital is what makes people identify with, and feel part of a community. Bridging social capital is the relationships between people and groups



within a community. Linking social capital is the relations between groups in one community with those in another community or at regional, national or international levels. In looking at social capital community planners also made the distinction between associations, membership groups, and institutions (more structured often hierarchical, technocratic or bureaucratic groups) that would support community change.

Agency. Also, important in this literature is a focus on agency: the initiative of individual community people and communities themselves to take action and engage in change. This community-driven approach shifts the decision making in community development from outsiders, ‘experts’, or government technocrats, to community people themselves. Community development is not just located in a community, or decided in consultation with a community, but is actually controlled by communities through their own power of agency. This participatory approach grew, particularly with practitioners on the ground, over the past 40 years based on the influential work of Chambers (1983), Pretty et al (1995), Uphoff (1986) and numerous others. It has been adopted, or some would say co-opted, by the World Bank (Bhatnagar & Williams, 1992) and others, but putting it into practice continues to be a challenge.

Based on my review of the community development literature, however, “community resilience” is a term that is used infrequently. One of the rare places where the term is used is in the publication, *The Community Resilience Manual*, in which Colussi (2000) takes a strong community economic development approach. In this Manual, developed in the context of work in rural communities in the North American context, Colussi (2000) provides 23 elements that are considered necessary for a resilient community. Breton (2001) uses the term *neighborhood resilience* to describe similar issues in more urban settings (still in a “developed world / global north” context). Stewart, Reid, Jackson, Buckles, Edgar, Mangham & Tilley (1996) also use



the term community resilience in their investigation of the responses of communities to the downturn in local economies (e.g. the closing of a fish plant or a manufacturing facility) that caused unemployment and changed the way people made their livelihoods. Others in the community development stream use the terms *community vitality* (Grigsby, 2001), *community capacity* (Jackson, Cleverly, Poland, Burman, Edwards, & Robertson, 2003), *sustainable communities* (Bopp & Bopp, 2001), and *healthy communities* (Wolff, 2003).

More recently authors such as Magis (2010) have begun to use the term community resilience. She builds on the entrenched community development ideas such as assets and social capital, and reemphasizes the importance of agency and the role communities must play in their own resilience. She makes the point that what is unique about resilience thinking is that people are living in times of change, unpredictability and surprise, and must be able to express their agency within that context. Magis extends the idea of resilience from just bouncing back, maintaining equilibrium, to the actual transformation of natural systems and community management systems. Her work also touches on the concept of thresholds and communities being pushed to thresholds where they may not be able to continue in their same form in the future, but can be pushed into another state of being.

Magis (2010) makes effort to distinguish community resilience from community capacity, and popular asset-based community development approaches. Although she highlights many similarities, she argues that the distinction is that community resilience focuses specifically and exclusively on community systems in the context of change whether in responding to, or attempting to influence social, environmental and economic change. Community capacity is a broader, more general community development approach.

Systems thinking for community resilience. Wilding (2011) wrote a highly accessible book on community resilience for the Carnegie Trust in the United Kingdom. The work



focused on the European context and work around transition towns, alternative energy, and sustainable livelihoods. It has a strong asset-based focus and extends community resilience thinking to systems. Wilding (2011: 27) states that:

Community resilience builds both strength and flexibility. ... civil society plays a vital role examining the values underpinning local visions of 'community resilience'... Assets (strengths-based) approaches are core to resilience building. ... The disciplines of systems thinking and social capital underpin resilience thinking, stressing the importance of feedback (trust & learning), diversity (don't put all your eggs in one basket) and modularity (localized infrastructure) resilience [is] complex, dynamic, unpredictable and likely to confound 'command and control' mindsets.

He drew on extensive research and proposes that resilience is the opposite of efficiency, often one of the mantras of our modern world. Lietaer in Wilding (2011: 21) argues:

In general, a system's resilience is enhanced by more diversity and more connections, because there are more channels to fall back on in times of trouble or change. Efficiency, on the other hand, increases through streamlining, which usually means reducing diversity and connectivity... Because both are indispensable for long-term sustainability and health, the healthiest flow systems are those that maintain an optimal balance between these two opposing pulls".

Wilding (2011:59) also introduces a resilience compass for measuring the outcome of a community's resilience and describes 'break through' resilience across four dimensions of personal, cultural, economic and inter-community collaboration.

Personal resilience is an active process of feeling in control of life, getting fit, and being positively engaged in community life. ... Local economies can steward their own energy, water, money, housing, food and other resources. ... Creativity, fun and a strong and inclusive sense of identity, belonging and place are at the heart of cultural resilience.

Common in many of these approaches is the emphasis on people-centered social action, understanding group power relations and an emphasis on agency of the community.

2.1.3.2 Learning From Development Studies. International Development Studies (IDS)

is an interdisciplinary academic discipline that has informed the work in developing countries



www.udsspace.uds.edu.gh

for the past 50 years. IDS has focused on macro level change led by government and multilateral aid agencies, and has also always had a rich alternative tradition of promoting participatory, community level change, although implementation has not always lived up to the rhetoric. Since 2000 ideas of resilience and community resilience have become prominent in the IDS discourse. Unfortunately, the concept of resilience has evolved for the most part into a technical, apolitical programming approach.

Technical apolitical resilience? Bene et al (2012), for example, argue that in recent years resilience has become the new buzz word in development practice, and has replaced poverty, as the overarching concept. They do not see this as a good thing. Resilience is positive in that we look at systemic issues and change across scales, but it is problematic in their view, because it does not usually consider issues of power and agency. If one of the fundamental purposes of development is striving towards a just and equitable society, they argue, resilience on its own is lacking. They state resilience is actually dangerous because, “it could move us back to technical, apolitical approaches with social justice and transformative dimensions lost” (Bene et al, 2012: 14). The humanitarian news agency IRIN (Integrated Regional Information Network, 2012) agrees power, equity and agency are often left out of the current operationalizing of resilience and root causes are often neglected.

There is lots of evidence of this weakening of the resilience concept. The Montpellier Panel (2012) for example, emphasizes the need for a “bounce back” to previous growth for resilient markets, resilient agriculture, and resilient people. The panel’s report emphasizes the political leadership needed for this return to a previous development trajectory, but does not question the fundamental underlying assumptions of this trajectory, and the fact that people were getting left behind as disparities in the world increase.



Food and Agriculture Organization (FAO) (2013), as a multilateral technical agency, promotes resilient food systems and disaster risk reduction through governance, early warning, prevention, preparation and mitigation, but has limited consideration of community agency in systems.

Figure 2.3 Useful Technical but Apolitical Actions Suggested by FAO

Examples of Technologies, Practices & Approaches for Building Resilient Livelihoods		
Agriculture	Livestock	Fisheries
Crop diversification Appropriate crop selection (drought/saline/flood tolerant) Intercropping Crop breeding Conservation agriculture Adjustment of cropping calendars Seed systems Terracing Post-harvest management (storage, food drying, food processing) Livelihood diversification Crop insurance Integrated pest management Urban gardening	Proofing of storage facilities Livestock shelters Strategic animal fodder reserves Fodder conservation Resilient animal breeding Vaccination to reduce or prevent the spread of animal disease Grazing and pasture resource management Strengthening pest management systems to cope with threats Biosecurity in animal production systems Agro-silvopastoral systems	Implementation of the Code of Conduct for responsible fisheries Fisheries, aquaculture, vessel and infrastructure insurance Safety in the design, construction and equipment for fishing vessels Aquaculture biosecurity measures to reduce or prevent the spread of fish disease
Natural Resources Management		
Water	Land	Forests
Rainwater harvesting, conservation and storage to improve capture and utilization of rainfall Water reserves to buffer drought Efficient irrigation such as drip and furrow irrigation that use less water and reduce water loss Management of fragile catchment areas Capture of floods or recharge of groundwater for use in dry season	Restoration of degraded lands Land use and territorial planning Sustainable wetland management Land and soil management Field or network drainage to minimize flood impact Appropriate energy sources and technologies to reduce pressure on land Secure natural resource tenure rights	Integrated fire management Forest pests prevention Agro-forestry Afforestation/reforestation Preventive silviculture Prescribed burning Fire breaks Improved cook stoves and alternatives to wood energy to reduce deforestation

Source: Reproduced from FAO, 2013: 54.



Figure 2.3 reproduced above from FAO, provides examples of technologies and practices for building resilient livelihoods. It is a useful list, but is problematic because it does not deal with power or structural issues or the agency central to so many others conceptualizations of community resilience.

Frankenberger (2012), writing a piece for the United States Agency for International Development, spoke of technical capacity combined with great importance of political will to promote a healthy ecosystem. Much of his emphasis is on government capacity, and misses the idea of community, and community decision making. He promotes an exogenous approach to community resilience within a paradigm of social and economic growth. The importance of ecological systems concepts such as biodiversity and transformational change where community itself, as an entity worth sustaining, is left out in Frankenberger's work.

Crane (2010) challenges this thinking. He feels resilience is too mechanistic and materially-centered and privileges both the economic and the ecological spheres, without really considering social, cultural and community aspects. He argues that cultural resilience also needs to be considered or marginalized cultural groups will get pushed over their thresholds and could cease to exist. He poses the provocative question, "is it possible for the ecological and material components of a system to be resilient, while at the same time a cultural group within it is pushed over a threshold to a new state in which the most valued practices and beliefs become untenable, irrevocably transforming the culture itself (Crane, 2010: 19).

Crane (2010) supports an appreciation of biocultural values, ideology and world views into resilience thinking. These views are supported by the International Union for the Conservation of Nature (IUCN, 2010) that speaks of bio-cultural heritage, as an essential element of resilience that cannot be neglected. Through their program work they support the role of bio-cultural community protocols, asset and benefit sharing, free prior and informed



consent and improvements in value-chain work as parts of community resilience. Others who have shared their views include Pilgrim, Samson, Pretty (2009) who cautions us that a disconnect from nature can be harmful and we need community-driven pride in identity to nurture beliefs, meanings and worldviews. This form of resilience calls for a revitalization of culture and the connection to land.

Others, such as Gubbels (2011), agree with the need for good governance, but also put forward a mainly technical approach. While considering child malnutrition in the Sahel, he respects the changes communities can make for themselves, but his work privileges macro-level government, international NGO analysis that prescribes strategies that communities should be taught to use. Other big players in the development field are promoting resilience in their titles (i.e. IFRCRC, 2004; Hsu, Du Guerny, Marco, 2011 (for UNDP); World Bank, 2013), however, none of these has a real focus on community agency, or consider the analysis from a community development perspective.

Resilience of community systems within global systems. Looking at community resilience within the discourse of development studies forces us to consider community systems within global socio-political contexts. Bene, Wood, Newsham & Davies (2012) for example, argues we have to think about community and not just what a system has (such as in the United Kingdom's Department for International Development (DFID) sustainable development five capitals) but also what a system does (processes) and how they are influenced by power. He quotes Levine:

Understanding adaptive capacity [resilience], therefore, requires that we also recognize the importance of intangible processes such as decision-making and governance, the fostering of innovation and experimentation, and the exploitation of new opportunities and the structure of institutions and entitlements. This means 'moving away from simply looking at what a system has that enables it to adapt, to recognizing what a system does that enables it to adapt' (Levine et al, 2011: 5 cited in Bene 2012: 28)



Bene et al's (2012:20) thorough literature review identified a number of characteristics

of a resilient system:

...diversity of groups performing different functions, effective decentralized government, acceptance of uncertainty and change, preparedness to live with uncertainties, build redundancies, non-equilibrium, continual learning, cross scalar and networks, community cohesion, community voice and ownership over natural resources, social and economic equity, social values, acknowledged structures (p.20)

His work suggests important learnings about strategies to protect, prevent, promote, and transform communities. He discusses the importance of understanding three ways to deal with change: absorptive coping, adaptive capacity, and transformative.

Wilson (2012) reminds us, however, that resilience thinking will not be easy to put into practice in the world of today. He makes a strong critique of global capitalism and cites many problems being experienced that are a result of human-made disturbances such as mismanaged ecology; the breakdown of socio-political, economic, and global systems; and the loss of cultural values. He emphasizes, social memory, transitions, and transitional corridors or pathways that people can make decisions within. On the issue of social memory, Wilson shows how community learning and tradition, if rediscovered, can contribute to community resilience.

He states,

Social memory implies that knowledge, experience and accumulated wisdom are passed on from generation to generation and from actor to actor within a community (and beyond). Any community system will be at its specific starting point in a transition precisely because of the history of decision-making trajectories preceding that starting point. ... Human systems ... are anticipatory. In these systems, social memory is a crucial transitional element and may lead to a learning and adjustment phase, based on past experience, that streamlines transition pathways (Wilson, 2012: 80).



His power analysis of the factors for and against the possibilities for community's own agency in regard to resilience are important, and sobering. The unstated connotation in Wilson's (2012) work that social memory is often negative in terms of communities being able to draw upon it to deal with the challenges of today and this may be disempowering. Many indigenous people would argue for a celebration and valuing of that social memory, as an end in itself, in harmony with their own world views.

In describing what he calls transitional corridors, resilience and community pathways, Wilson (2012) introduces the idea of communities occupying the space between weak and strong economic, social and environmental capital. Within this space, there is a pathway that a community moves through over time, and that has a survival threshold. Within the transitional corridor there can be some differences, but the community is able to make decisions within those parameters to deal with stresses and shocks and maintain the integrity of the community. He advocates for the importance of community agency, but demonstrates this agency has its limitations and structural lock-ins that are a form of invisible power that limit the parameters within which a community can maneuvered. He outlines macro structural influences within systems thinking and tradeoffs between social, economic and environmental capital.

Many critiques of resilience (Bene et al, 2012; Crane, 2010; Wilson, 2012) are turning away from the term resilience in favor of transitions or transformations. They acknowledge there has been a cooptation of resilience as a technical, apolitical term relegated to maintaining the status-quo. Their ideas of transformations resonate with what is written in the ecosystem literature about regime shifts and they advocate for the need, or inevitability, of this kind of a radical change in community and societal systems for well-being to be achieved. Bene et al (2012: 22), for example paraphrases O'Brien (2011)



These shifts may include a combination of technological innovations, institutional reforms, behavioral shifts and cultural changes; they often involve the questioning of values, the challenging of assumptions, and the capacity to closely examine fixed beliefs, identities and stereotypes”

This comprehensive view of transformations, that are not only economic and political, but environmental, social, values, and worldview based, are inspiring and resonate with some of the endogenous development philosophical perspectives I have claimed for this work. It is important for community resilience to emphasize people’s own agency to make better and more informed choices, based on their world views and analysis of the current context, and then to execute their own plans.

Bene et al’s (2012) work challenges us to think about resilience within a particular framework. The framework is a matrix with short to long term objectives on one axis and the possible outcomes on another axis. The objectives are known as “3P-T” and include protection (policies and instruments to protect vulnerable people), prevention (policies or safety nets to reduce vulnerability to specific hazards), promotion (policies and interventions to enhance income, capabilities and resilience) and transformation (to address concerns of social justice and exclusion through promoting rights or redressing discrimination). The outcomes are known as “3D” and are on a continuum of resilience from stability (coping, rehabilitating), to flexibility (adapting, incremental adjustment), to change (transformational responses) Bene et al, 2012: TABLE 8.1). The continuum of resilience is particularly provocative because in it he identifies a range of good and bad resilience. This prescriptive and top down model starting at the macro level, raises issues to consider in exploring community resilience further.

2.1.4 Community Resilience in the African Context

The three streams of literature reviewed above emerge from distinct disciplinary perspectives. Those perspectives frame the literature on community resilience. In addition, a



growing body of work about and by African and indigenous peoples, knowledges, sciences and ways of being are re-emerging and finding their way into discourses related to community resilience. This scholarship provides unique perspectives on community resilience from the lived experiences of indigenous people in different parts of the African continent with variations based on gender, generations and personalities. In this section I focus on some of these contributions to the literature as a way of privileging an indigenous African perspective. I acknowledge there is great diversity within the African continent and with indigenous people around the world, and there is a risk of essentializing African and indigenous experience. One can perpetuate colonizing mindsets if one describes African or indigenous experience as a generalized “other” defined by their location as outside the mainstream of western research and its hegemony. However, because of the indigenous approach I bring to this work, and the fact that the focus of this research became an exploration of community resilience within one group, the Dagara community in Ghana, it is important to conceptualize community resilience with the African and indigenous focused academic literature. This focused review helped to identify the relevance of community resilience in a context differently than the disciplinary literature previously cited. This helped begin my own decolonizing approach – to privilege the African and indigenous literature on community resilience over the “other” main stream literature to honor the contextual legitimacy and relevance of the African and indigenous focused scholars.

2.1.4.1 Stories of Survival.

The academic literature that conceptualizes and demonstrates the relevance of community resilience in the African and indigenous context comes from various perspectives. Many researchers are writing about resilience, community resilience, or coping strategies in the context of food security, disaster management and ecosystem change on the African continent. The International Strategy for Disaster Reduction (ISDR, 2006: 2) for example, is advocating for a paradigm shift in Africa from disaster





response to comprehensive www.udsspace.uds.edu.gh disaster reduction. They argue that, “building community resilience requires joint commitment and concerted actions from NGOs working in different areas of development and humanitarian affairs”. Olsson (1993) challenges the belief that environmental change is a disaster in Africa and shows that poverty is the ultimate cause of land degradation. He demonstrates how the interactions of different subsystems, both human and environmental, influence the resilience of communities in dryland socio-economic systems. Adams, Cekan and Sauerborn (1998: 263) do not use the term community resilience, but explain the importance of household coping strategies in rural West Africa. They state there is, “A growing realization that development efforts might be more sustainable and constructive if they were sensitive to the origins, dynamics and differential experience of rural adversity, and supportive of what communities and households do themselves to minimize risk and cope with crisis”.

Adams, Cekan and Sauerborn’s (1998: 265) work, based on independent research in different parts of West Africa, verifies the relevance of community resilience. Their work emphasizes both the inter and the intra-household dynamics that can critically influence the nature and consequences of coping. Successful coping is defined as “overcoming adversity without endangering long term objectives such as livelihood security”. They go on to describe catalysts for coping such as droughts, crop infestation, civil unrest, structural adjustment programs and household issues such as indebtedness or illness that challenge a household or community – much like risk factors in the resilience literature. Adams, Cekan and Sauerborn (1998: 266) advise to “consider the type, severity, timing and duration of catalyst(s) involved”. Their description of the exogenous and endogenous catalysts and strategies for coping with change, such as the power relations between gender and generations in a household, provide much inspiration for exploring the dynamics of community resilience in the African context.

Nel (2006: 103) writes in relation to community resilience from a frame of indigenous knowledge in South Africa: “Local communities, together with their knowledge systems, have always been adaptable, reshaping survival strategies and fostering social and environmental healthiness...the rich history of Africa reveals communities evolving and in flux, with an inherent strength to change and to face new circumstances”.

He acknowledges what we can learn from African communities and their knowledges, rather than what we (as outsiders) might want to teach them. Based on their work in Tanzania, Enfors and Gordon (2007: 682) argue that dryland agro-ecosystems are primarily a social endeavor not an ecological system, and that resilience is eroding, and can be rebuilt, by looking at “human values, market forces and policy decisions”. They see hope for improved community resilience in increasing local and global awareness of the problem, the availability of practical technical solutions, and the willingness for political action through dialogue and renewed local institutions for management.

Freudenberger, Carney and Lebbie (1997) explain the case of *tongo* – an indigenous conservation strategy in the Gambia, Guinea and Sierra Leone. *Tongo* is a resource management strategy that defines and enforces rules to seasonally regulate access to vegetation, fruit and palm trees, sacred forests, wildlife, fishing areas and even drinking water. *Tongo* was also used in resistance to colonial administration by establishing a cartel to increase the price of groundnuts. It is an example of an indigenous practice that supports community resilience.

These examples highlight both the adversity faced by communities and ecosystems on the African continent and the learning that can be gained by looking at how communities address these issues to build and maintain community resilience. Each of these examples locates rural African communities as groups struggling to survive in a harsh environment, yet with endogenous strategies and tools to manage in this situation.



Additional stories of survival contribute new perspectives. Bacho (2005), for example, alludes to a symbolic and mythic understanding of ethnicity and how this understanding combined with socio-economic and political pressures has led to conflicts over resources. His point is that livelihood issues are not environmental issues with technical solutions, but are related to historical and political processes. He argues that mutual distrust and low cooperative spirit can be a bigger blockage to community survival, and resilience, than the agro-ecological environment. His work has an interesting link to the political, psychological and ideological aspects of community resilience in the African and indigenous context. Apusigah (2002), Ntsoane (2005) and Masoga (2005) all provide insights risks, highlighting, colonialism, racism, discrimination, conflicted identity, and patriarchy. Ntosane (2005: 106) describes the challenges of working with African university students, who are detribalized and mentally colonized, and in getting them to appreciate and privilege their indigenesness. He sees this as priority in order to deal with the challenges on the African continent today and articulates the need to begin by, “recovering from the shock of colonialism, undergo a thorough mental decolonization, and (by) employing perspective from the pre-colonial past, rediscover a sense of direction in our present predicament”. Masoga (2005: 29) articulates the challenge of identity during this time of dramatic change in the 21st century and outlines the need for Africans to “reconstruct their lives and the African continent so that we can contribute to the shaping of the global village”. Masoga (2005: 22) is also asking Africans to “utilize accumulated indigenous knowledge to create a quality of life and a livable environment for both human and other forms of life”. He uses the example of *diturpa*, a form of Africanized military band music, which helped people wrestle with their African identity in the face of apartheid challenges and colonial experiences and enabled communities to express resistance and resilience. Apusigah (2002) outlines how reconstruction efforts in Ghana failed to confront systemic forms of discrimination inherent in patriarchal culture and paternalistic development,



and argues for the privileging and supporting of women for change, moving from a deficit, problem-oriented model to a credit or strength-based model. This example demonstrates an African contextualized community resilience. Although not based on work in Africa, Fleming and Ledogar (2008: 7) describe a, “growing interest in resilience as a feature of entire communities and cultural groups”. Their work with aboriginal communities describes resilience as an evolving concept that starts from a recognition of individual factors, adds a list of cultural factors such as spirituality, traditional language, and healing, and emphasizes perceived discrimination and historical trauma as part of the context of many aboriginal communities. They quote Healey’s work (2006) as pointing the direction for conceptualizing community resilience for the future: [Community resilience is the] capacity of a distinct community or cultural system to absorb disturbance and reorganize while undergoing change so as to retain key elements of structure and identity that preserve its distinctness” (Fleming and Ledogar, 2008: 10).

2.1.4.2 A historical and holistic conceptualization of resilience. An indigenous African understanding of community resilience draws on the ecosystem definition of resilience and puts it in a context that is historical, political, ideological, cultural and psychological. It approaches a holistic understanding of community resilience that will be appropriate in the African context. Millar (2004) and Bagah (1995) advocate this holistic understanding as they describe the Dagara cosmovision that combines spirit, material and social worlds. Any conception of community resilience in the African context must not only acknowledge, but privilege this perspective. This stance is not to return to the past and indigenous ways as a kind of romanticism, but to rebuild community, and recreate ways of being, and responding to change, that are indigenous African that can co-exist with the challenges of the 21st century and go beyond the adoption of traditional agricultural or healing practices (Millar, 2004).



Researchers working in other parts of the world with people trying to maintain the best of indigenous and traditional ways argue for a similar perspective (Norberg-Hodge, 2009).

Lothe and Heggen (2003) remind us of the need for community resilience to be inclusive of aspects of individual resilience with their study of childhood experiences of famine in Ethiopia. Their findings reaffirm the importance of faith, hope and spirituality as protective factors in individual resilience that others have demonstrated (Algado et al, 1997; James, 2004; McCubbin & McCubbin, 2005). Lothe and Heggen (2003: 320) also extend the understanding of resilience when they talk about the particular importance of family bonds, personal history and connection to an ethnic group and native village – resilience is intricately linked with community: “Hope, religion, personal history and roots may be more important factors in the total concept of resilience in the Horn of Africa than what has been previously described in the resilience literature”. Jones’ work (2007: 127) with African-American children also highlights formal and informal kinship and spirituality as predictive factors for resilience. He specifically draws on the central African concept of *ntu* “which highlights the interrelatedness between the intrinsic and the extrinsic factors involved in one’s ability to respond to the problems of daily living”. *Ntu* is based on the principles of harmony, interconnectedness, authenticity and balance. Chandler and Lalonde (1998, 2004) who have done extensive work with First Nations communities in Canada speak of cultural continuity and cultural resilience as a resource for fostering healthy youth development and emphasize the need to build cultural resilience as an end in itself for the good of communities. Their work in First Nations communities showed that in communities with land claims, self-determination, control over education and health care, revitalization of indigenous languages and the existence of cultural facilities, rates of teen suicide were much lower (practically zero) than when compared to other First Nations communities. Chandler & Lalonde (1998: 192) conclude that, “communities that have taken



active steps to preserve and rehabilitate their own cultures are shown to be those in which youth suicide rates are dramatically lower”. Their interpretation of this phenomenon aligned with cultural continuity and cultural resilience has much for African communities who suffer from the mental colonization described earlier.

Apusigah (2007: 1) writes about the need for endogenous development, and for African communities to “shape our own pathways in a critical manner” to deal with the challenges of today. She sees development from within drawing on indigenous knowledge essential for African communities to heal from and overcome the reality of being “culturally alienated and detribalized people”. Apusigah (2006) also reconnects us with the gender dimension of an Africanized conceptualization of community resilience. She writes about the matri-force as the maternal value and spirit that keeps body and soul of family and community together in the African context and demonstrates how this value and its components and practices of preserving, sharing, renewing, recreating, and extending nature and culture is needed for sustainable development. Values, for her, are the critical element that has enabled rural African communities, through women, to be resilient for generations. Apusigah (2008) shares specifically the concept of *tullum* which she describes as the living wisdom Gurunsi and Dagara women possess for dealing with challenges. She articulates these challenges as stemming from domination, patriarchy, food insecurity and colonialism, yet describes how her foremothers contested domination and exclusion and used their own agency through thrift, savings and anticipating the future to deal with these challenges. She advocates for revitalizing *tullum* for food security, women’s empowerment, values education and resource conservation. She hypothesized that *tullum* was the indigenous, gendered conception of community resilience appropriate for northern Ghana. (Personal conversations with Apusigah, 2008)



In contrast to the evolving mainstream literature on community resilience the perspective one gains from the privileged African and indigenous literature highlights discussions of cultural identity and power, and has a stronger element of resistance built into the community resilience conceptualization. This conceptualization will need to be considered in moving this study forward.

2.2 A Transdisciplinary Conceptual Framework of Community Resilience

In this section, I synthesize and locate synergies between the three streams of disciplinary literature that inform community resilience, and claim the spaces between and beyond these disciplines, including the indigenous African perspective, to articulate a transdisciplinary concept of community resilience. This framework is then utilized as a starting point for this research study of community resilience with people of Dagara communities in Ghana. From a transdisciplinary perspective, community resilience is concerned with three major dimensions: an environment of risk or disturbance, processes of and capacities for response, and successful outcomes. In the following sections, I discuss each of these dimensions, drawing from the literature identified. Prior to this, however, it is necessary to rearticulate the understanding of community used here. This is necessary because community is a major defining feature of the transdisciplinary perspective on *community* resilience, and often the concept is taken for granted, when it is of fundamental importance.

2.2.1 Sense of Community

In section 1.2.3.1, I presented a definition of community as “any groupings of human beings who enter into a sustained relationship with each other for the purpose of improving themselves and the world within which they live”. A rural community in northern Nigeria fits



this definition, as does a social justice interest community in Halifax, Canada or the Iranian community in Great Britain. These communities are heterogeneous, and recognize there is some purpose or benefit for them to stay in association. Their *sense of community* is the defining characteristic, people *belong* to a community that they feel some affinity towards. There are conflicts and different perspectives within community, but when faced with a threat, a community is able to work through its differences (or put them on hold) and, to varying degrees, work together to respond to the threat (Bopp & Bopp, 2001; Peck, 1987).

Sense of community also means that there is some feeling of ownership for the community and people recognize their place in the community contributes to making the whole greater than the sum of its parts. There is also a belief in the agency of the community, that the community, as a collective entity, can rally together for mutual benefit and take actions to transform their world (Kulig, 2000).

This entity called community is dynamic, constantly changing and vibrating with life, which can either be considered by the community itself to be healthy energy or dysfunctional energy. As Peck (1987: 70) states, “there is no community [per se], only healthy and unhealthy communities”. The expression of this community life is through the culture of the larger society of which the community is a part and is in constant interaction, both consciously and unconsciously, with the context.

Culture and spirituality influence the community and are in turn constructed by the community and the network of other communities and societal forces. Nothing happens that is not mediated through culture (Masten, 2001; Ungar, 2005). Context includes the social, political, administrative, environmental and economic spheres, and the historical and ideological spheres within which the community is embedded (Bopp and Bopp, 2001). Community cannot be separated from its context. It is this complex entity of community that



encounters a threat and responds—ideally with a positive outcome—that is the study of “community resilience.”

Beyond community, culture, society, and context is the intimate relationship a community has with its ecosystem and all the other living beings within that ecosystem (Macy, 2000). For rural peoples, living off the land and sea, this relationship is quite visible. For other communities in urban landscapes, or as communities of interest or identity, the relationship is less direct. The relationship with our local, regional and global ecosystem is real for everyone, however, and must be considered (Berkes, 1999; Chapin, Carpenter, Kofinas, Folke, 2010). In these times of climate change it is especially true that all communities realize their resilience will be caught up in their relationship with their ecosystems, and resilience can only be achieved if those relationships are sustainable. Temporal and geographic scales are important to consider when thinking of the relationship with the ecosystem, including past, present and future and a scale from individuals to the planetary community (Holling, 2001).

Related to sense of community, and the relationship with the ecosystem, are the endowments a community has, or its natural and physical assets. *Endowments* (Sen, 1981) are the natural assets including natural resources, or the environment that the community has access to and some control over for sustaining their livelihoods. For rural communities, this is often considered fertile land for agriculture or forestry, the sea for fishing, or a resource such as iron ore for mining. For an urban community, this aspect may be proximity to a manufacturing plant, or can include issues such as air quality among others. Physical assets are also an important element of community resilience (Colussi, 2000). Particularly for those working in a disaster context, physical capacity is important for resilience. Housing for shelter, roads for transportation, and communications all enable a community to bounce back and respond to stresses in positive ways. Some authors highlight additional physical factors such



as well-lit streets, clean air, and boundaries (Breton, 2001). Information technology resources, are emphasized by some as essential infrastructural elements for resilience (Grigsby, 2001).

Physical assets, infrastructure, also needs to be considered in the context of communities of interest, or communities that are not confined within geographic boundaries. These communities will still possess some form of physical assets that will support the functioning of the community. This might include sites on social media as utilized by many global social movements or, a box of files, a mailing list, and a regular meeting place (Coover et al, 1985).

2.2.2 An Environment of Risk or Disturbance for Communities

Embedded in the definition of community given above is the notion that the community has either suffered a particular acute disturbance, and /or is living in an environment of chronic risk and vulnerability. From the streams of literature reviewed earlier it is possible to identify three categories of risk and disturbance.

2.2.2.1 Major acute disturbance. The first category is that of disturbance, or perturbation, as it is named in the natural resource literature (Berkes & Folke, 1998), or hazard, as it is articulated in the disaster literature (Paton & Johnson, 2001). An example of this is a phenomenon such as a flood or hurricane. Equally as relevant are human-made disturbances such as war, or the closing of a resource industry or a manufacturing plant in a community when it is the predominant employer, or the establishment of laws that institute marginalization in a community (such as the imposition of apartheid in South Africa), or the sudden cut of funding to homeless shelters (Clauss-Ehlers & Levi, 2002; Kulig, 1996; Sonn & Fisher, 1998; Wolff, 2003). The work of the Red Cross is often focused on issues of natural disasters or situations of conflict. Work with the Community Economic Development model of resilience



often looks at a crisis situations where a major employer shuts down in a rural community and how the community responds to that crisis (Colussi, 2000; Stehlik, 2000). Often the word ‘shock’ or ‘disaster’, is used to identify a situation where people envision a community responding in a resilient fashion. Work done by Folke et al. (2002:54) in preparation for the World Conference on Disaster Reduction in 2002 was interesting in reframing the concept of ‘shock’ to “surprises and unpredictability”.

One of the challenges in conceptualizing community resilience is how to identify the scale of different acute disturbances. A forest fire in an upper middle class neighbourhood in California may or may not be as significant a disturbance as having electricity supply shut off for four months at a rural community in Nigeria. It’s important to contextualize this complexity in the study of resilience.

From an ecosystem perspective, a shock can entail a sudden regime shift within an ecosystem, where the combination of species, land and water shift so dramatically that they are no longer recognizable (Holling, 2001). He would argue the original ecosystem in this situation was not resilient, because it was unable to return to a state of balance. There are challenges in using this kind of an approach, however, as it is unclear where boundaries should be delineated between ecosystems. Similarly, from a development studies perspective a sudden policy announcement, concerning migration or refugees for example, can cause real upheaval in communities affected by that policy. These various acute disturbances therefore are one concern in the environment of risk.

2.2.2.2 Chronic oppressive conditions. Poverty; environmental degradation; oppression; alienation; marginalization due to race, ethnicity, or culture; neocolonialism; globalization; cultural genocide; erosion of livelihoods; violence; religious intolerance; and social exclusion due to gender, sexual orientation, or ability are all realities for communities in



both the majority and the minority world (Blackstock & Trocme, 2005; IFRCRC, 2004; Prilleltensky & Prilleltensky, 2005; Seccombe, 2002; Werner and Sanders, 1997). Researchers working with marginalized and excluded groups have focused on “successful adaptation to oppressive systems” as a definition of resilience (Sonn & Fisher, 1998: 458) and others have identified a chronic inhospitable environment for communities as being a major limiting factor to resilient communities (Wolff, 2003).

When oppressions are listed as in the sentence above, it can be overwhelming in community and they enter the tricky ground of ranking or comparing oppressions in order to make strategic choices. Community members need to communicate and engage with one another to maintain healthy community which demands a feeling of solidarity (i.e., my liberation is wrapped up in yours) and an understanding of power and how it is expressed. Issues of equity, justice, race and gender are major dimensions of power influencing individuals within communities and communities within societies. The kind of deep social transformation work that must be done in this area is challenging and often considered outside the scope of one community. Yet arguments are made in the literature that it is precisely within communities where efforts need to be made to initiate these changes (Bopp & Bopp, 2001). For example, Wolff (2003: 104) refers to one successful initiative from the United States and argues:

Healthy communities is not just about projects ... programs or policies. Healthy communities is about power. Unless we change the way power is distributed in this country, so that people in communities have the power to change the conditions of their lives ... we will never have sustainable change.

Humanity in the 21st century must tackle the issue of disenfranchised people and communities and nations of the world (Prilleltensky & Prilleltensky, 2005). A process of conscientization as advocated originally by Friere (1970), may be one approach for doing this. Interrogating the privilege of the powerful and work at the societal, structural, and policy levels



are essential. However, work at these levels does not replace what needs to be done with communities to help them be resilient within their own context. This does not mean an acceptance of the larger issues as the status quo, but is suggested as a strategic direction—to get healthy oneself and gather strength, power, and resources as one strategizes to work on those bigger issues. Sonn and Fisher (1998: 467) describe how these integral processes were critical in the struggle against Apartheid and state, “the interdependence, positive attachments, and togetherness were influenced by what people had in common—Apartheid oppression”.

Of significance here is the pervasive nature of oppression and powerlessness for many communities in the world. Chambers (1983), from a sustainable development stance, captures some of this in describing the deprivation trap. This “trap” of risk shows the intricately linked issues of poverty, isolation, powerlessness, physical weakness, and other factors that compromise community livelihoods. In their report to the World Conference on Disaster, Folke et al. (2002: 34) point out how the process of threats and chronic oppressions is a cumulative one, much like the risk chains described in the child development literature: “the process is a cumulative one, in which sequences of shocks and stresses punctuate the trends, and the inability to replenish coping resources propels a region and its people to increasing criticality”.

Climate change, can be considered a chronic oppressive condition for some communities (Pettengell, 2010), as it is slow, but relentless unfolding increases peoples’ vulnerability and they often feel unable to do anything to change the root cause.

2.2.2.3 Internal disturbances, fractures and loss of diversity. As noted above, communities are heterogeneous. Therefore, as well as dealing as a collective entity and negotiating through acute threats and chronic conditions external to the community, a major consideration for any community is disturbances within its own defined boundaries. Communities are made up of people. Disturbances within communities can thus manifest



themselves as stress or conflict between genders, race, ethnicity, generations, people of different sexual or political orientations, or clashing personalities. Activities to deal with outside threats can divide communities and cause fractures where power accumulates to one group and is taken away from another. Groups within communities can choose to deal with threats in a particular way, such as acculturation versus resistance, and this can damage other community capacities (Tse & Liew, 2004). Communities, when not threatened from outside, can become insular and lethargic and can then lose the ability to respond in the future. They can lose hope and the motivation for change. Communities can subscribe to a sense of lowest-common-denominator and be unsupportive of individual or group efforts within the community to transform (Bopp & Bopp, 2001). They can move towards ‘homogeneity’ and become more vulnerable because of their lack of diversity. These internal dynamics of community are critical to consider in understanding resilience. In the ecology field, biodiversity has been identified as a positive predictor of resilience: the greater the biodiversity, the greater the potential for resilience. These ideas are being applied to community systems as well (Adger, 2000).

2.2.2.4 Combined Risks. Both crisis situations and chronic situations need to be investigated if one truly wants to understand the dynamics of community resilience. There is a danger that dealing with a crisis situation in a certain way might alleviate immediate needs for a community, but if there are underlying chronic issues the same stressors that exacerbated a crisis before will likely reoccur and therefore dealing with the underlying issues is important (Kulig, 2000; Prilleltensky & Prilleltensky, 2005, Ungar, 2005). In disaster management literature, it has been demonstrated that it is the combination of a hazard (or environmental perturbation) *plus* human vulnerability (conditions of livelihood based on control and access to resources) that will lead to a disaster. Neither the disturbance alone nor the chronic conditions alone will lead to disaster. The realization arising from this finding is that a unique



set of chronic and crisis conditions will exist in each, and every community, and that communities are expected to respond. How a community responds will depend on both the severity and the duration of the stressful conditions. How well, how resiliently, the community responds depends on the environment of risks and endowments and will also be dependent on a set of capacities and processes. The purpose of the next section is to lay out the relationship among the processes and capacities known to influence resilience in a community.

2.2.3 Processes of, and Capacities for Response

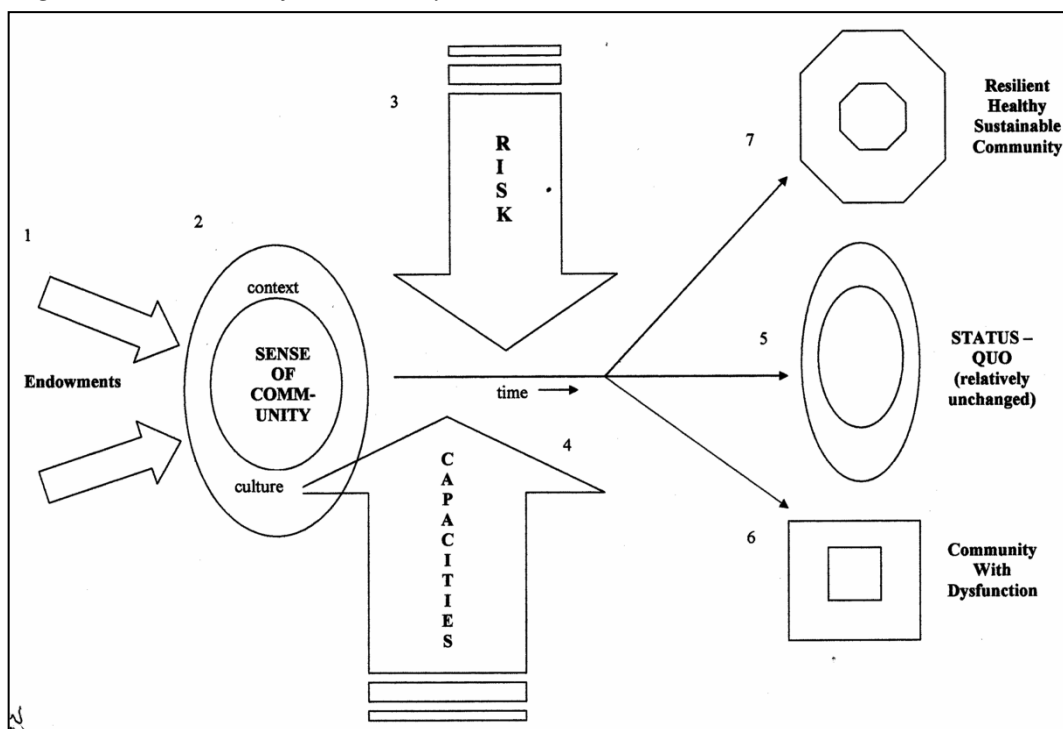
When a community is confronted with a disturbance it can either respond positively or negatively. How the community responds, what resources it draws upon, and the processes it uses to interact with the disturbance and its impacts, are capacities for community resilience.

Processes of Community Resilience. Elaborate models of different processes of resilience exist in all three streams of disciplinary literature, and each have their own strengths and weaknesses, and are linked to their own disciplinary discourse. Additional field research and interaction with communities who have experienced resilience is needed to ground a model of community resilience and make it trustworthy, as well as culturally and contextually relevant. Figure 2.4 is a model of community resilience that is a synthesis adapted from three models from work of Kulig (2000), Sonn & Fisher (1998) and Richardson et al. (1996).

In this model, the process of resilience is seen primarily as the community's interaction with the threat or risk in a way that moves it to a positive outcome (to be discussed in a later section below) wherein the community is more resilient, healthy, and sustainable relative to what it was before. The community's interaction processes draw on capacities within the community.



Figure 2.2 A Model of Community Resilience.



Source: Author, 2017 adapted from Kulig (2000), Richardson et al (1996) and Sonn & Fisher (1998).

Table 2.1 Key to Figure 2.4

1. A community has certain **endowments** (natural and physical capital), and is intimately tied to its ecosystem. The community is not really a community, however, until it identifies itself as such and has a “sense of community”.
2. This **sense of community** is constantly being defined and redefined, or constructed, within the historical, ideological, social and political context and this process is mediated by the culture – which determines certain actions of the community and is in turn determined by the actions of the community.
3. When the community encounters a **risk or disturbance** (i.e. a natural disaster, a systemic oppression or internal conflict), its “life” as it moves through time, will be altered.
4. The community needs to call on certain capacities in order to respond to the risk or disturbance. These **capacities are brought to interact with the risk forces over time** to create a new state of being. The capacities can only act through the culture and context which is also dynamic. These capacities work at multiple levels within the community and between the community and the external system. These interactions may also affect the original natural and physical capacities of the community. The **process of interaction and negotiation will lead to** either 5, 6 or 7.
5. This is a situation where the community remains relatively **unchanged**.
6. This is a situation where the community experiences some long-term **dysfunction** lived through either by certain individuals within the community, between groups within the community and / or between the community and the larger environment. Capacities are also compromised so that in the future the community may be more likely to enter dysfunction again.
7. This is a situation where the **community actually grows**, develops and becomes stronger as a result of its interactions with adversity.

Source: Author, 2017.



This model would fit with Luthar, Cicchetti, and Becker (2000: 543), who state that “resilience refers to a dynamic process encompassing positive adaptation within the context of significant adversity. Their argument is, to define resilience processes and factors as ‘protective-stabilizing’, ‘protective enhancing’, ‘protective but reactive’, ‘vulnerable-stable’ and ‘vulnerable and reactive’, in order to improve the validity and measurable impact of resilience work. These are noteworthy efforts that stem from a variable-based research approach and a quantitative statistical analysis of resilience in young people.

As Masten (2001) has argued, however, other models of resilience come from a different research tradition (longitudinal studies) and do not necessarily work to prioritize, limit, and isolate risk, moderating, and protective factors based on an assumption of particular trajectories of growth. Just as there are multiple pathways for individual growth, there are multiple pathways for community development and change; efforts to understand and describe the qualitative experiences of particular communities will provide insights that would not be gained from larger correlational studies that do not always account for the subtle realities of the dynamic influences of culture and context.

Sonn and Fisher’s (1998) model uses a combined framework for understanding intercultural contact and responses to oppression and provides a different set of insights. Their work with cultural ethnic groups focuses on a process that sees groups coming into contact in a particular social, political, and historical context. These groups interact and respond to these chronic relationships through mediating structures in a variety of ways, and then develop certain outcomes for the community. Sonn and Fisher (1998: 460) label these outcomes as: negative (internalization, loss of culture, deculturation, dysfunction, pathology), recovery (revitalization, reconstruction and reinvention) and positive (resilience, consciousness and well-being). Their model also has much to offer the understanding of community resilience,





www.udsspace.uds.edu.gh

and conscientious effort will be needed to make the processes and outcomes uncomplicated to increase their usefulness in guiding community interventions to boost resilience in the field.

In the environmental study of complex adaptive systems, Folke et al. (2002: 20) contend, “The process includes an acceptance of uncertainty and change, the nurturing of diversity, and the knowledge and learning from dynamic interplay”. Their findings from observing biological communities undergo change is that adaptation takes place through chaos, and one system is likely to be replaced by a dramatic transformation in the entire system before a return to a state of harmony and balance. Not just an individual species adapts, but a totally different bio-ecological system emerges at a much more complex level. Important to this perspective is that the process of resilience, i.e., responding to adversity, can also build capacities that will enable a community to be more resilient in the future (Paton & Johnson, 2001). Sometimes these outcomes can be surprising and fulfill multiple objectives as found in Folke et al. (2002). They also make the argument that this process is ongoing and that adaptive management in social systems must recognize institutional learning, value collective memory, and continually revisit and change as the knowledge of each dynamic system advances. Building capacity to learn and adapt is essential to resilience. Folke et al. (2002: 8) also reason that trying to control the process of change can actually reduce the successful outcomes of a community and actually promote collapse rather than resilience. They emphasize this fact when they state that, “Management that uses rigid control mechanisms to harden the condition of social-ecological systems can erode resilience and promote collapse”.

Kulig’s (2000) influence on the model of community resilience processes presented here is that resilience can also be seen as proactive. This is valuable to consider, but may return the discourse on community resilience to more mainstream community development. Kulig (2000: 374) has described community resilience, as the “ability of a community to respond to



www.udsspace.uds.edu.gh

adversity and in doing so reach a higher level of functioning, such as increased health status”. She has articulated a model of a community resilient process that starts with interactions as a collective unit. These interactions may be the responses to outside influences such as new ideas, an economic downturn, or a natural disaster such as a flood. The community then responds through expressions of a sense of community, which are dependent on a sense of belonging, leadership, community cohesiveness and togetherness and the existence of community networks.

Some descriptions of the community resilience process are simply stated as problem solving approaches, as responding to change (Grigsby, 2001), as *negotiation* or as *rights based approaches and entitlements*. To determine how these processes fit with the emerging understanding of community resilience requires an investigation of how a community, interacting through their culture with their surrounding context and with an environment of risk, negotiate between different players with different sources of power. It would not be a simple step-by-step process. Diverse entitlements will mean relationships within the community and between the community, and the “outside” will have to be worked through continuously. In the world of the 21st century, communities have the right, and need to be able to express the right, to be free from the chronic oppressive forces outlined above. Given the complexity of explicating community processes, however, there is value in focusing on building upon capacities that exist within a community first, and then recognizing the inherent political dimension of negotiation within each of these capabilities. There is also the opportunity for altering the environmental conditions that led to the crisis or stressor in the first place. This form of prevention, however, is challenging (IFRCRC, 2004). Other processes discussed in the literature are processes of coping, mitigation, adaptation, revitalization, transitions or transformations (Davies, 1996; FAO, 2013; Paton and Johnston, 2001; Wilson,



www.udsspace.uds.edu.gh

2012). All of these are important, and can be captured in the model as ways in which a community works through its environment of risk, drawing on its sense of community and endowments, and its multiple capacities, to achieve a particular outcome.

Holling's work (2001) deserves mention here because it introduces the sophisticated concepts of exploitation, accumulation, conservation, creative destruction and renewal as parts of the process of ecological resilience. These concepts are worthy, and will be utilized in the analysis and conclusions of this research.

2.2.3.2 Capacities for Community Resilience. Significant work related to community resilience uses the language of capacity or asset building (Colussi, 2000; Kretzman & McKnight, 1993; Mathie & Cunningham, 2009). I have chosen to use the language of capacities while recognizing it has drawbacks. *Capital*, a term frequently used (i.e., social capital, human capital, etc.) has a stagnant connotation to it and also carries the sense that it exists as a commodity, can be invested, and can be exploited. For some, it might also carry the hidden ideological baggage of capitalism and a neo-liberal, globalization agenda. Other terminology such as *abilities* or *characteristics* make one think of individual traits, which does capture the dynamic of agency, and hopefully makes it easy for people to see how these things can be learned. I have chosen the term *capacities* because I think it can refer to both individual and collective capacities, and as a resource available to be used, and as a process. As well, collective or community capacities, emphasizes the agency of the community.

Social Capacity. The social capacities of a community have significant influence on a community's resilience (Grigsby, 2001; Henderson, Benard, Sharp-Light, 1999; IFRCRC, 2004; Jackson et al., 2003, Putnam, 2000; Walsh, 2002). Social capacity, more commonly known as social capital, is the network of groups, organizations, and relationships within a



www.udsspace.uds.edu.gh

society. It has a vast and growing literature and is being used frequently both in the North and the South (Alwang, Siegel, Jorgensen, 2001; Putnam, 2000).

Extensive work on social capital/capacity looks at both the horizontal relationships in a society, and the vertical associations that can exist. Sources of social capacity include families, communities, firms, civil society, public sector, ethnicity, and gender. Social capacity is also seen as an enabling social and political environment and is valued as collective social networks (who people know) and norms of reciprocity. Social capacity enables information flows, collective action, and solidarity (Putnam, 2000). Often, however, analysis of social capacity is on a society-wide basis and I argue here for looking at it locally within a community context.

A valuable way to understand social capacity in the context of community resilience is to look first inside the community and then outside the community. Inside a community, groups work together to develop their potential and to respond to stresses and shocks. It is the effective collaboration of these groups that strengthen resilience (Folke et al., 2002). The engagement and empowerment of citizens to work together as acquaintances, as functional groups, or as kinship groups all enhance resilience (Breton, 2001, Stehlik, 2000; Wolff, 2003). The emotional connections between these groups are also important. Trust and solidarity develop between groups of people sharing tasks and this links to enhancement in human and psychological capital which is discussed below. These networks and relationships are sometimes referred to as stress moderators (Sonn & Fisher, 1998).

Development organizations that support livelihoods and the economic aspects of community are particularly important and often an appropriate entry point (Colussi, 2000; Stehlik, 2000; Wolff, 2003). Equally important are the networks and relationships within a community that value and honor diversity. Valuing and supporting equitable participation,



www.udsspace.uds.edu.gh

nurturing diversity, learning from its interplay, developing fairness, and eliminating workplace discrimination are all organizational aspects that support resilience (Bopp & Bopp, 2001; Folke et al., 2002; Grigsby, 2001; Paton & Johnson, 2001; Prilleltensky & Prilleltensky, 2005).

A healthy economy is also an essential aspect of social capacity. For example, this means employers from outside a community that employ people locally are networked within the community and respect what is going on. As well, they are both horizontally and vertically integrated to decrease the dependency of the community on the outside and maintain a positive relationship. Diversity of the economy also supports this (Colussi, 2000; Grigsby, 2001). Colussi (2000) also describes the importance of financial capital, positive image of the community in the media, justice, and safety.

In the context of community resilience, social capacity outside the community refers to networks of support and alliances, human services, the policy environment, and the nature of the economic environment. Networks of support and alliances are groups and organizations outside the community that are still morally supporting what may be going on inside the community. These alliances of support from outside the community are significant, and global social movements have benefited from these in recent years as did the world wide anti-apartheid campaigns for South Africa. The role of government human service organizations deserves special attention (Breton, 2001, Stehlik, 2000; Ungar, 2004). Wolff (2003) insists that the services they deliver must be based on issues that emerge in communities. Policies can set conditions that strengthen both social and physical capacities or they can be obstacles that limit a community's ability to respond. This is another significant issue for attention (Breton, 2001; Colussi, 2000).

Human and psychological capacities. There are numerous human and psychological factors that are seen as contributors to resilience. Much of the literature on individual resilience

in the disciplines of psychology focus extensively on these factors, and most authors agree that it is always a composite of a number of different factors that contribute to resilience (Luthar, Cicchetti, Becker, 2000). In the context of community resilience, it is not simply the sum of individual capacities that give the human and psychological capacity of the community. If ten individuals in a community have a certain capacity, for example, by working together and cooperating through community networks and relationships, they may inspire others to bring forth similar or complimentary capacities and will be able to achieve much more than the original ten individuals could achieve on their own. From work in Trinidad, Desoran (2000) discovered cultivating psychological capacity and a new consciousness among both dominant and non-dominant groups helped to build a critical mass that radiated hope and inspired transformative change.

One of these capabilities is the issue of resistance, or challenging authority, which is reflected in the individual literature (Ungar, 2004). The argument is made that for many communities, a mobilizing and strengthening factor to their ability to respond is a sense of resistance and a desire to fight oppressive or dominating forces (Brown, 2000; Kulig, 2000; Sonn & Fisher, 1998; Stehlik, 2000). Efforts at problem solving and conflict resolution are also seen as significant elements of human and psychological capital. Collective problem solving is a skill set necessary for community resilience (Paton & Johnson, 2001) and an essential one in traditional community development approaches to change.

Human capacities in conflict management and resolution are essential for community resilience. Communities are not homogeneous and during times of stress (whether acute or chronic) communities must be able to draw on processes for resolving disagreements and more serious conflicts (Folke et al., 2002; Kulig, 2000; Wolff, 2003). As Peck (1987) states, a community cannot be resilient or healthy unless it can resolve conflicts.



Discipline and commitment to community change are also important, as are autonomy, independence, and creativity in a community pursuing wellness in response to surprising and unpredictable challenges. Discipline is needed to ensure collective actions are rigorously followed and ensure effectiveness. Independence is essential as it can foster leadership and develop role models of change. Autonomy, or self-determination is the factor that shows the greatest enhancer of resilience in some groups (Blackstock, 2005) and inspires the most vital communities (Grigsby, 2001). Creativity demands equal attention.

Focusing on these elements of human capacity in no way detracts from the importance given across all the literature to competence and leadership. The notion of competence is inclusive of both general and specialized knowledge and skills that need to be available for a community to bounce back from a particular shock or stressors. The availability or access to this knowledge and skill is important and communities appear to be more resilient where these skills are shared freely and openly, but also in a way that supports the livelihoods of community members.

“We should build knowledge, incentives, and learning capabilities into institutions and organizations for managing the capacity of local, regional and global ecosystems to sustain human well-being in the face of complexity and change.” (Folke et al., 2002: 16)

From a psychological standpoint, issues of self-confidence, efficacy, courage, and humor are often raised as contributors to individual resilience. This is also true at a community level.

Spiritual capacity. There is something beyond human and psychological capacity that deserves attention in any conceptual model of community resilience. In some cases this capacity is referred to as community spirit, the critical mass of factors that invigorates a community (Richardson, 1996). In other cases, traditional knowledge, beliefs, and practices



are respected for the unique insights and energy they can provide to communities (Folke et al., 2002), and in others, reference is made to mutual values and beliefs as being at the heart of community (Wolff, 2003). Spiritual capital is a dimension of community resilience that is getting more attention and recognition (Brahma Kumaris World Spiritual University, 2002; Desoran, 2000; do Rozario, 1997; Masten, 2001, Sonn & Fisher, 1998; Townsend, 1997; Wolff, 2003). In much work from an African and indigenous perspective, the spiritual sphere holds a prominent place in peoples' world views (Mbiti, 1969; Millar, 2012).

Specific community resilience studies (Algado et al., 1997; Thibeault, 2002; Tisdell & Tolliver, 2003) have shown that spirituality (a process of self-reflection, belief in metaphysical energy or a higher power), had a significant positive affect on the response of communities to threatening circumstances. In much of these authors' work with First Nations groups and environmental organizations, a connection to the "power" of nature is anecdotally reported as being a major contributor to resilience. Some authors disagree with this "divine" view of nature (Ungar, 2003), suggesting instead a connection with place and successfully negotiating challenges in local geography is important. Given the multiple references to spiritual capacity it deserves further attention in any field exploration of community resilience.

2.2.4 Outcomes of Community Processes of Response

In this conceptual framework, the environment of risk and disturbance has been discussed, as has the processes and capacities for response. Resilience is not expressed, however, unless there is a positive outcome. How is this determined? Can we even identify communities that have become stronger, healthier, more sustainable, and more resilient or communities that have fractured and become weaker, dysfunctional and more vulnerable? Is there benefit in labelling communities in this way? Does success, or a positive outcome, at one point of time predict future outcomes? These are all complex and contested issues. Seeing



community resilience only as a process, however, can be problematic and indicators or criteria for discerning what constitutes a positive resilient outcome of a response or adaptation process is important to this study.

From a systems viewpoint, and the extensive work on socio-ecological resilience, outcomes are never conclusive, but only a moment in time and space along a continuous cycle of change (Holling, 2001; Holling and Gunderson, 2000). Authors of child development literature, however, discuss outcomes and measurement in terms of the “normal trajectory” of growth. Given some of the arguments I made earlier in this paper, such a perspective does not translate well to community resilience. Kulig (2000) speaks of the higher functioning of community, yet this does not provide sufficient knowledge to understand resilience as an outcome. There are extensive discussions in the community health literature on what it means to be a “healthy” community. For example, balanced, stable, resolving a particular problem, are all ways to articulate well-being of a community.

Sonn and Fisher (1998) encourage the achievement of positive outcomes (e.g., resilience and wellbeing) by contrasting them with negative outcomes (e.g., internalization, dysfunction), and recovery outcomes (e.g., revitalization, reconstruction). Richardson et al. (1996) describe a resilient outcome as one that makes the community stronger than when before the disruption occurred. Bopp and Bopp (2001) propose 16 principles for recreating the world. Their principles include justice and interconnectedness and emphasize participation, spirit, and healing. In a powerful way they articulate what it means for a community to demonstrate resilience in the face of crisis and oppression. For them, a positive outcome, is to move towards the achievement of these stated principles.

Literature on quality of life, cultural revitalization, and resistance also provide guidance on what successful community outcomes might look like. Some of these empowering



orientations are in direct contrast to others who believe a successful community fits into the system as it exists. This issue of structural change can generate much debate because it forces people to think about power. Bene (2012), Crane (2010), Pelling (2011) and Wilson (2012), challenge us to consider this issue of structural and systemic transformations, not just resilience. In contrast, one element that is important and raises little controversy is that capacity-building takes place. Community members gaining more skills and knowledge can certainly add to community resilience. Which particular knowledge and skill provides this additionality to resilience, however, should probably be left to communities themselves.

Finally, we must consider sustainability. Some authors insist that more sustainable communities must go hand in hand with resilient communities. However, it is also important to realize that there is a temporal nature to community resilience. The ability to respond cannot just be confined to short term recovery, but must have a longer-term view (Kulig, 2000). From a sustainable development perspective it is essential to recognize that:

Resilience focuses on variables that underlie the capacity of social-ecological systems to provide ecosystem services, whereas other indicators tend to concentrate on the current state of the system or service. Management that monitors, clarifies and redirects underlying, fundamental variables may succeed in building resilience, and thereby adaptive capacity. (Folke et al., 2002: 44)

One must also recognize that the resilience which can change a community might be identified as resilience at one specific time in one particular set of circumstances, then as times change, so do the circumstances; therefore, the set of capacities to respond will also be different. Resilience is shaped by the times.

These perplexing issues related to the outcomes of community resilience processes will inform the exploration, research, and analysis undertaken with Dagara communities. For the purposes of the research, outcomes are proposed as one of the following three scenarios:



www.udsspace.uds.edu.gh

- Resilient Community: Positive, community responds in a way that improves the well-being of the community; or Recovery, community revitalizes itself so people can regain a good quality of life.
- Status Quo: Community Unchanged: Protection, the community protects itself and its inhabitants as much as possible from suffering harm; or Vulnerable, the community attempts to respond in a way so the community and its inhabitants do not become more vulnerable.
- Dysfunctional Community: The community and its members fall into dysfunction, pathology, and experience a loss of culture and community.

2.2.5 Insights and Limitations.

In preparation for the research field work, this review of the literature expose several limitations in constructing a conceptual framework for community resilience. First, there is a Eurocentric orientation to much of the resilience literature. Not only is the literature produced, consumed, and based on research conducted primarily in countries of the minority world, but there is an unexpressed ontological framework that has gone uncontested. There is a great bias, especially in the psychologically-rooted literature, towards individual measures of wellness or pathology as opposed to the holistic or collective beliefs about wellness, which are much more common in other parts of the world. There is also a judgmental nature to much of the work, as opposed to a compassionate tone, that also raises particular biases. Individuals, systemic structures, or organizational systems are often blamed for the risks or disturbances, with little energy for compassion or mercy shown for those who suffer as a result. As well there is a lack of acceptance for the diversity of conditions experienced by different peoples in the world leading to devaluation of the role of values in certain world views.



Cultural relativism can be as problematic as a particular ethnocentric view. Discerning the truth of particular pathways to resilience for communities will ultimately lead to moralistic and value-laden territory. Accepting multiple truths is important, if we want to do justice to our existence as human beings. We cannot avoid discussions of values and universal values, and should explore relevant concepts such as meta patterns, implicate order, or spiritual truths. This discussion is relevant because the discourse on community resilience has “truth” intimately bound up with culture and context, which has to take a prominent place in the dialogue.

As described earlier some of the strong roots of the conceptualization of resilience are in child development. Ingrained in child development is a belief in a stage-by-stage pattern of ‘normal’ growth. In international development studies, there have been models depicting stages of economic growth as well (Rostow, 1960). These have been rejected in international development discourse. Vestiges of modernization and neo-colonialism remain, and globalization can be interpreted as a model that assumes a predetermined, appropriate path to development. Within development studies, authors overwhelmingly speak of self-defined development and unpredictable transformative change. It is ironic that resilience is entering discussions in international development discourse as a new strategy for change when there is little acknowledgement of the roots of the concept and some of its potentially negative baggage.

There is a growing recognition of the importance of societal forces, structural deficiencies, policy-related barriers, and obstacles to community well-being. It is important that these deficiencies are not just acknowledged, but that changing the structures becomes one of the priorities of our society. As Prilleltensky and Prilleltensky (2005) articulate and Secombe (2002) demands, “changing the odds—not just beating the odds” is necessary. However, there is a danger in this approach in that it can cause communities to focus solely on the negative oppressive forces rather than nurturing the positive energy for change.



Resistance to disturbances from outside can be one positive form of change that can arise from a structural analysis, but it is culturally dependent and not appropriate to all world views. Also, a focus on the bigger issues of social justice carries the risk of disempowering communities if their new insights from doing a structural analysis become overwhelming and stifle their motivation for action and change. My personal experience has revealed the reality of both of these dangers in doing such analysis in communities. The power and uniqueness of the *community* resilience concept could be lost and the energy of the strength-based orientation could be dissipated if too much focus is put on transforming these pervasive societal structures. Yet, this transformation needs to occur. Communities also need to build their strategic resources to encourage this transformation by expressing their own resilience in the short term and confronting immediate problems directly. They can also build community resources and capacities that enhance social, just communities that can grow and become sustainable and thus, eventually replace the existing social order.

2.2.6 Summary: Proposing a Transdisciplinary Definition and Conceptual Framework.

In Figure 2.4, the dimensions of the community resilience framework drawn from the three streams of disciplinary literature and the indigenous African perspective are integrated into a model of community resilience. A detailed synopsis of the elements of this framework is provided in Appendix A. Additionally from the literature the following propositions for community resilience are offered as a starting point for further dialogue about community resilience.

- Community Resilience is the ability of a community to respond to an acute crisis and / or chronic stress in its environment in a positive way through processes that will



enhance its ability to respond positively in the future by (i) altering the environmental conditions that led to the crisis / stress, (ii) negotiating for change and support with / from the environment, and by (iii) building its own assets, capacities, and competencies.

- Communities are intimately tied to their ecological environments and need to respond to crises and stressors in ways that are sustainable.
- The environment the community interacts with is not only an ecological environment, but also a historical, political, economic, and ideological environment. This context can provide assets and capital for the community or it can provide risks and danger. All interaction between the community and the environment is mediated by a set of ever-changing values and practices which is the culture of the community.
- A community is a gathering of people that are bound together in some way, who relate to their environment as a collective entity (at least some of the time), and move through time and respond to changes in either a positive or a negative way. Their responses have social, economic, physical, human, psychological, and spiritual components.
- A community that faces an acute crisis and / or chronic stress and responds in a way that is constructive and enhances its ability to respond positively in the future is considered resilient. As such, community resilience is also the outcome of a process of responding to negative environmental influences in a positive way.



METHODOLOGY

3.0 Introduction

In this chapter, I present the ontological and epistemological perspective of indigenous knowledges, and the methodological approach that guided this study, a qualitative case study. I briefly profile the study community and then introduce the five phases of the research design and the specific methods that were used. I also include a section on ethical vigilance, a critical element for research that uses a decolonizing indigenous knowledge paradigm.

As a postmodernist, and one who subscribes to a constructionist axiology, ontology and epistemology, it is imperative that I forefront the philosophical beliefs that guided this study before articulating the methodology. These aspects of underpinning values, the nature of being, and the theory of knowledge transcend methodology as they frame the very nature of this work.

3.1 Ontological, Epistemological and Ethical Perspective

A philosophical understanding of reality (ontology), and a perspective on how knowledge is learned and acquired (epistemology), are important dimensions in academic scholarship. Ontologies, and epistemologies are complex and diverse; each hold their own body of literature, seminal works, key proponents and critics, and frame knowledge in a specific way.

Social scientists often choose to work within the parameters of a specific frame to investigate phenomena in the world. There are advantages and limitations in using such a bounded approach. All philosophical frames carry with them hidden assumptions, biased understandings, and historical ‘baggage’ of how they have been used in the past. Increasingly,



a multidisciplinary or interdisciplinary approach is considered an option to provide an in-depth and robust understanding of social phenomena (Creswell, 2007).

Academic knowledge philosophies are usually framed in two broad ontological camps, that of positivist research and interpretivist/constructivist research. Positivist, reductionist, quantitative research that delineates the object of inquiry and finds a ‘correct’ answer is privileged in academia and has the greatest number of adherents. In the development context, positivist research is promoted as research that gives ‘true’ answers, that then can be applied to policy and program initiatives. Interpretivist research, which accepts multiple truths and is often qualitative in nature, is accepted as providing deep meaning and understanding, but is often accused of cultural relativism and of not providing the quantitative evidence to guide change. In searching for a frame more aligned to the intentions of this research I found inspiration in a new emerging philosophy of research that critiques both the positivist and interpretivist forms of academic research from an indigenous perspective and advocates for a new, ethically based, creative form of inquiry and knowledge making. As I challenged myself to work within the concept of endogenous development, it made sense to investigate, and ultimately claim, this indigenous research philosophy as a frame that would guide this inquiry into community resilience with Dagara people.



Indigenous knowledges and research philosophy has been greatly influenced by the seminal work, *Decolonizing Methodologies*, written by Linda Tuhiwai Smith in 2001. Smith, an indigenous Maori educator and scholar from Aotearoa in New Zealand, argues that, “research is inextricably linked to European imperialism and colonialism” (p. 1). Indigenous Mi’kmaq scholar Marie Battiste (2000) made similar arguments when she wrote of cognitive imperialism, and many others articulate a critique of the western, scientific, positivist bias of academic scholarship (Castellano, 2004; Dei, 2000; Little Bear, 2000). The discussion that

follows will introduce this relatively new indigenous research paradigm that guided the unfolding of this study.

3.1.1 An Evolving Decolonizing Indigenous Knowledges Perspective.

To engage in this research, I claim an indigenous paradigm incorporating both critical and interpretivist theories. Since about 2000, this indigenous paradigm of research has emerged and been claimed as an equally valid approach to social sciences research as the conventional paradigms (Battiste, 2000; Castellano, 2004; Denzin, Lincoln & Smith, 2008; Millar, 2005; Smith, 2000; Wilson, 2008). This evolving paradigm does not have rigid rules nor does it have a narrow, prescribed approach; it is a complex, multifaceted approach to inquiry that draws on the specific accumulated wisdom of indigenous people in their specific place at particular times. It is developing in reaction to, as an alternative to and as complementary to other research paradigms. It is a relevant paradigm or for exploring community resilience with Dagara communities in Ghana.

Two eminent scholars of qualitative research, Denzin and Lincoln (2008), who identify themselves as constructionists, introduce the discourse on indigenous methodologies as a dialogue between critical methodologies and indigenous inquiry. They resist definitions and yet radically challenge conventional theoretical paradigms by outlining the complex nature of what indigenous inquiry could be:

Such inquiry should meet multiple criteria. It must be ethical, performative, healing, transformative, decolonizing and participatory. It must be committed to dialogue, community, self-determination and cultural autonomy. It must meet peoples' perceived needs. It must resist efforts to confine inquiry to a single paradigm or interpretive strategy. It must be unruly, disruptive, critical, and dedicated to the goals of justice and equity. (Denzin & Lincoln, 2008: 2)





www.udsspace.uds.edu.gh

Denzin and Lincoln (2008) negotiate the tensions of proposing such an understanding of inquiry by first exposing the historical damage done by both qualitative and quantitative, by interpretive and positivist research, that alienated and marginalized indigenous people and their knowledge and served the purposes of colonizing power.

Numerous indigenous scholars have articulated this understanding (Loppie, 2005; Millar, 2005; Smith, 2001; Wilson, 2008) and have envisioned an approach of the heart that privileges indigenous knowledges, voices, and experiences. Within accepted academic discourse, however, Denzin and Lincoln (2008) struggle to locate indigenous inquiry, oscillating somewhere between the explicit political purposes of critical qualitative research and more interpretivist research that uses devices such as life stories, narrative, field notes, photos, and other devices as dialectical representations or performances.

Critical theoreticians recognize the different perspectives and frames from which one sees the world, yet name a universal understanding of power in the world (Denzin & Lincoln, 1994; Lather, 1986; Smith, 1987). They are prescriptive about the purpose of research to expose the power differentials and provide knowledge to contribute to changing them (Creswell, 2007). In comparison, interpretive theorists (Denzin & Lincoln, 1994; Gubrium & Holstein, 2003; Reason & Bradbury, 2001) focus on recognizing the multiple perspectives and frames from which one sees the world and advocate that naming and providing opportunities to voice and express these perspectives is valuable in itself, and engaging in dialogue in the shared spaces between these perspectives is the performance of knowledge creation (Creswell, 2007).

Critics contend that this interpretivist position is ahistorical and apolitical, running the risk of becoming pure relativism where there is “no truth” or overall societal meaning to the world (see Creswell, 2007; Denzin & Lincoln, 1994). On the other hand, interpretivists see a danger in the critical theorists’ position on power and justice that they argue strays to an almost



www.udsspace.uds.edu.gh

positivist / post positivist position of believing there is a reality out there in the world. They name that reality as one of power over, exploitation, and subordination and that reality orients knowledge generation work in the world (Fine, 1994; Smith, 1987). This theoretical debate challenges one to respect, honor and accept others' knowledge claims at face value (interpretive) and yet still critically engage with interrogating and attempting to understand the play of power within human and social interactions. Where does indigenous inquiry fit?

According to Denzin and Lincoln (2008: 5), "we locate indigenous methodology in an intersection of discourses". They are averse to indigenous methodologies simply becoming some kind of quaint folk theory, however, and veer much more closely towards a critical stance. They (Denzin & Lincoln, 2008: 3) argue that:

These [indigenous] epistemologies are forms of critical pedagogy; that is, they embody a critical politics of representation that is embedded in the rituals of indigenous communities. Always already political, they are relentlessly critical of transnational capitalism and its destructive presence in the indigenous world.

Smith (2000: 229) reminds us, however, that:

Critical theory must be localized, grounded in the specific meanings, traditions customs and community relations that operate in each indigenous setting. Localized critical theory can work if the goals of critique, resistance, struggle and emancipation are not treated as if they have "universal characteristics that are independent of history, context and agency".

I appreciate this solidarity with a local critical stance, from an indigenous frame, because it is quite different than a non-localized critical stance. Framing inquiry from a non-localized critical stance or exclusively power-over perspective can still locate indigenous peoples in a historical cage of oppression from which one will not be able to fly out, even if the door is opened. Owning a perspective that knows and envisions flight and has no recognition of the

walls or doors of any cage enables forms of knowledge and being to be expressed from their own location. This perspective is captured in the work by Graham Smith (2000), Linda Tuwihla Smith (2001) and other Maori scholars who articulate Kaupapa Maori research, one form of indigenous research:

Kaupapa Maori research is a local theoretical position that is the modality through which the emancipatory goal of critical theory, in a specific historical, political and social context, is practiced. However, critical theory is fitted to a Maori worldview, which asserts that Maori are connected to the universe and their place in it through the principle of Whakapapa. This principle tells the Maori that they are the seeds or direct descendants of the heavens. Whakapapa turns the universe into a moral space where all things great and small are interconnected, including science and research. (Denzin & Lincoln, 2008: 9)

Maori research is not a traditional, ‘frozen in time’ way of doing research; like culture, it is a dynamic, performative process that has appeared at this time. Other indigenous research paradigms may therefore link themselves to different understandings of power realities in society. Tensions in how indigenous methodologies and indigenous knowledges can be understood are a reminder of the wisdom of two-eyed seeing (Marshall, 2007); recognize the paradox and potential dissonance generated by viewing things from multiple perspectives, and, also celebrate the complementarity and deeper nuanced meaning that is revealed.

Compared to other theoretical paradigms, indigenous approaches are being claimed and valued as a reaction to the colonizing influence and cultural and cognitive imperialism of academic discourse. Transcending the internal debates and discussions about knowledge and truth, indigenous approaches critique all academic discourses as being Eurocentric and arising out of a colonial mentality (Battiste, 2000; Castellano, 2004; Dei, 2000; Little Bear, 2000; Smith, 2001).



Contributors to the indigenous perspective endeavor to carve out a unique, holistic, participatory, multi-voiced understanding of the world to challenge and potentially replace more conventional perspectives (Apusigah, 2008; Henderson, 2000; Wilson, 2008). This indigenous frame draws on academic scholarship of the past, and is creative in the sense of articulating a paradigm that draws from the accumulated wisdom of indigenous people. This perspective does not try to essentialize indigenous approaches to a fixed, definable view, but rather tries to claim the territory of an indigenous paradigm while respecting its diversity.

Defining the parameters of an indigenous frame or world view is therefore problematic because there is not a single set of beliefs, understandings, or knowledge that informs this frame. By its nature it is multifaceted, specific, unique to time and place, holistic, open to paradox and contradiction, dynamic, and changing. There are multiple indigenous knowledges and sciences that can be valued for their uniqueness.

While acknowledging the risk of contradicting this diversity and complexity, there are some propositions that can be put forward that set parameters around the space within social science that indigenous scholarship occupies. It remains the right of indigenous peoples within their contexts to decide whether these propositions hold true for them at a specific time or whether they do not resonate with their own knowledges, or whether something has been revealed through these studies that requires an expansion or change to the parameters inside which research is undertaken. Table 3.1 proposes characteristics of an indigenous research paradigm. It is these characteristics that guided the ontological and epistemological orientation of this study.



Table 3.1 Proposed Characteristics of an Indigenous Research Paradigm

Characteristic	Brief Explanation	Major Proponents
i. Decolonizing	-interrogates historical relations between indigenous and non-indigenous -transforms relationships by appreciating indigenous ways as inherently valuable and not “other”	Battiste, 2000 Henderson, 2000 Little Bear, 2000 Smith, 2001
ii. Respects Diversity	-diversity respected and celebrated within community and beyond -learn from biodiversity	Battiste, 2000 Marshall, 2007 Smith, 2000
iii. Renaissance of Knowing	-honour different epistemologies -reclaim what has been lost including spiritual, intuition and metaphysical knowing	Dei, 2000 Millar, 2004 Wilson, 2008
iv. Explicit Value Base	-Axiology is central to paradigm -Values such as communality, reciprocity, and interdependence with nature are important	Caastellano, 2004 Loppie, 2005 Millar, 2006
v. Pragmatic	-research must be useful for indigenous people being “researched”; -supportive of improvements in culture and socio-economic conditions	Mi’kmaq College Inst, 2006 Smith, 2001
vi. Relational	-relationships central to the process of research; before, during and after -must be mutually respectful, honor diversity; including with nature -solidarity and maintenance of relationships important	Battiste, 2000 Bishop, 2005 Wilson, 2008

Source: Author, 2017



3.1.2 My Location and Gaze

I am claiming an indigenous knowledges paradigm and an ontological and epistemological stance that straddles interpretivist, constructionist and critical approaches and therefore it is important to locate myself in relation to this research. It is important because I believe all knowledge is socially constructed, it is not a body of knowledge “out there” to be discovered, but only exists through the conscious and unconscious negotiations between societal constructions, individual’s perceptions and the fluid, complicated spaces within which that negotiation takes place.

This sociological concept of location recognizes that the systems, structures and ruling relations of society shape the way that people see and experience the world. One’s location is temporal, situated in the context and always limited in some way. This concept is hinged on the constructivism, that each of us sees and thereby constructs the world we experience. One’s location is value laden. Each location develops from “socially constituted, historically, embedded and valuationally-based” life experiences (Lather, 1986: 259). My embodied location as a “white-looking”, multi-racial, male, middle class, able-bodied North American speaks of privilege. My experiences in this embodied location have made it possible for me to assume and seize opportunities in this society as “normal” without questioning, or having others question, my entitlement. This includes my experiences as a male growing up in a patriarchal society; as well as my experiences as a Canadian living on land historically taken from the indigenous people of this continent. There are the experiences as a Canadian working in other places in the world wherein others give me status and power, and white privilege, due to their perceptions of me and my birthplace. These experiences have shaped the way I experience the world.



Each person has multiple locations (Manias and Street, 2000). Although I am the child of a first generation immigrant of mixed racial background, I was not always aware of this and did not own this identity while growing up. My mother is from Guyana, South America and is of mixed ancestry that includes various European, Amerindian and African connections. Others' perceptions of me may be predominantly of my "whiteness", yet my mixed ancestry has influenced who I am. In my work in Africa and North America over the past thirty years I have experienced a resonance with African and indigenous cultures and have begun to claim this as part of my identity. This 'claiming' complicates my location and the gaze I take on the world.

In creating an understanding of the world, the viewpoints of marginalized people are essential if one wants to more deeply appreciate the context and location of people within the bounds that limit them. I choose purposefully to try and see the world through such a gaze. In this research, I recognize that the location and standpoints of the people in communities in Ghana were different from each other, and from mine. Uncovering their standpoints was an important ongoing element of the research process. The whole inquiry was designed to help me see the world through their eyes. I recognize that my location influenced my ability to adopt another's gaze, and influenced the relationships between myself and those in the research group, no matter what my best intentions were (Lather, 1994). Therefore, I began this research journey by trying to understand an indigenous paradigm for inquiry, and by adopting an endogenous development approach. In addition, by recognizing that as people with different backgrounds we each have multiple locations, as the researchers that conducted this inquiry, we explored how our locations influenced us, by being reflexive, by engaging in dialogue, and by discovering the "space between" our various standpoints (Smith, 1987). Therefore, my gaze in this work was to be appreciative and respectful of the indigenous way of being, without



romanticizing, and I privileged the standpoints of the Dagara people with whom I interacted. This location and gaze influenced the co-construction of knowledge and the interpretation and illumination of an understanding of community resilience throughout this study.

3.2 The Methodological Approach: A Qualitative Case Study

The ontological and epistemological stance I have taken to explore community resilience points towards a broad qualitative research orientation as being most appropriate. A quantitative approach utilizing surveys or experimental methodologies would not have provided rich description of the phenomena of resilience, and probing for quantitative information may have alienated participants (Charmaz, 2002; Denzin & Lincoln, 2005; DePoy & Gitlin, 1994). There are many different qualitative methodological approaches that could have been chosen for this research project, each necessitating different methods, tools and techniques of data collection, analysis and reporting. Creswell (2007) for example, categorizes five major qualitative research methodologies: narrative, phenomenology, case study, grounded theory and ethnography. Each of these methodologies have their strengths and weaknesses (Denzin & Lincoln, 2005). All of these methodologies are limited and problematic, however, when viewed from the frame of a decolonizing indigenous research paradigm (Battiste, 2000; Dei, 2000; Smith, 2001; Wilson, 2008). Much of the ‘rich tradition’ of many of these qualitative methodologies come with philosophical stances and practices that can be considered colonizing. These methodologies, and the knowledge and experience they represent, cannot be put aside to await new decolonizing methodologies. Some negotiation and reconstruction of the knowledge within these methodologies is necessary to go forward that builds on the strengths of those approaches and stays true to the emerging indigenous paradigm.



The methodological approach utilized for this study was a qualitative case study approach. Using this approach provided the opportunity to build on the scholarship around case studies while also negotiating some of the tensions that the indigenous paradigm exposes in this approach.

A case study is described by Yin (1989: 4) as a way in which researchers can “retain the holistic and meaningful characteristics of real-life events”. A case study is a respected research design that yields a detailed in-depth description of a phenomenon. Case study method is considered appropriate when a researcher is “interested in examining a phenomenon in its current context, interested in contributing to theory and wanting to explore in-depth a case that is atypical or different” (Depoy & Gitlin, 1994: 154). Stake (1994) recommends the first methodological step of case selection and the opportunity to learn something are of primary importance. A case is best explored *in situ*—within its own world where its own issues and interpretations are in context. As Stake (1994: 239) describes:

With its own unique history, the case is a complex entity operating within a number of contexts including the physical, economic, ethical and aesthetic... holistic case studies call for the examination of these complexities ... that social phenomena, human dilemmas, and the nature of cases are situational and influenced by happenings of many kinds.



Depoy and Gitlin (1994: 150) explain that the purpose of the case study is “to combine different methods to reveal an additional piece of the puzzle or to uncover varied dimensions of one phenomenon. Referred to as the “completeness function” different methods are purposely chosen because each assesses a different aspect of the dimension of the problem under study”.

Exploring the phenomena of community resilience with Dagara people can provide an in-depth description of community resilience within the context of the Dagara people. This

case study can contribute to the transcending of existing theories on community resilience, in that it honours and values the diverse world views of the Dagara people, a unique ethno-linguistic group in the world that has valuable wisdom to share about community resilience. The research study design combined different methods, literature review, research assistants, in-depth interviews, focus groups, participant observation, collective analysis, community meetings, and take from constructivist, critical and transdisciplinary perspectives to reach a deep understanding of the complexities of community resilience.

This multifaceted, yet bounded, case study methodology provided an understanding of community resilience with Dagara people that no single approach could provide (Flyvbjerg, 2004). Case study often straddles the space between quantitative and qualitative methodologies and its researchers are sometimes viewed as following a pragmatic theoretical paradigm. The intention was not to be simply pragmatic, however, but that the case study would draw on the indigenous research paradigm and meet all of the characteristics outlined in table 2.1. In order to complete a research initiative that demonstrates those characteristics of a case study emphasizing in-depth qualitative approaches is appropriate. A case study of a phenomenon can be bounded in many ways: by the actors involved, spatially, temporally, sectorally, and/or epistemologically (Stake, 2003; Yin, 1989). This case study is a contemporary, transdisciplinary exploration of community resilience with Dagara people in Lawra District based on an indigenous paradigm.

It is important to note that the localized context comes first in a case study approach and that in this case study the research is grounded in the indigenous Dagara realities of time and place. A case study method ensures that the context receives extensive attention and that findings and interpretations are made within that context, and are not theorized to an abstract level separated from the context. Within the bounds of this particular case study, there were



still certain methodological issues that needed to be negotiated to ensure the study was informed by the indigenous paradigm. These issues are concerned with dialogue, representation, reflexivity, triangulation and usefulness.

Dialogue. Conventional positivist and post-positivist research argues for distance and objectivity between the researcher and the researched (Creswell, 2003), whereas using dialogue to develop a case study as suggested in this research required a very different relationship between the two. From a constructivist viewpoint it is important to explore issues like; how does one not impose one's ideas on another in dialogue? how does one avoid bias at the stage of analysis?, in conversation as the research takes place (Gubrium & Holstein, 2003; Minkler, 2003; Reason & Bradbury, 2001). Indigenous scholars (Loppie, 2005; Millar, 2005) recommend that one needs to enter into dialogue with empathy and love and through respectful, active, deep listening and sharing, challenge oneself to understand the indigenous perspective. Smith (2001: 8) is clear that any research on ... [i.e. community resilience] ... should be emic and community based and that the process "is more important than the outcome ... and processes are expected to be respectful, to enable people to heal and educate". One should not just silently accept another's views (as that can lead to misinterpretation), but one needs to dialogue with others and explore differences.



Representation. The issue of *representation*, also receives significant attention in the research literature (Denzin & Lincoln, 1994). Researchers need to explicitly ask whose story is this and for what purpose is it being told. Case studies using participatory research methods strive to locate control of the research process with the people being researched, in this case the Dagara community (Fals-Borda & Rahman, 1991). To assume that any interview, for example, will discover discrete facts is a myth; everything is colored through the lens of the researcher (Fontana, 2002). There is a place for non-indigenous researchers to work as allies,

however, and by working with together to negotiate a representation based on interviews, useful insights can be gained. Checking information with research participants and asking them if interpretations truly represent their intentions is therefore essential (Laws, Harper, & Marcus, 2003). This member-checking can still be problematic, however, as the researcher has the option to put many stories together, while community members often are limited and disempowered when their own representation is confined to a specific time and place (Gatenby & Humphries, 2000). The sequencing and triangulation of individual, focus group, and community meetings within the context of a qualitative case study can help negotiate this tension.

Triangulation is an accepted practice in qualitative research to enhance and verify the quality and legitimacy and to find alignment or essence to capture meaning of a case study (Lincoln & Guba, 1985). Triangulation can entail gathering information from different sources, gathering information using different methodologies, and / or gathering and analyzing information at different times and then comparing to each of the others to observe the interconnectedness. Some qualitative researchers argue for a process that goes beyond triangulation and searches for a ‘crystallization’ of perspectives (Richardson, 2000). This metaphor captures the beauty of various different perspectives that are reflected and refracted when light is shown on an issue from different angles. It also captures the clarity of different perspectives coming together in a myriad of ways to provide an accurate, focused, complementary yet complex understanding. Finding ways to capture such holistic complexity fits the indigenous paradigm.

Reflexivity is also crucial because various social and cultural expectations and norms will play out in every research interaction. Any text or performance capturing a case study is constructed within an interaction, yet there are always other, subtler issues not captured in text



that also need to be considered. Research is about relationships. It is important for researchers to be reflexive to ensure texts are contextualized to enhance their trustworthiness, and that one's own location is interrogated. This is essential for decolonizing research. Overly reflexive confessional stories of researchers can become self-therapy and nihilistic, however, and a balance must be struck between reflexivity and the purpose of the research (Gubrium & Holstein, 2003).

Usefulness. Finally, pursuing a qualitative case study also demands *usefulness* as a step of decolonizing (Battiste, 2000) and can lead to some tensions with the more conventional paradigms. Drawing on the principles of an indigenous and a more action- oriented research approach makes the usefulness of the work a primary, defining characteristic (Fals Borda & Rahman, 1991; Reason & Bradbury, 2001; Smith, 2001). Using a qualitative case study approach ensures the interpretation of community resilience remains contextualized, and therefore more apt to have insights translated into action.

Alternative Approaches. The case study methodological approach was chosen over ethnography, one of the most common approaches in investigating phenomenon embedded in culture, because reaching a comprehensive understanding of all aspects of the culture in this situation is not necessary or practical. Ethnography has limitations in transitioning into action for social change. Ethnography also continues to encourage the separation between researcher and researchee. Phenomenology, although also attractive, was put aside for similar reasons. Phenomenology demands prolonged engagement for deep understanding and theory building, and abstracts knowledge and concepts from the actors, or subjects of the research. It does not usually promote engagement or action. Narrative is a popular methodological approach for many researchers subscribing to the indigenous research paradigm. Narrative was seen as an appealing approach because it emphasizes the *voice* and contextualized *story* of research



subjects, yet aspects of peoples' lives are often silenced by colonizing discourses. Since the desire was to explore community resilience at a meso level and co-construct an understanding of a conceptual phenomenon that would be useful to people, a narrative approach alone did not seem sufficient. Finally, although aspects of participatory action research were certainly drawn upon to implement this research, since it was not initiated by the community, and there were logistical limitations, this approach was not adopted.

3.2.1 Validity, Relational Accountability and Limitations

It was important to ensure the case study methodology was as valid and trustworthy as possible. Conventional positivist and post-positivist researchers do not consider any research legitimate if it is not valid, generalizable, and reliable. These principles for research legitimacy are taken-for-granted by the research establishment, yet they stem from quantitative research in the natural sciences and a positivist ontology and epistemology. With a constructivist or critical stance, other principles of validity need to be looked at (Denzin & Lincoln, 1994) and strategies for checking the accuracy of findings such as triangulating different sources of data, using member checking, and emphasizing thick description are encouraged (Creswell, 2003; Depoy & Gitlin, 1994; De Koning & Martin, 1996).

Much has been written within the qualitative research literature on validity, to distinguish it from notions of validity within conventional research approaches (Creswell, 2007; Lincoln & Guba, 1985; Whittemore, Chase & Mandle, 2001). In the indigenous methodologies literature, issues of ethics and axiology receive more attention than validity per se, but there are complementary developments in both discourses that challenge researchers to take particular actions to ensure validity (Canadian Institutes for Health Research, 2007; Mi'kmaq Ethics Watch, 2005; Schnarch, 2004; Smith, 2001; Wilson, 2008). The most



important issues related to validity are credibility and authenticity, criticality and integrity and relational accountability.

Credibility and Authenticity. Credibility concerns demonstrating effort to accurately interpret meaning from qualitative data, while authenticity relates to the resonance of written interpretations to the meanings and experiences as perceived by participants (Whittemore, Chase and Mandle, 2001). Credibility of this study was enhanced within a design that included competent research assistants, comprising male and female Dagara representatives from the area, and putting community validation procedures in place as recommended (Ellis & Berger, 2002; Lincoln & Guba, 1985; Minkler & Wallerstein, 2003). During the study itself, the researcher and the research assistants lived in the community for an intense period of four-and-a-half months and relationships extended beyond the intensive period, as researcher and assistants continued to work in the area. These kinds of engagement and participatory observation strategies are suggested (Creswell, 2007; Ellis & Berger, 2002; Holkup, Reimer, Salois, Weinert, 2004).

Built into the research strategy was an ongoing reflection and debriefing strategy that engaged the researcher and assistants and a field study advisory committee (Depoy & Gitlin, 1994; Lather, 1986; Reason & Bradbury, 2001). This reflective practice and the regular ongoing member checking following interviews, focus groups and community meetings provided evidence of credibility.

Researchers (Charmaz, 2002; Creswell, 2007; Denzin & Lincoln, 2003; Fontana, 2002) recommend a design that includes speaking to both individuals and groups (e.g. men's group and women's group), speaking to some informants multiple times, and then bringing their information together for discussion in a focus group or community meeting to enhance people's awareness of their own context, and thereby their understanding of phenomena like community



resilience. The endorsement of the work done by the researcher and assistants during community validation activities also enhanced authenticity.

Criticality and Integrity. Criticality captures notions of reflexivity and critical analysis to explicate different viewpoints within the research endeavor, and integrity relates to the confidence that the investigators interpretations are grounded with data (Whittemore, Chase & Mandle, 2001). Conducting regular reflexive journaling and discussions to take place at a number of levels: individual researchers, dialogues and discussions with ad-hoc advisory committee members (researchers from the University of Development Studies) was valuable. Interview protocols to encourage the researcher assistants and myself to probe for different viewpoints and critical differences can be illuminated in the text (Lather, 1994; Whittemore et al, 2001). The researcher and assistants were included in the processes of open coding, and thematic analysis to contribute to integrity (Huberman & Miles, 2002), and checking, community validation and audit trails of the data and interpretations are available for review (Creswell, 2007).

Relational Accountability emerges from the indigenous methodologies discourse. As Wilson (2008: 99) states, “[relational accountability] means that the methodology needs to be based in a community context (be relational) and has to demonstrate respect, reciprocity and responsibility (to be accountable as it is put into action)”. Designing a qualitative case study methodology that starts with a preliminary study, has Dagara associates involved and includes a commitment to ongoing work in the area ensures relational accountability is considered. Ongoing connections with CIKOD are built into the design to help ensure there is an avenue for useful knowledge translation, dissemination and implementing follow-up.

As in any research initiative there are certain limitations to the approach used. Community resilience is a complex and multifaceted phenomenon. This research will only

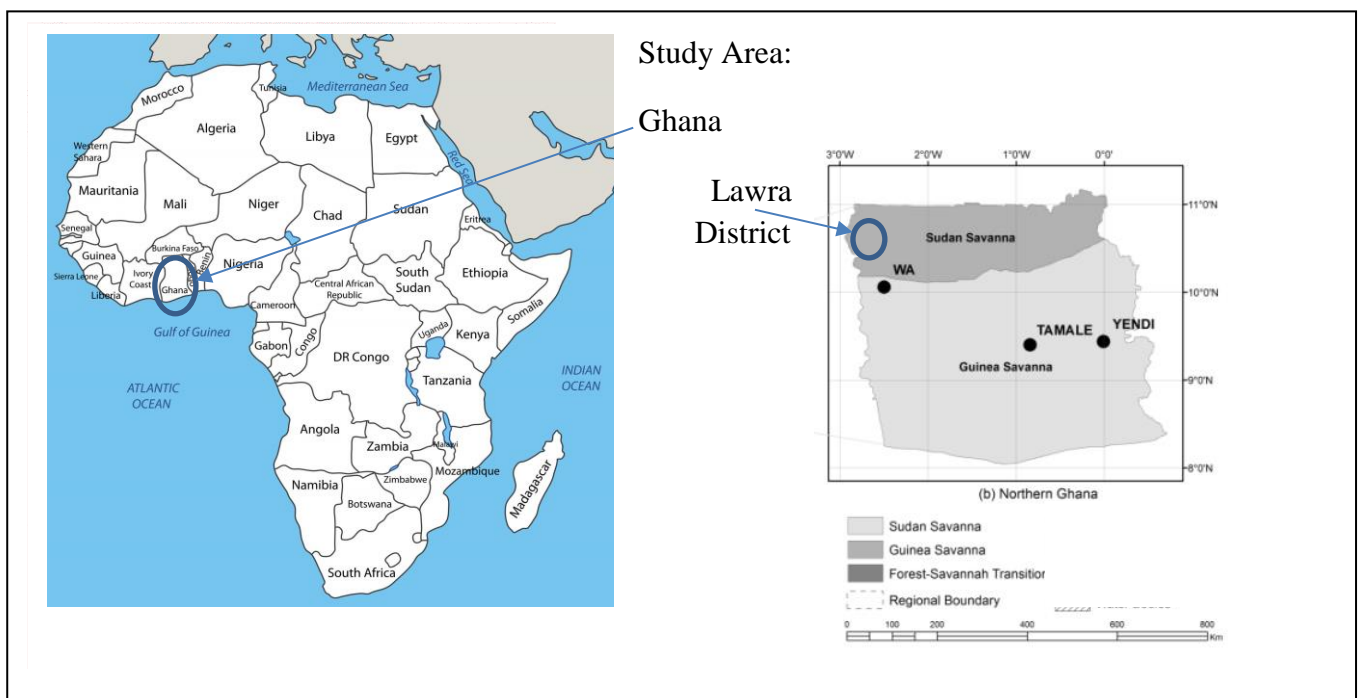


happen at a particular time of the year and respondents' visceral understanding of resilience could be very different in different seasons. A qualitative case study can be designed, however, that will ensure sufficient data and information can be collected to provide valuable meaning and insights on community resilience from the Dagara perspective. That research design is presented in section 3.3 below. It is important, however, as with any case study, to present a justification and a preliminary profile of the case study area where the research is going to take place. Setting that initial context of the research location is the purpose of the next section.

3.2.2 Initial Profile of Study Community - The Dagara People of Lawra District

As I began having conversations about researching community resilience my attention was drawn to communities living in the Guinea Savannah vegetation belt of West Africa. I have had the privilege of working in community development in different countries of Africa and in Canada, since 1985, and communities in this belt had always represented contrasts and transitions for me, both practically and metaphorically, which I thought would be a rich environment for learning about community resilience. The Guinea Savannah/Sudan Savannah

Figure 3.1 Map of Research Location



Source: Reproduced from Ghana Statistical Service, 2000



vegetation belt, extends across Africa from The Gambia in the west to the eastern border of Nigeria in the east (World Wildlife Fund, 2013). I had worked with people in this ecological zone in Nigeria and the Gambia, and had previously visited that region of Ghana in the early 1990s and the land and people resonated with me. In these times of climate change, increasing natural and human made disasters and chronic stress, this ecoregion, and the people who make their lives here, experience different kinds of vulnerability on a regular basis (WFP-MOFA, 2013; WWF, 2013).

The peoples of this region may be vulnerable, but in my experience they are also vibrant and hardworking, have continued to honor their rich history and cultural traditions, and may be strategically placed to bounce back and contribute to a transformation of negative socio-ecological, economic and cultural trends. Figure 3.1 shows the research area.

3.2.2.1 The Ecosystem. This ecoregion suffers specifically from declining soil fertility, declining and erratic rainfall, both which can be exacerbated by some farming practices, bush burning, and fuel wood harvesting, and is susceptible to flooding and other extremes. This zone is particularly vulnerable to natural and human change (WFP-MOFA, 2013; WWF, 2013). The guinea / sudan savannah zone is a transition zone to the sahel, which is an even more vulnerable socio-ecological zone to the north. Certain ecological resources can still be accessed in the guinea / sudan savannah, however, and perhaps with careful human nurturance and conservation this could become a richer, less vulnerable ecosystem for future generations. UWR has an area of 19,375 square kilometers, 914 square kilometers of this is Lawra District (Ghana Statistical Service, 2002). Lawra District has an international border with Burkina Faso to the north and west.

3.2.2.2 The Economy. Most people earn their livelihoods through subsistence rain-fed farming of crops such as millet, pulses, yams and some maize and rice. Livestock are kept,



often as a form of security for when crops fail. Seasonal migration to the forest and mining zone of Ghana is common for 20 % of households, and this is causing the fragmentation of social and religious structures (Blench, 2005). For the Dagara community access to health and schooling is very poor and disease incidence is quite high. This region of Ghana is known as the poorest and most vulnerable in the country and, with changes in climate, lack of road infrastructure and increasing population, both acute and chronic challenges to people's livelihoods continue to grow (Blench, 2005; WFP-MOFA, 2013). The economy of the area and families' livelihoods, traditionally based on agriculture and trade, are also vulnerable. This economic vulnerability is related to the stresses on the environment, but also to the global economy which dictates terms of trade, with no negotiation with the peoples' of the area (WFP-MOFA, 2013). The economy here, like other marginalized areas, is influenced by decisions made at capital cities hundreds of kilometers away, yet the zone's economy was once rich in trade in livestock, groundnuts and cereal crops, and as a place of exchange for goods travelling from the forest zones to the south, with the peoples of the Sahel and the far reaching trans-Saharan routes to the north (Ghana Statistical Service, 2013).

3.2.2.3 Social and Cultural Background. This study focused on Dagara communities in Lawra District, Upper West region, Ghana to explore and illuminate community resilience. Dagara communities may be considered some of the poorest and most isolated in the Ghanaian context, but there is something about their pride and determination that attracted me to them. The Dagara people are one of eight main ethno-linguistic groups in the Upper West Region (UWR). Their kinship and clan structures remain very strong. Families are intricately linked through both patri and matri lines, for example, and there are specific roles and responsibilities for men and women and family members of different generations. Many Dagara people migrate to other parts of Ghana on a seasonal basis to work and supplement their incomes.



Dagara people are considered the original inhabitants of the district, the indigenous people of the area, although historically they migrated into the area from elsewhere. Table 3.2 presents some basic indicators on Lawra District, UWR, Ghana. UWR has a population of approximately 702,110 people, approximately 101,000 live in Lawra District (Ghana Statistical Service, 2002). Table 3.2 presents some basic indicators on Lawra District.

Unfortunately, the cultures and languages of people in the area are also at risk. People are marginalized socially and culturally because they are far from where decisions are made and new trends are fashioned in the capital. On the other hand, there is that pride and connection with history and culture as well. As I considered studying communities in this ecological zone more deeply out of curiosity about community resilience, I heard of, and read inspiring works (Apusigah, 2006; Guri, 2003; Millar, 2004, 2005; Some, 1995) that led me to believe there might also be hidden survival wisdom, and a cultural revival of sorts percolating in the northern part of Ghana.

The Dagara people follow a complex land tenure system where different forms of land, and trees on the land are controlled by different traditional institutions. Compared to other parts of Ghana this means there is a relatively well conserved natural environment with fertile soils and substantial tree cover (Blench, 2005). Tendaanba, or earth priests/guardians, exercise dual authority over land with chiefs and these indigenous structures wield much influence (Millar, 2004).

Since the 1990's elected Assemblymen have become a competing arm of authority in villages as part of decentralized government structures and indigenous institutions are being challenged. The Dagara, Sisala, Wale, Fulani and other peoples in this area of Ghana have been marginalized from national governance and economic structures since colonial times, and formal education and other trends in the region are increasingly confronting the viability and



respect for the indigenous way of life. At the same time, a recent appreciation for indigenous knowledge and the indigenous world view has been attracting attention in academic discourse (Battiste, 2000c; Dei, 2000; Smith, 2001) and the area is a unique one to investigate change and sustainability, particularly within a conceptual framework such as community resilience (Guri, 2003, Millar, 2004). Certain Dagara communities have been surviving and thriving for generations and they may provide important lessons related to community resilience.

<i>Table 3.2: Background Indicators on Research Area</i>			
Indicator	Lawra District, UWR		
Population	100,929	48,641 (male)	52,288 (female)
Household Size	5.9 people		
Percent Urban (Towns)	13		
Percent 18 and over	53.8		
Percent of economy in Agriculture	80		
JHS Completion rate	74.4	75.4 (male)	73.9 (female)
Top 3 most prevalent diseases	52.2 % malaria	11.6% Acute Respiratory	6.7% Skin Diseases

Source: Data extracted from Ghana Statistical Service, 2013

There is danger, risk and vulnerability in this zone that has ecological, economic, social and cultural dimensions. There is also hope and opportunity, and the chance to learn something about community resilience. Chance phone calls and meetings, seeming coincidences, and random opportunities, then pointed me specifically to the Dagara people of Lawra District, Upper West Region. This district is not considered the most vulnerable according to selected indicators, but it has a unique combination of features that made it clear a study with people in this area on community resilience would provide some insights.



3.3.1 Research Initiation and Planning

I have traced the seeds of this study back to earlier experiences I had been working in the Guinea savannah zone of West Africa and my involvement in community development spanning three decades that spawned my deep interest in community resilience. At times, I believe it was inevitable that I would do a research project like this and many circumstances seemed to conspire to put me in place to conduct this study over the past few years.

Within the confines of this research activity on revealing community resilience with the Dagara community I benefitted greatly, and the study became a reality, because of the relationship I have developed with the Centre for Indigenous Knowledge and Organizational Development (CIKOD) and its founder and Executive Director, Mr. Bernard Y. Guri. CIKOD is an organization that works throughout Ghana, and has strong ties in the Dagara area. Bernard is a Dagara man who grew, was educated in the area before completing graduate studies in Europe. He has worked in the development sector for 30 years, and founded CIKOD in 2003 to support endogenous development. As a community development facilitator and researcher, he seeks ways to find synergy between creative solutions for the development challenges faced by communities today and the wisdom and indigenous knowledge of the Dagara cosmovision (Guri 2003, 2007). It is through discussions with him, and members of an ad-hoc advisory committee that this study coalesced.

CIKOD as an organization has also been supportive of my research in other ways. CIKOD staff provided introductions at the community level as part of the 2008 preliminary study and served as language and cultural interpreters. Relationships with CIKOD staff have been developed through workshops I co-facilitated in Ghana. The two research assistants, a



Dagara man and a Dagara woman, were recruited with CIKOD assistance, and have done other work with CIKOD in the past. These connections helped ensure this study was based on relationships of mutual respect and trust, was cognizant of indigenous research principles of ownership, control, access and participation and was pursued with love, as a kind of ceremony of mutual learning. The overall design of the research was iterative. I was the principal researcher in Ghana with a Dagara man and woman as research assistants, with suggestions from CIKOD and advisory committee on issues of community entry, relevance and respect. We, myself and the research assistants, were flexible in accommodating the concerns and priorities of the key informants, household members and various focus groups of Dagara women and men, girls and boys with whom we explored concepts about community resilience from their place in the community.

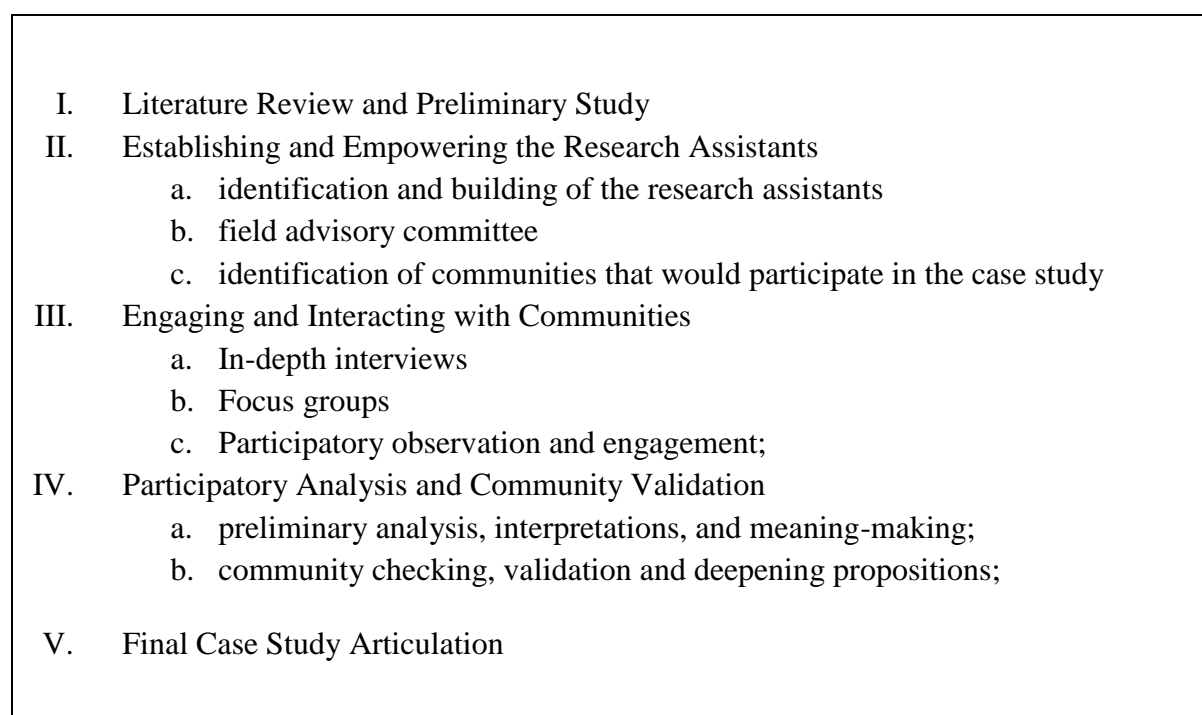
As an exploration of community resilience with Dagara people, this study was a subtle negotiation for space within an evolving understanding of both the academic discourse on community resilience, and a growing appreciation and connection to the Dagara community discourse on resilience. This imagined space was constantly fluctuating and shifting, filling with different ideas and propositions and being massaged by my own changing understandings. My research politics compelled me to choose to privilege Dagara perspectives, and as an outsider not knowing the language, I knew I would have conscious and unconscious biases, and power and privilege that would manifest in different ways throughout the study experience.

In addition to revealing Dagara perspectives on community resilience, I also wanted this work to be useful and connected to broader discourses on the topic. This put me in a challenging position to acknowledge and interpret the co-constructed knowledge of community resilience with the perspective of the Dagara, while simultaneously keeping up with the literature. In order to meet these demands, I designed a qualitative research exploration of five



phases, that are itemized in Figure 3.3. A significant aspect of the design of the research plan was to practicalize an indigenous research approach to data collection, by choosing to carry out the research in collaboration with two research assistants, a young Dagara man and a young Dagara woman. With the research assistants, I planned, executed, analyzed, presented and validated findings with the community.

Figure 3.3 The Five Phases of this Research Initiative



Source: Author, 2017

In Appendix A, I present details of the original chronological timeframe of phases II – IV. Tentative timelines were set and the schedule of activities in the field emerged as people and circumstances allowed.

3.3.2 Phase I – Literature Review and Preliminary Study

The review of the literature for this study on resilience and community resilience has been ongoing. There has been a burgeoning of research and published literature on resilience in recent years and it informed this research at four critical moments: i) my initial exposure to

the literature as I worked on and reflected on my past community experience captured in my funding proposal in 2003, ii) a literature review on the subject as part of academic studies in 2006, iii) an updated literature component in 2009 as part of my proposal prior to conducting field work, and (iv) the updating of this literature in 2015 for this dissertation. This relationship with the literature focusing on the discourse of resilience was significant, and influenced my understanding and interpretations of what I was learning from the direct interaction with Dagara people.

I consciously keep concepts from the literature at bay, however, to ‘bracket’ them (citation) in order to stay open to a cultural understanding of community resilience with the Dagara people. This stance was part of the decolonizing framework in the research design. Learning about the history and context of the Dagara people was important, as was the language of the Dagara, Dagare, which is the carrier of knowledge and wisdom in a community.

Early on, as this research idea took root, it became clear that in applying a decolonizing framework, some of the ideas I was learning about resilience and others’ interpretations of the Dagara people, would need to be set aside to more directly explore with the Dagara people their own perspectives on resilience. As the design emerged it was clear it needed to be iterative and that getting a first-hand introduction to Dagara people and Dagara communities would be a beneficial starting place. This realization, led to preliminary investigation of “contextual and indigenous issues of community resilience in northern Ghana”. This preliminary study, completed in 2009, was the beginning of interactions and relationships with Dagara communities. In this study, approved by the Dalhousie University Research Ethics Board, I interviewed 13 key informants (8 men and 5 women) about indigenous and contextual issues related to community resilience. These discussions provided many insights around issues of community resilience particular to Dagara communities and helped frame the specific





www.udsspace.uds.edu.gh

questions of this study and some unique areas for follow-up (Fletcher, 2008; 2010). The preliminary study was supported by CIKOD and their Regional Coordinator for the Upper West Region, Mr. Daniel Banuoku, who helped set up interviews and provided introductions. These interviews became building blocks for the relationships that followed for conducting the research study.

3.3.3 Phase 2 - Establishing and Empowering the Research Assistants

3.3.3.1 The Research Assistants. As described by Lincoln and Guba (1985) and others (Smith, 2001; Wilson, 2008) the primary instrument for conducting a qualitative constructivist study of this nature is the human instrument: the individual researcher. In this inquiry, because of the deep contextual factors and particular cross-cultural issues, I was inspired to find research assistants from the area. CIKOD helped recruit a man and a woman who knew the area intimately, spoke local dialects, had skills to gain community entry, and experience in interviewing and note taking, to be research assistants. It was also important the individuals had some openness to indigenous knowledge and would be willing to take initiative and disagree with me and each other if necessary. Mrs. Vida S Gum and Mr. Zuma S.M. Gbedi, both graduating students from the University for Development Studies (UDS) in Wa, were recruited and turned out to be excellent research assistants.

From my early understanding of what the research approach would entail, the role of the research assistants with the principal researcher, was carefully constructed so as not to be only assistants to the principal researcher. The research assistants played full roles, including that of cultural interpreters and guiding the final design of the research. Given the context of northern Ghana, having a woman as a research assistant was essential to engage female

community members. Research assistants had input into the final research instruments, their involvement in the preliminary analysis and synthesis of findings, and their direct participation in the feedback and clarification sessions was essential to understand the contextual realities of resilience in this region. Establishing full roles for the research assistants is supported in the literature (Fals Borda & Rahman, 1991; Kincheloe & Steinberg, 2008; Minkler, 2003; Townsend, Birch, Langley, Langille, 2000). The research assistants also became subjects of the overall research process and our joint journey of learning became part of the shared analysis and final outcomes of the research initiative.

Mrs. Vida S. Gum (Vida), is a well-connected, mature woman from the town of Lawra, who has worked as a Junior Secondary School Teacher for 10 years. She has experience facilitating women's groups and is a poetic speaker of Dagare. Mr Zuma S.M. Gbedi (Zuma) is from a village in Jirapa district not far from Lawra. He attended Nandom Boys Secondary School and grew up in Eremon, the son of a School Principal. He knows many people and many parts of the district well. Both Vida and Zuma had been trained and gained practical experience in community entry and establishing respectful relationships with community members. Vida and Zuma knew each other and had a positive relationship between them. They had attended CIKOD training courses over the years and had worked as assistants with CIKOD on other research initiatives.

The extensive work with full roles as research assistants meant that co-construction of knowledge about community resilience happened at numerous levels: between the principal researcher and the research assistants, between research assistants and their friends, families and colleagues, between research assistants and various interviewees (both individual and in groups), and in dialogue when we reviewed, analyzed and interpreted discussions from the communities we visited.

The approach of recruiting research assistants from the area helped provide both outsider and insider perspectives on the exploration of community resilience. Using the decolonizing frame was an innovative way of devolving power out of the hands of the outsider. Setting up full roles for the research assistants drew on my understanding and experience with participatory action research (PAR) (Fletcher, 1993) and the rich academic discourse in this field (Hall, Gillette, Tandon, 1982; Fals Borda & Rahman 1991; Maguire, 1998; Minkler, 2003). Although this was not a PAR project, I knew forming full roles for the research assistants and sharing some of the power for designing and conducting the research, would build capacities and be decolonizing.

The research assistants were intimately involved with me in the overall design of the research exploration, the selection of illustrative communities and households, conducting interviews and focus groups, documenting interviews and focus groups, engaging in thematic analysis and interpretation, preparing and presenting initial findings to the communities for validation, and engaging in reflexive activities on their own learning. Appendix F provides examples of how research assistants enhanced the quality of the research through relational accountability. In addition, Vida's rapport with women and girls and her facility with Dagare, Zuma's connection to youth, and his note taking and analytical skills were some of the various ways they contributed to the research and deepened our connections to the Dagara community. The research assistants and the principal researcher had multiple locations from which we functioned, both outsider and insider relationships, and we encouraged and viewed these different subjectivities as strengths. This diversity of locations allowed us to have discussions, and for the direction of the research not to be dominated by anyone's individual voice or bias.

Zuma and Vida commented on the challenges they recognized as insiders to the community, who should have known answers to the questions they were asking and who may

have been identified with particular factions within the community. As the research unfolded, however, we all became clearer about our various locations with respect to the research and found ways to honor those relationships.

3.3.3.2 Field Study Advisory Committee. Another important element of this research design was an ad-hoc field study advisory committee. This committee was set up as a group of elders, or an advisory group, that I could turn to as the research unfolded. They did not have direct involvement in the study, but their advice and suggestions were always valuable and it was morally supportive to know they were there to back us as researchers, should the need arise. Originally this committee had no official status as regards the formal completion of my thesis. They were to be an ad-hoc, volunteer group of three respected, university-based researchers; two Dagara men, and one Gurunsi woman, who made the commitment to serve as advisors. I met and consulted with these individuals a number of times since 2006. They were involved as interviewees in other studies I conducted in Ghana (Fletcher, 2005, 2008). All three are involved in the research discourse around indigenous knowledge and endogenous development. Since 2011 two of these individuals have served more formally as co-supervisors of this dissertation research.

3.3.3.3 Identification of Communities and Participants in the Study. To explore the phenomena of community resilience with Dagara people in the Lawra District, a qualitative case study research was designed. This design took an emic approach, from the perspective of the Dagara people themselves, and included a number of key informants from different walks of life, individual and focus group interviews, interviews with two illustrative communities, and six illustrative households. The illustrative communities were in different parts of the district, and the illustrative households represented some ‘relatively financially better off’ households and some ‘relatively financially worse off’ households. Five of the households



were in rural villages and one was in the town of Lawra, the district headquarters. In total 273 people were interviewed (including multiple interviews), 153 men and 120 women. This included some women and men who had migrated from Lawra to other parts of Ghana for work. Figure 3.4 provides a synopsis of this data set and Appendix C includes a list of the full data set. Pseudonyms are used for all people interviewed to maintain confidentiality and anonymity.

Figure 3.4 Breakdown of People Interviewed by Gender, Generations and Type of Interaction.

	Male	Female	Total
Individuals Interviewed individually or in focus groups *	153	120	273
Individuals involved in individual or pair interviews	77	36	113
Number of Focus Groups			24
Range in Size of Focus Groups	3 to 14 people		
People involved in Focus Groups	76	84	160
People interviewed by age grade			
Youth	32	23	55
Adults	56	81	137
Elders	57	11	68
Migrants interviewed	14	13	27
Number of people involved in two or more interviews	13	7	20
Number of people involved in data collection (1 st round)	85	58	143
Number of people involved in community validation (2 nd round)	60	57	117
NB. * Preliminary study included. Multiple interviews counted more than once. Totals do not add up in different breakdowns because of the number of people in multiple interviews.			

Source: Author, field research, 2017.



Participant selection was determined by research principal and assistants. In order to get an overview of the district community we would need to interview men and women, elders and youth and people of different economic classes. Before beginning the research, we interviewed one another to get acquainted and to acknowledge our biases and our initial recommendations. This bracketing also served as pilot testing for our interview protocols and a practice session for interviewing.

As 70% of the population of the Lawra District lives in small rural villages some distance from the district headquarters (Ghana Statistical Service, 2002), our first task was to select possible illustrative villages in different parts of the district. We chose to do a purposive sampling of rural villages of approximately 500 people which was the median population of villages in the district (Ghana Statistical Service, 2002). We had census data on all the communities, and jointly developed a set of criteria for selection. This criteria included representative of local ecosystems, farming and other livelihood options, proximity to market. Our process included drawing a sketch map of the area and having the research assistants share what they knew of the communities. Four communities were proposed as possibilities and we made reconnaissance visits to those communities to determine if they were interested. Based on this interest, two communities were selected. Within each of these communities we then worked with the chief to draft criteria and select illustrative households within the communities. The chiefs were very helpful in this process, and put their own requirements on the selection. Households in any kind of tension or conflict with the chief may have been excluded. We specifically asked the chief to propose households with a geographic spread across the village and some that were relatively better off economically and some relatively worse off economically. Then within those households we asked to speak to men and women of three generations. For Lawra town, the researchers proposed a small number of families



who met our criteria and could possibly be the illustrative household. We decided on the final household by a random draw.

An extensive list of other key informants, both men and women, was developed by the research principal and assistants to achieve a cross section of Dagara peoples' perspectives on community resilience. This list included elders, women leaders, youth, government officials, civil servants, farmers and business people. From these key informants, we were looking for a diversity of views about communities and community resilience and perspectives on indigenous knowledge. Both the principal researcher and the research assistants had a strong influence on this selection process so there were biases, but they balanced each other off. As the project evolved we checked to ensure we were getting a balance of men and women, elders, adults, youth and people of different socio-economic standing. We did not gather socio-economic data, but relied on the local knowledge of who were well-off families and who were less well-off families.

We were encouraged by a member of the advisory committee to trace people from the illustrative villages or households who had migrated to other parts of the country. The population under 18 years of age is very high in Ghana and many travel to other parts of the country in certain seasons to receive cash wages. We did interviews with people from Lawra district who had migrated to two communities in Brong-Ahafo Region where many Dagara youth migrate.

We recognized there could be a danger of essentializing the Dagara community as thinking or being one way, as this research unfolded. Dagara women and men of different generations have diverse opinions and beliefs about the world, which are influenced by their own upbringing and culture and the current trend towards modernization and globalization in the world. This diversity of individual views would need to be respected and valued in this study. Multiple perspectives from different places of power in the community would need to



be exposed and interrogated to ensure the study was credible. As well shared communal values were an additional dimension to an individual's world view. Dagara people, who speak the Dagare language, identify themselves as Dagara, recognize kinship ties, honor ancestral relationships, and consider themselves part of the Dagara community, have a sense of belonging that may be revealed in explicit ways through this research. Their sense of belonging as members of the Dagara community, the unit of analysis for this study, may supersede their individual interests and perceptions. These shared communal values are an element of the Dagara world view that was explored in this study.

3.3.4 Phase 3 - Engaging and Interacting with the Community

Engaging and interacting with the community on their perceptions of community resilience was what this research process was all about. Although the principal researcher and the research assistants had high expectations about exploring questions around community resilience, we always had at the forefront, the principle that establishing and maintaining the relationships with those who were volunteering their time and energy to share a piece of their lives with us was of ultimate importance. Three primary modes of interacting suggested in the literature were adopted: in-depth interviews (Charmaz, 2002; Creswell, 2007; DeVault & McCoy, 2002; Ellis & Berger, 2002), focus group discussions (Creswell, 2007; Depoy & Gitlin, 1994; Fontana, 2002) and participant observation (Cook, 2005; Creswell, 2007; DeKoning & Martin, 1996).

3.3.4.1 Individual in-depth interviews. As suggested in the literature, in-depth interviews offered a great opportunity for exploring community resilience from the perspective of the community (De Koning & Martin, 1996; Depoy & Gitlin, 1994; Laws, Harper, & Marcus, 2003). Laliberte-Rudman and Moll (2001) for example, recommend in-depth interviews help get participants' meanings, perspectives, definitions, and how they experience





www.udsspace.uds.edu.gh

the world. We used both constructivist and critical in-depth interviews, which are quite different than conventional interviews. In conventional interviews from a positivist paradigm, the “interviewer” takes center stage to construct meaning. There is discrete information to discover and it is the interviewer’s task to “dig” to extract this information (Creswell, 2007; DePoy & Gitlin, 1994). In constructivist understandings, biography and context of both the interviewer and interviewee are seen as crucially important; as such, in-depth interviews take on much more of a story-telling format and the objective is to gather rich and thick description. Meaning is negotiated and constructed within the interaction of the two parties involved (Fontana, 2002). We also drew on the critical paradigm to probe on issues such as gender dynamics, but remained cautious to balance our interrogation with the recognition that the structures and relations we were asking about are socially constructed themselves. We resisted the temptation to ask interviewees specifically about quantitative information related to economic class such as assets, farm production, or income levels for example, as we decided this would be intimidating and could alienate interviewees. As the literature recommends (Cook, 2005; Fine, 1994; Gaventa & Cornwall, 2001) we had a set of guiding questions and an interview protocol, and tried to uncover the assumptions, social structures, and ruling relations that may have been influencing the issues under consideration, without imposing a pre-existing framework. Our balance of critical and constructivist perspectives implied listening to the interviewee and honoring the relevance of whatever she or he said without prejudice, while gently pushing interviewees to be clear about their meaning.

Building on the work of Millar (2005) and Some (1995) we showed respect and honor to indigenous ways of knowing and indigenous ways of bringing meaning to the world by listening for and capturing peoples’ recounting of spiritual ceremonies with nature, consulting with ancestors, and valuing intuition. These often neglected dimensions of what brings

meaning to life are considered essential aspects in a constructivist interview situation (see Holkup et al., 2004; Schnarch, 2004; Smith, 2001; Wallerstein, 1999). Charmaz's advice (2002) is to recognize the interview as a dialogue, that can, according to Ellis and Berger (2002: 860), become a "sea swell of meaning making in which researchers connect their own experiences to those of others and provide stories that open up conversations about how we live and cope". We, as research principal and assistants, encouraged ourselves to do these kinds of constructivist interviews. At the same time, from the critical perspective, we were reminded one "can't ignore cultural, historical and political environments that surround and cut through the interview process" (Gubrium & Holstein, 2003: 16). We worked together as researchers to find this balance in our interview approaches and to maintain a commitment to open-ended interviews where the interviewee determines the flow of the interaction, as Millar (2004, 2005) insists.

Within the dynamics of a rural Dagara household, it was not always possible to interview people individually, or to construct a focus group with a specific make-up. Flexibility was important to allow different constellations of people to come together, ultimately with the aim of getting household perspectives on community resilience while still respecting issues between gender and generations within the household.

The actual content of the interviews outlined in the question guidelines, were developed with the research principal and assistants, with guidance from my previous studies and experience. A sample of what an interview protocol might look like (for both individual and focus group interviews) is included as Appendix D. Interviews were conducted in Dagare with highlight notes in English provided afterwards, in Dagare with English translation, or in English alone. Early in the process the research assistants with the principal researcher attempted to develop a lexicon of Dagare words related to community resilience based on the



concepts that surfaced in the preliminary study. Millar suggested we ask key informants for explanations of Dagara words that relate to resilience such as the following: hardiness, bouncing back, coping, trauma, disaster, crisis (Millar, 2008). This suggestion proved challenging initially, however, so we began asking questions in a more general way to identify the conceptual vocabulary that interviewees were using most consistently. Even those key informants, university trained in Dagare language, found the conceptual translations challenging. The research assistants had confidence in their own translations in context from Dagare to English and English to Dagare but the literal translations of vocabulary terms became an ongoing process that culminated at the end of the research.

One example that demonstrates the importance of flexibility and openness in the interview process and relationship happened during one interview when a bird flew overhead while the interview was being conducted. The person being interviewed stopped, observed the bird, and explained that bird species was his clan totem. He went on to explain the story behind the significant role this bird plays in the cultural cosmology, and the pride his clan has in being associated with this bird. He also elaborated on other clan totems, the human world - animal world relationships and the significance of clan and kinship systems. The interview relationship that had been established showed flexibility and openness to the interaction taking on its own nature.

3.3.4.2 Focus group discussions.

Focus group discussions were conducted with groups of youth, women, elders, family units of mixed generations, farmers and used clothing traders. As stated by Depoy and Gitlin (1994) and DeKoning and Martin (1996) being in a group with others “like you” can give people confidence to speak about their experiences and develop a sense of camaraderie that enables a construction of knowledge that may be difficult to articulate in an individual interview. We certainly observed this in our focus groups. Laws,



Harper and Marcus (2003) argued that this collective building of knowledge can be particularly effective in cultures where communal values are important, and thick description can be generated. We also experienced that group interviews are also susceptible to dominating voices. Group interviews run the risk of leading to lowest common denominator responses, wherein people are overly agreeable and superficial in their discussion (Laws, Harper, & Marcus, 2003; Hollis, Oppenshaw, & Goble, 2002; Zeller, 1993). We observed that both of these scenarios can happen in a focus group and that the structure of the focus group and the skills of the facilitator, cognizant of the pitfalls and the opportunities of group dynamics, can use them effectively to explore the diversity of views on community resilience.

Focus group discussions were useful for getting people to think deeply about changes; and to motivate participants to take action. Often the discussion in our focus groups was more than “gathering data” as participants in dialogue offered analysis and synthesis of information, and brainstormed various action initiatives. Focus groups also had the advantage of reducing the power and influence of the research principal and assistants, as in a few instances wherein the group perceived their own strength and just began talking about what was important to them. We were privileged to listen in on the community discourse. In these moments, it appeared the power within the group enabled them to keep each other honest and true to their own constructed reality and not easily be manipulated by an outside researcher (DeKoning & Martin, 1996; Laws, Harper, & Marcus, 2003). Others have argued that, “By creating and sustaining an atmosphere that promotes meaningful interaction, focus groups convey human sensitivity, a willingness to listen without being defensive, and a respect for opposing views that is unique and beneficial” (Morgan and Krueger, 1993:18). Of the 24 focus groups conducted, those that were part of the community validation discussions were particularly useful. In all cases an instrument for facilitating focus groups, stimulating dialogue and





www.udsspace.uds.edu.gh

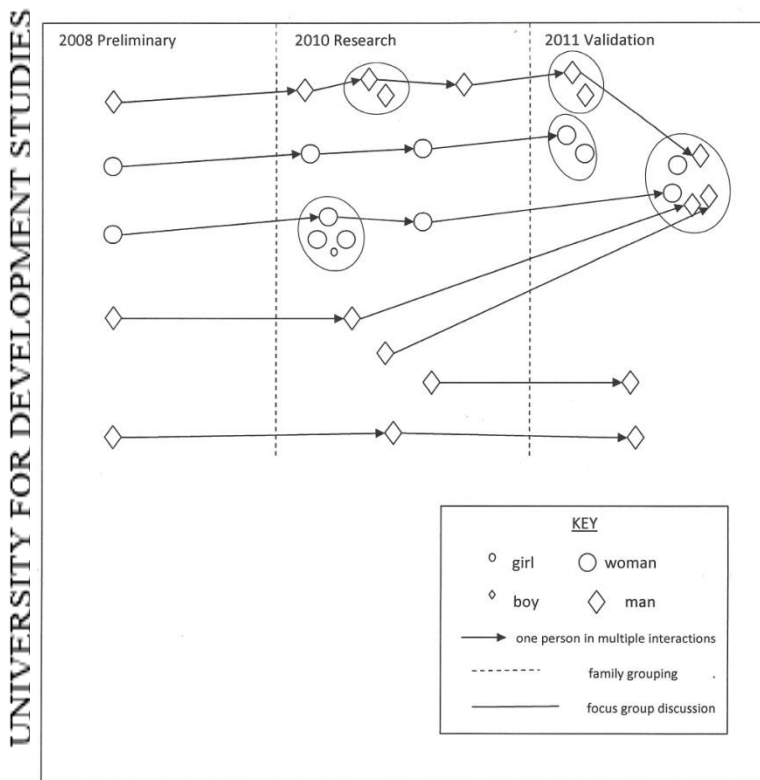
encouraging collective interpretation and analysis was developed based on suggestions in the literature and these proved beneficial (see Arnold, Burke, James, & Martin, Thomas, 1991; Chambers, 1983; Friere, 1970; Laws, Harper, & Marcus, 2003; Pretty, Guijt, Thompson, & Scoones, 1995; Theis & Grady, 1991).

The design and facilitation of these groups also drew on the previous experience of the research principal and assistants and the extensive work done in the development of Participatory Learning and Action tools (Pretty, Guijt, Thompson, & Scoones, 1995). Some tools such as mapping, ranking exercises and seasonal calendars were integrated into our focus groups effectively.

Illustrative Households. Most Dagara people continue to live in large multigenerational households. Therefore, it is illuminating to meet a cross section of male and female family members of different generations from within the same households to compare their perspectives (Guri, 2008; Millar, 2005). Daily life is centered around these household units, values and culture are transmitted at least in part through these structures, and livelihood strategies focus on activities at this level. Conducting in-depth interviews with members of three generations (both men and women) living in such a household provided insight to one of the essential building blocks of community. The men and the middle-aged group is often the group with most power and access. It is imperative that the youth, who constitute the largest percentage of the population in communities and are often excluded from decision-making are also given the space to speak. Elders, who traditionally are respected and considered to hold the wisdom of the community must also be included. It is also important that men and women be involved in an equitable manner. In certain instances, women's voices had to be given additional opportunities to be heard because they are often silenced in research initiatives.

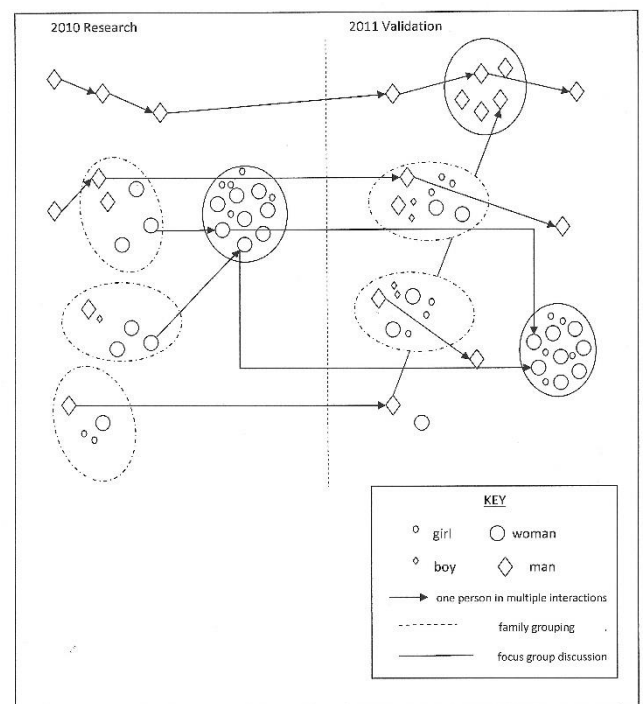
It soon became clear that there are not universal perspectives shared by each generation, or by each gender, yet there is an oral community discourse within each of these groups that was important to capture. This was not always easy to do, however, holding this principle in mind did inspire us to get broad representation over the research data set as a whole, so we heard a range of different perspectives from both genders in three different generations.

Figure 3.5 Discussions in District Headquarters Showing Multiple Interactions with Selected Individuals



Source: Author, field research, 2017

Figure 3.6 Discussions in Village B Showing Multiple Interactions with Selected Individuals



Source: Author, field research, 2017

Multiple interactions with the same Individual. Another special feature that evolved in

this research was multiple interactions (interviews, focus groups, informal discussions) with the same individuals. In the original proposal for this study I did not state an intention to interview anyone more than once, although as the research unfolded, it was some of the multiple interactions with the same individuals that proved the most insightful. These multiple interactions enabled discussions to go deeper, to both probe and interrogate and be open to

synergistic, spiritual and transformative connections. Once rapport and respect was established in the first interaction, it was possible to quickly go to a deeper place in subsequent interactions, either individually or in a group setting. The subsequent interactions also provided the opportunity to cross-check and to probe about what we had heard from others and if people agreed or disagreed or could help us understand issues we had heard elsewhere. A sample of these multiple interactions are mapped in figures 3.5 and 3.6 and show continuity between the three field phases of the research.

3.3.4.3 Participant observations and reflective activities. Participant observation and engagement is a common methodology in qualitative research (Creswell, 2007) especially ethnography (DeVault & McCoy, 2002) and was very useful in this case study revealing community resilience. The research principal and assistants drew on this method extensively and it was especially valuable for me as an outsider, to better understand the context and the Dagara world view.

Participant observation and engagement is a qualitative method for informally gathering data while immersing oneself within a cultural milieu to understand the nuances and to contextualize what is being heard. In using participant observation and engagement the researcher must be skilled at deep and active listening. We utilized this method throughout all three phases of the research exploration. Much of the literature that promotes participant observation talks about the value of attending and observing the events of everyday life with an eye for insights related to the topic under study. With informal attendance at funerals, condolences, lunches, drinks after work, visiting people at their homes, and visiting markets we were able to observe certain behaviors and practices. These interactions also build authentic relationships, and trust from which one learns the most.



Figure 3.7 maps selected relationships that were formed by the research principal and assistants and the sites that were created for participant observation and engagement. It was the nurturing of numerous relationships that provided insights directly and upon reflection. Three circles of relationships were the most intimate. First the relationship with the research principal and assistants, such as our professional time together, travel and meals, their connections in the community, their cultural competence, and negotiated interpretations provided rich opportunities for observation and learning. Second, the relationship with the CIKOD Executive Director that teaching together, writing proposals, informal discussions, and a strong friendship outside the confines of this research provided a sounding board for what I was learning. Third the relationship with the CIKOD Regional Coordinator and his family in Lawra, who welcomed me into their home, served as logistical support, and who were key informants providing ongoing opportunities for learning and cultural understanding. Just being with and observing these groups helped develop an understanding of Dagara community resilience. At another level of relationship was the connection with the chiefs of the two village communities because we followed protocol and went to them each time we were in their community, so saw them multiple times. They were defacto gate keepers to work in their communities and always were welcoming and encouraging.



In addition, other key informants, academics, household members and other individuals were interviewed in the community broadly. The literature, media and news reports brought forward from the research assistants based on their connections provided another level of interactions. Observing them and staying in-tune, listening in on the community discourse helped shape our construction of community resilience. All of these relationships, helped inform the understanding and co-construction of knowledge about community resilience with the Dagara. These kinds of observations from relationships were written up in research

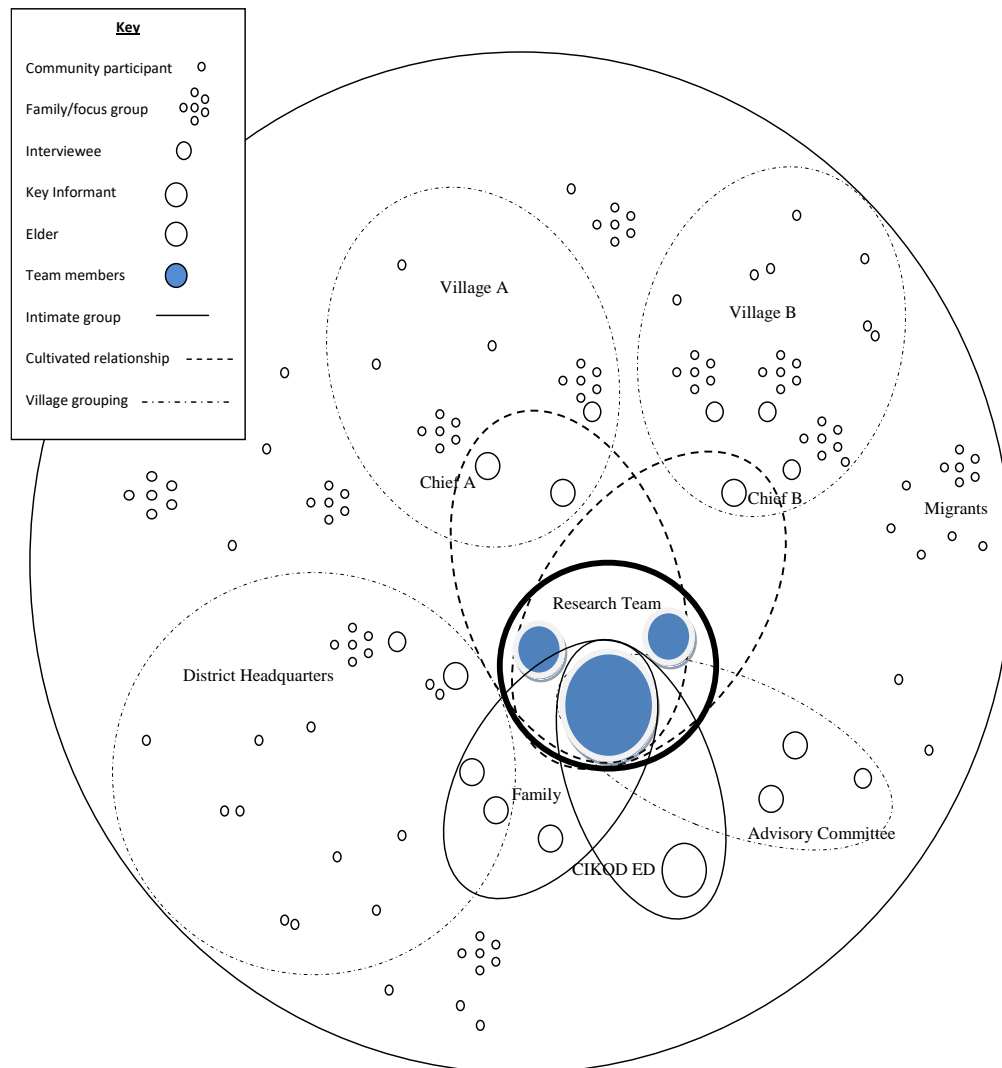
principal's and assistants' journals, as field memos that were added in to the data base, or most often served as background thoughts to the debriefing discussions we had.

One particular experience of participant engagement in the broader Dagara community, that was quite profound was a two-day earth ritual workshop I attended facilitated by Malidoma Some, a Dagara elder, and scholar from Burkina Faso. Although this workshop did not take place in Lawra District (it was held in Halifax, Canada) the experience was beneficial in better understanding the Dagara cosmovision and spirituality. I made lengthy journal entries during this experiential workshop and reflections from that experience are brought into the discussions in this study.

The participant observation method was very useful throughout the process and the ability for us as researchers to check observations with each other as a usual part of the debriefing process was valuable in interpreting these observations. Reflexive activities were also used by the research principal and assistants to capture their learnings about the process and findings as they unfolded.



Figure 3.7 Participant Observation Relationships 2008-2011



Source: Author, field research, 2017

3.3.5 Phase 4 – Participatory Analysis and Community Validation

3.3.5.1 Analysis and interpretation. The qualitative analytical framework used was ongoing constant comparison of data, content and thematic analysis (Creswell, 2007). At the same time, we also protected the integrity of peoples' stories and narratives so that the contextual nature of their comments was not lost (Huberman & Miles, 2002). The intent of the process was to create a participatory approach in which all researchers engaged with the analysis. There was an opportunity for analysis and reflection immediately after the interviews



www.udsspace.uds.edu.gh

and focus groups, and further analysis after the community meeting. Research principal and assistants shared their perceptions and interpretations of the data as it was collected and this helped build discernment of themes and delineated unique characteristics.

The most intense time for analysis and interpretation however, was three two day workshops that were conducted at the beginning of the research work together in 2011. When the principal researcher and assistant reconvened after being apart for nine months we started by reflecting on previous years' learning. As we reconnected it was amazing what highlights each remembered from the previous year's interviews and how we each perceived things in different ways. I had been connected to the data as I had the task of organizing the transcripts in the database. Both Vida and Zuma had been disconnected from the interview notes, but still involved in discussions with others in the Dagara community around community resilience. Our initial reflection activity, using a card sort, of what we had learned the previous year became an early attempt at naming possible themes and categories for coding interviews that we built upon later.

All interviews and field memos from interviews had been entered in an Atlas-TI database, and were printed for our reference. The research assistants were asked to read through a few transcripts to get back into the flavor of what we had heard and the wealth of data we had collected. Using a couple of interviews chosen at random, they individually highlighted what they found most interesting, and we then discussed these and used them to develop a possible list of themes for coding. I then shared with them the list of open codes that I had developed using the same process. We discussed the similarities and differences in the naming process and came up with a set of primary codes, agreeing that we could use multiple codes or add new ones if the data demanded it. The research principal and assistants then took several examples of interviews and did a more formal coding of themes. These codings were



www.udsspace.uds.edu.gh
then compared with coding I had done earlier and we explored differences in the interpretations. For the most part we were using broad codes and the coding was very similar. We took note of the kinds of differences identified for later follow-up.

I then shared with the research assistants the coded and sorted data set of interviews that included over thirty distinct codes. We discussed how these codes related to each other and formed cluster groups of codes and hierarchies. Each research assistant was then assigned different clusters and asked to go through those notes highlighting what they saw as significant, capturing specific quotations that were insightful and finally drafting a short summary of that theme to share with each other. This task proved challenging, but it certainly engaged everyone in the data analysis and helped us deconstruct and collectively reconstruct an understanding of community resilience based on the perspective of Dagara women and men, girls and boys who we had interviewed. The final stage of our analysis was to go back through the notes to identify any differences based on age, gender, geographic location and perceived socio-economic status. We attempted to manipulate the database to provide these kinds of insights, but found it was just as easy to go through the thematically sorted transcript notes. The principal research and assistants then took on the responsibility to prepare a report of findings, concerns, questions for further follow-up and any recommendations that they had heard for presentation back to the communities for validation. These presentations, were prepared and shared with each other to ensure major issues were captured and presented in a provocative way. Through these deliberations, a simple model was developed to capture the essence of community resilience which was used to guide the feedback to the communities.

This collective analysis was a very intensive time for the research principal and assistants. In a short period, extensive analysis was done of a huge amount of data. Certain subtleties were lost along the way, but they were still in the data and were drawn out in the



www.udsspace.uds.edu.gh

secondary level of analysis that I conducted in phase 5 of the research. What we did accomplish was a thorough overview and analysis of the interviews and focus groups, provided propositions to answer the guiding questions for this study and prepared feedback to communities for their deeper input, analysis and validation.

Throughout these intensive workshops various tools and techniques were used to promote the participatory analysis process. One technique we used for doing this analysis was adopted from Total Quality Management (TQM), an organizational development system. The card sort (or affinity tree) diagram is based on individuals having summaries of their interview notes and then writing on index cards short phrases that capture some of the key findings from their interviews. All researchers then put these cards on a table and together we silently sorted the phrase cards until categories are formed based on affinities, or similarities between the phrases. Once the majority of the cards are sorted, individuals can ask questions for clarification about individual phrases to ensure everyone is satisfied with the categorizations. Then the main task is to name the different categories. More discussion can then take place and the raw data can be revisited to check accuracy. We successfully completed this activity where over 100 pieces of data (phrase cards) were sorted into potentially 10 or 12 categories. As a preliminary form of analysis, it was very useful. Other ranking, web charting, and diagramming techniques from TQM and Participatory Learning and Action also helped with preliminary analysis.

Detailed final analysis was done utilizing Atlas TI software. The code list for doing this work was based on the initial categories generated by us, and the final analysis verified the preliminary work, and provided a triangulation of credible results that can be audited.

3.3.5.2 Community Validation. A required element of the research process was to present feedback to the community to clarify understanding and deepen interpretations. This

feedback was done in community meetings where presentation and dialogue was facilitated in a way to ensure the community felt respected and that their views had been accurately captured. Opportunities were given to clarify and to correct information that had been summarized and synthesized by the research. One essential element of checking was whether interpretations were representative of the community as a whole or only of certain “factions” within the community. This was challenging and, ultimately, we were unsure whether supplementary focus groups or individual interviews following the community meeting were needed. Community meetings had been envisioned for validation, feedback, clarification, and deepening discussions. These meetings were held the year after the interviews and focus groups were conducted. The meeting was a great success in one community and less so in another. Elders sat close to the traditional leader, women congregated on one side and men on the other. Children and youth were usually at the back and did not contribute unless asked specifically. To acknowledge the contributions of the community and express our gratitude the research principal and assistants presented tree seedlings to the communities as gifts, and local beer was shared following the meeting.

Preliminary findings were shared with the traditional leader in advance of these meetings, and the research principal and researchers began each session by providing a synopsis of the findings. This presentation was done as a simple verbal report with the principal researcher and each research assistant taking responsibility for drafting and delivering different sections of the report back to the community. An outline of what was reported is provided in Appendix D. Validation meetings were also held with key informants and with the illustrative households. The household meetings were particularly informative because people were also able to provide a sense of what had transpired in each household in the intervening year and how this related to resilience.



3.3.6 Phase 5 - Final Articulation of Case Study

The final articulation of this case study was done in two parts. First an analysis of the conceptual vocabulary around resilience in Dagare, the language of the Dagara was completed. This analysis was based on deep examination of interviews and discussions with the principal researcher and assistants about the lexicon of concepts in Dagara around resilience. This lexicon was supplemented by reference to a Dagare English Dictionary (Durand, 1953) and other relevant documents. I also consulted by email with the research assistants and asked specific questions for feedback for their corrections and / or endorsement of the final conclusions. This work has been published in a collection called *Bridging Worlds: Interfacing Indigenous and Conventional Knowledge for development in Ghana* (Apusigah, 2014). More importantly, it set up the conceptual space for the final articulation of this case study on revealing community resilience with the Dagara people of Lawra District captured in this dissertation.

The chapters of this dissertation were written, with feedback and guidance from my supervisors and support from other colleagues. I revisited the data base extensively identifying quotations to substantiate findings and to broaden and deepen analysis. For the most part, however, the essence of the construction of knowledge on community resilience had been completed with the research assistants and did not change.

3.4 Ethical Vigilance: Monitoring Power in Researcher – Researchee Relationships

The intention of this research design, and the indigenous research perspective I brought to the work, was to make it a decolonizing experience. As a non-indigenous, non-Dagara person researching community resilience with the indigenous Dagara population I cannot take-for-granted the ethical nature of my philosophical standpoint. I therefore had to use processes



to interrogate the power that transcends my location and philosophy and exists in the actual day-to-day relationships encountered in conducting this study.

I learned to monitor the power in researcher – researchee relationships through three lenses: through a pragmatic lens, through an empathetic lens, and through a lens of negotiation – negotiating from a place of difference to co-construct meaning. The power within the relationships can manifest in many forms: who plans, designs, sets the time and executes the project, who makes decisions about who to engage with in which communities and in what ways, who has access to and controls the resources, who engages in analysis, articulates interpretations and names conclusions. My location, as male, outsider, non-Dagare speaker in relation to the location of Dagara people involved in this study was part of this power dynamic. Conceptualization of power is useful here, where was there visible power at play in the relationships, where was there hidden power (manipulation or setting the agenda behind the scenes) and where was there invisible power (ideological influence or internalized oppression) at play (Gaventa, 2006).

3.4.1 Monitoring power from a pragmatic lens

At one level I can look at my role as an outside researcher through a pragmatic lens. Robert Chambers (1983) in his classic book, *Rural Development: putting the last first* challenged those working in development to assess their role as outsiders. He challenged his readers to consider six biases that influence field work (spatial, project, person, dry season, diplomatic and professional), and to consider five reversals in the normal way of doing things to devolve power and reduce privilege. Perhaps his most profound insight, however, is his naming of “we”, as development professionals, as the outsiders and the need to acknowledge the agency of people in communities in the global south as insiders with knowledge, skills and world views that they can contribute to development activities.



Chambers (1983) articulation of the six biases show where both visible and hidden power exist in the researcher (outsider) – researchee (insider) relationship. His recommendations also challenge all of us to be vigilant about reversals. Many of these reversals recommend pragmatic action, but are really about ways to confront ideological or invisible power. Although his work is now 30 years old, and he has been prolific since then, his book serves as a touchstone to monitor and confront power in relationships. In my work as an adult educator and community development facilitator I begin with seeing people as agents of change with their own knowledge, skills and world views. I have cultivated my professional work to be interdisciplinary, culturally-based, oriented towards mutual learning and utilizing participatory decision making. I brought this experience to this research.

Recently scholars have critiqued participation saying it has become so normalized that it could be considered a “new tyranny” (Cooke and Kothari, 2001: 1). Others argue, there are always boundaries created between *us and them* because of the *ruling relations* that become established in carrying out the everyday work (Devault & McCoy, 2002). There are mundane social practices that reaffirm the power differentials between the researcher and the researched and one needs to make tireless strategic efforts to overcome these (Millar, 2005).

The ideas of tyranny of participation and the mundane social practices that reaffirm power differentials often manifest in visible power. These may be the easiest to identify and change. For the researcher, sensitivity, reflection on one’s own practice and reflexivity is necessary to help bridge theory and practice (Lather, 1986; Maguire, 2001; Manias & Street, 2000). Two examples of visible power in this research was (a) our foregrounding an interest in indigenous spirituality meant reduced discussion with people on the structures and influence of the Catholic Church and (b) my logistical constraints meant research was conducted over a limited time, during the dry season, convenient to my schedule.



Millar's work (2005) www.udsspace.uds.edu.gh is also helpful at a pragmatic level as he acknowledges the difference between rural, village people and those researching and/or engaging in development initiatives with them. Anyone not currently living a rural, village life, even if they may have grown up in that community, has to recognize themselves as an outsider to those with current life experiences and recognize there will be power at play in the relationships between them. Millar (2005:97) recommends an endogenous way of working to confront various levels of power differentials such as: accept the idea that local communities have indigenous knowledge; accept the rules and regulations set by the community; enter into a respectful and constructive dialogue; and accept the guidance of local leaders.

3.4.2 Monitoring power from an empathetic lens

The empathetic lens challenges an outsider to see community members in an empathetic way, to walk in their shoes, and to bracket and put aside one's own location and its socialized biases, and attempt to understand a phenomenon from the location of another. Attempting to unpack relationships in this way, first interrogating one's own location and its inherent power and privileges and secondly taking on the perspective of another.

Power in My Location. There are structural, systemic and cultural norms that gave me power in the relationship with the people in Dagara communities. As the initiator of this research and the principal researcher the study is perceived as 'mine', even though the research assistants played a major role and members of the advisory committee influenced elements of the research design. My embodied location (Lather, 1986, 1994; Smith, 1987) as a white-looking, middle class, North American male speaks of various levels of power. In conducting this research there were lots of assumptions about my right to make decisions and to control the research. My age and education reinforced this power differential and often put me in places of advantage viz-a-viz the community people wherein they would often refer to me for





www.udsspace.uds.edu.gh

decisions and interpretations. This power may not be inherently bad, it is a form of responsibility, but it did mean I was having undue visible influence over the process. Most importantly it may have reaffirmed some biases and stereotypes about who determines the purpose of, and how research is conducted.

Each person has multiple locations (Manias & Street, 2000), however, and claiming my mixed ancestry and being a passionate and committed ally for African and indigenous cultures not only complicates my location, but that complex multifaceted location influences my ability to adopt another's standpoint. My location and gaze influenced the relationships between myself and others involved in the research potentially providing a more equitable ground for negotiating the relationships (Lather, 1994). By recognizing we each have multiple locations, I explored what each location means by being reflexive, engaging in dialogue, and discovering the "space between" various standpoints (Smith, 1987).

Privileging Another's Viewpoint. In understanding the world, the viewpoints of marginalized people are useful in knowing more deeply the context and location of people within its bounds (Dei, 2000; Fine, 1994). In critical theory, and the associated radical approach of participatory research, many scholars have argued that a researcher must take the standpoint of the dispossessed in order to make the changes that are necessary in an unjust world (Hall, Gillette, & Tandon, 1982; Fals Borda, & Rahman, 1991; Maguire, 1987, 2001). Smith (2001: 1) acknowledges that she privileges this standpoint in relation to research with her phrase, "the vantage point of the colonized". Analyzing her actions through a critical lens, she is convinced her research can either be for maintaining the status quo of an elitist and colonizing research or for a new form of liberating research—but it can never be neutral. This echoes Friere's (1970) work in liberatory education where he posited there is no neutral

education. However, to truly bracket and put aside one's own pre-conceived notions and unconscious assumptions and values to take those of another is psychologically challenging.

Smith (2001: 9) describes the nature of conventional academic research *on* indigenous people and its ties to colonialism, and neo-colonialism. She argues that, research has been worthless to indigenous people and has been a power wielded over indigenous people by others. Her (Smith 2001: 74) desire is for research to be more “respectful, ethical, sympathetic and useful”. She describes a distinctly different way of knowing from western science, one that is part of the indigenous world view and insists that “the values, attitudes, concepts and language embedded in beliefs about spirituality represent, in many cases, the clearest contrast and mark of difference between indigenous peoples and the west”.

Reason and Bradbury (2001: 8) writing from an interpretivist frame provide additional insights into power relations by distinguishing between separated and connected knowing. They describe separated knowing as *critical and doubting*, and connected knowing starting with empathy, a receptive eye and entering the “spirit of what is offered and seeking to understand from within”. This relativistic view resonates with a holistic world view (Konadu, 2003; Mbiti, 1969; Millar, 2004; Monteiro, 2000; Some, 1995) and informed my entry point for research in northern Ghana.

To privilege the Dagara world view, Dagara knowledge, or Dagara way of being means starting from their own perspective. The Dagara world view must be understood and articulated with limited interpretation and theoretical analysis by outside agents. This worldview is not one frozen in time (Millar, 2005). It is one that coexists with western, modern world views and evolves on a daily basis, yet must be accepted and appreciated by outsiders, and owned by the Dagara themselves as a decolonizing project (Smith, 2001).



The Dagara women and men, boys and girls in these same communities are not homogeneous. Each have their own unique identities and locations. Many take great pride and strength from their indigenous ethnic origins and are certainly not impoverished victims as others may label them. Others in the Dagara community have grown up in a colonial education system and have succeeded to enjoy certain privilege, or feel they have been denigrated and marginalized economically, politically, and culturally from the globalized world. Their locations are diverse, multiple and complex.

Bishop (2005), who titles his article *Freeing ourselves from neocolonial domination in research*, discusses the diversity and complexity in indigenous peoples lives according to age, class, gender, education and other dimensions and states there is not one *other* in the conventional sense of the term. He represents a new body of scholarship that contests the notion of the *other* and privileges indigenous people as insiders, and the best people to do research on themselves. He quotes Swisher (1998: 113) who proposes that a defining characteristic of the *other*, the new insider in an indigenous research project, is ... “the passion from within and the authority to ask new and different questions based on histories and experiences of indigenous people”. Insiders therefore have an advantage in doing decolonizing research, yet they must also be ethical, respectful and humble. Bishop (2005) does not discount the possibility of an outsider conducting indigenous research, but that the researcher needs to have cultural knowledge to accurately interpret and validate experiences and that as an outsider should only conduct research at the invitation of indigenous people.

From an empathetic lens therefore, I must recognize the different worldview seen through insiders’ eyes, and struggle to be appreciative and respectful of the indigenous way of being, without romanticizing, and being critical when necessary. It is a difficult balancing act, but was worth the effort and the close collaboration with Dagara colleagues helped minimize



some of the outsider – insider power dynamics and overcome some invisible power at play by privileging the standpoints of the Dagara people.

3.4.3 Monitoring power from a lens of negotiation

We can illuminate the power at play in researcher – researchee relationships at another level if we consider what I call a negotiation lens. This lens owes much to researchers who have looked at the researcher – researchee, or outsider – insider, issue from an indigenous viewpoint (Bishop, 2005; Little Bear, 2000; Smith, 2001). This lens forces us to consider these relationships and analyze the power at play at a deeper level.

The discourse on outsider – insider relationships has been taken to a different place by indigenous scholars, and scholars from traditionally exploited groups, who have contested the outsider – insider dichotomies and their stereotypes. All researchers have been challenged to reflect on their own multiple locations and how these locations and the associated power dynamics influence the relationships in research projects, including their own relationships with their multiple selves.

Negotiating to co-construct meaning means to forefront, honor and acknowledge differences, not to judge them, and to celebrate them as unique understandings of how the world works. This co-construction means finding a way to go forward together without losing the richness of different viewpoints. Working from this negotiation lens is not to compromise to a laissez-faire cultural relativism, but demands real dialogue to reach new understandings that are not blind to power differentials which can replicate the status-quo.

Smith (2001) describes how indigenous researchers are both outsiders and insiders at the same time. Outsiders in the sense that they receive certain privileges, and at the same time very much insiders who have their own relevant knowledge, experiences and insights to



contribute and a passionate stake in the research process and outcomes. Insiders also have both a perceived and real accountability to their own families and communities about the research findings and conclusions.

Apusigah (2002), in her research thesis on *Reconsidering Women Development and Education in Ghana*, states she privileges the views of Ghanaian women from within and challenges herself as an African feminist to do serious work from the inside-out. However, she states she is also open to other viewpoints and to looking from the outside-in ... to own these multiple locations as there are a myriad of other angles and ways of looking at things and she strives to contest discourses from all locations (p.42).

In this research initiative, the research principal and assistants had different locations at different times along the spectrum of outsider – insider, researcher – researchee, and us - other. What we were hearing and learning from Dagara people in communities was then negotiated through this lens. We had certain power and privilege to be able to shape the discussions, as well as visible, hidden and invisible power, yet we were ever mindful to let the discussions evolve under the direction of those being interviewed and to regularly reflect on the biases and influence we might be introducing in ever so subtle ways.

It was a collaborative co-construction of meaning that we strove for in this research, which meant we focused on relationships and a healthy balance of power within those relationships. As Narayan (1993: 672) articulated:

What we must focus our attention on is the quality of relations with the people we seek to represent in our texts: are they viewed as mere fodder for professionally self-serving statements about a generalized Other, or are they accepted as subjects with voices, views and dilemmas – people to whom we are bonded with ties of reciprocity.

Apusigah (2002) talks about resisting the challenge to over-analyze stories, from the primary author's viewpoint. This research included a saturation of multiple voices in ongoing



analysis within interviews and reflections by the researchers, during analysis workshops and community validation.

Bishop (2005) and Minkler (2003) talk about making transparent the power differentials which realities reveal, including the sometimes divergent and conflicting agendas. Superficially we could say my agenda was to finish PhD research, for the research assistants it was a job, and for the community members it was to get some direct benefit, or maybe just to have the chance to share their stories. It was more complicated than this, however, and the methodology chosen and the design put in place revealed this.

This personal vigilance and interrogation challenged me to look at how I worked with others in phrasing research questions, listening, capturing stories and making meaning. I initially wanted to erase some of the differences between my location and those of the research assistants and the community members. As time went on I clearly accepted the differences and the power and privilege that went with them and worked to negotiate and co-construct meaning in an authentic way. This co-construction meant privileging others voice at times, being acutely aware of the power in the writing, and monitoring relationships with others in the community.

I was aided by the research assistants, my colleagues, and my supervisors to stay honest and maintain integrity in this process. I cannot deem to say anything as an insider, my location is very different from Dagara men and women who live their lives in Lawra District. Yet, the methodology and research design undertaken was valid and I can say there is a spiritual element that I propose complexifies my location and my identity that aided in the co-construction of knowledge and meaning. I approached this work with passion and in solidarity. My spiritual self resonates with the Dagara context, and from my world view there are blood memories (Loppie, 2009) of past life times that connect me with this region and its people.



The methodological approach selected for this study acknowledged these tensions around locations, insider / outsider, indigenous / non-indigenous power within the research. We remained reflexive and vigilant about these continuous tensions. The design of the research process was such that it led to a co-construction of useful knowledge about community resilience with the Dagara. The methodological approach used was a qualitative case study and the research design included working with Dagara colleagues as research assistants, conducting in-depth interviews and focus groups, collective thematic analysis, and community validation.

3.5 Summary

In this chapter I have shared the indigenous ontology and epistemology that informed this study. I discussed the decolonizing stance that was taken and outlined issues of trustworthiness I took into account (credibility, authenticity, criticality and integrity) and relational accountability. The qualitative case study methodology that I drew on in the research study was explained. The five-phase research design was shared with a focus around the process of cultivating relationships with Dagara people, and the establishment and empowering of the research assistants. These research assistants took responsibility for conducting the major elements of the research methodology from design, to data collection to analysis and community validation. I have also included a section on ethical vigilance, and how this was maintained throughout the study process. Employing an indigenous philosophy and decolonizing methodological approach has provided a valid and credible case study of community resilience with Dagara people in Lawra District. The findings and conclusions based on this case study are described in the following two chapters.



FINDINGS AND DISCUSSION

DAGARA VOICES ON COMMUNITY RESILIENCE

4.0 Introduction

In this chapter I provide findings in the voices of Dagara women, men, boys and girls as they share their views on community resilience, and strategies that can ensure or inhibit community resilience. I also build on this knowledge to co-construct understandings of community resilience that interface the Dagara knowledge that was shared, with my own interpretations from participant observation, and with concepts promoted in the interdisciplinary academic literature. Through this interfacing of knowledges, the three objectives of this study are discussed:

1. To reconstruct a rich description of dimensions of “community resilience” relevant to Dagara people of Lawra district for future dialogue.
2. To identify and re-present strategies to Dagara people of their experiences that ensure or inhibit their resilience as communities for their possible action.
3. To honor and validate Dagara indigenous knowledge and practices that sustain community resilience and well-being; and challenge Dagara indigenous knowledge and practice that constrains community resilience and well-being.

The chapter is organized into three major sections, each related to one of the objectives. Each section is divided into findings and emerging insights. Each findings section privileges the voices of Dagara people, and reflects what was validated in community meetings.



Quotations are taken from interviews, focus group transcripts and the field notes of the research principal and assistants, and each is referenced with a code and a line number for audit purposes.

4.1 Dimensions of Community Resilience Relevant to Dagara People

To reconstruct a rich description of dimensions of community resilience relevant to Dagara people, it is important to use a Dagara world view perspective. Much of a world view is held in language, so such a description ideally would be presented in Dagare, the language of the Dagara people. This research was conducted in Dagare by the research assistants, who are fluent in Dagare, or in translation from Dagare to English with the principal researcher. The abstract concept of community resilience was captured in Dagare vocabulary. This vocabulary related to resilience and community resilience, is shared below. Articulating the concept was also strengthened by grounding the concepts in three practical aspects of the Dagara context. The research principal and assistants used the analogy of the three stones of a cooking fire to reflect back to the community what we had heard about three interdependent, practical aspects of the context of Dagara people. One stone is describing what people are proud of, to more deeply understand community from a Dagara world view perspective. Another stone is acknowledging the challenges Dagara people face, to appreciate the context within which they consider resilience. The third stone is identifying the kinds of practical ways Dagara people use to respond to and overcome the challenges they face. These contextual aspects were validated at community meetings and people appreciated how the concept of community resilience was captured from a Dagara community perspective. It took a recognition of all three of these practical aspects of the Dagara context, plus the Dagare vocabulary on resilience and/ community resilience, to be able to describe in English a concept of community resilience found to be relevant to Dagara people.



4.1.1 Resilience, community, and community resilience from the Dagara perspective

The vocabulary in Dagare that helps capture the conceptual space of resilience and community resilience, was not easy to identify. To understand terms and concepts in Dagare is not only identifying vocabulary, but an exploration of expressions, proverbs, songs and their usage in different contexts. The research principal and assistants found it challenging to discuss certain concepts in English or to share Dagare vocabulary at the beginning of the study. It is not possible to make a direct translation of words like *resilience* or *community* into Dagare without imposing subtle meanings and ways of thinking onto the Dagara world view. Conversations in Dagare are always contextual. The research principal and assistants were confident in their understandings and translation of these conversations within the context, but it was difficult to reduce and name abstract concepts in Dagare isolated from context. It was only at the culmination of the research that the research assistants was able to provide words and phrases they had heard consistently in the community discourse and relate them conceptually to community resilience (Fletcher, 2014). Table 4.1 provides some of this most significant vocabulary.

<i>Table 4.1 Dagare Vocabulary: Characteristics of Men & Women Related to Resilience</i>	
<i>Kanyir</i>	patience and courage
<i>Marpai</i>	perseverance and commitment
<i>Poglo</i>	pledge to get something done; will power, resolve
<i>Deblo</i>	strength; manliness, maturity – as opposed to boyishness – can be applied to females
<i>Kpeng</i>	strength to manage difficulties
<i>Fang</i>	Firm
<i>Zukpeng</i>	daring, brave, courageous
<i>Diibo</i>	faith; trust in God; plant something, nurture it and it will grow
<i>Kyillo</i>	hope, God will help with problems; rejoice, see the positive ending and celebrate
<i>Bang milo</i>	how women can maneuver through difficulties
<i>Pogbe zore no nimbaalo</i>	women are sympathetic and endure pain to care and nurture others
<i>Fo tere kanyir</i>	women with patience can boil stones

Source: Author, field research, 2017



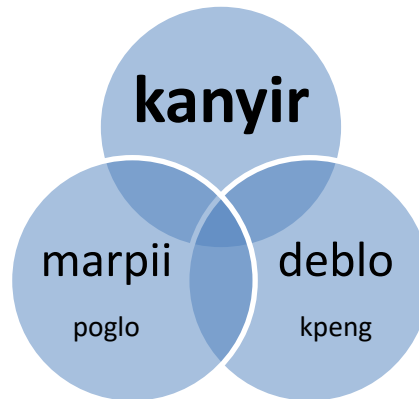
One insightful saying among Dagara people is: *kanyir tuon kpeng*, literally, “patience conquers strength.” This saying introduces *kanyir* as a powerful concept related to the resilience of individuals and communities. *Kanyir* as a personal characteristic is conceptualized as patience by most Dagara speakers, but it is much more than just the English concept of patience. *Kanyir* is described as patience and courage and is the overarching term that captures the strength and spirit that individuals express to overcome challenges. *Kanyir* is understood as a combination of *marpii* and *deblo*. *Marpii* signifies the ability to stick to something, the characteristics of perseverance and the commitment one demonstrates by not running away from problems. *Deblo* is a word for strength, or manliness, and connotes the pride for strength in fulfilling the role of a man in Dagara society. This role includes the ability to farm, to hunt, to support a family, to contribute to and earn respect for one’s family and clan, and to mature and gain wisdom in life. Manliness in this sense would be in contrast to boyishness: an immature stage where one is still vulnerable and has not yet learned the necessary skills and knowledge to fulfill one’s responsibilities in society.

Kpeng is another word for strength and is a subset of the *deblo* concept. *Kpeng* is understood as the strength needed to manage challenges or live through difficulties. A common greeting in Dagare is to ask people “*fo/ye kpeme na?*” [Are you strong?] and is used to inquire how one is making out through the daily journey of life. The characteristics of *kpeng* expressed over a long period of time can lead to *deblo* [manliness], and *deblo* combined with *marpii* [perseverance] leads to *kanyir* [patience and courage] or the trait of personal resilience. Associated with *marpii* is the concept of *poglo*, a pledge or a resolution to get something concrete done. The aspect of personal will is significant here in that *marpii*, one’s “stick-to-it-ness,” is dependent on *poglo*, the will power and the resolve to complete something. Figure



4.1 captures the constellation of interrelated terms that make up the idea of resilience for Dagare speakers.

Figure 4.1 Constellation of Dagare terms related to resilience



Source: Author, field research, 2017

It was significant that many people spoke of these and other terms related to resilience in relation to women. *Bang milo*, for example, is a common expression used to describe how women maneuver through difficulties. The expression is often applied during times of food shortages when women somehow make something nutritious for their families to eat with limited ingredients. As both women and men explained it, *bang milo* is the ability of women to create something “out of the blue”. A related expression is *kpe te mil*. This expression means, “Go in [the house] and do something [so we can maintain the relationship and show proper hospitality]”. Both these expressions celebrate the creativity and resourcefulness of women during times of need. Both are characteristics related to resilience.

Dagara people will also say *pogbe zore ni nimbaalo*, signifying that women are sympathetic and have great love for humanity. This kind heartedness is combined with *kanyir* to connote how women endure even when something is paining them and maintain their caring towards others in the community. This use of *kanyir* as a positive and powerful characteristic of Dagara women reinforces the expression, *fo tere kanyir*, one with patience can boil stones. It reinforces the determination of women to keep working at things to benefit their family and



community and shows how the personal resilience of Dagara women becomes one of the bridges to community resilience.

<i>Table 4.2 Dagare Vocabulary: Concepts Related to Community, and Community Resilience</i>	
<i>Fong</i>	physical village
<i>Yillo / yir</i>	house, social house or patriclan
<i>Bello</i>	matriclan; mother's house
<i>Lonluore</i>	joking partners
<i>Longta</i>	belongingness; you are part of the other and the other is part of you
<i>Nolang</i>	unity and togetherness
<i>Songtaa</i>	to help others, solidarity
<i>Ni bean be kore wob kuo o nyore</i>	No one person can give an elephant water to drink; there must be cooperation to solve problems.
<i>Yo villa / nin saalo</i>	They have a good name; they are humanitarian
<i>Tizaa fero tome</i>	mutual obligation for communal labour

Source: Author, field research, 2017

The sense of community for Dagara people is intimately tied to concepts of the *yir* [patriclan], *bello* [matriclan] and *lonluore* [joking partners] as listed in table 4.2. These concepts signify the multiple kinship ties that bonds a Dagara community together.

Values such as *longta* [belongingness] and *nolang* [unity and togetherness] consolidate these relationships. *Longta* signifies very deep connections between individuals and clans and has the meaning that “you are part of the other and the other is part of you.” This concept is powerful in that it binds the community together, gives them strength, and encapsulates both the rights and responsibilities one has in Dagara society. *Nolang* is spoken about as an essential ingredient in a household, a village and a clan. To have peace and prosperity *nolang* is necessary. Women speak of *nolang* specifically and of *songtaa* [to help others] as a form of women's solidarity that keeps the community strong.

There are also proverbs that capture the value of communality in the Dagara world view, for example: *Ni bean be kore wob kuo o nyore*, [no one person can give an elephant water to drink, there must be cooperation to solve problems]. *Baa lo eh baa lo ni baar diehn'u*



is also an important proverb for Dagara that captures the importance of community, cooperation, and the imperative to resolve differences. Literally, the proverb means “if two dogs are playing and one falls down, the other must also fall down for the game to continue.” This proverb vividly illustrates the spirit of compromise, togetherness, and support within Dagara culture, especially found among women. At the same time, people realize there may be disagreements and tensions within relationships, reflected in the phrase *nyime ni zel mi langna kpier kye a nyime mi wa dun a zel bibir kang*, literally, “teeth and tongue stay under one roof, but teeth do bite tongue one day.” However, conflicts need to be moderated because both parties suffer whenever there is a quarrel: *nimir ba kono ka nyur tangna* [the eye cannot cry without the nose responding]. These proverbs are significant for their messages, and also for their common usage to teach the younger generation values and a moral code in everyday situations.

Frequently in discussions with communities, women and men of all age groups spoke of practices that tie community together such as *tizaa fero tome* [the mutual responsibility or obligation one has as a member of the community for communal labour]. This expression was used frequently. Some elders described it as something one is encouraged to do, while others described it more as something one is expected to do; a person could actually be fined by the village head if he or she did not take part. These different interpretations help to name the conceptual spectrum that includes participation, mutual responsibility, obligation, taboos, and imposed rules and regulations. For some Dagara people, the distinction related to communal labour was made on three levels: *yir tome* [obligatory household labour], *tizaa fero tome* [communal labour for which all members of a community have mutual responsibility], and *teng mal yella* [communal labour which a village head or other authority figure can impose on community members]. People also spoke of *dien kob* which is the practice and expectation of



young men to help work on their in-laws' farms during specific times of year to solidify the relationships between households and clans.

Taken collectively, the words, proverbs, and practices described above construct a conceptual space in which communality plays a significant role. This nuanced concept of togetherness identified with *nolang*, and then combined with *kanyir* helps to name the Dagara view of community resilience.

Related to these concepts of the relationships among the researchers, we also gained insights about community resilience by taking an appreciative stance and learning practically what people were proud of in their community. Table 4.3 presents some of the responses we heard frequently as researchers.

Table 4.3 Summary of Things Dagara People are Proud of about Their Community.

unity and togetherness clan structure Peaceful Hardworking successful people from area Farming livestock rearing small businesses women's solidarity and child upbringing Land trees (eg. Shea, dawadawa) Kobine festival traditional medicine funerals and honoring the dead Bagre festival Tengansob's role
--

Source: Author, field research, 2017

Some of these aspects were captured in the Dagara vocabulary above. For others, the intimate connection to the land was particularly significant. One male elder explained, "people are proud of their land, because it is the source of their livelihood", (P7:5:5), while another added, "we are of the land", (P34:19:19). Many people enthusiastically talked about the



Kobine Festival that happens in Lawra each year. Young people said, “The festival brings people together and is an avenue to channel development ideas, etc. It is one place to share our cultural heritage like dancing, hunting, farming, etc.” (P25:23:26). A man added, “At the Kobine festival all come together from all parts of the country to count yourself as a proud citizen of Lawra” (P6, 46:48). People also shared their pride in traditional medicine. One woman commented, “Effectiveness was there in much traditional medicine. Some communities can still find herbs, but they differ from one place to another” (P35,33:35). People did not go into long explanations about the nature of ancestorcentrism, but were happy to share their pride in the Bagre festival. One male elder explained, “In Bagre, youth learn endurance, respect, obedience, honesty, and belongingness. They learn all these things” (P34,38:38). Each of these insights provides a clue to the conceptual space for understanding community resilience from the Dagara perspective.

Community resilience in the context of Dagara people is a multifaceted, nuanced concept about strength, survival and preserving the Dagara way of life. In the context of Dagara people, community resilience is a way to address and overcome the challenges one’s family and community faces in life, while maintaining one’s pride, identity and connection to the community. One needs strength, perseverance, hard work, and a commitment to certain values (i.e. discipline, honesty and respect) to retain and nurture this identity. Challenges are most often constructed as ongoing chronic issues, whether they are within the natural world, the human world, the spiritual world or at one of the intersections between them.

This conceptualization of community resilience from the perspective of the Dagara is complementary to what current researchers are saying about the concept. The Dagara concept of community resilience focuses on nurturing community and cultural assets that can bolster individual resilience to respond to challenges. Networks of clan and joking partners, the





www.udsspace.uds.edu.gh

important value of belonging, unity and togetherness all resonate with and extend to the works of others (Breton, 2001; Grigsby, 2001; Stehlik, 2000; Ungar, 2004; Walsh, 2004). Moreover, to deeply understand the concept of the individual Dagara within his or her community, one must understand the prescribed roles and responsibilities within that context. The notion of the individual for the Dagara is nested within community. One's independent spirit is recognized, but individualism and individual effort is for the good of the clan lineage and the community in which there are roles and responsibilities, and where there must be reciprocal respect: the individual for the community and the community for the individual.

The notion of patience, courage, responding to the will of God, and having the collective role as people to till the earth extends the psychological and spiritual dimensions captured in community resilience literature. Other researchers often minimize these considerations (Adger, 2000; Davies, 1996; Kretzman and McKnight, 1993). Combined with the ideas of compromise and mutual responsibility, the Dagara ideas on resilience challenge many accepted notions of individual and collective agency because they call into question the competitive notion of agency for some (World Bank, 1999) and promote agency as a real responsibility and obligation that people have. Others support the responsibility dimension of agency (Mathie and Cunningham, 2008) but the debate is strong and often centers on neo-liberal notions of positive competition versus ideas of solidarity. The Dagara notions of agency challenge people to think about the responsibility each member of the society has to express individual and collective agency and take a strong stance on fulfilling one's responsibilities as a citizen, a son or daughter of the soil, an integral part of society and community.

4.1.2 Life in an Environment of Challenges and Risks

Central to the Dagara understanding of community resilience is an acknowledgement that Dagara people live their lives in an environment of challenges and risks. This context of

vulnerability, and people's responses to vulnerability, is intimately linked to the Dagara conceptualization of community resilience. Over the course of the research field work and community validation meetings a number of issues were identified in Dagare related to the environment of challenges and risks for Dagara people. These concepts are listed in Table 4.4.

<i>Table 4.4 Dagare Vocabulary: Common Challenges or Difficulties (shocks, stresses, vulnerabilities, threats)</i>	
<i>Teng bala zie yina</i>	land is exhausted
<i>A teng sanga / zie yina</i>	land not as it used to be; God is angry for human transgressions on land
<i>Dogre</i>	Suffering
<i>Yelwoni / yelfere</i>	facing difficulties
<i>Mwello</i>	squeezed from different directions
<i>Tulo</i>	hot; situation has potential for great trouble
<i>Feru manu</i>	Distress
<i>Laadime</i>	extreme suffering
<i>Yelba wanta</i>	Misunderstandings
<i>Zebr</i>	conflict / fighting (rare occurrence)
<i>Kol</i>	famine (rare occurrence)
<i>Koupaal</i>	flood (rare occurrence)

Source: Author, filed research, 2017

In addition to these overall concepts, the researchers found that when they conducted interviews and focus groups with Dagara women, men, boys and girls the participants were eager to talk about the specific problems and difficulties they have as individuals, families and communities. Table 4.5 captures some of the most common of these challenges. I have elaborated on some of them so the reader can get a sense of the challenges from the voices of Dagara people.

<i>Table 4.5 Summary of Challenges and Risks in Dagara Communities</i>
soil fertility and tree cover
erratic rainfall
economic challenges
challenges of cattle theft and armed robbery
challenges of household conflict, alcohol and misbehavior
youth migrating to the south



youth loosing cultural values
widowhood rights and rites
breakdown of unity and togetherness
broad cultural change

Source: Author, field research, 2017

Soil fertility and tree cover. According to the interviews, reduced soil fertility and tree cover was one of the biggest challenges people were facing. Reduced tree cover impacts the environment by reducing water retention in the soil around roots, decreasing the amount of shade, increasing surface evaporation, and reducing organic matter to decompose back into the soil. The explanation of why this is happening was contested. Multiple reasons were given including population increases demanding more land for farming, road building leading to the cutting of certain trees, bush burning in the dry season, and diseases causing certain trees to die. The greatest debate, however, was around the cutting down of trees for firewood and the making of charcoal. Men stated that women were cutting healthy trees for firewood. Some men were sympathetic, recognizing the need for firewood for cooking, and knew there were few alternatives available, but others accused women of blatantly disregarding community protocols and indiscriminately cutting trees for wood for themselves, and to sell in the market. Women strongly refuted this accusation. They insisted it was actually some men who were cutting healthy trees in the business of making charcoal or selling large quantities of wood outside the area. Women said they only collected fallen wood or broken dead branches from trees, and that it was men with their cutlasses and saws that were making the situation worse. Making charcoal for people in towns to burn instead of wood was discussed as the real driving force behind the problem.

Erratic rainfall. A group of youth stated, “The rainfall pattern is changing and is now erratic and unpredictable, there is reduced fertility now as compared to our grandfathers’ time” (P26, 62:67). Elders spoke passionately about the spiritual causes related to soil and water. It



was explained that Dagara people are of the land and they need to treat the land and water with respect, and these relationships must be maintained. Because of this mutuality certain taboos have been established, but often these taboos are being broken.

Economic Challenges. Many challenges and problems were related to income and financial matters. People spoke directly about the need for money to pay bills, school fees, and to buy food to address food shortages within the household. Young people were more apt to define themselves, their families and Dagara people as poor. This naming of their collective reality as one of depravation and need was striking. There were exceptions to this, and young people did show hope for the future, but they were more likely to call themselves poor than their parents or community elders. In contrast, many adults spoke more about particular challenges such as not enough money for paying bills, school fees, market taxes, farm inputs, transport or particular expenses such as health care costs, a wedding or a funeral. Most adults spoke of these as specific financial challenges and did not label themselves as poor.

Youth migration. A group of men and women elders related the impact that the migration of youth out of communities was having on them:

Only the old people are left in the village and houses that get demolished after heavy rains remain like that until the young people come back. There is a loss of cultural values e.g. youth growing up in the south can't speak the Dagare language, and they even adopt southern names. (P27,23:26)

This issue of migration is passionately discussed in the Dagara community discourse.

It is not only an issue for this generation of youth, but has been a part of the Dagara way of life for generations. It is a difficulty, but is also seen as an opportunity. As one man explained:

The danger with migration to south is of engaging in social vices. The people from Lawra in the south are just managing; they should deter relatives from coming; JSS [Junior Secondary School] students even go to the south for casual work. There is poverty there. You can't sit and wait for somebody to get you out of problems. You can cry, but nobody comes to aid you. The instinct in one's heart to help a person is not there (P10,48:48).



Socio-cultural Challenges. A set of social problems that were discussed by women, men and youth was that of misbehavior, conflicts in the home, and alcohol usage. As one woman shared:

If the situation is not well with the lady and her relations with her man, he can threaten and beat her. This happens often with young ones when they are angry, but not with other generations. (P8,4:5).

Conflicts in the home were most often described between husbands and wives, or between fathers and sons, and were exacerbated when alcohol was involved. Often the violence was not considered serious. Many men, and some women, condone a male slapping or beating a wife or child who has misbehaved. When alcohol is involved, however, people commented that this beating may be excessively violent, frequent, or unwarranted and may have more to do with the man's own anger or frustration than with any kind of discipline or exercise of acceptable authority within the home. As two women shared:

Young people who are into drugs and alcohol are more abusive. Some women are also involved in the same behaviors ... they may be able to stop locally brewed beer, but there is more beer and alcohol that is coming in from outside the community in sachets (tetrapaks) which is worse. (P40,58:61)

Another male elder elaborated:

In the past, if you did something wrong you were beaten to the extent that running to somebody will mean another beating. Upright discipline was used to discipline children, but today, there are laws against the beating of children and women. Teachers could cane pupils in the past if they go wrong, but now if a pupil is disciplined in the form of caning you will be confronted by parents and sometimes the law. So, it is better to leave them. (P33,46:51)

Adults were not necessarily blaming individual children for bad behavior, but were critical of the changing times and the overall loss of cultural values. One woman commented, "Youth don't believe 'it's ours', they always say, 'It's mine'". (P35,5:5). Dagara youth agreed things were changing, and spoke about their interest in learning values and the reciprocity they needed from adults and elders. One challenge that people said exacerbated youth losing their cultural



values was the role of the media and the importation of different cultural values through television and movies. A male elder commented, “People learn bad things from watching movies and television. They have made children these days to become armed robbers and smokers among other things (P33,54:55). Two female youth stated it was even worse than that, “aspects like pornographic acts in movies were making the youth engage in certain immoral acts (P29,40:46). Others confirmed the availability of pornographic movies in rural markets and that a mobile phone application is available to get those movies. Youth admitted that many of the problems existed, but also made a case for the educational benefits of TV and movies as a window on the bigger world. One man explained:

Unity is the number one thing for resolving conflicts. ... Those days people saw themselves as one, whatever happened was for everyone, people never felt cheated. Development came to create problems. Western education created problems. We were united to do things in common before. We used to educate a child to help community, but the system now looks out only for the nuclear family, and thereby creates envy and jealousy and then polarizes family and community. ... in our traditional setting, you’d be very interested in your sister’s children, very much interested in their well-being, but there is a big segregation now (P36,33:37).

Another male elder added:

Education has two sides, it divorces you from culture and you learn from foreign ways. Our ancestors also had their way. Why do you leave your customs and go to follow another way? You place yourself in a second class. Some say I must belong to my community, get married here and learn my culture deeper. I have pride in them. Why would I leave my culture to copy others ... We can keep to our own, this includes our relationship with God ... our moral behavior is superior to [modern ways]. (P34, 39:41)

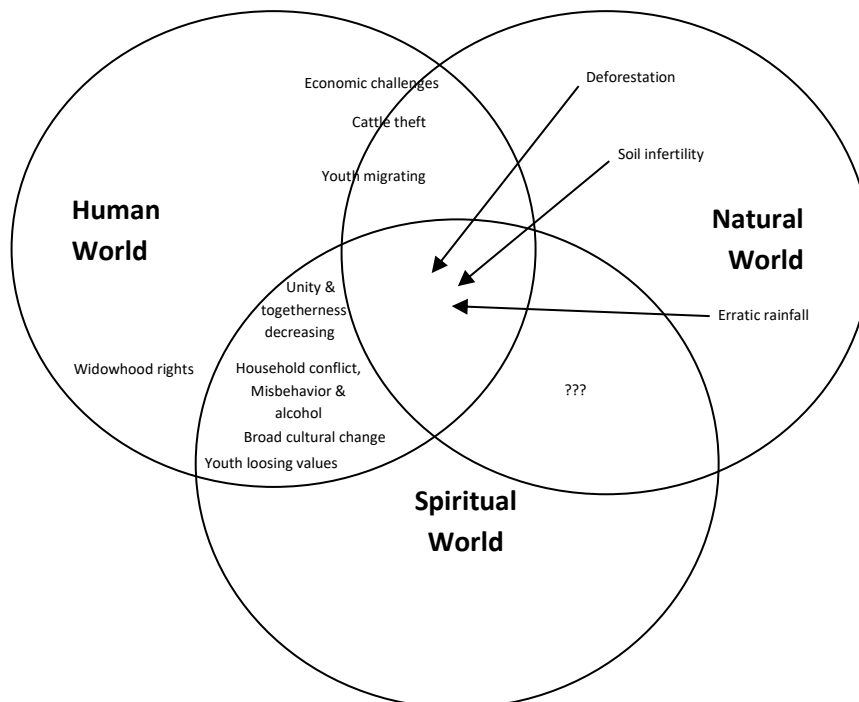
These issues were talked about by people at a much deeper level than just cultural norms being shifted. They were suggesting that their entire belief system was being assaulted in a profound way and it was a spiritual challenge they were experiencing. There was appreciation for a cultural dynamism and the need for things to change and shift, to ensure the Dagara way



of life is viable for the 21st Century, however, ensuring that any transformation did not neglect the Dagara identity was an issue many people had on their minds.

Interpreting the Challenges in Dagara Everyday Lives. Dagara people speak very pragmatically about the challenges and changes they are experiencing in their life ways, and the strategies for overcoming them. These challenges are not unique to the Dagara people. For the Dagara, however, the challenges are seen from the perspective of their everyday lives, from their worldview which illuminates an understanding of the coexistence of different elements in their world, related to the natural, the human and the spiritual spheres. It is useful, therefore to look at Dagara challenges as they fall within the seven constellations identified in the intersections of the Dagara worldview as articulated by Dagara scholar David Millar (Millar, 2006). As we look at these challenges more closely, in figure 4.2, it is the interactions and mutually reinforcing synergies between them that may prove the most illuminating for our discussion.

Figure 4.2 Challenges Illuminated in the 7 constellations of the Dagara Worldview



Source: Author, 2017



For example, the majority of Dagara in Lawra District make their livelihoods from rain-fed agriculture. The erratic unpredictable nature of rainfall in recent years, and the associated issues of soil infertility and decreasing tree cover combine to make a chronic environmental challenge (in the natural world) that put Dagara communities and their way of life at great risk. From a Dagara world view perspective, however, these issues are not seen as only in the natural world. Dagara people put the cause of these issues close to home, first, identifying the indiscriminate cutting of forest cover for fuel and charcoal production for an economic livelihood, and secondly, disrespectful, immoral behavior by women, men, boys and girls in their interactions with the natural world.

This self-blame can be viewed in multiple ways. First, from an agency perspective, the self-blame can be considered as highly commendable responsibility, and as local accountability for the environment. Second, paradoxically, this self-blame could be considered naïve, uninformed and superstitious belief, as the ‘real cause’ is climate change and global warming (Gubbels, 2011; Osbahr et al, 2008; Pelling, 2011). Third, the self-blame could be considered a creation of invisible and ideological power that maintains hegemonic control over people globally, and shifts the blame for certain global excesses to the marginalized victims of those very excesses (Macy, 2000; Korten, 2006; Wilson, 2012).

Few people recognize the wisdom of people like the Dagara, who understand the natural system and take ownership for a battered relationship with the natural world as ultimately the root cause for the chronic challenges they (and all human beings) are suffering. A growing number of environmentalists (McKibben, 2010) are recognizing this connection, and although writers like Macy (2000) articulate it differently, her insistence on a change in consciousness of our spiritual relationship with nature, echoes the words of Dagara elders. These challenges in the natural world are very real to Dagara people. Responding to them is perceived as both a



technical ability and a process, and the restoration of a relationship for the Dagara people of harmony, trust and stewardship with the natural world.

Soil infertility and erratic rainfall are seemingly phenomena of the natural world. From a western, scientific perspective these phenomena are in the natural world, although further analysis would confirm that human behavior impacts the fertility of the soil. Mckibben (2010) also confirms an indirect impact of human behavior on rainfall patterns. Therefore, the challenges of soil fertility and erratic rainfall could fit at the intersection between the natural and the human worlds. For the Dagara people, the changes in livelihood practices definitely have had a profound impact on soil fertility. This impact is attributed to the lack of animals to provide manure on fields, the overuse of land for mono-crops, and the practice of using fertilizers to disrupt natural cycles of soil regeneration and thus create a dependency on external inputs. Concerning erratic rainfall, Dagara of older generations believe the problems are a result of both disrespect for the land and breaking taboos or moral codes, such as having sex on farms. Breaking these moral codes has severely damaged relationships with the natural world. These intimate relationships between the human, natural and spiritual worlds are clearly seen as the root of this challenge.

Community resilience for Dagara people is also about finding ways to respond to the human challenges with which they are confronted. These challenges include economics and livelihoods; household conflict, alcohol usage and misbehavior; and youth migrating out of the area. Much of what men and women spoke about as livelihood challenges were a reiteration of the vulnerabilities they experience due to relying on rain-fed agriculture for their livelihoods, and not producing enough from their farms to cover all of their expenses. The connection between the natural and the human world is very intimate.



For Dagara men, the theft of cattle and livestock is another good example of the chronic nature of their challenges and the interconnectedness. Because people feel vulnerable to cattle theft they are less likely than in the past to keep livestock. The associated income, savings and safety net from animal raising is gone. Without livestock, manure is not as readily available as it had been, thus contributing to soil infertility. Psychologically the pride men and boys developed in tending livestock have been lost, and the unity and trust between people is also lost, exacerbating the situation since people find it difficult to organize as a community to confront the problem. Mistrust is reinforced because government structures and mechanisms are ineffective in dealing with cattle theft, and disempower communities from taking their own action.

Another important human challenge is the interrelated, mutually reinforcing issues of household conflict and alcohol use. This challenge is a critical one according to the Gender Desk in Lawra District Government, and people have witnessed trends in these abuses increasing over recent years. Often domestic violence is related to alcohol usage, and this issue has economic, social, psychological and cultural implications. The challenges of alcohol usage and domestic violence are challenges the entire human race is facing at this time, and unfortunately the community resilience literature does not spend a lot of time to address these issues (Fleming & Ledogar, 2008a, 2008b; Kirmayer et al, 2009). As in the Dagara view, the analysis in the studies cited show the breakdown of local cultures as being one of the major antecedents to alcohol and domestic violence. This resonates with the interrelatedness of the human and spiritual worlds in the Dagara world view.

Finally, another major human challenge for Dagara people was about youth migrating to the south. This practice was definitely contested in the community discourse, with people seeing both advantages and disadvantages, yet it has become a major dynamic in their lifeway.



Youth migrating to the south is not new to the Dagara. For generations, seasonal migration of labor has provided additional income to households, alternative livelihoods and a window on the larger world. However, in recent times people have become concerned about the extent of this migration, the duration of it, and the subsequent loss of culture.

From resilience literature, rural-urban and seasonal migration is common. Many see migration as a powerful coping strategy (Van Der Geest, 2011), while others suggest we should be talking about community transitions or transformations (Wilson, 2012). The Dagara contribute to this perspective by recognizing they need to pursue resilience, as a people, wherever they find themselves.

For Dagara people, cultural and spiritual aspects are at the core of the community discourse and are considered the heart of community resilience. Youth losing cultural values, widowhood rites and rights, the breakdown of unity and togetherness and broad cultural change are all priority challenges to which they must respond. Dagara people explained how broad cultural change and youth losing cultural values brought about a “loss of one’s identity (P3, 86:89) and a profound assault on the core of one’s being and one’s spiritual beliefs. What the Dagara understanding of community resilience brings to the foreground is that identity and worldviews defined by cultural and spiritual beliefs should be at the centre of community resilience.

Dagara people told us that individualism and personal ownership is a significant issue to which society must respond because it has so readily been taken on by youth. In the past, there was a much deeper sense of a material good being claimed as “ours”, an underlying value of a worldview based on mutuality and communalism.



The breakdown of unity and togetherness, is a phenomenon experienced in both the human / social world and the cultural / spiritual world. Elderly Dagara identified the value of unity and togetherness as how Dagara people of different clans and lineages relate to one another, and that it is in direct contrast to the modernizing influence of individualism and competitiveness that pulls people apart. Unity and togetherness is coded into livelihood practices. These cooperative practices are not to say individualism and an entrepreneurial spirit is antithetical to the Dagara culture. On the contrary, Dagara people are known for their hard work and ability to adapt to different environments. This hardworking nature to imitate others, to do well, and to be an upstanding member of the community is motivated, however, by wanting to bring honour and respect to the family and the family name.

As a so-called ancephalous society, one that traditionally did not have a head person or a chief (Lentz, 2006), the focus for the Dagara was on equity and surviving in peaceful harmony, not getting ahead. The courage of an adventurous and expansionist nature also took people outside their home area to find ways to survive. As the population increased in the region and land usage became tight, other peoples' interactions led to conflict over land and resources. The Dagara, on the other hand, chose to migrate and set up systems for seasonal migration. This approach may have been encouraged by the forced labor of Dagara men in the mines and cocoa fields of Southern Ghana during colonial times.

In the literature on community resilience scholars discuss the breakdown of cultures, dissipating unity and togetherness, and increasing individualism as negative factors, but they are often not considered to be the central shock or risk to which communities have to respond (Adger, 2000; IFRCRC, 2004; Wilding, 2011; Wilson, 2012). They talk about how better unity, cooperation and social capital can build resilience, but the lack of it is almost seen as



inevitable. What the Dagara wisdom shows is that unity and togetherness is a major indicator of strength and should be nurtured in its own right, as an end in itself.

From a Dagara world view perspective, it is clear that living in an environment of risks and challenges is intimately tied to their understanding of community resilience, and there is a recognition that the challenges they experience can fall into natural, human and spiritual spheres. There is also a recognition that these challenges are often interrelated and, as Figure 4.7 shows, many of the challenges experienced are at the intersections of the human and spiritual spheres.

4.1.3 Dagara Responses to Challenges and Risks

The third practical aspect of the context that helps to comprehend community resilience from a Dagara perspective, is how Dagara people, individually and collectively respond to the challenges and risks in their environment. Table 4.6 presents some of the Dagare vocabulary that captures these processes of response.

<i>Table 4.6 Dagare Vocabulary: The Process of Responding to Challenges or Difficulties</i>	
<i>A be e yel</i>	'Doesn't matter, I will do what is needed and recover from this distress'
<i>Te tera a fang</i>	we have the strength, we are capable
<i>Te ire ne bila bila</i>	we are doing small, small; making progress gradually
<i>Ti mi moure le</i>	doing one's best to cope with the situation
<i>Mille</i>	to twist; as a bean plant climbing up a stick to grow tall and strong
<i>Tuonuo</i>	overcoming something; suffering through something to bring enjoyment in the end
<i>Won tuo bang yah</i>	pain makes you sensible
<i>Lieb fo menga</i>	change yourself to get out of a bad situation
<i>Fo mona</i>	you have done your best, but still more to do
<i>Zagr fo</i>	direct refusal, become awake to recognize when one is being cheated and fight for one's rights
<i>Kpan kpan kpeng</i>	strong headed and will agitate for one's rights
<i>Ar-kpeng</i>	standing firm in one's resolution

Source: Author, field research, 2017



A be e yel, [shrugging off difficulties, with an I can recover attitude], *mille*, [to twist] and *ti mi moure le*, [doing one's best to cope] all capture an attitude towards dealing with difficulties that is strong among Dagara people. The women, men, girls and boys the researchers interacted with, named a broad range of ways they could respond to overcome the challenges in their environment, and specific actions that they were confident would make a difference. Some of these strategies are revitalizing culture and spirituality, healing the ecological environment, enhancing sustainable livelihoods, and remembering the strengths of women and men. People did not just talk in the abstract about these strategies, but articulated specific, pragmatic actions that can be taken to make a difference. Including the category of actions and strategies to respond to challenges is an integral part of the concept of community resilience in the world view of the Dagara. At the community validation meetings when the analogy of the three stones of a cooking fire was used to reflect back to the community the interdependent nature of the three aspects of community resilience, people said two stones cannot support a pot. They said, describing resilience, community and what people are proud of is only one stone; describing the challenges, and how they are interrelated is also insufficient. Like the third stone of a cooking fire that is needed to balance a pot, to understand community resilience the strategies people use to overcome the challenges are also extremely important. Acknowledging the need for these strategies is sufficient at this point to understand the concept of community resilience in the world view of the Dagara people. The specificity of the strategies and actions is shared in detail in section 4.2.



Conceptually the Dagara ideas of overcoming challenges and maintaining identity, through perseverance and hard work, are a clear articulation of what community resilience means in their context. This complements what many were saying about community resilience starting from individual and collective agency (Blackstock, 2005; Clauss-Ehlers and Levien, 2002; Grigsby, 2001; Kretzman and McKnight, 1993; Paton and Johnson, 2001). The Dagara

view seems in contrast, however, with the ecosystem literature that introduces community transformation and regime shifts from a much broader systems perspective (Berkes and Folke, 1998; Gunderson and Holling, 2002; Pelling, 2011; Wilson, 2012).

The challenges in the lives of Dagara people are the context from which they understand community resilience. The challenges for Dagara people are significant for their chronic nature and their interconnectedness. These characteristics are not often viewed at the center of the community resilience discourse. Much in the discourse about community resilience, especially from the disaster management area, specifically addresses ‘sudden change in the context’ as the challenge that communities experience (Blaikie, 2002; IFRCRC, 2004). Much of that discourse has focused on acute shocks or disasters as the place to explore community resilience (Blake, 2002; IFRCRC, 2004; Kulig, 2000). It is rare to find community resilience advocates arguing for community resilience as an appropriate response to chronic issues (Sonn and Fisher, 1998), although this is becoming more common, specifically with aboriginal and indigenous communities. The literature also often isolates resilience into sectoral areas, so people talk about psychological resilience (Masten, 2001), economic resilience (Colussi, 2000), ecosystem resilience (Holling, 1973) or disaster resilience (IFRCRC, 2004). The Dagara view has something to add to these discussions.



This discussion alludes to the third interrelated aspect of community resilience, that which people said enabled the community to respond positively to challenges. How Dagara communities respond, what strategies they use, and what they can do to learn and build the community to be stronger in the future is part of the whole concept of community resilience in the world view of the Dagara. Community resilience is not only a concept, contextualized in an environment of challenges and risks, assets and capabilities, but is most importantly a process to respond to these challenges. These processes of response cannot be separated from

the understanding of community resilience. The strategies of Dagara people that ensure or inhibit community resilience were articulated as a second objective for this study, and the specific findings and interpretations related to these strategies are outlined in section 4.2.

4.1.4 Emerging Insights

Dagara people live in a context of vulnerability and change. They are a proud people and honor their lifeway as tillers of the soil. Dagara men and women, boys and girls experience chronic challenges in their lives, and community resilience for them is about overcoming these challenges in a sustainable way that respects their relationship with the natural environment and a way that maintains their identity. As a result of this exploration and rich description, the following composite definition is being proposed by the principal researcher, about community resilience in the world view of the Dagara people:

Community resilience is about patience and courage to deal with the challenges of life, while maintaining a sense of belonging, togetherness and unity within the community. Challenges in life are inevitable, and so is the pride of what it means to be Dagara, and the knowledge that God and the ancestors have provided the community with the opportunity to live peacefully, in a good relationship with nature, and to till the soil to make a livelihood. Community resilience is not an abstract concept to be talked about, but is achieved through the hard work of revitalizing culture and spirituality, healing the ecological system, enhancing sustainable livelihoods, remembering the strengths of women and men, and taking actions to respond to challenges.

Considering the Dagara perspective on resilience, I now name a number of emerging insights:



www.udsspace.uds.edu.gh

- Community resilience is a multifaceted and nuanced concept. It needs to consider all aspects of the Dagara world view (the human world, natural world and spiritual world) and the interconnections between them.
- Community resilience, both conceptually and practically, needs to be contextualized within local ecosystems and the local economic, political, social, cultural and spiritual environments. Not doing so runs the risk of it becoming a colonizing concept.
- Community resilience should not only be about the ability to respond to shocks or acute disturbances, but also chronic issues that impact a community.
- Community assets – such as social capital – should not only be seen as a means to respond to a particular challenge, but an end in themselves that gives value and a sense of community.
- Some of the greatest risks for which communities need to be resilient are not only external factors, but the internal breakdown of community itself. Nurturing community from a cultural and spiritual perspective is an important part of building community resilience.

4.2 Strategies of Dagara People to Ensure their Resilience as Communities

4.2.0 Introducing the Hand of Resilience – Strategies to Respond to Challenges

This section addresses the second objective of this study. The voices of Dagara women, men, girls, and boys are shared to provide a nuanced understanding of the experiences that they related concerning community resilience. These interpretations and synopses from the research principal and assistants were validated in community meetings. In those community validation sessions, we told people that we had heard that responding to the multiple and interrelated challenges in their environment was not easy. There are different kinds of complex problems



and there are not simple ways to solve them. We presented back to people the multi-faceted and collaborative strategies they described that they used to affect change. Women and men who came to the validation meetings nodded their heads and seemed pleased that we were going to share what we had learned about how their fellow community members dealt with challenges. We drew on a Dagara proverb, that one can't eat okra soup with one finger, to metaphorically capture the complex, interrelated nature of community strategies for resilience. The research principal and assistants named the strategies "the five fingers of the hand of resilience", and used it to feedback to communities the five inter-related, and equally important, aspects of community resilience we had heard about: 1) revitalizing culture and spirituality, 2) healing the ecological environment, 3) enhancing livelihoods, 4) remembering strengths and values in people, and 5) taking actions to overcome challenges. Each of the five fingers is discussed below drawing on the voices of Dagara people. These aspects of community resilience start from a different world view than the working conceptualization articulated in chapter 2 of this thesis. The research principal and assistants synopses are shared for each finger, and after the five fingers emerging insights are offered. A deeper conceptualization of community resilience, drawing on both Dagara wisdom and the academic literature, is revisited in chapter 5.

4.2.1 First Finger - Revitalizing Dagara Culture and Spirituality

4.2.1.1 Dagara Voices. From all the people we listened to, women and men, young and old, we heard about the importance of revitalizing Dagara culture and spirituality. A female elder, for example, articulated clearly why she thought a strong culture was important, "It is culture that makes you believe the way you do, where you come from and who you are" (P 2,31:31). A group of school boys added:

We have to think about keeping our past or rushing into the modernizing world. We can move into the modern world, but we want to take some values and customs of the



past with us. ... Society is dynamic, but we should not drop everything. We should not take everything, either (P26,124:127).

This thoughtful, appreciative, and sometimes critical perspective on Dagara culture was very common with women and men of different generations. People demonstrated that Dagara culture is alive and dynamic. One male elder, commenting on education, stated: “Stories, riddles, proverbs and listening to elders are still important. There is no story without a lesson. It is still a traditional part of educating our young ones” (P34,50:51). The stories taught values and proper behavior, and let people know the consequences should they break the cultural rules. One man explained:

Traditional customs deterred people from vices in society, and it made them shiver. For example as a child (I am now 36) I wouldn’t pick up anything I saw dropped on the ground because I knew it belonged to someone else. People had a shrine of pots; they’d go and consult with white cowries which would tell them a message (P10, 22:22).

People discussed that Dagara society is a very moral society, and the only way to revitalize those morals, values and right behavior, was to revive some of the cultural customs, spirituality and ritualized ways of doing things.

One man commented:

We must do something to change. Think about the past, something can be done, it will be difficult to reverse trends, but I need to do whatever in my means to begin to think of values of past, reactivate them and then lead that lifestyle and it will revitalize natural unity. ... We were taught you had to have discipline; you had responsibility to take care of others and see to the welfare of others. You have to go and contribute to community meeting. (P36, 36:55).

It was a universal sentiment that strengthening Dagara culture in a thoughtful way, not a romantic or fundamentalist way, would put mechanisms in place to ensure community resilience.

Kinship ties and cultural practices. People interviewed explained specifically the cultural importance of clans and kinship ties in Dagara culture. The patri-clan links people to



their father's ancestors and inheritance, while the matri-clan links people to their mother's clan and the rights and responsibilities that go with that. A woman shared:

Clan support was very effective. If you are not perfect, clan members will sit you down and talk. Your mistakes will remain within the clan, and the talk will help you to correct. Usually this happens within the patri-clan (P35, 38:38).

People discussed the obligations and responsibilities related to age within extended families. Respect for elders is important. At the same time, they have an obligation to help you take care of your problems, talk to you and give you advice. People know they have these obligations to others. There is also a cultural institution of playmates throughout the northern part of Ghana. It is a traditional set of relationships between ethnic groups, in which one group is given the right (and responsibility) to joke with, tease, criticize, and generally make fun of, and make light of problems experienced by the other group. A man explained:

Playmates joke, insult and make a mockery of the situation. When people hear a song with a xylophone at a festival, they can just pick it up and sing. Problems are generalized and not personified with songs. Songs and music encourage people to stop doing bad things. They can be for praise or disgrace and can be accompanied by women's dancing. Songs can be for lamenting over issues, or music gives message - how to dance to change spirit (P 6, 6:6).

Funerals. Those interviewed also spoke passionately about funerals, and their importance as a cultural practice that defines the Dagara people. Traditionally, funerals are a time to mourn the dead and to acknowledge the transition of someone into the realm of the ancestors. A group of men and women farmers explained:

When there is a death people who are close relatives and friends do contributions either in monetary terms, pito, etc. in order to perform the funeral rites. Also, the immediate relatives of the deceased are comforted during and after the funeral in order to prevent them from harming themselves as a result of the shock because of the death of the relative. (P16,55:58)

Funeral practices therefore show how Dagara people work together to respond to one major challenge human beings face – death. There are specific roles and responsibilities for different people and different clans at a funeral. Senior mourners with a connection to the



deceased are signified by armbands they wear, and groups in the community, like the hunters, fire off a salute. It is stipulated which clan is responsible for burying which clan members, and one clan can never bury their own members. There is an expectation you fulfill these duties, including a duty to the land, and a burial is considered a giving back to the land. Funeral practices strengthen community ties that help people respond to other difficulties as well. Funerals were also discussed as being important because they show continuity within the community between the living and the dead. This spiritual component of funeral practices is significant. In Dagara society, people are traditionally buried directly in the earth, and there are ceremonies and norms of how the corpse is dressed and the type of music (xylophone dirges) that is played. As a female related:

Our cultural practices make me proud; funeral is not a good thing but a practice within the people that is always uniting them. You'll see families at logger heads, but when there is a funeral you will see everyone coming together and mourning and putting him to rest and so that itself is a unifying force ... even though funeral is not a good thing. (555)

In current Dagara society, funeral practices are undergoing a transition, thus putting the traditional Dagara world view into conflict with other world views. People have started to use coffins, and ceremonies have become major occasions for alcohol consumption, and the installation of a refrigerated morgue has meant the ceremony can be delayed. What we heard people discussing is that some families feel forced to engage in elaborate ceremonies, even though these ceremonies are not traditional, because they are made to feel poor if they do not put on a big show, and display a fancy coffin as would be done in southern Ghana. Unfortunately, this pressure has meant that the original intent of the funeral has been sidelined, and many youth do not even know how to behave at funerals or what roles they are expected to play. People explained that for Dagara people, funerals are a very serious issue, and there is the belief that if taboos about funerals are broken, then the whole system of taboos will break



down. If a person is not returned to the earth, but buried in a coffin, it can lead to drought. Funerals are significant in defining the Dagara community and providing individuals with a sense of identity and community, strength, and confidence to live their lifeway.

Kobine Festival. Festivals were also named as cultural institutions that give particular benefits to the Dagara people. The Kobine festival in Lawra was frequently named as a time when people come together to celebrate, network and re-establish community bonds. A group of women and men farmers explained:

The Kobine festival is a cultural thing that is very important because it brings people within and outside the district together in harmony, joy and happiness. During this period, lost relations come back home and meet their people to celebrate the festival. The local dance is another thing we are proud of because it identifies who we are. There are demonstrations of some faded cultural activities (the stone for grinding grains) to the youth during the Kobine festival. We want the youth (particularly the young ladies) to know that this is how our grandmothers used to grind grains. It is also a kind of comparison to show the youth the activities of the past and the present. (P16,9:14)

The nurturing of relationships between people and between generations is an important aspect of the festival. As a male elder stated, “The Kobine festival makes the people proud of their culture. Kobine is celebrated after harvesting to give glory to the gods for the farming season and whatever we have sown” (P13,24:24).

The resurgence of the Kobine festival is seen as a very positive thing. It brings people together, from all villages under the Lawra paramount chief, and in recent years a development forum has been initiated by the Lawra Naa (chief of the district) to provide an opportunity to discuss problems, issues and future strategies for positive change in the area. Numerous people praised this additional element as it emphasized the dynamic sense of the culture, and provided an opportunity to contribute to responding to the challenges of today.

A group of three women explained:



www.udsspace.uds.edu.gh

Originally the festival is celebrated to give thanks to the ancestors for a good harvest. But even if the harvest is not good we still give thanks to the ancestors for a successful year. The youth, the indigenous people come together to discuss development issues. The following day the politicians are also invited to come say what they have for the people. Some physical benefit may not come, but education is given to the youth and people in general. Peoples from the various schools in the district and region are given the opportunity to come and learn the culture of the place. Last year, we organized a quiz competition for the Senior High School and prizes were given to the winning school in the form of books, pens, T-shirts etc. (P24,5:21).

People are proud of how this festival has grown, the multiple purposes it now serves and how it has also become an economic boost to the area. Others commented, however, that originally there was a stronger spiritual aspect, but much of this has withered away. Prayers of thanksgiving are still sung, but for many it is more a party than a time of gratitude to the metaphysical world. One woman commented that, “Kobine festival is not as before...before you’d feel it within, but that has gradually diminished... there should be more focus on the traditional aspect” (P35,26:27); and a group of school girls and boys commented, “the cultural dance during Kobine festival is becoming corrupted” (P25,90:90). People were clear for the festival to continue to play a positive role and to help the community as a whole to respond to challenges and not to develop new problems, some aspects of the festival had to be looked at with caution.

Bagre Festival. The Bagre Festival was given particular significance by the people interviewed. Bagre is a powerful cultural institution, and rite of initiation in the consciousness of older Dagara men and women, and much more than a curiosity for the youth of today. From what the researchers heard, the Bagre Festival happens on a rotating basis every 3 to 10 years in different Dagara villages. It is an opportunity for Dagara men and women to learn Dagara science and the origins of the Dagara people. As a female elder stated, “Ancestral formal education is what the Bagre is. Girls and boys learn history, how we originated, geography, the land marks, science and all subjects. It is also a cleansing, a cerebral type bath” (P 2,34:34).



People explained Bagre is a time for people to learn the responsibilities of being a man and being a woman at different stages of life, and ultimately the importance of respect within society. The festival is a time for bonding and learning about unity and peace and building a strong sense of what it means to be Dagara.

There are some differences of opinion about the involvement of youth in Bagre, but generally it was considered valuable. Elders who lead the Bagre explained that it is a time to learn self-discipline, endurance and how to withstand hardships, all important elements of resilience. A woman shared, “Bagre teaches discipline, a young woman who takes part becomes very disciplined, it is the same as the Ten Commandments”. (P35,48:48). A male elder added, “Good teachings like good morals and values are taught to people being initiated. But it is like school and depends on the individual. Some refuse to listen to the teachings and so if they commit a taboo they may go mad” (P 9,77:78). The elders further elaborated on the spiritual significance of the Bagre as a time to “call one’s soul back to be centered in the body” (P3,15:22). There was a sense that people are born with an understanding of these spiritual things, but as they grow and live in the world and focus on the material and social realms they tend to forget the spiritual. Bagre is a time to reconnect with these spiritual understandings and consciously integrate them to benefit one’s life and way of being. As one male elder said, “[Bagre] is to learn to overcome risk” (P 7,40:40).

For some people we interviewed, the Bagre festival is dying out. Many young people, because of their formal education and their Christian upbringing, are not interested in the Bagre, and many elders who were the teachers of the Bagre are passing on. Some of the people interviewed argue it needs to be preserved and documented as an historical, cultural phenomenon, while others see the possibility for Bagre to be revitalized and modernized as a useful, dynamic practice in which people learn useful things.

The research principal and assistants asked community members to consider whether revitalizing the Bagre could bolster the resilience of Dagara communities. People responded that Bagre is an essential element of Dagara society and is the best way for people to learn to understand and respect themselves, and learn a clear sense of identity and belonging.

Spiritual World View. There are many spiritual beliefs concerning how Dagara people view coexisting with nature, the power and taboos of animal totems, and the belief in metaphysical forces. Dagara spirituality is integral to people's lives. As one woman said, "It shapes our whole life". People said these beliefs are the core of who a Dagara person is and even if people publicly renounce ancestor-centric beliefs as their "religion", the beliefs are still there. Not having these spiritual beliefs makes it difficult for people to cope. In the Dagara beliefs, there is a spiritual component to everything and, therefore, it is necessary to always offer gratitude or appeasement to the spirits.

The relationship with the land, with sacred groves, and the role of the *tengansob* were given particular significance. The Dagara relationship with the land is one of coexistence and stewardship. People spoke of themselves as "of" the land and both women and men, in calling themselves sons and daughters of the soil, were actually referring to a belief that they come from the soil itself, their existence was dependent on the soil. Living in harmony with the land and nature was therefore considered an obligation for Dagara people and protecting and taking care of the land was an aspect of one's purpose in life.

The earth priest, or *tengansob*, is a significant traditional institution in Dagara society. He is the de facto owner, or trustee, of land in a Dagara village and he is the one who allocates land to people for farming. He also plays the role of intermediary between people and the spirit of the land and offers spiritual protection, prayer and sacrifice. Beliefs among the Dagara are strong that if the land and spirit of the land are not treated with respect, they will not provide



what humans demand from them. People made it clear the *tengansob* plays both a spiritual role and a governance role. One male elder, for example, shared:

A role of the *tengansob* is to take care of the spiritual spheres of the community. He knows the boundaries, knows owners of lands, the role is still strong today. He comes in to tell why calamities are befalling a community. *Tengansob* has been able to tell people that because this has happened, this is what you should do. *Tengansob* takes care of spirituality of the community (P 7,21:29).

For an agricultural people this close relationship to the land, spiritually, economically and psychologically, was something people, particularly men, spoke about repeatedly. They made it clear any changes, whether they are ecological, legal, or spiritual, that happen to the land, would need the *tengansob* to play a major role in overcoming the challenges.

Some people also spoke specifically about sacred groves, and how people, “pledge themselves to the land, to get food and water” (P34,4:5). A male elder explained:

Sacred groves can be inherited or they can be places of which the gods of the land or otherwise exist. The sacred grove of the land might be places where sacrifices are made in times of calamities and also, to give thanks to the gods. The inherited groves are places where people might hide during slave raiding to save their lives after which they perform sacrifices from time to time. Sacred groves are protected areas in the community where no one is supposed to fetch fire wood (P13,42:45).

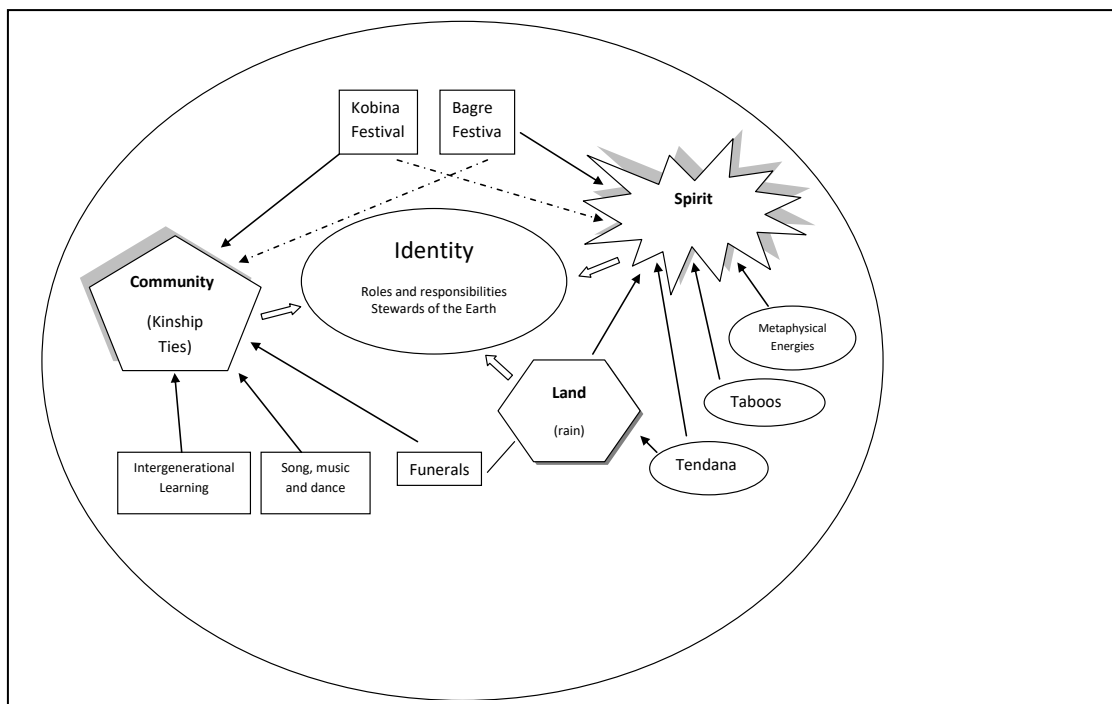
Revitalizing culture and spirituality was therefore promoted by people interviewed as a very important way to respond to the challenges of today.

4.2.1.2 Interpretations - Revitalizing Culture and Spirituality

The worldview of Dagara people is highly spiritual and its essence needs to be nurtured to build the resilience of communities. Cultivating a nuanced understanding of Dagara culture and spirituality will strengthen a sense of identity and self-efficacy, build the community sense of belonging, nurture different aspects of social capital, and further the relationship with the ecosystem. Figure 4.3 is a synopsis of the Dagara voices shared above, and shines a spotlight on the factors related to revitalizing culture and spirituality which contribute to the collective identity of Dagara people.



Figure 4.3 Spotlight on Identity and Aspects of Culture and Spirituality



Source: Author, 2017

This process of cultural and spiritual revitalization is considered very important because it solidifies Dagara people's identity which provides the strength and confidence to live in an ever-changing world. This sense of identity is different than a psychological capital (Desoran, 2000) or the literature on self-efficacy (Masten, 2001) because it is not spoken about as an individual identity, but rather an identity as part of a group and a collective community, for example, the patri and matri clan structures that provide pragmatic support in times of need. It is also important to note, although Dagara males and females are born with individual personality, (sometimes linked to the reincarnation of an ancestor), this individualism always takes secondary place to the clan you were born into (Some, 2000). Clan identity gives Dagara people a sense of their place in the world, a sense of community, and belonging. There is a strong presence in the literature that confirms sense of community (Sonn and Fisher, 1998), and belonging (Kulig, 2000) as traits that enhance community resilience. In addition, Dagara





www.udsspace.uds.edu.gh

culture has a strong moral leaning where vices are identified, infractions named, and transgressions severely dealt with.

Identity and intergenerational learning. The traditional mechanisms of learning between generations also contributes to solving problems of today. Often traditional knowledge, or learning from elders, is given the connotation of conservatism and denigrated in much development discourse. In the health and development field for example, USAID has imposed work on HTPs (harmful traditional practices) for decades (Winter, Thompson, Jeffreys, 2002). It is quite rare to come across work such as Millar's (1996) that focuses on traditional ways of knowledge exchange between generations. The bias against traditional forms of knowing comes from a colonizing mentality, and is an imposition of a foreign world view considered superior to that of the Dagara. Numerous authors in the field of indigenous knowledge interrogate this argument (Battiste, 2000; Dei, 2000; Smith, 2001; Wilson, 2008). From a Dagara perspective, the valuing of knowledge from the past is not blindly replicating what ancestors did, but learning from the wisdom and adaptation strategies of a people living in a complex ecological system, and constantly using their own agency to adapt and adjust to ever-changing realities. Adapting to an externally imposed regime shift, that has set the agenda, takes away people's agency and dictates a particular pathway for change. Such an externally dictated pathway does not involve critical problem solving, or innovation which could strengthen one's agency, but directs people to follow a direction set outside their environment, and to do (and not do), things decided elsewhere. Such an approach is antithetical to resilience, and to an endogenous development approach.

Kinship Ties. Kinship ties and clan support are an important way the Dagara ensure community resilience, and extensive literature acknowledges this important mechanism as an aspect of social capital (Adger, 2000; Breton, 2001). The clan provides support of various

kinds and is also a group that makes decisions. In the context of Dagara identity, elders don't simply dominate decisions, but are part of a system of respect and responsibility that is a deeply ingrained value that must be clearly understood. At birth one is not just an individual, but is relationally identified as an older or younger sibling, a male or a female, a member of a patri-clan and a matri-clan, is connected to a long line of ancestors, and is connected to the very land upon which they are born. One's identity provides access to a wealth of networks and connections that can be relied upon, and comes hand in hand with responsibilities and obligations to take on roles with younger and older relatives that include discipline and obedience, and also encourages support and advice. In addition, the Dagara cultural regime at birth provides an identity with age mates that becomes an intimate group who one relates to as one grows, matures and responds to the challenges of life. Joking partner relationships are another set of roles and responsibilities that bind the community and provide community cohesion to respond to challenges. All of these relationships provide an intricate web of relationships that is strong and nurtures the unity and communal spirit that helps ensure the resilience of the community. Much of the literature on bonding social capital, community belonging and community cohesion only aspires to have such mutually reinforcing ties of identity (Kretzman and McKnight, 1993; Putnam, 2000; Wilding, 2008). Dagara kinship mechanisms already go beyond this. Unfortunately, people see these relationships being eroded and they are aware how this breakdown can potentially inhibit community resilience in the future.



Songs, Music and Dance. One mechanism to pass on Dagara values and beliefs is songs, dances and music. Two examples are funeral dirges that are traditionally played the same way for generations, and improvised songs by women of current happenings in the community. Both have their unique roles. Funeral dirges have a complex and spiritual

meaning. Their consistency across time and place may help to place the individual death of a Dagara person within a larger community and temporal framework. Women's songs often publicly ridicule misdemeanors in the community, and thereby hold community members accountable for their actions. Songs are both a form of punishment, the consequences people experience for bad actions, and a deterrent, as the knowledge of a potential immediate, and none too gentle public naming and shaming, can stop the commission of certain actions. Dances of males and females, usually done separately, and then coming together in formalized ways, help maintain roles and relationships. These mechanisms help ensure continuity, build social capital, and ultimately contribute to the resilience of the community.

Festivals. Many communities around the world have a form of harvest festival, like the Dagara's Kobine festival, that helps bind the community and strengthens relationships (Putnam, 2000). The value of the Kobine festival is being contested, however, as some see it becoming a big party with lots of alcohol and its assorted vices, and that the original purpose of showing gratitude to gods and ancestors is being lost. For some, the designation of Kobine as a recognized national festival is a great opportunity for sons and daughters of the soil to return home, for tourism, and for bringing people into communities to spend money. For others, it is a risky proposition that can deteriorate into the infiltration of outside cultural norms and practices. The changing nature of the festival is generally considered as an acceptable risk, however, as people are adapting, and are genuinely pleased with the development forums initiated as a part of Kobine.

The Bagre Festival helps solidify people's identity and belongingness within the Dagara community. In academic research conducted in English Bagre has been interpreted by some as a secret society (Kunkuure, n/d), an initiation ceremony (Some, 1995), as a venue for sharing an oral history of a people (Goody, 1956), but is spoken of most frequently as a festival





(Tengan, 1994; Tengan, 2005). www.udsspace.uds.edu.gh In all cases the connotation of celebration has been prominent; the celebration of being and becoming Dagara and becoming versed in that world view. The festival is a time for participants to understand and respect themselves, a time to take on responsibilities as full member of the community, and a time for binding the community together. It builds a sense of community and therefore resilience. It should not be interpreted from a reductionist perspective or a western world view that segregates an understanding of Bagre as a form of religion isolated from other parts of Dagara life. Spiritual and metaphysical beliefs are integral to the Dagara worldview and lifeways. These are inclusive perspectives, so one of the Bagre professors could confidently say he considers himself a Catholic and a leader in the Catholic Church, and not consider this contradictory. There is not one universal understanding of the benefits of Bagre today. Contested understandings in the most superficial form concerns the duration of Bagre and clothing. Some Bagre organizers are willing to adjust and show the dynamic nature of Bagre by making changes up to a point, but the continuance and revitalization of the festival as it is, is essential to some. Beliefs about the Bagre are four opinions on a continuum: (i) no Bagre and no need to learn traditional history and spirituality, (ii) other ways one can learn indigenous knowledge outside the ritualized structure of the Bagre, (iii) a need for changes within Bagre without losing the essence, (iv) maintaining Bagre the way it has always been done. There are advantages and disadvantages to each of these perspectives, echoed in the research on indigenous resilience in other contexts (Battiste, 2000; Smith, 2001); however, maintaining the strengths of Bagre with only minor changes may be the most useful for resilience.

Xylophoning is another component of Bagre contested in the community discourse. There is a particular type of music that is played for the climax and graduation of Bagre. Some people want to focus the festival around this time and invite others to learn by witnessing,



www.udsspace.uds.edu.gh

hearing and observing the graduation. Other elders see this as one of the most sacred aspects of the Bagre and don't want to expose it to outsiders, and the uninitiated, who might consider it voyeuristic entertainment and not appreciate the spiritual significance. This tension around the dynamism of cultural practices is common in other indigenous communities.

The Bagre festival is a bridge to some of the deeper aspects of Dagara spirituality, such as beliefs in ancestors and metaphysical energy. Having this belief solidifies a consciousness of relationships with other living beings that demands gratitude must be shown and appeasement sought for transgressions in these relationships, and that the relationships need to be continuously nourished. A Dagara researcher, emphasizes this point when he tells the story of a construction project in one village (Millar, 2007). It took a long time in one area to gather, prepare and begin using stones for building, but when people moved to another hillside work progressed very quickly. When asked about it, people said it was because the stones in the second place were ready (energetically) to be used by people for construction while in the first instance the stones resisted.

Stewards of the Earth. Another central belief of the Dagara that gives their lives meaning and purpose is their relationship and responsibility for the stewardship of the earth. They speak of being “of” the land and this intimate connection makes them tied in spirit to the health and well-being of the world around them. This relationship to the land is why the *tengansob* (earth priest) has such a key leadership role in Dagara communities. This is significant historically, as the colonial officials did not consider the *tengansob* the chief of the Dagara (Lentz, 2006). Colonial officials imposed a chief structure based on a chief as an administrative and political head (Lentz, 2006). In Dagara areas this imposition usurped some responsibilities, but the important and powerful role of the *tengansob* remained and has enabled the Dagara to continue governance of their lands in a way much more aligned with their world



www.udsspace.uds.edu.gh

view. The *tengansob* today will be consulted as the one who can identify why natural calamities might happen, and is the intermediary between humans and the spiritual energies of other elements.

Taboos. Another way spiritual beliefs are manifested and perpetuated is with taboos. Different families and clans have particular taboos that must be respected or difficulties will befall them. These taboos are an interesting mechanism for discipline and codifying social rules and regulations. Taboos also relate to the laws of karma which are strong beliefs in many eastern religions (Strano, 2005): there is a metaphysical consequence of actions and people must live morally in order to avoid repercussions. Denigrating taboos by calling them superstitions would be applying judgment from the perspective of a completely different worldview and perpetuating a colonizing stance.

Dagara people relate the cause of erratic rainfall to disrespect for the metaphysical powers of the relationship between people, the land and the elements. Taboos were broken and therefore rain is not coming as expected. When one accepts the indiscriminate burning of fossil fuels, and the overconsumption and exploitation of the earth's resources as the 'real' cause of climate change (Kline, 2014), it may not be such a stretch to recognize that fundamentally it is about a disrespect for the relationship with the energies of the natural world. Dagara elders believe it is a re-appreciation and re-nurturing of the relationship with the ecosystem that will help deal with these challenges. This perspective is echoed in some of the cutting edge scholarship in the environmental movement (Hawken, 2008; Macy, 2000; McKibben, 2010). For example, the work of Frances Moore Lappe in *Ecomind* (Moore Lappe, 2013) makes the argument that it is a change in consciousness that is most needed at a global level for overcoming the dangers we experience today. In essence, Dagara people articulate the very same beliefs in their connection between breaking the taboo of "sex on the farm" and the lack

of “productivity of crops” although theirs is a more direct and pragmatic language when put into translation. Many indigenous peoples around the world have similar rituals or prayer ceremonies to the elements (Wilson, 2008). These ceremonies support a relational worldview that respects natural and spiritual realms on an equal basis to the human or social realm. Christians, Quakers and Buddhists all speak of right relationship with all living entities.

Another aspect of spirituality as it relates to community resilience, or the ability of people to respond positively to the challenges faced today, is the Dagara belief in dreams, telepathic communication and gifted individuals who can help in connecting with the energy of the cosmos and provide advice for appropriate (and inappropriate actions) for the future. Many Dagara communities still have a significant role for soothsayers and listen to their advice from the ancestors, and other metaphysical energies. Many people believe ancestors assisted people to come out of problems in the past so to gain that kind of advice for the future is also considered very valuable. Medical research is being done in Ghana on soothsayers and diviners as spiritual diagnosticians (Azongo, 2015). Dreams can help people decide on an appropriate course of action and connect with what is happening in other places (Some, 1995). This influence of dreams is not considered a magic trick, but the manifestation of the belief in metaphysical energies and separate realms of being that Dagara see part of their lifeworld. Other indigenous people have similar beliefs (Little Bear, 2000).

4.2.2 Second Finger - Healing the Ecological System

4.2.2.1 Dagara Voices. Many people discussed one of the best strategies to respond to the difficulties and risks being experienced by Dagara people were to “heal the ecological environment” and this became the second finger of the hand of resilience. Most Dagara women and men live intimately with their ecosystem. They consistently articulated a need for healing and strengthening the ecosystem as part of what resilience means to them. They did not just



speak of living in an ecological environment, but being part of that system, with the rights and responsibilities that go with it.

Relationship with the natural world. People commented on being a part of nature, and on how that was the foundation of their role on the earth. The community discourse was about having a beneficial relationship with nature, that there were certain responsibilities and obligations on both sides. Many people, as farmers, spoke about the necessity of healing the land in order to then, be able to harvest from it; of respecting the rain and giving thanks to the rivers; and generally, being thankful for the trees and other natural elements for their presence.

School boys interviewed were aware of how peoples' activities can harm the land and were clear that something could be done about it. They stated, "If we correct our mistakes now, like clearing trees which causes desertification, it will help improve the situation in the future" (P26,90:91). Many other people spoke of the respect that must be given to the land and the ecosystem, and the responsibility people had to be caretakers of the land. Many men and women commented that appropriate, consistent prayers and sacrifices were not being made to the ecosystem and the ancestors, and therefore the systems were not providing what humans wanted from them. People explained that, some clan's totems are the land, the water, or nature, and clan members have specific responsibilities to these elements.



Taking care of the land. Many of the Dagara women and men interviewed also provided some very practical suggestions of how the ecological environment could be strengthened. In one community, farmers consciously left residue on the fields to decompose after harvest in order to improve soil health. They also built ridges to prevent water runoff and to retain top soil on sloping land. Farmers in that community spoke about gathering and applying animal droppings to regenerate farm lands, and one farmer described the benefits of

penning the animals in one place so droppings could be easily gathered and then applied specifically on areas where it was needed.

Other people made it clear from their perspective that commercial fertilizers may immediately enhance productivity in a short period of time if they are applied properly and rains come as predicted. Some people made the distinction, however, that the commercial fertilizers do not increase soil fertility, rather they promote the growth of leaves on plants rather than the grain/fruit itself. One man commented that, “commercial fertilizers seem to create a dependency” (R, 200). He explained that the chemical fertilizers may increase yields significantly in the first three years if they are applied consistently, and rainfall is as expected, but then they may need to be changed or adapted or yields will start to decrease. If the commercial fertilizer is not applied after the first year because it is not available, or becomes too costly, yields will drop even below where they may have been initially. People shared their experience that often, natural compost as fertilizer does not show as dramatic results as commercial fertilizer in the first year, but if used consistently it can show increasing productivity over a number of years. The issue of how to heal or replenish the fertility of the soil was certainly an important one in the community discourse.

Maintaining biodiversity. People interviewed also described changes to the ecosystem over the last decades and how the diversity of plant, bird and animal species had declined. The ability to hunt wild game as a supplement to diets was common in years gone by, but is not the case today. An example was given by a youth in one of the selected communities of an area along the river, where it is still possible to hunt grass cutter (a common large rodent in the area), but other people noted that so many people are farming closer and closer to the river that these habitats are being destroyed and soon there will not be opportunities for hunting. By-laws were being discussed in one village to ensure a buffer of no farms along the river bank to



not encroach on habitats, ensure that chemical fertilizers and pesticides do not leak into the river. Such a buffer zone would also maintain tree cover, that stabilizes soil, and keep silt from washing into the river creating local and downstream ecosystem changes.

In one of the selected community, elders proudly described the sacred grove and spring that exists on the edge of the community. The diversity of tree species, other plant life, birds, insects and the spring water itself were an obvious source of pride and joy to the community, and a traditional mechanism for protecting biodiversity. Those interviewed were very clear that one way of strengthening the ecological environment and enhancing relationships between the ecological environment and human beings was to continue to protect sacred groves and springs and to enforce laws and taboos governing them. Interviewees in one focus group proposed a tourism project to show off their sacred grove and spring, and argued such a project could help protect those sites.

People did speak about the importance of tree cover for overall soil health and moisture retention; pruning of dead branches to keep the tree healthy, and to provide firewood. People spoke about harvesting leaves from trees for making compost, although few people spoke about actually doing these practices. The research principal and assistants learned that for some Dagara people trees are a gift from the gods and therefore it is inappropriate for people to plant them. Trees grow where God wants them to and humans should not interfere. The planting of certain trees especially is considered a taboo. Others expressed an opposing opinion that people knew the benefit of planting trees and were looking for a local source for seedlings.

Another response to strengthening the ecological environment concerns the reintroduction and utilization of indigenous crops. From a food security perspective, growing a variety of crops that have different lengths of maturing times and different moisture needs is beneficial and this variety can also help regenerate the soil. Farmers commented on the benefits



of intercropping different indigenous species as they can complement each other in the utilization of the soil and the leaves of certain plants can keep away pests from another species if they are planted close together, and the leaves can provide green fodder.

Water resources. There was more limited discussion of water and water sources as an integral element of the ecosystem. People interviewed expressed their belief that the only way to influence these patterns was through sacrifice and prayer. One village rainmaker confirmed that he could perform the ceremony to stop the rains once they started, but he had not learned the ability to call the rains to start which his father had been able to do.

The women and men, both young and old, who were interviewed, acknowledged that it was peoples' own behaviors that were damaging the ecosystem of which they are a part and that they had the power to stop these behaviors to help strengthen the ecological environment. They also articulated practical things they could do that would help rejuvenate the environment, particularly the fertility of the soil. Most importantly they spoke of the relationship between nature and human beings and that there were obligations, thanks and appeasements required to have a productive relationship with the elements and the gods. People told us they knew that working on these relationships would lead to a strengthening of the ecological environment and also improvements to many of the difficulties and risks the Dagara people were experiencing.

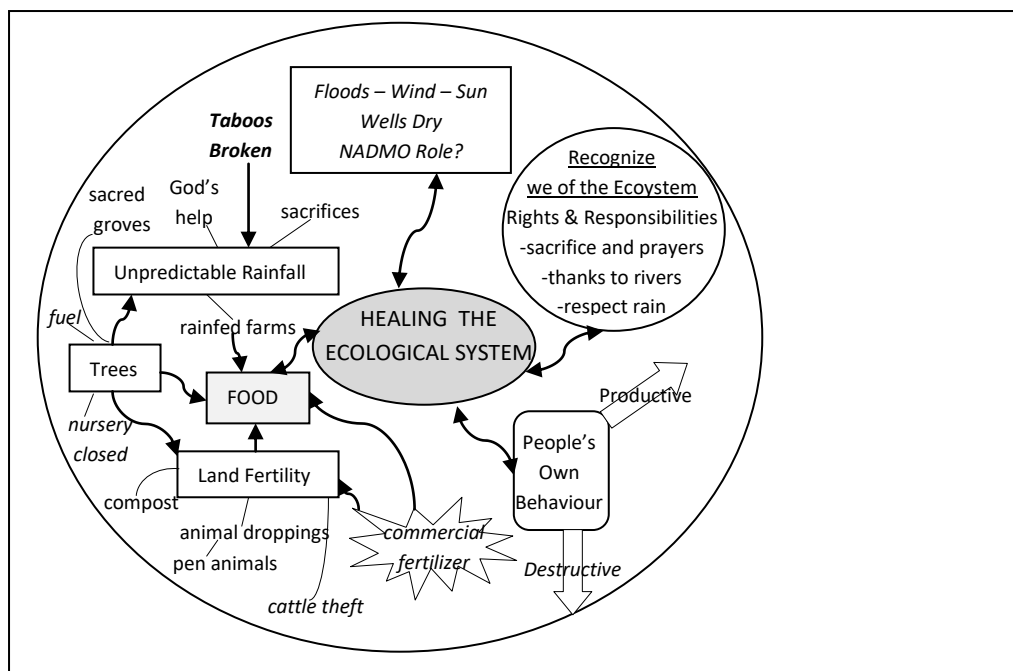
4.2.2.2 Interpretations – Healing the Ecological System.

As elaborated in the section above Dagara people explained one of the key activities that were necessary for (re)-building community resilience was healing and strengthening the ecological environment. Figure 4.4 is a mind map that shines a spotlight on the main findings of why healing the ecological system is so important to community resilience. A fundamental aspect of this healing was nurturing the consciousness that people are a part of the ecosystem, not separate



from it, and as part of the system have both rights and responsibilities. The cultivating of this consciousness is central to Dagara cultural and spiritual beliefs, and is also critical in understanding the Dagara perspective on their relationship with their ecosystem. An element of this consciousness is the recognition that people's own behavior can have both a positive, productive impact on the environment, and also negative, destructive impact on the environment. This understanding certainly deepens what environmentalists have been articulating for decades about interdependence between human beings and ecosystems, (Adger, 2000; Berkes and Folke, 2000) and resonates with climate change scientists' views on humans' cumulative impact on the global environment over decades (Hawken, 2000).

Figure 4.4 Spotlight on Healing the Ecological System



Source: Author, 2017

Dagara peoples' views certainly add to these global voices. With a moral culture of integrity, the Dagara cosmology also bridges the observed gap between what people say and their actions: for the Dagara if your actions are exploitative and disrespectful of the natural environment, you will suffer for that with immediate punishment. Therefore rules, regulations





www.udsspace.uds.edu.gh

and restitution mechanisms are in place to repair the relationship with the environment. The onslaught and enduring impact of colonialism, and the modernization of governance structures, however, caused people to drift away from some of these beneficial traditional practices.

Dagara people see an ongoing relationship with the land and the elements that stretches back into the past, to the time of their parents, grandparents and great grandparents. They are clear about their obligations to the ongoing maintenance over very long time scale. They are concerned with what the future might bring, yet they also know that the future is unpredictable, so focus their energies on the present and learning from past experiences.

This understanding of time scales resonates with research done by socio-ecological systems scientists who emphasize looking at long time scales to understand the adaptive and resilient behavior of complex adaptive systems (Berkes and Folke, 2000). Dagara science, whether in memory of the past, or advice from the ancestors, helps people understand and continue to adapt to the ongoing nature of the dynamic ecosystem. This Dagara science is not used directly for trying to predict the future, as is the emphasis of much western science regarding complex adaptive systems. Lessons learned from the past about living in harmony with the natural world, respecting it, honoring biodiversity, encouraging redundancy and holding knowledge in multiple hands, however, are conclusions of Dagara science that serve people well in adapting to their changing context. This pragmatic knowledge of the Dagara helps renew the credibility of other indigenous knowledges as they relate to complex, adaptive systems and grounds the findings of systems ecologists in the lived experience of generations of people in a challenging environment.

The singular focus on extreme weather events promoted by much climate change literature is limiting, and the focus on early warning system to predict these extreme events stems from a world view of mastery over the environment. Dagara morality deals more with



www.udsspace.uds.edu.gh

not committing wrong actions in the relationship with the environment. The National Disaster Management Organization (NADMO) is respected for the work they do, but they are part of an emergency coping mechanism, not a strategy for long term resilience, or healing the ecological system.

Dagara men and women do not consider themselves as conservationists, or exploiters of the environment, their role is as tillers of the earth and practitioners of rain-fed agriculture. This role includes the respectful relationship with the earth and the acceptance of what the earth provides, for people's sustenance. Dagara people speak of how erratic, unpredictable and changing trends in rainfall patterns impacts rain fed agriculture. Dagara people see the most effective way to influence these trends is in a spiritual way, either with traditional sacrifices or prayers to God in a church. They have stories that this is working. They also identify the breaking of taboos, and disrespecting the land, as the cause of these changes in rainfall patterns.

Concerning soil fertility, people see the soil as exhausted because of overuse, lack of animal droppings, lack of vegetative matter left to compost, and overuse of fertilizers. Related to this, they identify the reduced tree cover as having an effect on water retention and soil fertility, and spoke at length about how cattle theft has changed availability of manure, and even people's desire to keep livestock because they know the livestock would be vulnerable to theft. This local knowledge of the Dagara supports and grounds what environmentalists have determined regarding the change in soil fertility.

Dagara wisdom shines through when they talk practically about what they can do to heal and strengthen the ecological system. Many people want to plant trees and ask where to find seedlings and plant economic trees. A government run tree nursery in the region closed, opening an opportunity for it to be revived as a community-led facility. The same Dagara wisdom is reflected in the protection of sacred groves (sinks of biodiversity) and the traditional

taboos established and maintained legally (governance) and psychologically for generations. This community-based natural resource management practice, reflected in practices of other indigenous peoples around the world, brings to the foreground some of the published literature that informs the resilience discourse (Subramanian, Verschuuren, Hiemstra, 2014). For the Dagara, the importance of healing the ecological system is a priority for resilience, increasing production is a secondary, limited time frame goal.

4.2.3 Third Finger - Enhancing Sustainable Livelihoods

4.2.3.1 Dagara Voices. In many of the conversations the research principal and assistants had with Dagara women and men we heard about their desire to bolster and diversify livelihoods in their communities as an important strategy to respond to challenges and to build community resilience. Both women and men described how households lived through the different seasons of the year providing food, paying school fees, and meeting other demands. They spoke about the many ways women and men met demands in households, whether it was through gathering and harvesting wild fruits, sharing, exchange, or earning an income. Building up a portfolio of these diverse livelihood activities was considered a priority for all.

People interviewed explained that most women and men, of all ages, derive their livelihoods from the land. Men are responsible for clearing and tilling the land, and women have extensive roles in plantings, harvesting, processing and cooking food stuffs. The main crops grown are maize, millets, and yams which are controlled by men, while vegetable growing is controlled by women. Livestock rearing is mainly done by men, and pito brewing by women. Many people interviewed also related that receiving some kind of support from members of the household who had moved away was important, whether it was those working in southern Ghana sending home cash or food stuffs, educated members of the household who got jobs giving support from their salaries, or youth in the household being supported by a



youth employment scheme. A number of other activities were described including: dry season gardening, hunting, fishing, gathering and selling firewood, quarrying, running grinding mills, blacksmithing, basket weaving, pottery making, making bean cakes, or processing dawadawa for sale. Both the women and men interviewed stated that strengthening the mix of these activities would improve their livelihoods. A group of elders stated:

We can use the things we are proud of to overcome our poverty situation. For example, first, tending economic trees to use the fruits to process things like shea butter and sell, and even use some in the houses for consumption and this is reducing the poverty situation. Also, second, we are encouraging people to rear animals of which people are doing and selling them to increase income to deal with the poverty situation. For example, rearing of pigs for sale. Third, the brewing of pito by women is also boosting their income to tackle the poverty situation (P27,52:55).

This list was expanded on by another male elder with the addition of:

1. Dams for dry seasons gardening
2. Government helping the youth with loans to go into small business, because people sit idle for about 5 months in the dry season without work.
3. Borrowing from people around (if there is a funeral), from friends or people from district places. Monies are paid back with no interest because it is a help to the person who is giving to you. (P33,78:85)

People talked about their individual households, and also about how they were in a relationship of mutual support and exchanges with friends and neighbors. A woman stated one way to enhance livelihoods was, “Exchange of firewood by households and also exchange of food items like flour [for tuwon zafi the staple food of the area]. I contribute by cooking. Others contribute money and food” (P11,36:38). When the researchers probed in the interviews about how people enhance their livelihoods we heard more, especially about women’s roles.

Women’s roles in livelihoods. A female elder explained the major role women play in the household is in managing food reserves for the entire year. Another woman confirmed,



“When the food stuff in the house finishes, it is the woman who will know what to do to get food for the family. Mostly the women are into things like firewood selling etcetera because after farming and harvesting, the men travel to the south to farm (P23,30:35). Commonly women prune trees of dead branches and sell the firewood in the market. Some women have the skills to make pottery or baskets. Handicrafts may be produced in the same way around festival times of the year. Women are also getting more involved in processing shea butter or dawadawa for their own use and to sell in the market.

Many women engage in pito brewing and selling. This activity generated the most discussion among women as it is hard work in a competitive market. The marketing and ambience of a woman’s pito bar is just as important as the taste of the beer. For the brewer it is a complicated business proposition that takes a large capital investment and has high risk. Women commented that the greatest challenge in the business is those who buy pito on credit and then do not pay. Women said this is a very common occurrence, and they have little recourse to get people to pay other than public ridicule. If women consistently refuse credit then the ambience of her bar would be destroyed. When there is a short turnaround time on credit, women can manage. If enough men don’t pay, however, it becomes a start-stop operation where women lose their client base. Two of the women interviewed stated, “Financial management of a pito business is challenging. Psychological support to customers is needed and how to judge who pays end of month and who you cut off” (P5,8:8). A woman planning to operate a pito business needs to consider all of these factors and ensure she has sufficient capital and labor [youth to fetch water] to run through a few brewing cycles.

A number of women also spoke about being involved in traditional savings groups (susu), a mutual benefit society, that has roles that are economic, social, for charity and for moral support. In these groups women make small regular contributions and each woman



collects the total sum on a rotating basis. The woman, who collects, may use the money for her pito business, for shea butter processing, or her own specific needs such as funeral expenses. A group of three women leaders stated: “Now the women have developed the attitude of savings (susu) and at the end of two weeks, they loan the savings to women in the group and then payback with a small interest on the principle” (P24,40:40).

Three other women spoke about the risks in trying to improve livelihood activities and what they try to do to minimize those risks (P30,9:18). These risks include infertile soil, no money for fertilizer, cross border arrests for gathering firewood, low yield on farms, and no market for pito. These challenges are encountered in women’s everyday lives and there are perceived benefits and drawbacks to each set of activities. A portfolio of livelihood activities is seen as a pathway to enhancing livelihoods and contributing to community resilience.

Farming Livelihoods. Both men and women explained that farming livelihoods need to be enhanced and made more sustainable. People spoke of the benefits of the diversified local farming system. Families traditionally kept their own seeds or shared with other local farmers. Manure was readily available for fertilizer. Farmers planted a number of different crops in different soil conditions, with different growing seasons and rainfall needs. According to many of the farmers interviewed, these multiple and diverse investments provided security, nutrition and a variety of produce for cultural occasions. Farmers recognize, however, that fertility of the soil was better, the population was less, more manure was available, rainfall was more predictable, and there was greater forest cover in the past. People interviewed realized that one can never return to how it was before, however, there was wisdom in some past experiences. As one group of elders explained, “In the olden days the issue of crop rotation helped to maintain the fertility of the soil” (P1, 26:26).



A number of the farmers interviewed explained that today the Ministry of Food and Agriculture (MOFA) provides guidance, seeds and chemical fertilizers on an occasional basis. They focus on hybrid seeds, fertilizers and a package of inputs that are often costly or not readily available. People shared that MOFA can be helpful, but that they are responsible to a head office and a programmatic approach that is most supportive of farmers who already have extra resources to invest. People explained that the MOFA, one size fits all mentality, is often not compatible with the unique soil and ecosystem characteristic of a particular area, or the subtle land tenure and land use governance mechanism. For example, it was explained that the promotion of block farming is being encouraged in the region. This is a plan that with 100-acre blocks of land, productivity could be increased with more mechanization, intensity of cultivation, cost effective inputs of appropriate seeds and fertilizers, and more efficient harvesting. This large scale, industrialized mode of agriculture has its benefits on paper and potential for supplying urban areas, but people said it is unknown and untrusted in the region. Farmers explained they have scattered holdings in different places with different conditions. No individual in a village has 100 acres and it is impossible for a formal government authority to put together blocks of land of this size as they do not control the land. Traditional and village authorities through the *tengansob* may have the ability to do so, but their science has emphasized supporting diverse investments for each household in order to secure and guarantee local survival. Dagara farmers identify the challenges and increased vulnerability that would come with such large scale production. The susceptibility of high input agriculture to erratic rains is a concern for people, as is the need for capital investment. Some people do see the opportunity in such land consolidation and intensification of agriculture, but without careful household and community organization and planning, it would disrupt the family farming systems.



People interviewed said funds for investing in seeds and other inputs to begin the farming season was a big challenge. They said obtaining credit is difficult and decisions about what to plant, where and when is not easy. How much to plant is then often limited by the resources available. People sometimes help each other, but more often than not everyone is looking for resources at the same time. One man shared that his son was able to get a housing loan because he is a paid government worker, but getting a loan for farming is more difficult.

Farm supply, storage and marketing systems also have a profound influence on the viability of people's livelihoods. People explained how once grains are stored, there can be a problem with pests. One farmer described how he makes a mixture of certain plants and water and paints it on the inside of his storage bin to keep away pests. Others use chemical pesticides, but are aware of the dangers this can cause to people eating the grain. A group of youth shared examples of sicknesses related to chemicals sprayed on grains.

People interviewed explained that animals can disturb farms and they need to be chased away, fenced-in, or tied. Parents shared that children who traditionally may have tended animals are now in school, and fencing is considered impractical because animals are left to roam to find their own food. Tying animals while appropriate and practical, is more labor intensive. Men also spoke about the dynamics of cattle trading and the value of a goat trading association that existed. The biggest challenge that people discussed in terms of livestock rearing, however, was theft. One man shared:

Stolen cattle are not just taken here and there. They [thieves] get them in night, with a driver and a big lorry. They can clear all your livestock in the night and go south or to Burkina. The thieves have dealers on both sides of river. They are organized in advance. (P22,25:28)

A male elder stated:



www.udsspace.uds.edu.gh

Mechanisms had been put in place to check the theft situation but because of “governmental” structure and some citizens it is difficult to implement the mechanisms. In the past, there was unity among the people in order to check the situation. But because of individualism now, it does not exist and therefore is causing this rise in theft. (P 7,68:70)

This issue of livestock theft was a big issue on peoples’ minds. The researchers learned of community roadblocks set up at night to stop theft as one way to respond.

Non-farm livelihoods. Men also engage in other activities to complement their primary farming livelihoods: day laborers for cash or barter, hunt, fish, or gather and cut trees to make charcoal. In all cases these activities have their challenges and benefits.

The charcoal business can be a lucrative activity to supplement one’s livelihood, but people interviewed said it is very hard work, consumes resources, and is environmentally damaging. People know this. When faced with school fees or health costs for family members, with a funeral or wedding on the horizon, or when a harvest has been poor and someone is desperate for income, however, charcoal making and selling firewood from healthy trees is an attractive option.

Hunting and fishing were also described as risky endeavors because the resource is getting less available, even though the only investment is time. If a hunter or fisher is successful, selling of the catch becomes the next challenge. One’s catches are often offered for sale to those nearby who have cash resources, or sold on the side of the road.

One successful activity that was working for men in one village was selling used clothes. Other opportunities that seem to be more open to men are running grinding mills for grains, and some people said there is the potential for men doing dry season gardening. A female elder advocated for, “Opportunities like dams for dry season gardening will prevent the young ones from going down south” (P14, 32:32). Others suggested if there could be a factory





www.udsspace.uds.edu.gh

around to process groundnuts to get groundnut oil, the youth will remain because a lot of groundnuts are farmed in the area. These technologically supported opportunities do not come without challenges. One man gave the example of a rice farming group that was formed as a special initiative in his community, and some machines were provided by the agricultural department for dry season gardening, but no training was provided of how to run the machines, so they were never used. A group of school boys and girls warned that:

The trend with activities going on now, if nothing is done, there would not be these activities (Pito brewing, pottery, etc.) in the future and it would be a problem for Lawra district. Jobs people are doing now will fade out because of modernization. So, the present livelihood activities may not exist in the future, but more people will engage themselves in white collar jobs. (P25, 63:63)

Seasonal migration. The issue of seasonal migration and people moving and settling in southern Ghana was also a major topic of discussion and an important element in Dagara households' livelihood portfolios. Most households comment that, "we have our people there", signifying it is not just an occasional random happening, but a conscious livelihood strategy. A very popular destination a six-hour bus ride from Lawra is around Techiman in the Brong Ahofo Region, which is a fertile area with two growing seasons. Young people travel to the region to hire themselves out as day laborers for a couple of months and then return, others end up staying a couple of years or even settling permanently. Successful migrant workers bring home food stuffs or zinc sheets for roofing houses. Many of the people interviewed stated that many young people in Lawra district are idle for 5 months of the year during the dry season, so "running down south" is considered a good option for finding work. A young woman migrant explained, "My parents were in [one community]. I just went there for 2 months to learn computer; I got possibility to eat and a place to lay my head; we make do; there are less social obligations here" (M16: 6:6). Another woman stated, "Girls used to come down as house girls. They could spend 2 or 3 years and get nothing to go home with, not even clothes.

Now it is better. They can work in chop bars, labor and get something; and nearby you might have a sibling for a support group (M16: 24:25).

People we interviewed told us it is important to recognize that some of the places where people go have a tradition of Dagara people settling there, or visiting on a seasonal basis. A group of migrant men and women near Techiman explained:

We came here because whatever you do, you should think of what your grandfathers and fathers used to do. [This] is a town that our grandfathers and fathers settled in and that is how come we also came and settled here. Also [this town] is a place that there is vast land for farming purpose and as the Dagara likes farming, if you come and you are peaceful over here, the people will give you land to farm. (M13, 15:15)

Most people spoke of the direct benefits of migration, and how the work made their livelihoods sustainable. One man stated, “Despite all these challenges, it is still beneficial to travel to the south to work because if you are a hard working person, you will be able to get money to take care of your needs and family (P12,16:16). People discussed migration as beneficial because limited food stuffs can be stretched further with only the wives and elderly left in Lawra District and therefore fewer people to feed. Some people commented, even if young people who migrate simply get enough to eat while they are away, it is a viable livelihood strategy.

One migrant’s experience highlights the complicated nature of migration as a sustainable livelihood strategy, the opportunities and benefits, but also challenges and drawbacks:

I was in the center of Kumasi; live FM radio; air conditioned facilities. I left that because it was not a proper lifestyle. I got a certificate, but I don’t let that sustain me, not even Sunyani is home. I have seen the life in cities and the village is better! In the cities one has to get up early, and transport and facilities are difficult. People always struggle for money. Jobs and accommodation is not easy. One jean and shirt is not enjoyable. People end up doing odd jobs that they wouldn’t do here. You look at them and see how some struggle, and actually pity them. (P10,11:11)



None of these strategies for enhancing sustainable livelihoods is simple. Whether it was appreciating women's roles in livelihoods, learning lessons from farming or non-farming livelihoods, or trying to get the best from seasonal migration, people were clear it takes great effort and dedication to be successful.

4.2.3.2 Interpretation – Enhancing (reclaiming) sustainable livelihoods.

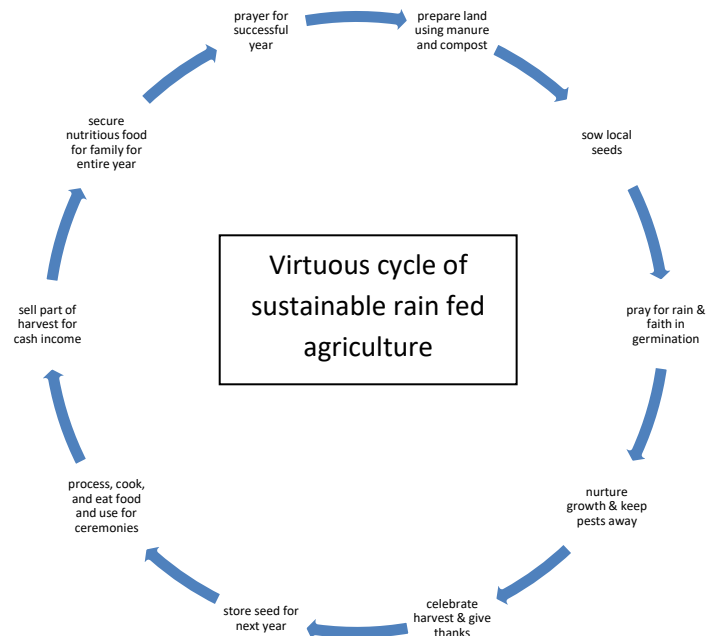
The Dagara people interviewed, male and female, young and old, spoke knowledgefully about the livelihood and food system in their region. Food was a major issue in the community discourse and framed any conversation people had related to livelihoods. Earning a livelihood, is seen more as a means to an end, with the end being securing food. People did not talk specifically about earning cash income as an end in itself. Other needs and aspirations were mentioned, but as rural farmers, as people of the land, discussions were primarily around securing nutritious food throughout the year. This blurs the lines between household food security and livelihoods. Aspirations specifically for occupations were only heard from young people.

In essence, Dagara people described a virtuous cycle of sustainable agriculture as their inherent lifeway, and they alternately longed to reclaim that lifeway, and explore alternative pathways for enhancing sustainable livelihoods. The virtuous cycle Dagara people alluded to is captured in the figure 4.5 below. The goal of the system is enough nutritious food for a full year for all household members. In order to achieve this, people know they must prepare the land, add compost and manure to increase its fertility, sow local seeds, pray for rain, and then be patient until the seeds sprout. The young plants are nurtured by keeping away pests and weeds. With the correct, respectful relationship with the land and rain it will be possible to harvest, share, exchange produce with others, collect fuel for cooking, and then eat nutritionally, both during harvest time and the lean season. Seeds will be collected, stored and



exchanged for the next planting cycle, and the surplus sold, with cash used for school fees, clothing, health care and any expenses such as spiritual ceremonies, funerals or weddings.

Figure 4.5 The Virtuous Cycle of Sustainable Rainfed Agriculture



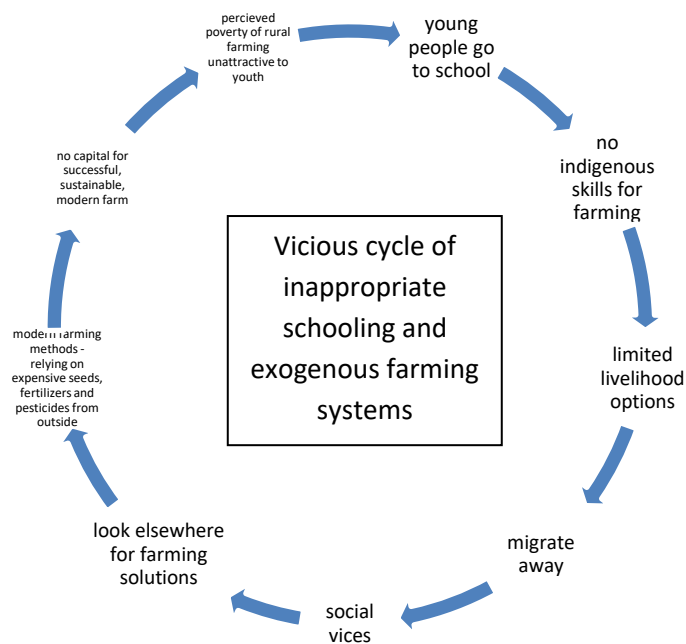
Source: Author, 2017

Unfortunately, this virtuous cycle can be interrupted in multiple places, thus disrupting the sustainable flow of interrelationships. For example, enough land is not available for a growing population, and systems are not in place to provide manure or compost to increase soil fertility. Local seeds for a diversity of crops is dwindling, and new mechanisms are being promoted through MOFA to use only hybrid seeds, chemical fertilizers and pesticides. Prayers and rituals to maintain relationship with the land and rain are sometimes neglected. Weather patterns become more unpredictable. Pesticides are expensive and young people, previously available to tend livestock and keep pests away, are now in school. After harvest storage facilities are not appropriate and there are losses. Fuel wood is scarce and demand for it tempts people to cut trees, which exacerbate declining soil fertility and water retention. The



focus on fewer crops can lead to reduced nutritional content and the overall lack of production leads to a lean season April to July when stored food comes to an end. Interruptions at any point can transform the virtuous cycle into a vicious one (Figure 4.6) in which the goal of enough nutritious food for an entire year is not met.

Figure 4.6 The Vicious Cycle of Inappropriate Schooling and Exogenous Farming Systems



Source: Author, 2017

Dagara women and men, girls and boys spoke about the desire to reclaim the virtuous cycle of a local sustainable food system. Their desire to reclaim this system was not naively expressed, but based on an understanding of the interrelated dynamics in their complex ecosystem. Using a diversity of seeds for different soil conditions with different maturing times is a sophisticated strategy of harnessing biodiversity during times of unpredictable rainfall. It is also an appropriate strategy for maximizing productivity when land tenure systems are such that people have a variety of scattered land holdings with different soil types



on which to produce. Using manure, compost and planting trees to improve soil fertility and water retention are also useful. Such a food system has many advantages for resilience.

Unfortunately, the Dagara have been experiencing the imposition of a radically different food regime that is controlled and designed by people from outside the Dagara community, and from a less intimate understanding of the ecosystem that the Dagara people have survived in for generations. This food regime is promoted by MOFA and is decided at central level and cascaded down to the Dagara farmer. It is an exogenous system that forces many changes to the virtuous cycle. The exogenous system encourages the consolidation of landholdings, and focusses on hybrid seeds that produce within a narrow band of soil and water conditions and demand costly inputs of fertilizers and pesticides (Ziem, 2012). This regime demands the availability of funds, or access to credit, to purchase inputs that, if production is not as expected, puts farmers into debt and at the mercy of creditors. The food regime creates a dependency for Dagara farmers on external resources. The intention of the regime may be to increase production, to harness efficiencies and to increase incomes through the sale of cash crops to an urban, external and potentially export food market. Unfortunately, the terms of trade of such markets are determined by outside forces and actually increase the vulnerability of farmers to price fluctuations over which they have little influence. This proposed food regime cannot be considered radically different from a colonial model of resource exploitation.

Other coping mechanisms developed endogenously by Dagara people may actually be better at promoting resilient communities and achieving sustainable community livelihoods. Women are known to share firewood and things like TZ flour with neighbors in times of need and these social support mechanisms between friends, age mates, in-laws, neighbors or matri-, patri- clan structures are talked about as an effective mechanism for surviving through lean times. Women are also known to gather baobab leaf, dawadawa and wild fruits at certain times

of year to supplement food requirements. In some instances, women form groups and raise pigs, an innovation that provides food and income. Men, for their part, might contribute directly to the food system by migrating on a seasonal basis to other regions of Ghana to produce food stuffs to send home to supplement what is produced in Lawra district. Although there are precedents of Dagara people having migrated for generations, it is more difficult than some people expect. Sometimes there are no jobs, no help from others and the added burden of debt to pay back loan for bus ticket to get there. Migrants can also fall in to vices which can lead to health costs as burden on the family. Also, families may not maintain Dagara language and culture. In spite of these complications, migration is seen as a very creative mechanism of adaptation and building resilience.

Youth aspirations. Concerning livelihood issues, it is also important to look at youth aspirations specifically. Many youth articulated a demand for dams for dry season gardening, and investments for groundnut oil processing to help diversify livelihood opportunities. There was also a desire by some youth to move away from agricultural livelihoods and secure a white-collar job, often as a direct result of their education. There was a desire for better linkages to towns and income earners so those who don't farm can provide fuel (firewood and charcoal), be employed as day labourers on others farms, and occasionally sell livestock, fish or bush meat.

As a result of education, youth were groomed to believe there is a new regime, a new virtuous cycle where you go to school, graduate, get a job, earn income, support family, get out of poverty, and then support others to go to school. This sometimes functions effectively, but not always. The cycle can be disrupted: school is seen as an end in itself; youth complete schooling, but don't get a job, or don't get a suitable one so always have unfilled expectations; or earn income, but it is not enough to support family; or have been 'educated' to disrespect



farming livelihoods so won't farm because believe it is beneath them, and thus become a burden on household; or the household becomes dependent on one child away or outside, and loses their own agency to fulfill aspirations for enough nutritious food. As figure 4.12 shows, schooling in relation to the food system regime can be inappropriate as the type of schooling does not help with food production, and often takes people away from aspirations for a rural livelihood. On the other hand, from a livelihood perspective education can be supportive to youth developing skills for alternative livelihoods, and taking stress off the local environment. Remittances or gifts back to the household can be beneficial. Because people are taken away from the traditional lifeway, however, this educated trajectory away from the community may not be contributing to resilience, but encouraging a very different regime shift to another way of being. Dagara people are well educated, there are many intellectuals from the area, and Dagara men and women in the past fought for education so as not to carry the stigma of being primitive. It is not possible to go back to the time before modern education. But how do people combine the livelihood opportunities (myths) of that education with the question of community food security and hold on to cultural identity? What do people need to give up to survive and come out of poverty, and who determines what is appropriate?

4.2.4 Fourth Finger - Remembering the Strengths and Values of Women and Men

4.2.4.1 Dagara Voices.

The fourth finger of community resilience as illuminated by Dagara women and men is self-confidence and self-esteem that is built by remembering the individual and collective strengths and values of women and men. These strengths were named differently by different people. One man articulated the three most important personal strengths he saw in people to draw upon: “1) Helping each other on farms, 2) Hard working and 3) “We will also do it” attitude” (P12: 74:77). A focus group of men and women farmers stated the most important strengths people have to respond to risk, shocks, problems etc. are:



“(1) “We will also do it” attitude, (2) clan support, (3) knowledge of farming (P16: 72:76).

When school students were asked to rank the strengths they had brainstormed, they engaged in useful conversation about why all these attributes were important. The most important attributes, articulated by diverse Dagara community members, that enable communities to respond to challenges, are considered below.

Hardworking. Numerous people stated that Dagara people are known throughout Ghana as hardworking. This hardworking nature is considered natural in Dagara people and is confirmed by many outsiders. Two women stated, “Our motivation for hard work is we look up to God, we know what we are doing is beneficial for family, and we have the self confidence that what we are doing will be fruitful, we know we’ll benefit” (P5: 15:15). A male elder also referred to God’s role, “People who refuse to work hard and say it is God’s work are seen by other people as being lazy” (P7:91:93). After some discussion, a group of school boys and girls elaborated on the idea of what it meant to be hardworking. They stated:

You can say we are hardworking because of how the youth migrate to the south to work in farms. This shows that the people are hard working. You see the old ones even working to sustain livelihood. Women wake very early to start working. The youth are also involved in activities that will sustain livelihoods. This all shows that they are hardworking, brave and disciplined. This hardworking nature, is like it is in the blood. When even our parents are not there we work hard because we have been involved in these activities. We still do it. It is also because of the harsh weather condition, we have to be hardworking, brave and disciplined to sustain our livelihood. (P25: 112:117)

Discipline, respect, courage, obedience, morality and pride. These six values were discussed extensively as being important to the Dagara people. Respect for elders was considered important because they have gone through many of the same things young people are experiencing. Respect and discipline of, and for, oneself is also essential for a mature Dagara person. Obedience is considered important, not just in the narrow sense of following orders (although that is important) but also in the broader sense of playing one’s role correctly



for the good of the clan and the Dagara people as a whole. When asked where the motivation for being disciplined came from one woman gave the following explanation:

When you find yourself in any situation you need to forge ahead. If you rely on others it could be too late, already you should be forging ahead. You can't depend on another. People know the household head cannot take over and togetherness is breaking. Dependency is not here. The 'we'll do it' attitude is common! Don't sit and wait because no one will help, use your own will power and discipline! (P35: 3:39)

Others confirmed this attitude with comments such as, "I'll prove my worth!" (P 6: 39:39), and "Don't let poverty convince you to relax", (P10: 4:4). People spoke of courage, and the importance of this characteristic to help people survive and respond to challenges. People's upbringing, participation in Bagre and the community rules and regulations help maintain morality. It was clearly important to Dagara people that self-confidence and pride were required. It was discussed as a great motivator for people that they need to behave in a certain way and do certain things to prove their worth in the larger community. Building on this sense of self-confidence is the important, "we will do it attitude".

Togetherness and Cooperation. Togetherness and cooperation are considered very important values in Dagara culture. Funerals were most frequently given as the example that demonstrates the importance that people put on togetherness. People also take the opportunity to meet in family and clan groups to discuss and assess their current situation. This sharing of life's passing phases is common in all cultures, but is particularly important as a time of togetherness for the Dagara people. Many hands and many resources are put together cooperatively to make a funeral go smoothly and different relatives have different roles and responsibilities according to their relationship with the deceased. All of these protocols are significant in acknowledging, honoring and maintaining the sense of togetherness of the Dagara community. These multiple strands of responsibility weave a web of togetherness and bonding within the community.



Togetherness is also demonstrated in traditions of farming. Both groups of men and women get together at different times to collaboratively till a field or to harvest a crop. This is often done through friendship groups, which then rotate between the farms of the group members. The work on each farm gets done efficiently and members also enjoy the camaraderie of working together. There is also tradition of young men assisting on the farm of their new father-in-law, which also helps to bond families together.

School girls articulated how these values from earlier times can help in the future:

The way forward can be going back to the past like listening to stories and story-telling. Parents tell us what happen in the olden days and we also learn certain things from the past. We can then give advice to fellow youth. Going back to the past is the way to learn how things were done (P29: 47:51).

Additional evidence for the importance that is placed on togetherness in Dagara culture is the clan support that manifests to help youngsters with school fees. Young people have roles and responsibilities around the home and the farm, and have the right to ask for support. These are not transactional relationships, or payment for completing individual tasks, but a mutual economy that has existed for generations.

Knowledge of Farming. Dagara men and women are also considered to have extensive knowledge of farming. This is a strength that was mentioned many times as a distinct contributor to the survival of the Dagara people. Whether it is soil conditions for particular crops, planting times, associated plantings, overcoming pests or appropriate storage techniques, the knowledge of the Dagara farmer was articulated as a major strength.

Imitating. There was discussion of the value of imitating, or adopting the practices of others. There appeared to be the sense of “if that person can do it” then “I can imitate them”. There did not seem to be any sense of copying or group think in these stories, but a genuine respect for following in the footsteps of others. When asked about creativity and innovation



there was much less resonance with these concepts. Imitating was inclusive of adaptation and making things work in the local context, but there was a greater comfort level with starting something new based on something that had been done before, rather than anything that spoke of a connotation of invention.

Following an in-depth discussion, a group of men and women farmers agreed to emphasize three important values.

First is a “We will also do it” attitude. We copy good things. We tend to be jealous about the goods things that people do and therefore try to stop just being jealous and copy the good thing and try and do them successfully. Second, we are hardworking, but no matter how hardworking you are without self-confidence, you will not be able to do it. Therefore, third is self-confidence. We have that confidence in trying to copy the good thing that other people do (P16: 82:87).

There are also specific strengths and values, especially concerning Dagara women, that were shared in section 4.1 – patience, making something out of nothing, endurance, and solidarity. What is significant is that Dagara people feel there are great strengths and values in Dagara women and men, and that it is by remembering these strengths and values that self-confidence and pride in being part of the Dagara community will be maintained. This in turn, will strengthen the resilience of the community and enable people to respond to the challenges they encounter in life.

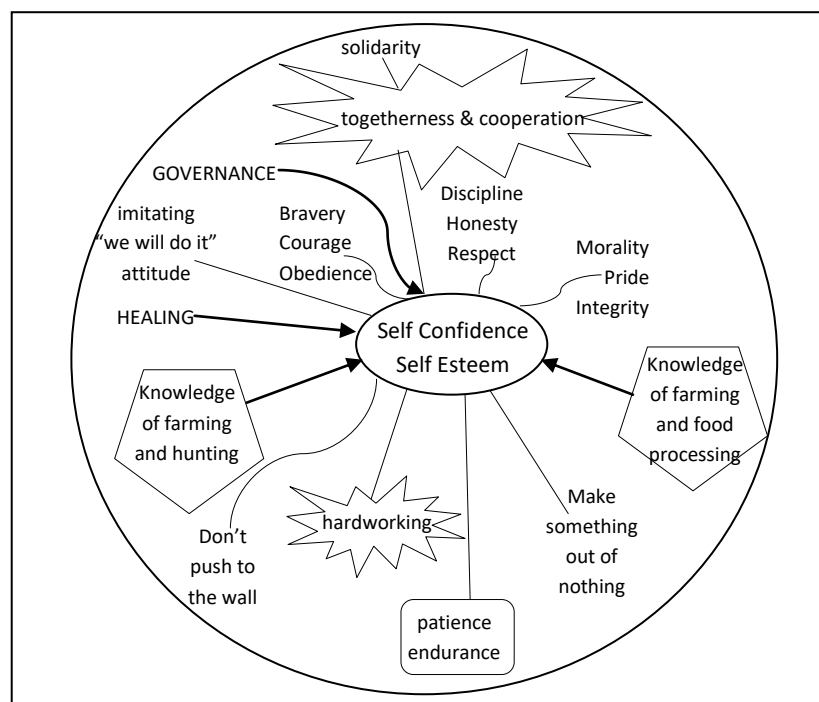
4.2.4.2 Interpretations – Remembering the strengths and values of women and

men. Dagara women and men of all ages commented on the knowledges, skills and attitudes held by individuals which, when harvested contributes to the resilience of communities as a whole. Figure 4.7 captures these strengths. Dagara women and men emphasized, that community resilience is ensured when women and men in a community have self-confidence and self-esteem. As figure 4.13 shows this self-esteem is developed through a focus on discipline, honesty and respect and a well-developed pride, morality and integrity as Dagara



people. The literature on resilience from the community psychology perspective makes similar conclusions about the link between individual values and the ability to recover from challenges in an environment of risk (Luthar, Cicchetti & Becker, 2000). The Dagara emphasis on their hardworking nature, and the patience and endurance (especially of women) brings to the foreground these particular values. Dagara women and men of different age groups regularly expressed pride in the hardworking nature of their fellow community members and the internalization of this belief, and practice, contribute to self-confidence and self-efficacy. Recognizing how the patience and endurance of Dagara women contributes to resilience, adds to what other researchers are saying. In an environment of risk, emphasis is placed on the ability to respond, and often endurance has a negative connotation. For the Dagara, however, patience and endurance takes on a very positive connotation, like a marathon runner endurance is the key, and having the patience to wait to make a move towards the end of the race is celebrated. Impatience, either for the self or for the situation to change, or the passive endurance of difficulties without any response takes on different meanings.

Figure 4.7 Spotlight on strengths of women and men



Source: Author, 2017

Other attitudes beneficial to community resilience are imitating and a “we will do it” attitude, and the ability to “make something out of nothing”. Imitating, or copying and adapting the best practices of others is considered an important skill for Dagara people to cultivate. Whereas much in today’s development discourse is about innovation, Dagara people are not adverse to talking about learning from what others are doing elsewhere, or replicating successful initiatives from the past. Having the self-confidence to follow in the footsteps of role models and doing as much as they were able is celebrated as an important tool for resilience. In the development jargon of today, innovation is elevated to the highest levels, whereas, for the Dagara, those concepts are even difficult for people to talk about as the impacts and consequences may be unknown. On the other hand, there is so much that can still be learned by taking on some best practices that have been tried and tested elsewhere. This is not to say Dagara people are not creative or experimental. Dagara farmers experiment with diverse seeds in different areas and monitor how they will respond to different conditions. The researchers observed that some farmers will weigh the advantages and disadvantages of penning animals, and choose to do so, while others let animals roam free to scavenge for food. In an environment of risks, however, there is wisdom in doing things differently based on other people’s previous experience rather than increasing the magnitude of one’s risk. Dagara people do not need to go looking for risk, it already exists in their environment, and they don’t need new innovations to help them nurture their lifeways, they may simply need the opportunity to flourish at their own pace, building on their patience and endurance, to achieve their vision of community resilience. This approach raises some questions about trends in development thinking regarding innovation, and may signal a need to rethink external innovations as untried Trojan horses that may create dangers and unanticipated outcomes that will lead to greater risks as opposed to greater resilience.





www.udsspace.uds.edu.gh

Interestingly, “making something out of nothing” is a practice one can label as creative, and it is a practice of resilience attributed to Dagara women. The practice is most often applied to women creating a nutritious meal when little food is available, or when unexpected guests arrive, and demonstrates an ability to use what one has access to and control over to achieve the best possible result. These strengths of creativity and self-reliance (building on local resources) are major contributors to community resilience. These ideas support the discussions in the community resilience literature that emphasize citizen-driven development, and re-localization (Colussi, 2000; Mathie and Cunningham, 2008; Wilson, 2012).

Of equal significance to self-confidence and self-esteem as drivers of community resilience is the value of togetherness and cooperation. Both Dagara men and women, young and old repeatedly emphasized this value as a critical element for community resilience. The Dagara emphasis on these two values fosters an appreciation for the sense of belonging and the nurturing of relationships as an end in themselves, in addition to a strength a community can draw upon for community resilience. This emphasis broadens the perspective in much of the literature on social capital, which is often considered a means to an end. There is a utilitarian nature to social capital, as it can be used to produce better results in terms of community sustainable livelihoods or general well-being (Putnam, 2000). For the Dagara, the importance of togetherness and cooperation is an end in itself; it is what it means to be Dagara. Solidarity is another articulated value of the Dagara, particularly women, and is something that can be relied upon in times of need. Unfortunately there is the feeling that more and more relationships are becoming politicized and the spiritual or social nature of some of these values is being corrupted. People can isolate themselves in cliques and set up as competitors against each other as opposed to living in mutually supportive ways.

Last to be mentioned are the strengths of Dagara women and men in governance, healing, traditional crafts and farming. Much more extensive work can be done by the Dagara in these areas, but certainly what they name reclaims the benefits and resonates with research findings elsewhere. Traditional crafts such as blacksmithing and pottery making, local activities that people have access and control over and that build on their own assets, can also inform work elsewhere. As regards farming, hunting and food processing, Dagara women and men also have significant skills and knowledge that enable them to live sustainably in their chosen environment. These strengths are helpful from the perspective of self-reliance and sustainability within certain thresholds. In the context of potential regime shifts, however, many community resilience practitioners may question the suitability of Dagara strategies. In the face of global climate change and unfettered neo-liberal capitalism, can Dagara people rely on their own lifeways and existing strengths to meet current challenges? Are they naive and unaware of the global trends and predicted future impacts on their communities? Are they living in an unconscious state of how the world is unfolding? Many Dagara will state that dire predictions about the future and the continuance of their culture and traditions have been made previously and they have survived. Lands have not been lost, traditional religion and power of *tengansob* is still there, pride is still strong, knowledge of farming is still there, and people are still considered hardworking by others. People may also be ready to step forward and stop movement in particular negative directions and demonstrate alternatives. Recent development of the UWR coalition against gold mining is a good example of this. People interviewed often said the Dagara are not fighters, resistance is not big part of the Dagara persona, but “don’t push us to the wall or you will see us fight back”. Are we perhaps coming to a time when this will be necessary?



4.2.5 Fifth Finger – Taking Actions to Overcome Challenges

4.2.5.1 Dagara Voices. The fifth dimension of resilience illuminated by Dagara people is taking actions to overcome challenges. One male elder listed off a number of practical actions that he thought should be taken to respond to the multiple challenges people were facing.

Dams for dry seasons gardening. Government helping the youth with loans to go with small business. People sit idle for about 5 months in the dry season without work. Animal rearing (selling them in times of needs to help the family). Economic trees (women harvest sheanuts, store them and sell to support the family). Borrowing from people around (if there is funeral) like friends or people employed in district places (P33,78:85).

More illuminating than these lists of actions, however, were the detailed, nuanced suggestions and inspiring stories of people's experiences overcoming challenges.

Resilient Attitude. An attitude people spoke about that was considered very valuable in overcoming challenges, is the belief in the inevitability of experiencing challenges, and the necessity of carrying-on in spite of these challenges. People used the example that if you are walking down the road and you kick a stone with your toe and stumble or fall down, you should immediately get up and carry on. Falling into despair or lamenting about the barriers that have come into one's path were said to be a waste of time and energy, and one needs to continue making effort to move forward. People interviewed talked about how pain can sometimes make someone stronger. They shared the proverb that heat opens a shellfish's wings, without some heat one does not get the reward.

Accept Family Responsibilities. The underlying chronic challenge many Dagara families said they had is to get enough food and some small additional income to pay bills. Many farmers spoke of their pride at being sustainable tillers of the soil that had been provided for them by the ancestors, and saw it as their responsibility to till the land in harmony with the elements, and to celebrate the unfolding of their lives in concert with others. This positive view



of working with the environment to live one's life to the fullest was very important to the Dagara people interviewed. One of the household heads demonstrated great pride in being a farmer, and another male elder spoke repeatedly about Dagara people 'being of the soil' and 'what we do is till the soil'. People were unanimous in arguing that it is the hardworking nature, particularly of women, that enables Dagara people to make a living from the land and respond positively to challenges in their environment.

Never be Idle. Many people stated that women are never idle. From the early hours of the morning before others are awake, until late at night when others have gone to bed, women are engaged in activities for the good of the family. It might be fetching water, collecting firewood, preparing, cooking and cleaning up, breast-feeding a young child, or dealing with the health issues of an infant. These reproductive tasks are nurturing and essential to the well-being of the family. The woman may also be involved in tending a backyard garden where she grows green vegetables to sell in the market, weeding on her husband's maize farm to help ensure a profitable harvest, collecting and transporting firewood to sell in the market, making pots to sell, brewing pito to sell as her own business, preparing and selling bean cakes in the local market, or engaging in petty trade such as buying and selling salt or other small ingredients that are needed for making soup. These productive tasks contribute to the income of the family and cover the expenses for everything from needed cooking ingredients, to health care costs, to clothing and children's school needs. Women also engage in community work, actively organizing and contributing to weddings, birth ceremonies, funerals, festivals, etc. Women play a role in the community justice system as regards domestic issues and get involved in women's groups of mutual support. The researchers heard from both the women and men, that whatever type of activity women are engaged in, they are striving to help their children and families.





Transform Conflicts. People said conflicts between people and between communities can most often be resolved through traditional means. Structures and systems are in place for resolving conflicts between men and women in family situations, between individual farmers over farmland, and between communities over access to markets and resources. For domestic issues women elders and the Pognoa [woman chief] will sit to hear and resolve disputes. They will be involved with the male chief and elders when issues come up between women and men.

Members of one women's group explained, "We advise each other on issues of concern or when there is an argument between people, but if the people or person refuse to pay heed to the advice then we remove them from the group (p39: 25:25). Another woman stated, "There are sometimes clan to clan disputes. If behavior is not worthy, then clansmen come together and tell you to repair your ways. Then playmates might come and compose songs and sing (P8:8:8). A male elder explained, "Peace building, conflict resolution etc are taken care of by the *tengansob* and the chief" (P7: 30:30). A female elder added, "If there is a problem to solve, ask others to come and help make peace and resolve the conflict" (P2: 6:6). One male elder told the story of his own community:

People had to stop being troublesome because [our community] was beginning to be stigmatized and any bad thing that happened were associated with [our community]. People were vociferous in those days and liked fighting. Upon talks to the young people, they went into petty trading e.g. sale of second hand clothing and overcame the troublesome behavior. (P13: 7:9)

Domestic violence was a particular type of conflict that people experience. A group of men and women farmers went into some detail about what they believed was appropriate:

[Domestic violence] is happening, but we find it easy to settle them through advising the people involved by an elder in the house or community. The elderly woman in the house advises and settles the fight particularly if it is among women. If it is among men, the elderly men in the house advise and settle the dispute. If trying to solve it in the house fails, we call the elders of the village to settle the issue. But it is not to punish the people, but to let the elders threaten them to stop the dispute. (P16:66:70)

Women ridiculing men in public, in songs or jokes, was discussed as a particularly useful conflict resolution mechanism. The researchers also overheard descriptions of a traditional conflict resolution mechanism when two people were involved in a dispute and there was blame on both sides. Their stories would be heard by the chief and then different fines assigned – a goat for one, two chickens and some guinea corn for the other – but the different fines would work out to the same thing. People interviewed stated that formal court systems also exist and laws are enforced by police, but these were usually reserved for very serious cases.

Another challenge to overcome for the Dagara person, particularly in years gone by, was discrimination. There are stereotypes in southern Ghana of people from the north being primitive, living in trees, and barely surviving in a very hot and harsh environment. Some people related how when they went to schools in the south, they would be teased with these stereotypes and they would need to be ready to fight to defend themselves. A more impactful response than fighting, however, has been the focus on education, and success in this field has overcome much of the discrimination.

Create Groups and Associations. Another useful strategy people spoke about for overcoming different kinds of challenges is sharing and working together – whether this is in families, larger clan structures, or in more formal groups and associations. A male elder spoke about how forming groups can start the process to deal with serious issues:

There was a meeting with the people about 20 years ago to tell the people to stop being barbaric and from that meeting, the [community] Youth Development Association was formed. (P13, 11:11)

Another man commented:

Community initiatives such as [society] started at the [community] junior secondary school helped minimize all challenges that are coming. It helped get the chief installed



www.udsspace.uds.edu.gh

because the society wanted the chief as its patron. In [another community] there is a bridge association. Even though it doesn't have any money they sit down and discuss, they give out suggestions and then build on it. In [a third community] they needed blocks to build a library. We had been writing to many NGOs etc, we have many visions – for about six years now the library has been operating. (P22, 30:34)

Another man shared the story of a community that established an association, developed bylaws and an enforcement mechanism, and this led to significant change related to bush burning.

Chief, elders, community leaders came together and set by-laws to do something themselves to help themselves. They abide by by-laws very strongly. The majority agreed to work together because the situation had affected them personally. Others were compelled to join because they realized they were affected. Now influential environmental departments commended the community on regional and national basis. The Environmental Protection Agency went there and honoured chief and elders. [The community] did it on their own. Previously they believed snakes and reptiles will come if you don't burn; and that you need to burn for shear fruits to produce well. However, people took the risk to stop burning and saw that this did not occur. When people willingly agree on their own to change today they are reaping the benefits. When people are not part of decision-making, if change is imposed, it will not work, if people are involved they are bound to follow the rules (P36,10:14).

Associations can be just as much part of the problem as part of the solution, however.

A common challenge interviewees shared is when associations ask for contributions, such as contributing so the village borehole pump can be repaired. This example was brought forward by many different people. Adult women and men are usually asked to make contributions to help repair these facilities. The challenge arises, when the amount gathered is not enough to do the repairs, limited contributions are made for the project because people do not enthusiastically support it, or because of negative experiences in the past. Any of these scenarios is more complex than when people simply didn't have anything to contribute. The challenge is both a community, and an individual, one as individuals are not only asked to make contributions to community efforts, but they have to pay taxes, market fees, road levies, health insurance costs, school fees and other expenses. These fees were some of the most common,



most chronic, and most difficult challenges to overcome. Timing of when fees become due, spreading out payments over time, and saving money to prepare for upcoming expenses were all discussed. Consistently and unanimously the answer come back from people that it was not managing their finances better to pay the fees that was necessary, it was that the number and amount of fees due on an annual basis is greater than their ability to pay, given the current level of productivity of their land and market prices. Therefore, the fees actually erode their livelihoods and their ability to invest in themselves for the possibility for improving things in the future. People did manage to borrow or put off fees from one season to the next, but fees were the biggest chronic challenge they experienced.

Strengthen Women's Associations and Leadership by Women. Women's groups of different kinds have been helping in overcoming challenges. Three women who were interviewed told the story of the organization they were involved with:

The idea came about when three women decided to organize women and to bring them together to improve their livelihood. The first was in Lawra town, but later the idea was sold to the other villages. The women's groups, through this association, got a lot of assistance through loans. The women previously did not get involved in small scale trade. We encouraged them and they got into small scale trading with the support of loans given to them. Tomatoes, grain etc are things that they trade in (P24, 27:34).

A different group of women from another community shared their own story, that showed both organizational and advocacy skills in how they responded to a water problem.

Women first had the idea to come together, and then sold the idea to the chief for the need for a borehole because they are the ones involved in fetching water. The Chief sat together with both men and women in the community to discuss ways and means of getting a borehole. Various contributions were made in the form of cash and groundnuts. ... Assistance from the District Assembly was later sought to support the project. Since the coming into being of the borehole about six years ago there has been reduction or complete eradication of guinea worm and diarrheal diseases. (P30,46:64).



A woman shared it is not just working together, but the strength that is developed through collective action to “fight” for something that makes a difference.

Collective fight to attain something: that is why we come together; normally you find that around community initiatives. For example: Water becomes a priority – it is a major issue before people and we needed to resolve it and find a solution! Enlightened people needed to be brought together with those who most felt the need. (P35,40:40)

The traditional mechanism of the female chief is particularly interesting because people shared different views on how traditional it really is. People are in agreement that the authority of the position had been lost in recent years, but there is some contestation about whether it ever existed in its current form, or if it is a newly created mechanism based on queen mothers in the south of Ghana.

The researchers heard about many other informal leadership roles that women play that contribute significantly to responding to challenges. In our listening in on the community discourse and our participant observation, we learned about a young woman working as a nurse, who plays a role and contributes her skills to the village women’s association; a retired school teacher who is now a district councilor and is called on to participate in numerous planning initiatives; and the chief’s wife in one community, who also plays a role as a literacy educator and an active organizer in the community. In all of these cases, each woman combines formal and informal roles, and volunteer’s significant time and energy to community work to build a stronger community for all. These examples are not used to say that men do not play any of these or other roles that contribute to the well-being of the community, but they are not spoken about in the same way. Women were given a lot of credit for the community building work they do in multiple ongoing ways.

Nurture Youth-Elder Relationships and a Vibrant Life for Youth. Another action that helps in overcoming the myriad challenges Dagara people are facing is understanding the roles



and relationships between elders and youth. This contested area has multiple perspectives, and is a big part of the community discourse. Elders, who are often concerned about the lack of responsibility and adherence to values by the youth, will take action when they trust that youth can learn the same values elders believe in. Elders accept the responsibility to work with youth to find ways to teach them. Elders admit simply complaining about things not being the way they were before, is not helpful. Youth, for their part, recognize they have many influences on them from the western formal education system, the media, and the easy accessibility of information and mobility to other places. In spite of these modern influences there are still youth growing up with Dagara values, showing respect for elders, and wanting to do their best to contribute to overcoming challenges their communities face.

With regard to respecting elders and cultural ways there is much being done to improve this situation. Schools are beginning to include curriculum elements related to local knowledge and customs, but there is still a long way to go. Both youth and elders discussed that people also have to appreciate the strength, energy and enthusiasm that youth can bring to a situation. Ultimately it is communication and mutual respect between elders and youth that will be beneficial in helping Dagara communities overcome challenges.

Enhance Farming Practices and Prepare for Environmental Disasters. Experiments by farmers on different ways of doing things were also encouraged as a way to respond to the challenges faced by farmers. A man commented that different methodologies related to storage should be tried. Rather than following directives of others like MOFA, people spoke of the need for farmers to do their own experimentation. For example, three women advised:

The present generation should go back to the past ways of doing things such as the application of manure on their farms for increasing yield. For comparison purposes apply manure on one farm and chemical fertilizer on another farm and observe the results (P30,74:77).



What was common in many discussions was people were ready to make their own decisions about what was going to be best for them. They just needed the space and the support to do what they thought was right, and the opportunity to learn from that as opposed to being told what was best.

There was little discussion in interviews with Dagara women and men about preparing for disasters, or preventing or mitigating them. Most people understood these events as fate, or the reckoning for an individual's bad behavior, and did not think there was much they could do. One man was an exception to this and he commented at length about the need for educational sensitization programs to help families and the local government prepare for the possibility of shocks so they do not become disasters.

Education and sensitization should be a major part of disaster management [DM] plans. Annual and quarterly DM action plans need to be developed and weekly activity achievement checked. People need to be educated to think about which disasters might happen in which quarter and to plan properly. Plans need to be put in place for the number of communities to meet, how to go to the chief, the DM man, religious leaders, opinion leaders and disaster volunteer groups and then to have everyone invited in big community meeting. The message is to prevent or minimize the impact of disasters. (P36,27:30).

He went on to share how challenging this planning and sensitization process is because things have changed regarding the real and perceived responsibility for responding to disaster situations:

Before NADMO [National Disaster Management Organization] there was a government organization under the presidency that issued directives to support people following a disaster. Now government is trying something different. Traditionally chiefs had the responsibility. A chief would personally give out food and/or engage people from houses affected, but that is no longer practiced now. In the past people would farm for the chief, and/or give a percentage of their harvest so he would have some reserve stocks. At this time, that is not being done. Chiefs are away in some places, regent can't do it, so there is a lack. (P36,41:43).



Other organizations are also supporting preparedness and disaster management initiatives. The researchers learned of organizations supplying food aid to school children, providing health equipment and sponsoring training in emergency response; supplying inputs to farmers, offering agricultural extension services and a seed exchange for farmers, raising seedlings for agro forestry, planting trees for wind breaks and to increase water retention in soils, and providing seedlings to schools. These actions build community resilience.

Foster Faith and Hope. In our interviews we heard the inspiration and catalyst for people's hardworking nature was often tied to their faith in God. People related that it was their role given by God to till the soil, be respectful of the elements, and make the effort to help themselves. Many people said they see great dignity in their role as tillers of the earth and are confident God will help honor the role they are given. Men and women interviewed related their faith in God, and that God will help, and also the recognition of their reciprocal relationship and responsibility to God, to live life according to certain principles in order to receive such help. People shared their faith in the ancestors, that, if treated with respect, the ancestors can also offer support that helps people to overcome challenges. This powerful belief in metaphysical forces is very strong in the Dagara culture.

In one village, for example, the story was told of how people made sacrifices and prayed for rain and rain came to that village, but not the surrounding area. In another instance, someone told of a broken leg that was healed, in-part, by breaking a chicken's leg and completing the ritual of the person with the broken leg nurturing that chicken back to health. Other stories were told of prayer and sacrifice made on farms and the farms did well, whereas when sacrifice was disregarded or taboos broken, farms suffered. An experience was related of a community with late and minimal rainfall: people had been burying the dead in coffins and there was much controversy because the belief was that one has to bury the dead directly in the earth, or it will



www.udsspace.uds.edu.gh

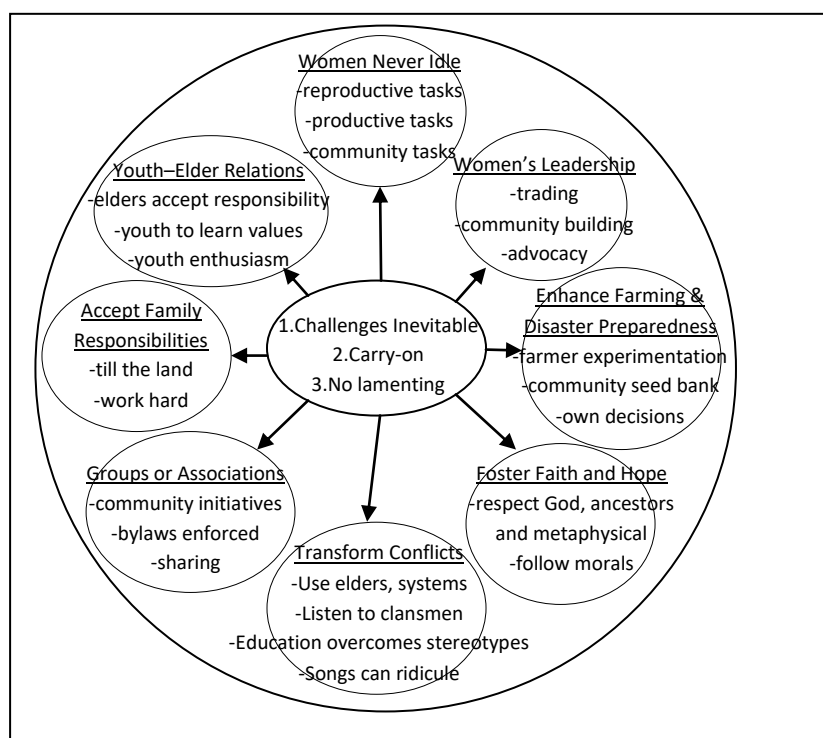
not rain. A woman died in this community and was put in a coffin for the funeral, but taken out and buried in the ground the traditional way. The next day it rained.

Hope was also talked about as a strength that enables people to overcome challenges. Hope is seen as something subtly different from faith, in that it is described more psychologically than spiritually. Having hope nurtures peoples' self-confidence. Without that it is difficult to do the work to overcome challenges.

4.2.5.2 Interpretations – Taking actions to overcome challenges. The fifth finger of the hand of resilience represents the actions that must be taken to overcome challenges. These actions were shared in the voices of Dagara people above, and are summarized in diagram 4.8 below. At the core of all of these factors, is the Dagara wisdom at the centre: challenges in life are inevitable, as human beings we need to carry-on living; and lamenting about our challenges is a waste of energy. This resilient attitude is profound, and throws into question the emphasis in mainstream development of striving to achieve particular results. The Dagara wisdom adds to what others have been saying in the literature (Macy, 2000; Fleming & Ledogar, 2008) and sheds light on an attitude that may need to be fostered for community resilience. Challenges in life are inevitable and our role should be to dance with them, not to stop the music. Dagara wisdom captures this essence and Dagara people have followed this lifeway for generations. They have carried on, not in a negative sense with the connotation of just scraping by, but with the knowledge and understanding of the cycles of time and change. This is not to say Dagara people are not motivated to identify ways to change, but at the essence of the Dagara world view is to recognize the inevitability of challenges and carry-on. The researchers learned this attitude is at the core of the Dagara worldview. This attitude is powerful for community resilience and is reflected in different ways in the literature (Ungar et al, 2006).



Figure 4.8 Spotlight on Actions to Overcome Challenges



Source: Author, 2017

One key action is, like Dagara women, never to be idle. Women engage in productive tasks, reproductive tasks and community tasks. Women saw how these tasks contributed to the ability of their community to be strong, to overcome both acute and chronic disturbances. They worked hard and were aware they often worked harder and put in more hours than their male counterparts. Women hypothesized that if men and boys worked as hard, the society would be much stronger. This point puts an important gendered understanding on social relations within Dagara communities. There are issues of access and control of resources, and patriarchal attitudes that need to be overcome. Education and community change work starting with a gender analysis, would not only acknowledge the actions women are already taking, but challenge Dagara men to also consider doing some things differently. Extensive work has been done internationally on how gender equity can contribute to development (Woodroffe, 2012) and would also contribute to community resilience. There is also recognition that some cultural norms and ways of being have been bastardized through the influence of modernization and

have deepened patriarchal relations of power-over, introducing ways of being that create more problems. Dagara women's lifeway can be compared to a traditional bitter soup that has a strong bitter taste initially, but then after some time has sweetness and is a real delicacy (Apusigah, 2005). This analogy resonated with women interviewed and they saw it as an analogy for resilience.

The second action, women's leadership, was also emphasized in areas such as trading, community building and advocacy. In local small scale trading an emphasis on local women's leadership is good for all livelihoods and would encourage more circulation of resources and have a multiplier effect (Mathie and Cunningham, 2008).

The third actions emphasized to overcome challenges was for people to accept family responsibilities, till the land and work hard. Most people were clear that to be resilient took personal responsibility to work hard. The Dagara emphasized their desire to work hard rather than see themselves as victims or blaming others. People critiqued governments, and had some awareness of global forces working against them, but were confident in their own agency to succeed, an important attitude for resilience.

Strengthening youth and elder relationships was the fourth action for resilience. Elders and youth both argued for rebuilding vibrant, mutually respectful relationships. Respect for the wisdom of the ancestors, the past, and previous ways of doing things, as well as for the enthusiasm and energy of youth to take risks, try new things, and apply their energy to the challenges of today is mutually reinforcing for resilience. In the resilience literature of indigenous people, there is the recognition of the importance of these intergenerational relationships (Loppie, 2005). Millar (1996) emphasizes the different learning systems for people at different ages in life. Intergenerational relationships are a contested area with multiple perspectives. The perceived generational divide, the possibilities for bridging and



valuing the different perspectives across that divide are a major element of the community discourse.

By recognizing the wisdom elders hold, youth can become more critically aware of their history and the pulls and pushes of modernity and the western paradigm of development. Being critically aware about these issues will help reclaim their culture in another way; youth who are aware of the power at play in international systems and with manipulative media may discern the blending of old and new actions for community resilience in different ways.

Working with groups or associations, and transforming conflicts are two additional actions. One way people spoke about overcoming challenges is by sharing, a mutual rather than a competitive economy, and living interdependently. Many African scholars are articulating Ubuntu to capture this belief in mutuality and others are speaking about sharing and mutuality as strengths for resilience (Malindi, Theron, Theron, 2013). Working through groups and associations was encouraged to bond people that can generate positive community results.

Having institutions in communities and bylaws enforced is an important factor in managing the commons and shared resources. Courts often defend individual rights and transforming this to include collective rights is necessary. In Dagara culture, enforcing bylaws related to communal rights, and confronting individual transgressions is necessary. Sometimes the punishment is community ridicule. This ridicule is a reminder that survival depends on being part of a group. This leads to a consideration of how to transform conflicts, which people described could be better done by listening to clansmen/women, who tell one how to repair one's ways.



In the area of conflict transformation, there is much written about having skills that can help to overcome challenges and build resilience (Pelling, 2011). The Dagara perspective emphasizes that reconciliation and rebuilding community, is valuable. The Dagara also bring the practice of achieving justice through ceremony, and acknowledging some injustice may be fate or destiny.

The final two actions are related to farming and food, and to disaster preparedness. Some ways people suggested to overcome these challenges included supporting farmers to experiment, to make their own decisions, to set their own priorities and to develop systems for community seed banks to conserve and spread biodiversity. Other specific techniques were described for the ecosystem context of Lawra District, and it was clear people wanted farmers to claim the space to make those decisions and not become victims of decision makers from outside with their own agendas.

Much of the resilience literature focuses on the material and practical nature of community resilience. In contexts like northern Ghana, commentary is on food, and the imminent threat of natural disaster (Gubbels, 2011). The focus is often on imported solutions, or warning systems, yet there has been significant work done on local responses that resonate more with Dagara people's views. This technical knowhow has been burgeoning in recent years and it would be extremely valuable for Dagara farmers to have access to these lessons learned and possible techniques to combine with their own. However, the Dagara insight remains that these technological options can only be offered as choices to Dagara farmers who make their own decisions whether to experiment with them or not. Putting farmers in positions to make informed decisions about technologies and not based only on an imposed critical frame from outside is necessary for community resilience.



A final element that the Dagara bring to community resilience is faith, or hope in fate or destiny, as reflected in the law of karma in eastern religions (Strano, 2002). This internal power is discussed as an important aspect of resilience in community psychology literature (Luthar and Cicchetti, 2000; Kulig, 2000; Masten, 2000; Ungar et al, 2006), but is often relegated as a side issue by the ecosystem and rural development streams. Even in books such as *Sacred Ecology* (Berkes, 1999) it is only a minor part of the model, whereas for the Dagara it is the starting point without which nothing else is possible, and following a moral path helps build the resilience of the community as a whole.

4.2.6 Emerging Insights from the Dagara Hand of Resilience

The Dagara wisdom captured in the hand of resilience provides numerous insights regarding community resilience. Revitalizing culture and spirituality is paramount. This includes helping people collectively and individually to connect to their identity and to recognize the roles and responsibilities they are to play out in the cosmic order. For the Dagara, this is about being proud Dagara: stewards, healers, and care takers of the earth; being in right relationship with the earth. Nurturing kinship and other relationships and life cycle milestones such as funerals is also a Dagara strength for resilience. This natural form of bonding social capital is more important to the Dagara than groups or associations formed for a specific purpose.

Dagara people continue to celebrate harvest and initiation with the festivals of Kobine and Bagre. These festivals are important cultural codes for understanding the Dagara world view and are important for nurturing the cultural and spiritual aspects of Dagara society. The Dagara moral spirituality demonstrates a way to appreciate the unseen metaphysical forces of the world, and recognize the entitlements and obligations to those who have gone before, to the ecosystem which generously provides, and to the great mystery.



For healing the ecosystem, Dagara wisdom teaches that the consciousness of being of the ecosystem, coexisting with that system, not being separate from it, is beneficial. From that consciousness one can fulfill responsibilities of giving gratitude and prayers of thanks to those ecosystem elements, and to put in energy to heal them. Recognizing how behavior impacts the ecosystem, both positively and negatively, at different scales requires responsibility and acceptance that what is given to the land is what comes back from it. This law of give and get applies to food systems as well, and acknowledging the varied and multiple impacts humans have on trees, on soil fertility, and on the rain is imperative. Being aware the short, medium and long term impacts of actions could vary, and at the time consciously choosing actions that contribute to healing the relationship with the land and the ecosystem builds long-term resilience.

Enhancing sustainable livelihoods is important. An understanding of the vicious cycle of exogenous agricultural practices and inappropriate schooling, along with an appreciation of the critical vulnerabilities within the virtuous cycle of rain-fed agriculture, could be overwhelming. For the very fact Dagara people rely on rain-fed agriculture, Dagara women and men recognize, and must accept, that they are at a tipping point as tillers of the earth as rains may continue to be erratic and unpredictable in the future. Difficult decisions will need to be made. Multiple, diverse production of food stuffs drawing on indigenous practices and biodiversity can help, but may not be enough. Pursuing alternatives for non-farm incomes is necessary, and may evolve differently for women and men with different benefits. At the same time reclaiming the sharing economy between women and between households can multiply benefits, while respecting the separate and complimentary roles women and men can play.

Remembering the strengths of women and men of different ages is a lesson to take forward, particularly as it builds self-confidence and self-esteem. Without these two internal





www.udsspace.uds.edu.gh

strengths, it is difficult for anyone to contribute to their community. Dagara culture has ways of building up these psychological strengths and, when combined with collective solidarity, respect, unity and togetherness, they provide the ability for people to respond to life's challenges. Dagara people have finely honed skills and intimate knowledge of harvesting a lifeway from their ecosystem. While men and women may take on different roles in this, at different times, the diversity and modularity in who holds the knowledge is in itself, a strategy for resilience. Similar to the variety of healing practices in different households, there is the reduced risk of losing all knowledge and the added chance of preserving some knowledge. Yet, different than health care, all people are farmers, so encouraging dialogue and sharing between people, and particularly between people of different generations to build social memory will be essential for survival in the future. Remembering that women can make "something out of nothing" and that men are good at "imitating others", can also be nurtured as strengths from which people can learn. Also, remembering the morality and values of what it means to be Dagara is a foundation for building community resilience in the future. Women and men must support each other in living up to these standards. This means being vigilant in not committing acts that are harmful to others or the ecosystem, and making the necessary appeasement with metaphysical forces if they do. Living the moral lifestyle includes working hard, an important characteristic of Dagara people, and one that both men and women demonstrate as "never being idle".

In terms of taking actions to overcome challenges, having the attitude that challenges are inevitable, one must carry-on and not lament, is central to the Dagara ability to be resilient. This attitude includes the faith and hope that if we plant things they will grow, and fostering this kind of attitude is important. Women take a special role in responding to chronic stressors. Women offer leadership in a great variety of household and community tasks. For men,

accepting their family responsibility and making all efforts to till the land and work hard will go a long way to support community resilience. Respecting indigenous mechanisms, such as elders and clans, can help transform conflicts, as well as provide intergenerational learning. Using informal mechanisms such as songs, for culturally appropriate blaming and shaming, can correct harmful behaviors. Applying bylaws to regulate and enforce appropriate personal behavior at the local level, and sharing between groups and associations is encouraging. The Dagara demonstrated wisdom in exploring youth-elder relationships, and their suggestions of promoting elder responsibility to share with youth, youth to be committed to learning from elders, and a mutual openness and space for youth enthusiasm and risk taking will be beneficial. As well, taking actions by experimenting on farms and preserving and exchanging local seeds are practical techniques to revitalize Dagara people as tillers of the soil, blessed with that entitlement and responsibility. This role comes with certain sacred obligations to maintain right relationship with nature. It also means that Dagara people will require space to make their own decisions and live their own life way - changing, adapting and recreating as they see fit – and outside interventions may interfere with their capacity to survive. Facilitating opportunities for Dagara people to make their own decisions, unpressured by external powers, yet building relationships of mutuality will be helpful.



4.3 Honoring / Challenging Dagara Indigenous Knowledge that Sustains or Constrains Community Resilience and Well-being

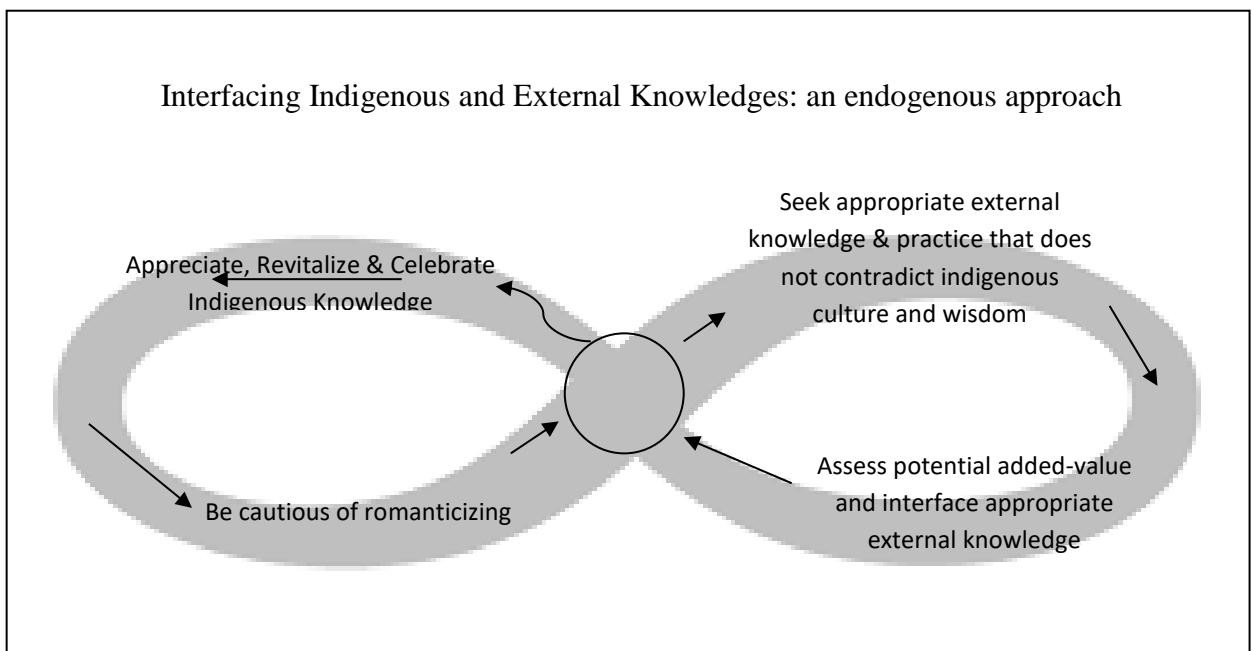
4.3.1 Indigenous Knowledge, External Knowledge and Interfacing Knowledges

This section presents findings and insights related to the third objective of this study: to honor and validate Dagara indigenous knowledge and practice that sustains community resilience and well-being; and challenge Dagara indigenous knowledge and practice that constrains community resilience and well-being. The preceding sections, 4.1 the concept of community resilience from a Dagara world view perspective, and 4.2 how to build processes of community resilience as elucidated with the analogy of the Dagara five fingers of resilience are ‘indigenous’ Dagara knowledge and wisdom. This knowledge, however, has been influenced by outside learning and contributions over the years. Knowledge and wisdom based on specific ontology, epistemology and cosmovision evolve within contextual and temporal boundaries, but it is not isolated or static, it is always influenced by what is occurring in the surrounding time and space (Little Bear, 2000). Figure 4.9 offers an endogenous development framework (COMPAS, 2015; Guri, 2015) for understanding the interfacing of indigenous and other knowledges. This framework starts from within, framed by one’s own world view, and appreciates, revitalizes and celebrates indigenous knowledge. The framework also includes a process of critiquing that indigenous knowledge and its associated practices in the current context. It seeks appropriate external knowledge and assesses its potential value. It flows that appropriate external knowledge can interface with practices of indigenous knowledge and practices to create a vibrant lifeway. This endogenous process of interfacing knowledges, also called two-eyed seeing (Marshall, 2009), can help to create wisdom that transcends any one system. At the same time, it is important that knowledge which is indigenous, support people



in living by their world view, within their changing environment. Issues of intellectual property rights over this indigenous knowledge must be considered as there are many examples of peoples' knowledges being exploited for outside gain (Smith, 2001). Dagara people will be called upon to develop protocols to help maintain their knowledge rights, as well as create a baseline for negotiation with others concerning their knowledges and resources. In this research study Dagara people did not specify indigenous or external knowledge from a perspective of ownership, but spoke about how Dagara beliefs and knowledge accumulated over generations are now part of their lifeway. Here, it is most valuable to discern what of this Dagara knowledge can sustain or constrain community resilience.

Figure 4.9 An endogenous approach for interfacing indigenous and external knowledges



Source: adapted from Guri, 2015

4.3.2 Dagara Knowledge that Sustains / Constrains Community Resilience

In this section, we explore the examples of Dagara knowledge and practices that sustain or constrain community resilience, as shared with the researchers. Tables 4.7 to 4.10 use the categorizations proposed by Millar (2005, 2012) to illustrate the breadth and depth of Dagara



knowledge and science shared by interviewees that sustain or constrain community resilience: world views and belief systems, technical knowledges, leadership, and artistic expressions. In the tables, knowledge examples are identified as sustaining community resilience (+), constraining (-), or were discussed in the community as having the potential of being both, (+/-) as predominantly sustaining, and (-/+) as predominantly constraining. Based on the endogenous framework for interfacing knowledge introduced in figure 4.16, I have further categorized the knowledge examples as primarily indigenous, primarily external or a clear interfacing of indigenous and external.

<p><i>Table 4.7 Dagara Worldview and Belief System Knowledge and Practices that Sustain / Constrain Community Resilience</i></p> <p>(+ sustain, - constrain, +/- and -/+ both sustain and constrain community resilience)</p>		
Indigenous knowledge and practice	Interfaced knowledge and practice	External knowledge and practice
+we are of the ecosystem +identity: belongingness, unity and togetherness makes a proud Dagara +/-all relationships have rights and responsibilities +/-roles for males and females of different ages +/-taboos, stories and proverbs +/-funerals with unique practices +respect for elders experience +intergenerational learning +/-sacrifices to the elements +be hardworking +/-immediate punishment if break taboo or community bylaw -/+treatment of widows +we will do it attitude +morality +faith and hope things will work out +/-relationship with metaphysical forces that must be nurtured	+/-funerals, maintaining much, but changing +/-formal school system valuable +/-catholic and other churches valuable +/-imitating what see elsewhere	-youth considering themselves poor -not respecting taboos +/-formal school system best +/-catholic and other churches best -/+youth developing desire for white collar jobs -/+bury people in coffins

Source, Author, field research, 2017



Some examples of specifically indigenous Dagara knowledge in the category of beliefs that sustains community resilience include: we are “of” the ecosystem; relationships are important; all relationships come with rights and responsibilities; relationship with the metaphysical world must be nurtured. There is also a strong belief that immediate punishment comes if a member of the community breaks a taboo or community bylaw. These beliefs can have both a sustaining (people do not cut down trees because of community bylaw) and constraining (people believe rain does not come because people are immoral) effect on community resilience.

Formal schooling. There is a Dagara belief, drawn from external knowledge, that the formal schooling systems and the Catholic Church teachings are the best, superior to traditional beliefs. This belief, and the practice of Dagara people attending Catholic run schools in UWR over the decades, has helped sustain community resilience: discrimination against Dagara people as uneducated has been overcome; generations of well-educated Dagara men and women support the area; and Dagara intellectuals who occupy high posts in government and universities make people proud to be Dagara, and thus nurture self-esteem in the Dagara community.

Youth. One imported external knowledge related to youth, is the belief by Dagara youth, that Dagara youth are “poor”. This labeling is an imported notion, it is not consistent with the indigenous belief system. This external belief is a constraint on community resilience. In contrast many young Dagara have the skills, knowledge and determination to be successful as full time students in the formal education system. Although the formal system is not indigenous, the skills to succeed in life can be seen to start within the Dagara world view that values of discipline and hard work can be viewed as an endogenous approach to learning, demonstrating the “we can also do it” attitude. However, this ability to succeed in the formal



education system can both sustain and constrain community resilience. Formal education can make people less proud to be Dagara, teach inappropriate knowledge and skills, denigrate farming lifestyles, and attract people into modern ways that lead to intergenerational conflict. On the other hand, many Dagara intellectuals are committed to supporting the dynamic Dagara lifeway, and are at the forefront of work globally on revitalizing culture and appreciating an endogenous approach to development.

Table 4.8 Dagara Technical Knowledge and Practices that Sustain / Constrain Community Resilience

(+ sustain, - constrain, +/- and -/+ both sustain and constrain community resilience)

Indigenous knowledge and practice	Interfaced knowledge and practice	External knowledge and practice
+knowledge of rainfed agriculture in local ecosystem +Sacred groves as resource management to protect biodiversity +use of shea and dawadawa -use of trees for fuel +manure and compost to improve soil fertility +soil and water conservation techniques +on farm experimentation by farmers with diverse local seeds +/-processing of <i>pito</i> as nutritious cultural drink +pruning dead branches from trees for firewood +local plant paint as herbicide +herbal remedies for common ailments +bone setting after accidents +pottery making +gather wild fruits and vegetables	+/-hybrid seeds and fertilizers +/-seasonal migration to other parts of Ghana +/-charcoal making and selling -production of <i>apeteshi</i> local alcohol -cattle theft and marketing +/-credit systems +used clothes marketing +/-rear and sell pigs +intellectuals +/-dynamic learning from push and pull factors +/-non-farm livelihoods +/-roles for males and females of different ages +soil and water conservation techniques	+/-penning livestock +literacy +/-formal education system -commercial alcohol in tetrapaks +dams for dry season gardening -block farming -/+youth as full time students in school takes them away from farms -/+youth developing skills for white collar jobs +mechanics

Source: Author, field research, 2017



Healing Practices. An aspect of indigenous technical knowledge was that people of different households in different clans have knowledge of different healing practices. One household knows how to deal with snakebite, another with childhood ailments, another with skin conditions, and so on. The indigenous system for preserving this knowledge encourages diverse and multiple knowledge holders so that the knowledge is available and not easily lost when one elder knowledge holder passes on. In the village setting people would know which house to go to for treatment for a particular ailment.

Alcohol. Indigenous knowledge related to alcohol spans all three knowledge systems. Indigenous knowledge related to alcohol is kept by women *pito* brewers, who make this local beer from guinea corn. According to most people interviewed *pito* sustains community resilience in multiple ways: as an income generating activity for women, a gathering spot for community dialogue, nutritious food for children, and an informal social and psychological counseling service. From an external perspective on alcohol there is the convenient tetrapak of commercial alcohol that no one interviewed said anything good about (although it is clear they are very popular). The tetrapaks were spoken of as something that constrained community resilience because they contributed to conflicts, domestic violence, lethargy, sickness, environmental pollution, and most profits went to big distillers from outside the community. *Apeteshi*, a locally distilled alcohol, could be considered endogenous as it technically uses local materials and know how. *Apeteshi* is not considered as starting from within Dagara culture itself, however, as it is a product imitated from southern Ghana. It was also considered to constrain community resilience for the same reasons as the tetrapaks.

Fuelwood. Another indigenous technical knowledge example, with both positive and negative effects on community resilience, is using trees for fuel. People spoke about the practice of gathering dead branches for fuel as being necessary and doing minimal harm.



Women also use the time gathering branches for dialogue about challenges and for passing on their knowledge to younger women. The adoption of the external practice of men cutting entire trees for making charcoal was considered much more serious a threat to community resilience because of its environmental consequences, although in the short term it was an alternative form of livelihood for men.

Animal Husbandry. The issue of cattle theft provides another illustrative knowledge example. Dagara people traditionally kept more livestock than they do today. Dagara men were praised for their knowledge of animal husbandry. This indigenous knowledge included cattle marketing. Some Dagara and non-Dagara, are using such skills in recent years to steal cattle in broad daylight and sell them across the border in Burkina Faso or in southern Ghana. They are blending knowledge of animal husbandry with an understanding of marketing and modern transport methods. Although using multiple knowledges, because of its immoral nature, this practice would not be an endogenous one. To address this issue, men are organizing to keep watch in their communities, and to mount road blocks to stop cattle theft. Such a community-driven local practice could be named endogenous, as it starts within the community world view, adapts methods of organizing that may have been used in the past and blends them with external technologies, such as cell phones, to protect the communities' resources.



Table 4.9 Dagara Leadership Knowledge and Practices that Sustain / Constrain Community Resilience

(+ sustain, - constrain, +/- and -/+ both sustain and constrain community resilience)

Indigenous knowledge and practice	Interfaced knowledge and practice	External knowledge and practice
+kinship ties (matri & patri clan, playmates) +public ridicule for breaking rules + <i>tengansob's</i> role as land owner +healing practices (i.e. snakebite) held in different households +/-elders as role models for youth +/-listen to clansmen	+Lawra Naa chief and planner +village chief retired school headmaster +/-groups and associations +/-organizing to stop cattle theft + <i>Pognaa</i> woman chief +/-borrowing between family members; between groups of women	+/-groups and associations +/-school fees required for education +planning for and responding to disasters

Source: Author, field research, 2017

Leadership. Concerning leadership, it was informative to interact with two knowledgeable indigenous leaders, respected chiefs of their various communities. Both leaders were strong advocates and custodians of indigenous wisdom. Both were also retired professionals: one, a school headmaster, the other, a government planner. They both shared knowledge and practices for building community resilience in a number of fields (from animal husbandry, to local governance and conflict resolution, to the moral upbringing of youth) that was an endogenous blend of traditional and external knowledge, but was clearly centered from within their identity as proud Dagara leaders.

Table 4.10 Dagara Artistic Expressions Knowledge and Practices that Sustain / Constrain Community Resilience

(+ sustain, - constrain, +/- and -/+ both sustain and constrain community resilience)

Indigenous knowledge and practice	Interfaced knowledge and practice	External knowledge and practice
+songs, music and dance +/-bagre festival	+/-kobine festival	+/-TV and media

Source: Author, field research, 2017

Festivals. Festivals combine aspects of leadership knowledge, technical knowledge and world view and belief systems, and are also artistic expressions. Both the Kobine and Bagre festivals are spoken of positively in turns of how they contribute to community resilience by nurturing the pride of people to be Dagara. They are teaching spaces for youth both individually and collectively. These festivals of Dagara knowledge and practices are examples of blending indigenous and endogenous approaches. Both festivals have strong indigenous roots, and people commented on how the Kobine is becoming popular as a tourist attraction (sustaining community resilience), but might be losing some of its spiritual component (constraining community resilience). People praised the initiative of the Lawra Naa to include a development forum as part of the Kobine festival. This forum may have been inspired by



external knowledge of organizing multi-stakeholder fora, but blended with the indigenous festival, it is appreciated as an endogenous approach.

The Bagre initiation festival, has maintained a veil of secrecy and although some people were critical, for the most part people saw it as a very useful mechanism for using indigenous wisdom to nurture people's pride and identity and thereby sustain community resilience. People commented on how compromises in the Bagre had been made recently to enable more people to participate. The festival is shorter and wearing clothes seems more appropriate for the current context. Some felt further compromise will be necessary to make it more popular for youth, and perhaps to attract people from away for the graduation ceremony. It remains to be seen if such endogenous changes will be accepted by the Bagre professors.

4.3.3 Emerging Insights

Dagara knowledge, whether it is indigenous knowledge, or knowledge that blends indigenous knowledge with appropriate knowledge from outside, as tables 4.17 to 4.20 demonstrate, can make major contributions to sustaining community resilience. It is important that Dagara people critically own this knowledge, and ensure it meshes with the Dagara world view. This endogenous Dagara knowledge then becomes important to reflect upon, and to locate the essence of what this knowledge offers to sustaining and constraining community resilience.



4.4 Overview of Findings and Discussion

In this chapter Dagara voices have described community resilience and strategies that influence community resilience. The statements echo the community discourse related to community resilience among Dagara men, women and youth in Lawra District. The pride Dagara people have in their community was shared, as were the challenges and risks that people

experience. The interconnected ways that people describe as their responses to these challenges and risks was then heard through the metaphor of the hand of resilience. The hand has five fingers, representative of (1) revitalizing Dagara culture and spirituality, (2) strengthening the ecological system, (3) enhancing sustainable livelihoods, (4) remembering the strengths and values of women and men, and (5) taking actions to overcome challenges. These responses from Dagara women and men were then explored to identify Dagara indigenous knowledge and practices that sustain or constrain community resilience, and the places where both indigenous and external knowledge and practice had been interfaced to help the Dagara community become resilient in their context.



SUMMARY OF LEARNING, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

In this chapter, I revisit the original three questions articulated for this study and offer a summary of learning, conclusions, and make recommendations. In answering the first question, “what is community resilience?” I add to the transdisciplinary model of community resilience introduced in chapter 3 to create a new model informed by Dagara wisdom. This model draws on the academic discourse, and the constructions of meaning resulting from this research journey. I also discuss the related question: is the Dagara lifeway a resilient community system? The second original question, “what is the experience held in Dagara communities that ensures or inhibits their resilience as communities?” evolved into an exploration of the strategies that Dagara people use for community resilience. In distilling the essence of these strategies I articulate the powers people can draw on for building community resilience. The third question, “How does Dagara indigenous knowledge and practice sustain or constrain community resilience and well-being?” is answered and a summary of learning, conclusions and recommendations offered. I also include a final section of reflections on the research journey, which contains an update on my personal location and how it influences my meaning making.

5.1 What is Community Resilience?

5.1.1 Summary of Learning – A Community Resilience Model and a Lifeway

5.1.1.1 A New Model of Community Resilience informed by Dagara Wisdom. The Dagara conceptualization of community resilience is captured in the analogy of the hand of resilience – all five fingers are needed to make a difference. Those five fingers which represent

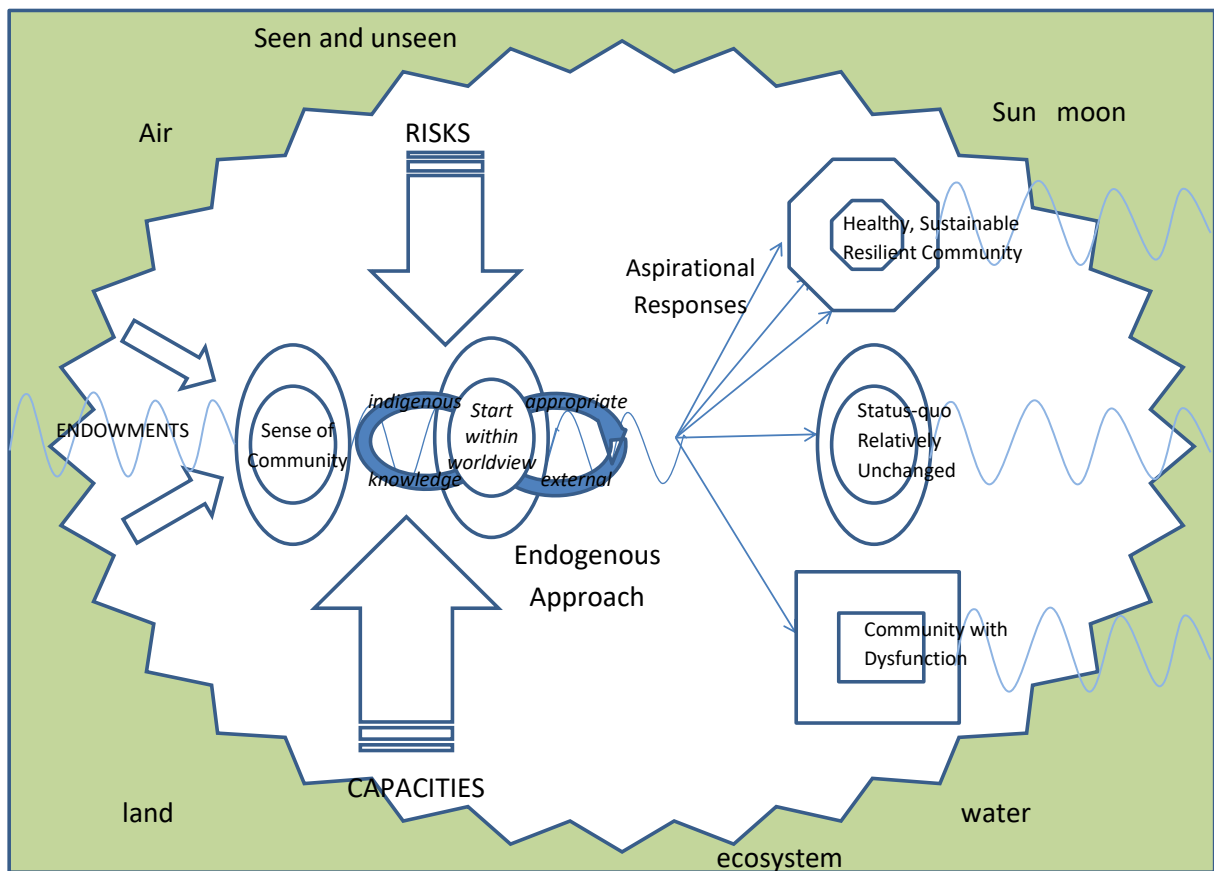


(1) revitalizing culture and spirituality, (2) healing the ecological environment, (3) enhancing sustainable livelihoods, (4) remembering the strengths of women and men and (5) taking actions to respond, introduce a pragmatic process for building community resilience. In relating this grounded indigenous process to the transdisciplinary conceptualization of resilience I developed in Chapter 1, it became clear that the model was limited in its capacity to capture the wisdom of the Dagara, and the reflection and learning they inspired in me during this journey.

I therefore now propose a new conceptual model of the process of community resilience as illuminated by the Dagara people of Lawra District, Ghana. The original transdisciplinary model of community resilience drawn from the literature can be reviewed in figure 2.4 on page 75 of this thesis. Figure 5.1 captures the new model of community resilience, illustrating how a community negotiates through time using its own capabilities in the face of risks and disturbances. An understanding of the sense of community and the relationship between the community and its ecosystem is central to this new model. Then, by using an endogenous development approach, communities can make both reactionary and aspirational responses to risks to ultimately enable them to become stronger, healthier, more sustainable and resilient. It is important to note that the outcome is not static, time continues, and so the community will encounter risks again and will need to call on their capabilities to respond. There is no guarantee that they will overcome the new risks, stressors, or shocks they may encounter. The outcome may yet again be one of community with dysfunction, the status-quo, or a healthier, sustainable, more resilient community.



Figure 5.1 A New Model of Community Resilience informed by Dagara wisdom



Source: Author, 2017

The new model of community resilience in Figure 5.1 inspired by this learning journey with Dagara people, has five significant differences to the transdisciplinary model that was synthesized from the literature.

The ecosystem encompasses the conceptual space. The first difference is placing the model within a conceptual space. The conceptual space is first and foremost the all-encompassing ecosystem, the land, water, air, sun, moon and stars and all living beings seen and unseen, in which a community exists. One might view the ecosystem as only the natural or physical space the Dagara live within – not the conceptual. But it is important to recognize it as both natural and conceptual. Communities see themselves as coexisting with their



ecosystem with certain rights and responsibilities to that system. Healing the ecological system is one of the fingers on the hand of resilience.

Making a conceptual abstraction and talking of the context or the environment as something separate, or in one quadrant in a model, or at one point in time, would not make sense in the Dagara world view. Communities are intimately connected with the ecosystem. The ecosystem is all encompassing, and ever present. The ecosystem is present, in all its complexity and was there, in a different way in the past, and will be there in a different way in the future. A comprehensive model of community resilience must be grounded in this reality.

Reconsidering endowments, risks and capacities. The second variation does not change the original model itself, but is significant in that it points out renewed understandings of the endowments, risks and capacities.

As researchers, we discovered that community endowments are much more complex to consider than originally articulated. Endowments must be considered in light of who has access to them, and who has control over them. This consideration is both generationally and gender wise. Land rights, water rights, rights to trees and the fruits of trees, rights to what is under the ground are all important to the Dagara. Common property rights to the land, for past generations, for the living and for those not yet born, are all considered. Equating endowments with natural and physical capital that can be exploited for some other purpose would be antithetical to the Dagara worldview.

When considering risks, the Dagara consider generational timelines, assessing risks not just for the present situation, but for future generations as well. This foresight may not be explicitly expressed, yet we as researchers, discovered it is at play as people make their choices. For example, there exists a stereotype of a rural woman living in poverty, under daily pressure to



survive and only considering her immediate needs. She is forced to cut wood for fuel, leading to environmental degradation and exacerbating environmental problems for the future. However, the woman exhibiting the same behaviors may have very different motivations. Perhaps the woman, as care giver and provider for her family, has calculated the trade-offs for a nutritious cooked meal for her family, plus the income from selling a head load of firewood in order to pay school fees for her children. Perhaps, she has only been pruning dead branches, and also harvests wild fruits in a sustainable manner to supplement an evening meal. Perhaps she also encourages her children to tend the fruit trees that have been recently planted near the primary school. She may be making conscious investments to minimize risks for her children's future lifeways, rather than simply her own.

Such a multigenerational view of risks, and even a sense of deep time going backwards and forwards for many generations puts risks in a much different perspective than when one only looks at immediate risks and the unpredictability in day to day events. Chronic, ongoing risks and challenges, cumulative stressors, take on a much greater priority than acute challenges or shocks.

Capacities, both individual and collective, are also extremely important, including bonding, bridging and linking social capital. These capacities are important ends in themselves, not just the means for securing something else.

Reactionary responses. The third variation in this model is the wave-like line behind endogenous development, and at the far right and far left of the diagram. This line represents the dynamic responses between risks and capabilities that can be called reactionary responses. The unfolding of the response process is a natural one, as a community moves through time, and negotiates the space between risks, disturbances and their own capacities. This negotiation can be seen between negative forces outside the community's control and with the internal





www.udsspace.uds.edu.gh

abilities of the community itself. These abilities, often called traits in the psychological literature on resilience (Masten, 2000) are ordinary, yet important forces that the community can draw on to navigate the process of community resilience. These are the strengths of women and men, girls and boys in the Dagara community, one of the fingers of the hand of resilience. These traits, or characteristics, are also represented by the values of the Dagara community, such as *kanyir* (courage and patience), *longta* (belongingness) and *nolong* (unity and togetherness), that give, and maintain the sense of community that is so strong. The responses, as actions to carry-on in the face of the inevitable struggles of life without any lamenting, provide some of the resilience in the Dagara community. The reason for calling them reactionary responses, however, is because they often only enable the community to maintain the status-quo, as they focus on such things as recovery, mitigation, coping, or simple adaptation. Even disaster preparation, or emergency warning systems, are a form of reactionary response because (a) they focus energy on a possible negative event rather than working proactively for a positive result, and (b) their ultimate goal is often simply for the maintenance of the status-quo or keeping everything the same. This idea, captured in the understanding of resilience as “bounce-back”, has to be contested, as resilience can be more than bouncing back to a state with many chronic risks. Resilience can also be bouncing forward to another place with fewer risks and greater capacities to respond in the future, while maintaining the integrity of the sense of community that people hold dear. Some researchers identify stages in community resilience of break-down, break-even, and break-through (Wilding, 2011). This research found that break-even is important, even if people are working towards break-through.

Endogenous development thinking. The addition of the endogenous development perspective to compliment the community resilience model is the fourth variation in this new



community resilience model. www.udsspace.uds.edu.gh The Endogenous Development (ED) approach, as explained in chapter 4.3, starts from within, from the world view, culture and values that make up the sense of community. Drawing on these local experiences as ways to respond to challenges in the local context is an important perspective on community resilience. It is clear from this research study ED is the kind of development Dagara people aspire to, and how they would like to respond to the risks and challenges they face. Revitalizing culture and spirituality is one of the fingers of the hand of resilience. The endogenous development perspective is represented by the infinity sign superimposed on the wave-line timeline in the space between the risks and capacities. After starting from within, the ED perspective advises a review of the indigenous knowledge of the past, and then interfacing that with appropriate external knowledge in order to respond to the risks and challenges that are presented.

Interestingly, others also use the infinity sign to capture elements of resilience from the ecosystem perspective. Gunderson and Holling (2002) for example use the infinity symbol to illustrate the cyclical concept of “panarchy” a term they coined to represent the cycles of remembering, exploitation, conservation and revolt in natural and human systems. The ED approach appreciates the sense of remembering, and builds in more discernment and agency with the people involved in being critical of the indigenous knowledge that is being remembered, not accepting it blindly, and choosing what can appropriately be taken from the external knowledge environment, not simply revolting and replacing the old with something new.

Aspirational responses. This dynamic process leads us to the fifth variation in this new model and the aspirational responses that communities can make to ideally reach the desired outcome of a healthy, sustainable and resilient community. As in the old model, the importance of both the process of community resilience and the outcome of that process being a healthy,



www.udsspace.uds.edu.gh

sustainable, resilient community is shown, before the process begins unfolding again. Falling into dysfunction or simply maintaining the status-quo is not enough for a community to be resilient in the face of an ever changing and dynamic context. The fifth variation is thus shown in the model as aspirational responses. To move towards being healthy, sustainable, and resilient, a community must make conscious proactive choices, and consider three kinds of aspirational actions: holding actions, creating alternatives, and changing consciousness (Macy, 2000). Holding actions are choosing through advocacy and education to weaken, slow down or stop the negative forces acting on the community. Creating alternatives is choosing to do things differently than the mainstream, taking risks and experimenting to maintain and create one's vision of the future. Changing consciousness, as mentioned in earlier discussions, is choosing to profoundly connect with values, beliefs and identity as a driving force for actions. Some in the literature choose to call these kinds of responses as transitions or incremental changes (Pelling, 2011), or transformations (i.e. Wilson, 2012), rather than resilience. Considering the idea of resilience, particularly from an endogenous perspective, however, means that many of the best responses will be found by returning, revitalizing and reinvigorating lifeways of the past. Communities are always dynamic and changing so the more resilient community may take a slightly different shape over time in reacting to perturbances, but the integrity of the sense of community will endure. This model is proposed for other communities to consider as they strive for resilience in these times of unpredictable change. It is a more nuanced and robust model and conceptualization of community resilience than what was proposed in chapter 2 of this thesis which drew solely on the published literature.

5.1.1.2 The Dagara lifeway as a resilient community system. As a summary of this study, it can be said the Dagara community with which the researchers interacted, appreciated their endowments, identified their environment of risk, named their individual and collective

capabilities, and outlined processes they can utilize to respond to the challenges they face. They articulated their own understanding of community resilience, and, as members of that community system, they proudly named themselves as a community with resilience (*kanyir-deb*). They emphasized this is because as a community they have a strong identity, a deep sense of community, robust kinship structures, and other social and spiritual practices on which they can draw when they need to respond to life's challenges. They also highlighted other factors. They are a resilient community because they are revitalizing culture and spirituality, through events such as festivals, to demonstrate a moral pathway for people to follow and to remind each other they have obligations towards each other, to the community, and to the ecosystem of which they are a part. They recognize this relationship with the ecosystem, because they are of the ecosystem, and know that their behavior can impact that system positively or negatively. They expressed that they need to take responsibility for their actions, and suffer the punishment or offer the sacrifices for the transgressions they may commit. They call themselves resilient because they are working to enhance sustainable livelihoods. At this time, they acknowledge that they may be close to a tipping point and may be forced to reinvent their reliance on rain fed agriculture. Cultivating a diversity of crops and experimenting with indigenous knowledge may be helpful in the short term. The complementarity between women's (i.e. pito brewing) and men's (i.e. seasonal migration) non-farm livelihoods activities is also cited as something they are working towards to enhance sustainable livelihoods. They speak with confidence about the skills and knowledge of women and men of different generations that enable them to respond to challenges, and would specifically mention women's expertise in "making something out of nothing" and men's ability to "imitate others" driven by that strong sense of self-esteem. Finally, they praise the cultural attitude people have in acknowledging challenges are inevitable, accepting one must carry-on, and not wasting energy on lamenting. This attitude goes a long way in making people resilient, as does the



appreciation of what elders, women, men, youth and local groups and cultural institutions can contribute in responding to the challenges being faced. People are not so naïve as to paint everything rosy in their communities; survival, fending off external influences and dealing with internal fractures is real, but there are some real powers in the community that make them believe in their resilience.

Changing Capacities and Capabilities of Communities. One important dimension of the Dagara lifeway is their willingness to change. The Dagara community is dynamic, constantly changing and adapting to tensions within their environment. These adaptations include: adopting Christianity, while maintaining traditional ways; migrating for work in gold mines and bringing material goods and new ways of working home; recognizing land was unproductive and seasonally migrating to farm in other areas; acknowledging stereotypes about backward education and nurturing many intellectuals; reflecting on a reputation of fighting in one community and intentionally changing this to become respected entrepreneurs; adopting practices of local compost pits and penning animals, after realizing the cost and dangers of commercial fertilizers; and, maintaining pride in funeral traditions when the influence from outside to ‘modernize’ is very strong.

In order to do this, the community members are willing to change and strengthen themselves; to work to have an influence on the external environment impacting them; to invest in and benefit from the rewards of kinship relationships, bonding and bridging social capital; and to keep working towards a meaningful and purpose-driven life.

Not doing what everybody else wants and advises you to do is a powerful form of resistance. Not doing what others want can be misinterpreted, however, as reduced motivation, unwillingness to change, and dependency on outside. Alternatively, not doing what others want shows dedication to protect proven ways, not to throw them out through resistance or



disagreement, when new ways are introduced. Now after many years, people are starting to consider indigenous ways of being with the environment and considering the value of adopting them. What was observed as foot dragging, evasion and feigned ignorance, may be appropriate everyday forms of resistance as named by Scott (1987) in his influential book, *Weapons of the Weak*.

Perhaps the most important change for the Dagara, however, as people of the land, is the strengthened, growing, intergenerational learning of values of carrying-on, patience and endurance, by youth. These values enable Dagara people to live interdependently with their ecosystem despite dramatic changes in the last 50 years. These changes include political-economic pressures to “modernize” agricultural methods with fertilizers, seeds, and industrial models. There are push factors to force people off the land and pull factors to attract them to urban areas. It may be a time for a regime shift to something different, yet at this critical point in time, people see opportunities to move in different directions because they are aware of the challenges.

Process and Pathways of Response. The outcome of a community process of response to risks is temporary and transient as communities live within a dynamic, ever-changing ecosystem. If one were to freeze time and observe the trajectory of a community at an arbitrary point in time, it is difficult to assess whether a community is maintaining the status-quo, building community resilience, or spiraling into dysfunction. The Dagara community of Lawra District, Ghana could be seen to be in all three states at the same time. Challenges of broad cultural change, youth losing values, unity and togetherness decreasing, household conflict, misbehavior and alcohol, cattle theft, deforestation, widowhood rights, youth migrating, soil infertility and erratic rainfall, could all point to a community spiraling into dysfunction. At the same time there is unity and togetherness of the community, their hardworking nature, their



lifeway utilizing land-based livelihood practices that have been sustained for generations, and their strong cultural beliefs and practices demonstrate resilience, and a sense of vibrancy and well-being. One might label this fluctuation between dysfunction and resilience as simply the status quo in a vulnerable community in this geographic region of the globe; however, that would be doing a disservice to the Dagara people. Their lifeway, or pathway of change, has maintained its integrity for generations and been both flexible and steadfast enough to absorb the perturbations caused by war and conflict in the sub-region, the slave trade, marginalization and exploitation during the times of colonialism, imposed governance structures, imposed cultural and religious norms, continued exploitation and marginalization post-independence, and limited benefits of the globalized world. Despite all of this, the culture and integrity of the Dagara people has been maintained and been able to influence others. This is seen in the expansion of the Dagara community, with populations settling and taking over farming in Brong Ahafo; with numerous intellectuals and leaders holding reins of power; and with communities showing great endurance and patience in livelihood ways that have been sustained. We must ask, however, are they reaching a time and place in their relationship with the ecosystem where a regime shift could occur? Are they approaching a threshold in which the cumulative impacts of chronic challenges over time are whittling away on their abilities? Will the ecosystem and their lifeway (a) not physically sustain them as a community and they will perish or (b) be so altered by forces outside their control that they will not be able to continue their lifeway or (c) their lifeway, and social, cultural and spiritual integrity will be so compromised as to not resemble anything of the past and they will continue, but as a radically different community, or (d) could a sudden unexpected shock knock them off their pathway and cause a catastrophic end of their community?



At the other limit of the pathway, could the Dagara community choose to transition to another lifeway in order to overcome challenges? Such a radical move could cross a threshold and create a community that does not resemble that of the past, yet maintains and even enhances well-being and sustainability. If this lifts the community away from a vulnerability threshold it could make the community more resilient even if difficult choices are made about “sacrificing” certain aspect of current lifeways. For example, seasonal and long-term migration to the south was a radical move that crossed a threshold for the old lifeways of the community, and yet through it, there was reduced stress on environment, increased livelihood and food security and people maintaining culture and language and were even sending youth home to school. The Dagara community transitioned to something different, yet at the same time is more resilient than the previous nature of the community.

Numerous scholars and practitioners have proposed their own systems for measuring the resilience of communities, some more, or less, elaborate than others. The Dagara community system is resilient because they see themselves that way, their confidence and attitude about “we can do it” is a large part of the challenge in responding to risks. From the analysis presented in chapter 4 one can also see the Dagara lifeway as possessing and nurturing a number of additional characteristics, such as interdependence, redundancies and biodiversity, that have been shown by others to represent resilient systems (Gunderson and Holling, 2002; Walker and Salt, 2012; Wilding, 2011).

Interdependence. The complex web of the Dagara kinship system demonstrates the recognition of interdependence and the value of indigenous mechanisms to strengthen and nurture those relationships. The relationship to the land and other elements, to the ancestors, and to the seen and unseen forces also shows the interdependency of the Dagara system. This appreciation of the value of unity and togetherness, helps people respond to challenges, and its



complexity also means that there is protection from a domino effect cascading through the whole system. This “patchiness” (Gunderson and Holling, 2002) enables interdependent components of the system to be isolated from challenges occurring in another part.

Redundancies. The Dagara kinship system and diversified livelihood system together demonstrate a sophisticated risk management system that has built in redundancies so that if one element of the system fails others are in place, or can easily be activated, to enable people to respond to challenges within certain thresholds. This complex system is much more resilient than a nuclear family system, or a single-waged livelihood system where people are more vulnerable should that minimalist system fail.

Biodiversity. Biodiversity currently exists within the ecosystem of the Dagara people, and the principle of cultivating diverse ways and means of doing things – farming, pursuing alternative livelihoods, or connecting with spiritual powers is appreciated. Although a move towards a cash, mono-cropping system has been recommended by MOFA for years, Dagara farmers have been doing their own thing, and are now bringing back respect for ideas of multiple indigenous crops with different growing seasons to try and manage risks of erratic and unpredictable rainfall. People attempt to diversify income streams, within households, but this is a little more problematic where opportunities are limited and the push for individualism is strong. Religious pluralism is encouraged, and within very small geographic areas there are different language dialects that are acknowledged and protected. These examples all demonstrate an appreciation for bio-cultural diversity. Sacred groves, as sinks of biodiversity, are something people are proud of and are protected for the most part, and people recognize the value of these areas for conservation, the availability of unique healing herbs and plants, and a store of biological and seed diversity that can be very beneficial in the future.



At the same time there is a caution regarding the resilience of the Dagara lifeways because of the relatively weaker position of two other indicators promoted in the literature (Gunderson and Holling, 2002), feedback loops, and autonomy and self-organization. Feedback loops that enable people to adjust their behavior were not as visible or predominant in Dagara communities. There is some flexibility for people to try new things and learn from experience, but many people are adverse to such risks. Imitating others, or trying mechanisms from elsewhere, like penning animals or digging compost pits for example, may not be considered useful because there are not local communication and feedback mechanisms that let people know what the impact of their actions can be. Farmers' on farm experimentation takes place and needs to be encouraged. Providing feedback to that individual farmer, and to the network of other local farmers who can benefit from the information will enhance uptake of resilient systems. Finally, there is a caution about the sense of autonomy or self-organization that is experienced within the Dagara community system. Is this an independent system, with elements of self-reliance and self-sufficiency or is it dependent on outside elements? There are multiple ways to look at this dimension. Dagara strategies of seasonal migration, and educating intellectuals to go and work outside the community, and even outside the country and send transfers home to the community could be considered sophisticated strategies working towards autonomy for the Dagara community as a whole. On the other hand, government imposed taxes and policy directives, whether they are for block farming or gender equality, can have both positive and negative repercussions. Another example related to autonomy is with foreign buyers coming in to local markets and determining a price for cashews. This may be considered outside negative influence or an opportunity that was taken advantage of by local Dagara people. The question for the Dagara community, or any community, to consider is how does any activity build resilience of our community for the future.



5.1.2 Conclusions and Recommendations – What is Community Resilience?

The understanding of what community resilience is from the perspective of the Dagara, leads to certain conclusions and recommendations.

Start with Culture and Spirituality. Community resilience, as a new approach and way of thinking in the development theory and praxis portfolio, is strongest when it focuses on culture, spirituality as a decolonizing practice, and honors a world view that understands human's intimate relationship with the ecosystem.

Focus on community resilience. Societies around the world create community as part of their lifeways, and as resilient mechanisms for survival and achieving their vision of well-being. It is important, therefore, to focus on building community resilience and not to simplify or reduce resilience to particular aspects of a system.

Confront underlying chronic challenges. Community resilience is about overcoming chronic challenges, not only planning for, or responding to, acute shocks. Any separation of acute from chronic issues will weaken strategies for building long term community resilience.

Recommendations. Drawing from these conclusions and earlier discussions, I present three recommendations. First, I challenge governments, development players and donors to avoid imposing concepts and theories of change, including community resilience, onto local and indigenous people. Rather, I recommend development actors to find ways to listen and facilitate community discourses to discover the world view perspectives currently held. Exploring indigenous views on current issues such as community resilience, will help in decolonizing research approaches and may provide unique insights to well-being and the powers people draw on to respond to the challenges of today.



Second, I invite all of us to walk barefoot on the land, silently feel its rhythms, and listen for the messages it can tell us about how to live harmoniously at this time. Recognizing our coexistence with our local ecosystem, and our connection to the planetary ecosystem is essential.

Third, I recommend working with Dagara people in the future to learn from them, and to share in exploring ways to respond to the challenges they face, while maintaining their cultural and spiritual integrity.

5.2 How Do You Ensure the Resilience of a Community?

5.2.1 Learning about Cultivating Powers for Building Community Resilience.

This learning journey with Dagara people has illuminated five fundamental forces at play in the community's negotiation with the risks they encounter, five forces that build community resilience. These forces are (1) the power-to live one's own lifeways, (2) the power-with the eco-system, (3) the power-with others, (4) the power-to respond, and most importantly, (5) the power-within, including both inner strength and the power-within linked to appreciating metaphysical energies. I am using a framework of alternative sources of power (Gaventa, 2006), to summarize the learning from Dagara people about ensuring the resilience of Dagara communities. Other communities could learn from this Dagara wisdom as well.

5.2.1.1 Power-to live one's own lifeway. As a result of this study, the researchers found that Dagara women and men see community resilience as coming from their own power-to live their lifeway, as their ancestors have done for generations. This pride in their own agency, and their own ability, is strong and worth celebrating. Outsiders may see the Dagara as poor and vulnerable, but that is not how they portrayed themselves to us, as researchers.



They have a pragmatic confidence in their ability to live, to survive and thrive in the local environment as tillers of the soil. This confidence transcends the abstractions of ‘livelihood strategies’ in a ‘hostile environment’ judged by others, that names people as ‘victims’. Dagara people certainly spoke of the risks and challenges in their environment, including the loss of culture with youth, and the physical migration of people away from the community, but there was substantial energy in the community discourse about their ability to live and to take on, and ultimately overcome, the challenges confronting them. It is important to remember the voice of one Dagara man interviewed in this study who said:

We must do something to change. Think about the past, something can be done, it will be difficult to reverse trends, but I need to do whatever in my means to begin to think of values of past, reactivate them and then lead that lifestyle and it will revitalize natural unity. ... We were taught you had to have discipline; you had responsibility to take care of others and see to the welfare of others. You have to go and contribute to community meeting; do other things if you could, but most important to start. ... Some values of the past are so important. We need to go back and get good values and blend them with the new lifestyle. We can't let what happened in the past to go off completely. We learned discipline, unity etc. We need to teach youth of today the right way (P36, 36:55).

Dagara peoples' indigenous strategies to live in the current dynamic context could be enhanced, much as they have always evolved. People interviewed, however, did not fit the stereotype of traditional, conservative people unwilling to change, outpaced by a rapidly changing world. Rather, they showed the power-to carry-on, deal with the risks and disturbances confronting them and maintain their identity, and integrity as a culture and a people. Outsiders labeling Dagara livelihood strategies as sustainable or unsustainable, is a disservice to their resilience as communities. Such judgments are rooted in an external worldview that, if imposed on the Dagara people, would lead, like a Trojan horse, to a particular meaning and series of change interventions that would not be appropriate. These are colonizing judgments, no matter how good the external's intentions. Dagara people, with a unique world



view and cosmovision, do not see themselves as victims, but as chosen people to live out their lives this way, at this time, in this particular environment.

Supporting such an autonomous lifeway as the Dagara's has its challenges, and may have huge imperial forces working to transform it in an increasingly globalized world, but for the time being Dagara people see living their own lifeway as a strength, and a major power-to build community resilience. Their view is confirmed by other community resilience researchers who see the value of bio-culturally diverse ways as important for community resilience (Walker and Salt, 2009), and the autonomous nature of communities as being a valuable strategy for survival in a global system that is confronted with new challenges (Wilson, 2011). Assuming one strategy, or one solution to these global systemic challenges actually makes people more vulnerable. To cultivate dynamic, autonomous community systems in which there is local control for people to express their own agency is an important power-to for community resilience. Communities should not let this power erode or be taken away.

The Dagara lifeway in relation to community resilience is captured in the five fingers of the hand of resilience: revitalizing culture and spirituality, healing the ecological environment, enhancing sustainable livelihoods, remembering the strengths of women and men and taking actions to respond. It is significant that in the English language these fingers are represented with the present continuous tense *ing*, as this is how Dagara women and men are presently and continuously using their power-to to build community resilience.

5.2.1.2 Power-with the ecosystem. The researchers discovered Dagara men and women are clear they are people of the soil, given the role and responsibility to till the earth and coexist with their environment. They are people embedded in their ecosystem and close



to nature's principles and values. We need to remember the voice of a male elder who explained:

How to deal with environmental challenges? Stop having sex on the farm, but people will not agree to this. Making sacrifices to pacify the land when such things are done, like spilling of blood. Issue of cutting down trees is a collective issue that should involve everybody in the community and not an individual. In the past, when there is drought, the elders used to sit together with pito and fowls to do some sacrifices to bring down rain. Sometime before the sacrifices are over it will start to rain. The place where the sacrifices were made is locally called *tingantuo*. I cried for rain some years ago when there was drought, and the necessary sacrifices following tradition were not followed afterwards. Finally when they were done, immediately we finished with the sacrifice, there was heavy rain that even preventing us from getting to our homes (P31, 34:37).

The Dagara people are divided into clans that are associated with certain natural elements (Some, 1995) and people have totems usually drawn from other living beings. These are codified understandings, rules and regulations within the culture about natural resource management. It would therefore be antithetical to Dagara beliefs to have power-over the environment, or even to base the power-to do something by taking resources as capital, or assets, from the environment in a one-way relationship. Dagara thinking and behavior is much more about nurturing human beings power-with the natural world, to live harmoniously with complex systems and the spirit of the natural environment. Using this power-with is one way to build community resilience.

The important role of the *tengansob*, for example, demonstrates the reciprocal and respectful relationship Dagara people are expected to have with the environment. Their own identity is related to the land. Healing the ecological system became not only an important finger in the hand of resilience, but is related directly to what it means to be Dagara.

As farmers, the Dagara people have demonstrated this power-with the ecosystem for generations. The ecosystem has changed in this time, there has been a decrease in soil fertility and forest cover, and a reduction in livestock. At the same time there are stories of protection of biodiversity and sacred groves, the reintroduction of indigenous crops and organic fertilizers,



and educated leadership that is respecting the role of *tendanas* and traditional ceremonies. Depending on the indicators used, very different stories can be told. What is most significant is that it is about the relationship of Dagara people with their ecosystem; it is not specific reductionist indicators from a different world view.

5.2.1.3 Power-with others. Dagara women and men emphasize the power-with others that contributes to community resilience. Whether this power-with is expressed as *tirzaa fero tome* [obligation for communal labor], *yir tome* [household labor], *teng mal yella* [communal labor imposed by village head] or *dien kob* [practice of young men working on in-laws' farm] building power-with others is ingrained in Dagara culture, understood and respected. People recognize the strengths of the matri- and patri-clan structures and the role of joking partners. People appreciate that these are strong forms of bonding social capital that contribute to community resilience. Dagara people are not naïve, however, and they mentioned how some of these kinship structures and traditional ways of communal labor and sharing are being eroded away or being politicized. Reaffirming and revitalizing the power-with gained from this value, and its codified practices are important.

Dagara people said they are learning to re-appreciate these kinship systems with their various webs of relationships, and other traditional governance systems as ways for self-organizing. These traditional systems can interface with imposed local government and other formal structures, rather than being left behind. People acknowledge the need to grow this inherent power-with for community resilience. This form of self-organizing is now being encouraged by many community resilience researchers and practitioners (Walker and Salt, 2008).

Similarly, to build resilient and vibrant communities, the need for bridging and linking social capital was acknowledged. Fostering bridges between women and men, and among males and females of different generations, and cultivating linkages with people living inside



and outside the community is needed. The Development Forum hosted by the Lawra Naa at the Kobine festival is one attempt to institutionalize these connections. There is a danger that the educated elites from away might propose a modernization approach to development that is considered inappropriate for some in the communities, however, many in the diaspora are knowledgeable and are advocates for an endogenous approach, and their continued respect for traditional institutions demonstrates an opportunity for continuing to build community resilience.

These ‘capitals’ are all linked to people’s identity as a people and activities to nurture this power-with will both indirectly and directly enable people to respond to some of the challenges and risks they are facing. For example, the *nolang* (unity and togetherness) and *longta* (belongingness) that Dagara people are so proud of can be explicitly celebrated and raised in peoples’ consciousness to the level that Ubuntu has been raised in southern Africa. Cultivating this value and philosophy as a power-with that specifically contributes to community resilience is something the Dagara people are contributing to the world.

5.2.1.4 Power-to use individual and collective capacities and respond. Dagara people provided many examples of their own agency and the power-to do things that they possess both as reactionary and aspirational responses. They do not consider themselves victims and they are not dependent on outside forces. Through a re-appreciation and critical reflection of their own capacities and assets, they avoid sliding down into created dependency. Using their strategies for change, which is a natural endogenous development approach, has the power to make a difference. The Dagara attitudinal strength in “we can do it” and “we can take from, experiment with, and learn from outside” is wisdom for all. The Dagara know they can draw upon their own technical knowledge and skills in farming; animal husbandry,



nutrition, healing and peace building that reemphasize the power-to accomplish things and respond to risks with self-confidence and self-esteem.

A number of Dagara people who spoke about the power-to do and create, also highlighted the power of resistance. Researchers were told, fighting back is not common with Dagara people, unless “pushed to the wall”. Examples of this include “fighters” turned traders in one community, and refusals to work in poor conditions in southern mines and plantations in the 1920’s (Lentz, 2006). Again these were examples of the power-to do something – a type of holding action to use Macy’s words (Macy, 2000) - to stop something which they knew was going to have a negative impact. Today there is a movement of Dagara people against gold mining because they recognize the negative impacts on their health, their culture and the ecosystem. These examples of the power-to can be further developed as necessary for the Dagara to respond to future risks and challenges.

5.2.1.5 Power-within. Revitalizing culture and spirituality, the first finger of the hand of resilience, illustrates specifically how Dagara women and men spoke about protecting and planting the seeds of the “power within” for inner strength, and a metaphysical collaboration in sustaining their lifeway. This is in part an attitude and value that people insisted on, i.e. recognizing challenges and risks are inevitable, and people just need to carry-on, and that lamenting about them is not constructive. It is much more than just an attitude, however, it is a spiritual appreciation of the roles Dagara women and men, girls and boys are expected to play at this time. These roles are linked to the land and the ecosystem. It is guarded by the *tendana* who still garners respect, and is linked to the ancestors, the seen and unseen and the not yet born. It is appreciative of a power(s)-beyond that influence the actions of human beings and relationships that are maintained. People explained, it is a power that every Dagara person individually and collectively can tap into in order to contribute to community resilience.



5.2.1.6 Powers for community resilience.

Drawing on the alternative sources of power articulated above acknowledges the agency and strength of Dagara communities to influence their own destinies, and not to accept limiting labels put on them by external forces. Deep within their lifeway is an acceptance of the unfolding of the cosmic drama and their ongoing role in it as tillers of the earth. To interpret their worldview through another lens, for example that of Freire's (1970) conscientization, or political economy, would be privileging another cosmovision, one focusing on power over and neglecting the spiritual or metaphysical forces at play in deep time. This is not an argument for one world view over another, but for the ability, as suggested in the endogenous development model, to own the paradox of two-eyed seeing, wherein indigenous ways are remembered and external knowledge is considered when appropriate. The emphasis here is on owning the paradox that men and women themselves have the opportunity of knowing and being aware of different ways to see reality, and using their own agency to choose the way that continues to strengthen their resilience.

The influences of external and embedded forces as power-over, in all its dimensions of visible, hidden and invisible power can control how people think and therefore make choices. If, like the Dagara, there is consideration that there are bigger metaphysical forces at play in the unfolding cosmic drama over generations, however, then people can accept and take responsibility for their destiny. They would consider short term, material-centered, unequal power relationships as a test, a moment in time for the community to respond and build capacities. They would not be prone to catastrophizing particular situations or trends into something that requires fixing and using precious resources to try and repair something rather than living and learning in life through the lessons of a difficult context.

Perhaps the most important understanding from this work is captured simply in three words in the Dagare language most often used to explain community resilience: *kanyir* (a





combination of patience and www.udsspace.uds.edu.gh courage), *longta* (belongingness), and *nolong* (unity and togetherness).

5.2.2 Conclusions and Recommendations: How do you ensure the resilience of a community?

From my learning with Dagara people on this journey, there are three conclusions that have been illuminated for ensuring the resilience of a community.

Promote Kinship Networks. We have learned from the Dagara that strong kinship and social networks, powerful values and beliefs, knowledge, skills, and intimate relationships to place, all provide a strong sense of identity and this in turn is a major contributor to community resilience. Family, relationships and community cohesiveness are all strong elements of Dagara society that nurture resilience. This goes beyond social capital, because it is about intimate relationships, blood bonds and shared ancestors.

Nurture Confidence and Positivity. Self-confidence and a positive outlook is a great motivator for community resilience. At the same time, we have to acknowledge how fragile that confidence and positivity may be. When people say, “they are managing”, dependencies can be created to other projects, policies and practices that can erode self-confidence and the “we can do it” attitude. People have hope and faith, and have built new ways of making a living. Positivity and self-confidence must be nurtured, and real examples of how people respond to some of the chronic issues in front of them helps to maintain faith.

Explore different conceptions of time. Dagara men and women often think of their children’s lives and their grandchildren’s lives when they consider possible risks and challenges to be overcome. They focus on building capacity in those future generations to be strong and able to respond to whatever they encounter. This capacity is built on morals,

behavior, local knowledge and skills education. They recognize things will be different in the future, and are making investments for the long term.

Often, however, people are not acknowledged for their long term, long time scale resilience strategies. Instead externals encourage them to spend time and resources on assessing the more immediate risk for a flood, or poor rainfall, windstorm or accident. When Dagara people comment that they are not generally worried about these things, that they are in the hands of God, or that they are big things that can't be changed, they are often labeled as too simplistic and soon to be victims. It is necessary to reassess the interpretation of community resilience strategies, in light of different worldviews, specifically regarding time.

Linear, progress oriented time celebrates creativity, innovation and newness and understands dynamism and uniqueness of time in a profound way. Coupled with an evolutionary belief system, time is intimately linked with a progression from primitive to civilized to better and better. An indigenous, cyclical conception of time will challenge thinking about things of the past as being better, more advanced and with greater integrity. Looking at the past is therefore not of the connotation of the old and conservative, but looking to the past sparks remembering a time when things worked and people were in harmony with nature. Nature is now in a time of destruction and suffering, and looking back will help us learn something about creating the future when things will be vibrant again. Having a longer time view, and perhaps a cyclical rather than a linear one is worth considering in relation to how our actions and decisions influence the living, the dead and the not yet born.

Recommendations. Using these conclusions and the power analysis to understand how to ensure the resilience of communities leads me to make the following recommendations.



I call on communities, civil society and governments to avoid politicization of issues, to reaffirm kinship structures and other systems of social relations in which people play their roles and fulfill their obligations over generations. This affirmation is important at all levels. At the local level, it may prove politicization is harmful, yet easy to avoid, as we reestablish reciprocal relationships within the social institutions that may exist in our own cultures.

I call on myself, and other development practitioners and proponents, to promote a process of healing from alcohol, drug use, domestic violence and other forms of violence as these are major challenges that cause cultural fracture, the breakdown of social and kinship bonds of many kinds, and distract energy away from things communities can do to build their resilience. This should include a curriculum in schools and universities teaching local values to youth, including an analysis of what is changing in the ‘modern’ world and how to apply values to these challenges.

I call for community members to celebrate themselves as agents of change, not as victims of structural and systemic forces. I urge them to acknowledge power-over, but nurture alternative sources of power (power-within, power-with and power-to) in order to achieve health and well-being and the community resilience they desire. This acknowledgement will necessitate inclusion of the past and trying to better understand its meaning, as a way to find and develop responses to future challenges.

Finally, I call on development proponents everywhere to continue the trend of nurturing strength-based approaches in all they do, as such approaches develop the kind of energy and inspirational momentum that can be self-perpetuating and contagious for liberating people’s own agency for change. At the same time, conclusions of this study point to a line from Joanna Macy’s work on the great turning, “don’t be afraid of the dark” (Macy, 2000, p.3). Development proponents must look intently at the challenges people are facing in their local



contexts, and the human race on this planet. We must unmask the structural and systemic issues we are facing that lay hidden and invisible as power-over forces behind those issues. At the same time, each one must look at our own behaviors in the mirror of critical self-reflection and ask what we can do differently to nurture community resilience. The Dagara world view is a moral and pragmatic one that includes rights and responsibilities to others and to the ecosystems of which everyone is a part. Their worldview provides lessons about appropriate and inappropriate behavior, that may help all of us ensure the resilience of our communities.

5.3 How Does Dagara Indigenous Knowledge Sustain Community Resilience?

5.3.1 Summary of Learning

There is great indigenous knowledge held by the Dagara people that sustains their resilience as a community. This knowledge can be categorized and discussed from a number of western defined, 'scientific' disciplinary perspectives. Protecting this indigenous knowledge is important. The Dagara people have intellectual property rights over this knowledge and any attempts to exploit or extract it for the exclusive benefit of others must be addressed (Schnarch, 2004). The Dagara people, and their knowledge, however, is a growing, changing system of science. By its endogenous nature, Dagara knowledge accepts and blends appropriate learnings from elsewhere to support Dagara people to live harmoniously within their ecosystem, their world view and their aspirations for the future. I therefore would like to summarize three particular dimensions of Dagara knowledge I learned below, that I believe are extremely important for sustaining community resilience. Whether this is *indigenous* knowledge is not most important. It is knowledge of Dagara people that they shared, and that they are confident sustains their resilience. This endogenous wisdom for building community resilience can also be beneficial to other communities wanting to build their resilience as they



draw on their own endowments, sense of community, and individual and collective capabilities for responding to risks and disturbances.

5.3.1.1 Learning resilience from a holistic cosmovision perspective. The learning experience with Dagara people demonstrates that anyone concerned about community resilience needs to learn about it from a holistic cosmovision perspective. Millar (2004), Guri (2007) and others (Millar, D., Kendie, S. B., Apusigah, A. A., & Haverkort, B., 2006) have introduced an African cosmovision as three interrelated and interdependent spheres representing: the natural world, the human world and the spiritual world. In section 4.1.2 we looked at how the challenges Dagara communities face can be looked at in terms of this cosmovision. In section 4.3.2 we looked at Dagara knowledge that sustains or constrains community resilience in four different categories. We identified whether this knowledge was based primarily on indigenous knowledge, external knowledge or interfaced knowledge. Much of the Dagara wisdom on building community resilience is also captured in the five fingers of the hand of resilience. This wisdom can be related to the three spheres of the Dagara worldview, as we did for the challenges the Dagara community faces.

The second finger of resilience, healing the ecosystem we live within, for example, can be related to the natural or physical world. For the Dagara people, this natural world is essential for the well-being and sustainability of communities, and healing this ecological system is critical. They don't see the natural world as totally exclusive of the social world, however, and recognize as human beings we are part of the ecosystem and our behavior can be productive or destructive in relation to the ecosystem.

Food is the use we, and other living things, make of elements of the natural world, whether it is as harvesters of wild food or agriculturalists, and this shows how the natural and human worlds coexist. Dagara people spoke of themselves as being given the role by God to





www.udsspace.uds.edu.gh

be tillers of the earth. This example shows how healing the ecological system in the Dagara world view is about the intersection between the natural world and the spiritual world. Some of the damage to the natural world is a result of both human physical destruction, and lack of respect for the world. To heal this relationship, ceremony, or sacrifices, need to be performed to re-establish the caring between the natural world and the human world.

In considering the enhancement of sustainable livelihoods different worlds and knowledges are interrelated. Livelihoods can primarily be seen as in the human sphere, or in the natural sphere when people earn their livelihoods off the land, and have a strong relationship with their ecosystem, or as related to the physical material world, based on the pursuit of these material goods. An exclusive pursuit of material success is not the world view for the Dagara, however, who believe the livelihoods of their human world are intimately linked with the natural world.

In considering the strengths of women and men, a majority of these issues could be safely placed in the sphere of the human world, demonstrating elements related to humans: their knowledge, actions, interactions and behaviors. However, for the Dagara, the inherent strength of these actions is related not so much to the skill or knowledge itself, but to the power-within that was the value or motivation for the strengths. The central strengths of self-confidence and self-esteem, for example, are related to both the human world and very closely to the spiritual world, from which the source of the power came.

Similarly, with a focus on the actions, processes, or responses, to overcome challenges, these elements would be primarily recognized in the sphere of the human world, yet they overlap with the spiritual world when fostering faith and hope, and into the natural world, when considering the enhancement of farming and disaster preparedness.

Revitalizing culture and spirituality, would not be considered exclusively in the spiritual realm, in the Dagara worldview. Spirituality is lived on a daily basis, an integrated part of people's lives. Although spirituality relates to metaphysical energies and the relationship with the dead, the present and the unborn, the spiritual world is not a distant, separate world, but deeply connected to the human world as well. Festivals, ceremonies, kinship ties and the identity people have, demonstrate a recognition of the overlap between the spiritual and human worlds. The institution of the *tengansob*, or earth priest in Dagara communities, is the custodian of the land, which brings the spiritual and natural worlds together.

This layered analysis is an attempt to demonstrate that from the Dagara indigenous perspective building community resilience is primarily about a synergistic combination of the three spheres: human, physical and spiritual. It is through the mutually reinforcing connections of the three spheres that community resilience can happen. An overemphasis on one aspect, or failing to see how one aspect is related to the others, can actually lead to less community resilience.

5.3.1.2 Interwoven Relationships and Sense of Community. Interwoven relationships within Dagara communities build the power-with and the power-to, as well as the deep sense of community that contributes to resilience. In the resilience literature, these aspects are talked about as social capital and they distinguish: bonding, bridging and linking social capital (Wilding, 2011). According to the indigenous knowledge of the Dagara, the interwoven relationships define who people are and their roles and responsibilities to others. These relationships are certainly a form of bonding, but as an end in itself, not a 'capital' for other purposes, even if that purpose is community resilience. The interweaving of relationships between patri-clans, matri-clans, in-laws, playmates, friendships and age grades entrenches a



sense of community, and a sense of belonging that is a powerful antidote to the drive for individualism seen in other cultures. This web of relationships comes with responsibilities and obligations. It is difficult, if not impossible, to extricate oneself from these relationships. They provide a network of connections once born into, immediately make one bound to a community, as opposed to something one has to nurture over time. These relationships are an end in themselves, a way of being, as well as a means to extend and receive support in a reciprocal manner as one encounters challenges in life. This reciprocity does not suggest a transactional nature in one-to-one relationships, but rather a systems-view of relationships where one recognizes that the system functions in a healthy way when we receive from the system what we require to live, and that we fulfill an obligation to put into the system what we are, as part of it.

There is a sense that these indigenous systems are breaking down; that people are becoming more individualistic and are looking for transactional relationships of an exchange of services for services, which could ultimately weaken the resilience of the community. The mutuality, modularity and redundancy of the kinship relationships mimic what occurs in resilient ecosystems where multiple ecosystem services are provided in different ways. Walker and Salt (2006) explain in this theory that vulnerable systems, which are not resilient, have one way of interacting with each other, often one linear pathway to achieve success. These can be very efficient systems, but if one link in the chain is broken or one piece malfunctions, the entire chain can break down. The pieces are interdependent, yet vulnerable because there are not redundancies in the systems. Also, the system is not modularized, wherein other components can continue to function, while some parts of the system adapt and create new ways to provide the services that the malfunctioning component previously provided to the system.



Kinship. The Dagara kinship is an excellent example of the modularity, redundancy and interdependence within a system thereby making the system resilient. However, it could be argued the system is inefficient and demands are being made on individual elements. Without a revitalization of this indigenous system and an appreciation for the sense of community and belonging that it generates, Dagara communities will become more vulnerable and ultimately less resilient. The good news is that there is much wisdom and multiple interlocking networks of connection known to Dagara elders, and renewing the kinship system could be a relatively easy task.

The multiple kinship ties of the Dagara people also extend beyond immediate geographic communities to Dagara people in the Diaspora, and to other ethno-linguistic groups in Ghana that have an assigned relationship (such as playmates) with the Dagara. These definitions are useful because individuals through their own actions and interventions can increase their bridging and linking social capital through structural and reciprocal relationships. For the Dagara the relationships and expectations are a given. Supporting those of your kinship group can seem natural and expected on one hand, yet considered patronage from another worldview. Strictly following a meritocracy or transactional relationships can be judged as cold and uncaring in one instance, and corrupt and manipulative in another. For resilience, understanding both the benefits and the challenges within these interwoven relationships is important, avoiding them in an exclusive, competitive mode will make a community more and more vulnerable.

5.3.1.3 Exposing, interrogating and celebrating gendered and generational differences. Directly related to the kinship ties in Dagara culture are the roles, rights and responsibilities of men and women, and of youth and elders. These roles have a bearing on community resilience and means must be found to identify which roles sustain, and which



inhibit resilience; which differences are celebrated, and which need to be exposed and interrogated. With regard to celebrating roles of males and females of different ages, generalizations are often made, and as such always run the risk of stereotyping a particular group or at worst characterizing groups to be a particular way thereby essentializing them. These notions of stereotyping and essentializing come out of western psychological and sociological mind sets, and one must be careful of applying such theories blindly in an analysis of relationships that start from a different place. Dagara culture, like many indigenous cultures, sees men and women, boys and girls and people of different generations in different ways. Starting from this different place does not deny the individuality and diversity within these groups, but significantly it starts from the group: young boys are like this; middle age women are like this; and old men are like this. There is certainly the risk of escalating a generalization or stereotype, to prejudice, discrimination or even a systemic form of oppression. Power differentials do exist, but it is not a given that power will play out in that way. Dagara people explain that the different roles and responsibilities for men and women in different age grades come with important roles and responsibilities, and there is accountability mechanisms built into cultural institutions to ensure people do what is required, and do not exploit their privileges, or shirk their obligations. The lesson is to understand these differences and where they come from, before making a particular judgment from a particular world view perspective.



Elders and Youth. One can see the relationships between elders and youth in a different light. Elders are obliged to give thoughtful, useful advice to young people and take the responsibility seriously to set good examples for youth to emulate, without the expectation that youth defer to and serve them. Rather than the youth being expected to be silent and listen and do whatever they are told; youth are expected to experiment with becoming responsible, caring, creative leaders to ensure the community's resilience. These are not such simplistic, dualistic

relationships; rather there is an alternative mind-set at play here. It is exposed when youth comment on elders not fulfilling their obligations when the elders are seen drinking excessively or not living up to the moral standards they preach that others should follow. It is exposed when elders show pride for the energy and enthusiasm of youth and the new skills and knowledge that youth develop for living in the world today, especially concerning certain issues to which elders have not been exposed. Elders and youth are not all the same, great diversity exists and they change with time and with different situations, which is the relational nature of dynamic interactions.

Gender roles. Dagara males and females can also not be categorized to be just one particular way. It is clear there are socially constructed relations, and cultural rules and norms that have been created, codified and then repeated, that certain roles and responsibilities have been assigned to women in Dagara culture and other roles and responsibilities to men. Exposing some of these differences as the sexual division of labour is revealing, but can create misunderstandings. We need to be explicit about the framework from which we are working, when we place value judgments or name power differentials accompanying differences. For example, if one approaches the issue of sexual division of labour from a western philosophical mindset of equality, one might demand men and women work an equal number of hours in similar, interchangeable tasks. If one approaches the same issue from a philosophical understanding of equity and a belief in different specialties that can be expressed by all human beings we may reach a different understanding. Different specialties can be sociological assigned roles and responsibilities, and then different criteria would have to be used to evaluate equity, rather than simple markers of time, physical effort, or the mundane nature of tasks. For Dagara women and men in relation to self-confidence and self-esteem there were many



similarities in terms of the hardworking nature of all Dagara and the importance of values such as obedience, discipline and morality.

5.3.2 Conclusions and Recommendations

I have reached three strong conclusions from the Dagara and academic discourses on community resilience. I also share a number of recommendations below.

Give time to healing and grieving for the land. As the Dagara people have taught us, this is a time for healing the land. Building an intimate relationship with the land and other elements of the ecosystem and showing appreciation for all the benefits we have derived from them is necessary. The land and elements are exhausted as living entities. Whether we believe in the spiritual essence of the ecosystem or not, acknowledgement of either positive or negative impacts on the land must be assessed. Any activities known to have negative impacts must cease and a process of healing the earth must begin. This healing may start with grieving for what has been lost and what has been done, and then a ceremony of prayer and sacrifice may be an important way to reestablish caring relationships.

Live gracefully. Dagara knowledge and lifeways help us learn about living peacefully and productively, working with the rhythms of the ecosystem and acknowledging our coexistence with them, working hard and upholding a strong moral code in spite of the challenges that are faced. Living gracefully, we can learn to dance with the challenges we face rather than confronting or trying to change them. Such an approach is based on a different world view than a positivist, scientific model of understand, predict and control. This graceful approach of coexistence may provide lessons for community resilience needed in communities today.



Think like an ecosystem. It is time to recognize that in ecosystems there are phases of creative destruction or release; reorganization; exploitation and conservation; and revolt and remembering; based on the connectedness and the potential of the socio-ecological system (Gunderson and Holling, 2002). Dagara people seem to have an acceptance of natural ecosystem phases. Within the Dagara worldview, systems are understood from the three worlds perspective of the physical, human and spiritual worlds, and people recognize how the interdependence between these worlds can go through different phases. The connectedness of the Dagara people to each other and to their ecosystem has been very high from this three worlds perspective. Dagara people are questioning, however, the potential of their system to continue as is, since the relationship with the physical ecosystem, with social relations and with spiritual connectedness is weakening. If we consider the Gunderson and Holling (2002) model of socio-ecological resilience perhaps the system has gone beyond conservation and now is a time of both remembering and revolt within the system, so a period of system release can lead to reorganization. This would mean this time when connectedness seems to be breaking down could continue into the future, but eventually, potential could build up again, and after self-reorganization, a new system could emerge in-which a renewed Dagara lifeway could flourish. These cyclical phases between growth, destruction and rebirth are often readily understood by people living close to the land. Further research would certainly be needed to intimately understand the Dagara perspective on these phases and the strategies they might inspire. Perhaps some of the community resilience understood and nurtured by the Dagara people is already based on their knowledge system which encourages thinking like an ecosystem.

Recommendations. By having an opportunity to listen in on the Dagara community discourse, and as a result of this research journey, two strong recommendations have taken shape. First, I invite others to celebrate the indigenous knowledges and wisdoms captured in indigenous language, songs, music, ceremonies and rituals. This celebration is not only as a

preservation of culture, but are vibrant tools for nurturing relationships with others, with the natural world, and with metaphysical powers understood or not, that can contribute to the resilience of our global community. For example, future studies on Dagara music and how it is used to publicly ridicule misdemeanors in the community could demonstrate a mechanism for entrenching values and holding people accountable. Future language studies on issues such as casual relationships and the deeper responsibilities of joking partners, and the contextual meaning and nomenclature of Dagara names and how they relate to resilience would be insightful.

Second, I am committed to endogenous development, to listening and sharing at the community level, and working in solidarity with community members to find ways to respond to their own challenges. By drawing on the indigenous strengths of their own world view and interfacing them with appropriate ideas from outside, we strengthen our capacities for community resilience.

5.4 Reflections and Experiences on the Research Journey

5.4.1 Myself - Revisiting My Location and Gaze

As a development practitioner, I certainly gained significantly from this research process, not only in learning about community resilience from the world view of the Dagara, but also in honing participatory qualitative research skills for completing a study of this type. One of my personal learning objectives for this work was inspired by Maori scholar, Linda Tuwila Smith (2001). She challenged me to think about my role and actions as an educator, a community development facilitator, and as a researcher, and specifically to ask, “How can I ensure I play these roles in a decolonizing way?” Her articulation of 25 decolonizing projects (Smith, 2001) demanded I reflect on this project and consider strengths to build upon, challenges encountered, and what I learned.



Through this study I certainly have come to a deeper appreciation of storytelling and celebrating survival, and have made efforts to learn Dagara beliefs, values and traditions. I have been able to contribute to indigenizing research by centering on Dagara world views, and privileging their voices. These efforts have influenced my work as an educator as well, as I challenge participants at the institute where I work in Canada to identify their own world views, and articulate their indigenous beliefs, values and traditions that are important to them and contribute to their resilience and well-being. I have also focused on connecting people with place, with animals and with the stars in my education work, whether through field trips to physically connect with the earth, through an appreciation of animals as totems that can provide messages to guide us, and by connecting to our place on this planet and in the sense of deep time. The Dagare language analysis shared in chapter 4 that set the conceptual space for the research was suggested by Millar (2012, personal communication) and was an influential part of this research. The dialogue and understandings it generated among us as researchers and with key informants helped in a small way to revitalize the language. Participants were able to name their own reality in terms of community resilience, rather than being tempted to respond to a concept imposed from outside. I learned small efforts like these can influence the reigning power dynamics of research. Certainly more could be done, and I am particularly interested in more creative research techniques to capture people's narratives in an oral form, and preserve them within their own context as a contribution to the revitalizing of local knowledges.



This research work has also given me the confidence to integrate spiritual and metaphysical discussions and experiential activities in the University classroom, often a vigorously protected area for only the rational and the logical.

It is also imperative that I reflect upon the multidimensional locations and gaze I brought to this work, and the ethical vigilance that was applied in the research process. Earlier

I identified my location as an outsider to the Dagara community, and that “my gaze in this work was to be appreciative and respectful of the indigenous way of being, without romanticizing it, and privilege the standpoints of the Dagara people with whom I interacted. This location and gaze influenced the co-construction of knowledge and the interpretation and illumination of an understanding of community resilience throughout this study”. Since the conclusion of the community validation phase I have been working full time at a Canadian University. The hand of resilience, captured in the voices of Dagara women and men in chapter 4, articulates their understanding of community resilience and the actions that can help build community resilience in their context. I have added an interpretation to those Dagara voices, based on theories of community resilience, and also from my shifting location and gaze. As I worked at the Canadian University and wrote the concluding chapters, four influences re-shaped my thinking about community resilience.

First, during this time, I worked closely with Dr. John Gaventa, whose ideas on power analysis, and the use of the power cube, permeated the Institute where I was working (Gaventa, 2006). This association is significant because it enabled me to use the language of the alternative sources of power (power-to, power-with and power-within) more casually than I have in the past and as I became socialized to these constructs, they became part of how I see the world, and inspired me to consider them as a framework in developing the conclusions of the study.

Second, as a radical adult educator, steeped in Freire's concepts of conscientization, (Freire, 1970) I was challenged in interpreting some of the Dagara perspectives on community resilience. From his framework of critical consciousness, the Dagara worldview could be labeled as having a naïve or magical consciousness, yet the Dagara do not fit into that model. Through deep personal reflection on the values and underlying assumptions that I have been



living with and applying to my work for more than 25 years, I was able to begin contesting his concepts in my own mind. Also, during this time, I continued a meditation practice as a student of the Brahma Kumaris World Spiritual University. This practice, based on an acknowledgement and appreciation of the metaphysical energies that exist in the cosmos (Brahma Kumaris, 2004) was a third influence on my location. It enabled me to remain open and appreciative of the Dagara spiritual world, while still looking at issues of power in multiple manifestations. This spiritual practice dissolved the need to label Dagara consciousness in a particular way; rather I was able to hold on to the paradox of both a critical consciousness and an acceptance and appreciation of the role and destiny of the Dagara people as assigned by a higher power.

Fourth, I had the opportunity to interact informally with Dagara people, and other indigenous people, in the course of my work and my life during the time of writing this dissertation. Although far geographically from Lawra District, Ghana and immersed in the rigors of my professional work I was able on occasion to re-enter the Dagara community discourse and be exposed to the Dagara world view in a limited way through dialogue with diverse Dagara women and men. These interactions, though informal and unstructured, were significant in enabling me to shift and blur my location and gaze, enabling me to write the conclusions and insights with a feeling of integrity in the process, as I was not completely isolated from the indigenous Dagara stance.

In the methodology chapter I highlighted three elements concerned with monitoring the power relationships between researcher and researchees and challenged myself to maintain a stance of ethical vigilance. The elements for monitoring power in the relationships are from a pragmatic lens, from an empathetic lens and from a lens of negotiation.

From a pragmatic lens the findings and the metaphor of the hand of resilience were validated in the community and very little other interpretation was offered. The agency of community people as insiders with the valued knowledge, skills and worldviews was privileged. As I moved on in my research process to conclusions and insights, I began the process of further interpretation of the findings, always relating these interpretations back to the hand of resilience that grew out of the Dagara community discourse which they had validated. I consistently tried to balance this interpretation with an affirmation of indigenous knowledges and the rules and regulations of the community, rather than imposing my own way of knowing.

From an empathetic lens, and as a committed and passionate ally for indigenous and African cultures, I presented knowledge from the Dagara viewpoint in a decolonizing way. I looked at knowledge of the spiritual world (often the most controversial, see Smith, 2001) as a knowing and legitimate form of knowledge that was also part of my own life. Spiritual concepts are not presented out of a curiosity of the “other” way of knowing, but rather, as an appreciation of the diversity of spiritual knowledges that exist in the world today. It was made visible in writing the conclusions and constructing the insights that I had. I understand my conclusions to not be an objective interpretation of Dagara wisdom, nor knowledge I can own, drawn from my own location, but rather a subjectively constructed knowledge from this journey of learning that has happened with members of the Dagara community and me. As Razavi (1993) reminded us these are only different subjectivities.

Finally, from a lens of negotiation I worked through the data collected with fellow research members to enable mutually evolving meanings to be constructed. In chapter 4 my efforts were to unpack the language of resilience in Dagare and not to try and transliterate meanings. Informed by this research experience, I developed a double translation methodology

to expose the connotations of words in different languages so people have an opportunity to understand concepts from different worldview perspectives. I have been transparent in forefronting and acknowledging differences in world views, and make effort not to judge them, and can accept the paradox of two ways of knowing and being at the same time.

These unstable and multiple locations and gaze, and the power imbalances between me, the research assistants, the community, and the broader society had an influence on how I completed this journey of learning and co-creation of knowledge. These realities had an influence on how I reached the overall conclusions and implications of this study and the recommendations and propositions put forward.

5.4.2 Research Assistants

This study contributed directly to local capacity building, as the two researcher assistants were Dagara, young graduates in development studies, played a full role in the field research design, implementation, initial analysis and community validation. Frequent reflection sessions were shared over the course of the field research and the research assistants commented positively on what they were learning and how they thought the new knowledge and skills would be useful in the future. For example, in our final debriefing one member commented:

It was always made clear; really, really, clear that in every relationship respect is important. Working together, learning and respecting different peoples' views on a topic was an important lesson for working with communities. Mostly you showed us how to work together by suggesting and asking us our opinions and letting us feel free to discuss anything.

The other research assistant stated:

I learned many tools and skills that I can use in community work. Lots of methods, approaches and techniques about interacting with communities and also not being rigid in dealing with people. Doing qualitative research is not about questioning people



www.udsspace.uds.edu.gh

about following a particular way, but letting the person talk and following where he is going.

How they are actually using this learning in their current work is beyond the scope of this study, but the experience they had of appreciative, indigenous research contributed in a small way to building research capacity in the Lawra District.

5.4.3 Other development practitioners

It would be premature to say how this study has, or may, influence other development practitioners. I continue to have the opportunity to design and teach courses with experienced development practitioners in which I draw on the learnings from this study. I have been assigned to lead a new thematic area on building resilient communities at the institute where I work. This task will entail both course and curriculum development and an action research agenda to develop with colleagues and take forward. This institute specializes in transformative education opportunities for experienced middle and senior level development practitioners from the global south, so there is certainly an opening for further influence with other development practitioners. My hope is that these practitioners would challenge themselves to work in decolonizing ways. In the field of community resilience, I hope they will begin by identifying with communities their own understanding of resilience and what connotation resilience might have in people's own indigenous languages. I hope practitioners would take an appreciative stance in their work and see the communities they interact with as having solutions to their own problems, from a world view perspective that may be different, but that is legitimate in its own right. There are other attitudinal, knowledge and skill based learnings that can be drawn from this study, yet fundamentally my wish would be for two things. First, that practitioners leave with the Dagara wisdom that "challenges are inevitable, carry-on, and no lamenting". Second, that a revitalization of culture and spirituality, including



our coexistence with the ecosystem, must be at the center of development thinking and practice if we are going to be able to respond positively to the challenges of the future.

5.4.4 For People in the Research Study Communities

Women, men, girls and boys in the communities where the research took place will be the only ones who can accurately judge if this study has benefit to them. Interactions were positive throughout the field visits and relationships maintained. People had the opportunity to articulate what they are proud of in their communities, what challenges they experience, and how they respond to those challenges. At the community validation meetings people appreciated hearing their voices accurately reflected back to them based on the researchers' thematic analysis. They specifically connected with the hand of resilience as the complicated, interrelated mechanisms they work with to respond to challenges and build community resilience. They expressed gratitude for people listening to them and respecting the value of what they had to say. People had the opportunity to hear what others in Lawra District were doing to respond to common challenges and perhaps they took up some of these practices in their own lives.

People in the communities have not yet been introduced to the model of community resilience that grew out of this work, nor the final insights on cultivating alternative sources of power for building community resilience, or the final recommendations. I remain committed to sharing this information with the Dagara community of Lawra district and beyond, and have faith they will find it reaffirming and challenging as they continue living their lifeway.

5.4.5 For Academic Discourse on Development

I am in a unique and privileged position that gives me an opportunity to have some influence on the academic discourse on development. Through my work at the University, I am able to influence colleagues and participants from the global south, and around the world,



www.udsspace.uds.edu.gh

who are experienced development practitioners who may in turn take knowledge and ideas from Dagara wisdom that will bring a fresh perspective to indigenous and endogenous approaches to community resilience. I have an opportunity through course development and publishing to challenge the existing discourse with ways of thinking and understanding community resilience that may compliment what is becoming a new buzz word in development. Two trends in the academic discourse may open space where my thoughts may easily find an audience: an increasing appreciation for indigenous knowledge and indigenous scholarship generally, and a burgeoning in the interdisciplinary field of resilience creating a demand from diverse stakeholders for learning in this area. Related to indigenous and African knowledges and scholarship there is a resonance with the field because of the decolonizing methodology I pursued and also because of the respect for the language, wisdom and lifeway of the Dagara people. In the community resilience field, the transdisciplinary approach to resilience valuing the human, natural and spiritual worlds, the focus on the sense of community, and the integration of the endogenous development approach should develop interest. This work also provides an opportunity for those in one discipline to be inspired and challenged by insights from other disciplines (i.e. ecologists inspired by psychologists, economists inspired by theologians), and all scholars to learn from the wisdom of the Dagara.



- Adams, A. M., Cekan, J., & Sauerborn, R. (1998). Towards a conceptual framework of household coping: Reflections from rural West Africa. *Africa*, 68(2), 263-283.
- Adger, W. N. (2000). Social and ecological resilience: Are they related? *Progress in Human Geography*, 24(3), 347-364.
- Adger, W. N. (2006). Vulnerability. *Global Environmental Change*, 16(3), 268-281.
- Ahmed, R., Seedat, M., Van Niekerk, A., & Bulbulia, S. (2004). Discerning community resilience in disadvantaged communities in the context of violence and injury prevention. *South African Journal of Psychology*, 34(3), 386-408.
- Algado, S. S., Gregori, J. M. R., & Egan, M. (1997). Spirituality in a refugee camp. *Canadian Journal of Occupational Therapy*, 64(1), 138.
- Alinsky, S. D. (1971). *Rules for radicals: A pragmatic primer for realistic radicals*. New York: Random House.
- Allen, M. (2006). Orfalea family children's centre: Child development. Retrieved 15 June 2015 from <http://info.citruscollege.com/OrfaleaCenter/curriculum.htm>
- Alwang, J., Siegel, P. B., & Jorgensen, S. L. (2001). Vulnerability: A view from different disciplines. Washington, DC: Social Protection Unit, Human Development Network, World Bank.
- Apusigah, A. A. (2002). *Reconsidering women, development and education in Ghana: Toward critical transformation* (PhD). Kingston, ON: Queen's University.
- Apusigah, A. A. (2006). The matri-force as an option for sustainable development in Africa. *Paper Presentation at the Geneva Conference on Bio-Cultural Diversity and Endogenous Development Organized by COMPAS International and ETC Foundation*, Geneva.
- Apusigah, A. A. (2007). Working with indigenous institutions for sustainable natural resource management and poverty reduction. *Endogenous Development and the New African Initiatives*, Institute of Local Government Studies, Medina, Ghana.



Apusigah, A. A. (2008). *Tullum: A gendered african wisdom with possibilities for development*
University for Development Studies, Ghana.

Apusigah, A. A. (2009). The gendered politics of farm household production and the shaping of
women's livelihoods in northern Ghana. *Feminist Africa*, (12), 51-68.

Apusigah, A. A. (2011). *Indigenous knowledge, cultural values and sustainable development in
Africa*. 2nd Annual Ibadan Sustainable Development Summit, Nigeria, August, 2011:

Apusigah, A. A. (Ed.). (2014). *Bridging worlds: Interfacing indigenous and conventional knowledge
for development in Ghana*. Accra: Sundel Services.

Arnold, R., Burke, B., James, C., Martin, D., & Thomas, B. (1991). *Educating for a change*. Toronto:
Between the Lines.

Avoseh, M. (2001). Learning to be active citizens: Lessons of traditional Africa for lifelong learning.
International Journal of Lifelong Education, 20(6), 479-486.

Azongo, T. B., & Yidana, A. (2015). Spiritual diagnostic laboratory: The role of diviners in the
management and resolution of life crises. *American Journal of Sociological Research*, 5(1), 7-
13.

Bacho, F. Z. L. (2005). Decentralization in a pluralist state: Ethnic identity, resource conflicts and
development in the East Gonja District of Ghana. *Ghana Journal of Development Studies*, 2(1), 7-
36.

Bagah, D. A. (1995). *Funeral rites participation and health services utilization in rural Ghana*
(Doctor of Philosophy). Hamilton, ON: McMaster University.

Balasubramanian, A. V., & Devi, N. (Eds.). (2006). *Traditional knowledge systems of India and Sri
Lanka*. Leusden, Netherlands: Compas ETC Foundation.

Bannerji, H. (1995). *Thinking through: Essays on feminism, Marxism and anti-racism*. Toronto:
Women's Press.

Bartlett, C. (2007). *Integrative science: Bringing together indigenous and western scientific
knowledges and ways of knowing*. Sydney, NS: Cape Breton University.



- Battiste, M. A. (2000a). Language, and culture in modern society. In M. A. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 192-208). Vancouver, BC: UBC Press.
- Battiste, M. A. (2000b). *Protecting indigenous knowledge: A global challenge*. Saskatoon: Purich Press.
- Battiste, M. A. (Ed.). (2000c). *Reclaiming indigenous voice and vision*. Vancouver: UBC Press.
- Battiste, M. A. (2004). Unfolding the lessons of colonization. In Sugar, C. (Ed.) *Unhomely States: Theorizing English-Canadian Postcolonialism*, (pp. 209-220). Orchard Park, NY: Broadview Press.
- Battiste, M. A. (2008). Research ethics for protecting indigenous knowledge and heritage: Institutional and researcher responsibilities. In N. K. Denzin, Y. S. Lincoln & L. T. Smith (Eds.), *Handbook of critical and indigenous methodologies* (pp. 497-511). Thousand Oaks: Sage.
- Bauman, Z. (2001). *Community: Seeking safety in an insecure world*. Cambridge: Polity Press.
- Bedekuru, A. E. (1996). *Exposition of the Dagara morality as brought out in their proverbs*. Wa UWR, Ghana: Wa Catholic Press.
- Béné, C., Wood, R. G., Newsham, A., & Davies, M. (2012). Resilience: New utopia or new tyranny? reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes. *IDS Working Papers*, 2012(405), 1-61. doi:10.1111/j.2040-0209.2012.00405.x
- Benyus, J. M. (1997). *Biomimicry: Innovation inspired by nature*. New York: William Morrow and Company.
- Berkes, F., & Folke, C. (1998). Linking social and ecological systems for resilience and sustainability. In F. Berkes, & C. Folke (Eds.), *Linking social and ecological systems: Management practices and social mechanisms for building resilience* (pp. 1-26). Cambridge: Cambridge University Press.
- Berkes, F. (1999). *Sacred ecology*. Philadelphia: Taylor & Francis.
- Berkes, F., Folke, C., & Colding, J. (2000). *Linking social and ecological systems: Management practices and social mechanisms for building resilience*. Cambridge: Cambridge Univ Press.



- Berkes, F., & Seixas, C. S. (2005). Building resilience in lagoon social–ecological systems: A local-level perspective. *Ecosystems*, 8(8), 967-974.
- Berkes, F., & Ross, H. (2013). Community resilience: Toward an integrated approach. *Society and Natural Resources: An International Journal*, 26(1), 5-20.
- Bhatnagar, B., & Williams, A. C. (1992). *Participatory development and the World Bank : Potential directions for change*. Washington, D.C: World Bank.
- Biddle, W. W., & Biddle, L. J. (1965). *The community development process: The rediscovery of local initiative*. Toronto, Ontario: Holt, Rinehart and Winston.
- Bishop, R. (2005). Freeing ourselves from neocolonial domination in research: A Kaupapa Maori approach to creating knowledge. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (3rd ed., pp. 109-138). Thousand Oaks: Sage.
- Blackstock, C., & Trocme, N. (2005). Community-based child welfare for aboriginal children: Supporting resilience through structural change. In M. Ungar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts* (pp. 105-120). Thousand Oaks, CA: Sage.
- Blake, P. (2002). Vulnerability and disasters. In V. Desai, & R. B. Potter (Eds.), *The companion to development studies* (pp. 298-305). London: Arnold.
- Blench, R. (2005). *Working paper: Background conditions in Upper West Region, northern Ghana, 2005*. (Interim Evaluation of UWADEP). Cambridge: IFAD - Office of Evaluation.
- Bodomo, A., & Center for the Study of Language and Information. (1997). *The structure of Dagaare*. Stanford: CSLI publications.
- Boonzaaijer, C.M.S, Apusigah, A. A. (2008). Reasons for supporting endogenous development. In Millar, D., Apusigah, A. A., Boonzaaijer, C.M.S., (Ed.), *Endogenous development in Africa: Towards a systematisation of experiences* (pp. 8-22). Leusden, Netherlands: ETC COMPAS.
- Bopp, M., & Bopp, J. (2001). *Recreating the world: A practical guide to building sustainable communities*. Calgary, Alberta: Four Worlds Press.



- Bourdieu, P. (1986). The forms of capital. In Szeman, I., Kaposy, T. (Ed.) (2011). *Cultural theory: an anthology*. Chichester, UK: John Wiley.
- Boyd, R. D., & Myers, J. G. (1988). Transformative education. *International Journal of Lifelong Education*, 7(4), 261-284.
- Boyden, J., & Mann, G. (2000). *Children's risk, resilience and coping in extreme situations*. Oxford, UK: Consultation on Children in Adversity.
- Bradbury, H., & Reason, P. (2001). Conclusion: Broadening the bandwidth of validity: Issues and choice points for improving the quality of action research. In P. Reason, & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 447-455). London: Sage.
- Brahma Kumaris World Spiritual University. (2002). Spirituality: The heart of sustainable development. Retrieved from www.bkwsu.com/bkun/papers/sustaindev.html
- Brahma Kumaris Educational Society. (2004). *Spirituality and values*. Abu Road, Rajasthan, India: Brahma Kumaris Educational Society.
- Breton, M. (2001). Neighborhood resiliency. *Journal of Community Practice*, 9(1), 21-36.
- Brown, D. D., & Kulig, J. C. (1996). The concept of resiliency: Theoretical lessons from community research. *Health and Canadian Society*, 4(1), 29-50.
- Brown, S. F. (Ed.). (2000). *Spitting in the wind: Lessons in empowerment from the Caribbean*. Kingston, Jamaica: Ian Randle Publishers.
- Burkey, S. (1993). *People first: a guide to self-reliant participatory rural development*. London: Zed Books.
- Canadian Council on Learning. (2007). *Redefining how success is measured in First Nations, Inuit and Metis learning, report on learning in Canada*. Ottawa: Canadian Council on Learning.
- Canadian Institutes of Health Research. (2007). *CIHR guidelines for health research involving aboriginal people*. Ottawa: Canadian Institutes for Health Research.



- Canella, G. S., & Manuelito, K. D. (2008). Feminisms from unthought locations: Indigenous worldviews, marginalized feminisms, and revisioning an anti-colonial social science. In N. K. Denzin, Y. S. Lincoln & L. T. Smith (Eds.), *Handbook of critical and indigenous methodologies* (pp. 45-60). Los Angeles: Sage.
- Capra, F. (1983). *The tao of physics: An exploration of the parallels between modern physics and eastern mysticism*. Boston, MA: Shambala Publications.
- Captured Program. (2011). *Learning together: Developing inclusive knowledges and sciences*. Leusden, Netherlands: ETC Captured Program.
- Carter, R. L. (2007). Understanding resilience through ritual and religious practice: An expanded theoretical and ethnographic framework. *Megacities: Social Vulnerability and Resilience Building. 2007 Summer Academy on Social Vulnerability*. United Nations University, Institute of Environment and Human Security, Bonn, Germany.
- Castellano, M. (2004). Ethics of aboriginal research. *Journal of Aboriginal Research*, 1(1), 98-114.
- Castle, D. J. (1993). *The visioning process as it is known and utilized by human resource development consultants* (Ed.D). Toronto: OISE.
- Cernea, M. M. (2002). Risk analysis and reduction of involuntary resettlement: A theoretical and operational model. In V. Desai, & R. B. Potter (Eds.), *The companion to development studies* (pp. 453-458). London: Arnold.
- Chambers, R. (1983). *Rural development: Putting the last first*. Essex, UK: Longman Scientific and Technical.
- Chambers, R. (1995). Poverty and livelihoods: Whose reality counts? *Environment and Urbanization*, 7(1), 173-204.
- Chandler, M. J., & Lalonde, C. (1998). Cultural continuity as a hedge against suicide in Canada's first nations. *Transcultural Psychiatry*, 35(2), 191-219.
- Chandler, M. J., & Lalonde, C. (2004). Transferring whose knowledge? exchanging whose best practices?: On knowing about indigenous knowledge and aboriginal suicide. In D. Beaven, & J. White (Eds.), *Aboriginal policy research* (pp. 1-7). London, ON: Althouse Press.



- Chapin III, F. S., Carpenter, S. R., Kofinas, G. P., Folke, C., Abel, N., Clark, W. C., Walker, B. (2010). Ecosystem stewardship: Sustainability strategies for a rapidly changing planet. *Trends in Ecology & Evolution*, 25(4), 241-249.
- Charmaz, K. (2002). Qualitative interviewing and grounded theory analysis. In J. F. Gubrium, & J. A. Holstein (Eds.), *Handbook of interview research* (pp. 675-694). Thousand Oaks, CA: Sage.
- Checkoway, B. (1995). Six strategies of community change. *Community Development Journal*, 30(1), 2-20.
- Clauss-Ehlers, C. S., & Levi, L. L. (2002). Violence and community, terms in conflict: An ecological approach to resilience. *Journal of Social Distress and the Homeless*, 11(4), 265-278.
- Clauss-Ehlers, C. (2010). Cultural resilience. In C. Clauss-Ehlers (Ed.), *Encyclopedia of cross-cultural school psychology* (pp. 324-326). New York: Springer.
- Coady, M. M. (1945). Brief to royal commission. In M. M. Coady (Ed.), *The antigonish movement: Yesterday and today* (pp. 3-28). Antigonish, NS, Canada: Extension Dept, St Francis Xavier University.
- Colussi, M. M. (2000). *The community resilience manual: A resource for rural recovery and renewal*. Port Alberni, BC, Canada: Centre for Community Enterprise.
- Compas Africa Network. (2010). Strengthening endogenous development in africa. Retrieved from <http://www.groundswellinternational.org/wp-content/uploads/Strengthening-Endogenous-Development-in-Africa-1-July-2010.pdf>
- Compas Network (Ed.). (2007). *Learning endogenous development: Building on bio-cultural diversity*. Warwickshire, UK: Practical Action.
- Cook, K. E. (2005). Using critical ethnography to explore issues in health promotion. *Qualitative Health Research*, 15(1), 129-138.
- Cooke, B., & Kothari, U. (2001). *Participation: The new tyranny?*. New York: Zed Books.
- Coover, V., Deacon, E., Esser, C., & Moore, C. (1985). *Resource manual for a living revolution: A handbook of skills and tools for social change activists*. Philadelphia, PA: New Society Publishers.





www.udsspace.uds.edu.gh

Crane, T. A. (2010). Of models and meanings: Cultural resilience in Social–Ecological systems. *Ecology and Society*, 15(4), 19. doi:10.5751/ES-03683-150419

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, California: Sage.

Daes, E. (2000). The experience of colonization around the world. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 3-8). Vancouver, Canada: Univ of British Columbia Press.

Davies, S. (1996). *Adaptable livelihoods: Coping with food insecurity in the malian sahel*. London, UK: MacMillan.

Davis, R., Cook, D., & Cohen, L. (2005). A community resilience approach to reducing ethnic and racial disparities in health. *American Journal of Public Health*, 95(12), 2168.

Davis, W. (2011a). Wade Davis quotes. Retrieved 15 June 2015 from www.goodreads.com/author/quotes/4652058.Wade_davis

Davis, W. (2011b). *Wayfinders : Why ancient wisdom matters in the modern world*. Toronto: House of Anansi Press.

de Koning, K., & Martin, M. (Eds.). (1996). *Participatory research in health: Issues and experiences*. London: Zed Books.

Dei, G. J. S. (1996). Critical perspectives in antiracism: An introduction. *The Canadian Review of Sociology and Anthropology*, 33(3), 247-267.

Dei, G. J. S. (1999). Knowledge and politics of social change: The implications of anti-racism. *British Journal of Sociology and Anthropology*, 20(3), 395-409.

Dei, G. J. S. (2000). Rethinking the role of indigenous knowledges in the academy. *International Journal of Inclusive Education*, 4(2), 111-132.

Dei, G. J. S. (2002). Spiritual knowing and transformative learning. In O'Sullivan, E.; Morrell, A.; O'Connor, MA (Eds.) *Expanding the Boundaries of Transformative Learning: Essays on Theory and Praxis*, (pp 121-133). New York: Palgrave MacMillan.

Dei, G. J. S. (2010). *Teaching Africa: Towards a transgressive pedagogy*. New York: Springer.

Dei, G. J. S., Hall, B. L., & Rosenberg, D. G. (2000). *Indigenous knowledges in global contexts: Multiple readings of our world*. Toronto: University of Toronto Press.

Delgado, F., & Mariscal (Eds.). (2006). *Educacion intra e intercultural*. Leusden, Netherlands: Compas ETC Foundation.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (2008). Introduction: Critical methodologies and indigenous inquiry. *Handbook of critical and indigenous methodologies* (pp. 1-20). Thousand Oaks: SAGE Publications, Inc. doi:10.4135/9781483385686.n1

Denzin, N. K., Lincoln, Y. S., & Smith, L. T. (Eds.). (2008). *Handbook of critical and indigenous methodologies*. Thousand Oaks: Sage.

Depoy, E., & Gitlin, L. N. (1994). *Introduction to research: Multiple strategies for health and human performance*. St. Louis, MO: Mosby.

Desoran, R. (2000). *Psychonomics and poverty: Towards governance and civil society*. Kingston, Jamaica: University of the West Indies Press.

DeVault, M. L., & McCoy, L. (2002). Institutional ethnography: Using interviews to investigate ruling relations. In J. F. Gubrium, & J. A. Holstein (Eds.), *Handbook of interview research* (pp. 751-775). Thousand Oaks, CA: Sage.

Development, World Commission on Environment and. (1987). *Our common future* (Reprint ed.). Oxford [u.a.]: Oxford Univ. Press. Retrieved 15 June 2015 from <http://www.econis.eu/PPNSET?PPN=255443676>

do Rozario, L. (1997). Shifting paradigms: The transpersonal dimensions of ecology and occupation. *Journal of Occupational Science: Australia*, 4(3), 112-118.

Durand, J. B. (1953). *Dagaare-English dictionary*. Navrongo, Ghana: St. John Bosco's Press.

Eakin, H., & Luers, A. L. (2006). Assessing the vulnerability of social-environmental systems. *Annu.Rev.Environ.Resour.*, 31, 365-394.



Edwards, M., & Sen, G. (2001). *NGOs, social change and the transformation of human relationships: A 21st century civic agenda*. New York: Ford Foundation.

Ellis, C., & Berger, L. (2002). Their story, my story, our story: Including the researcher's experience in interview research. In J. F. Gubrium, & J. A. Holstein (Eds.), *Handbook of interview research* (pp. 849-875). Thousand Oaks, CA: Sage.

Emeagwali, G. (2003). African indigenous knowledge systems (AIK): Implications for the curriculum. *Ghana in Africa and the World: Essays in Honor of Adu Boahen*. Trenton, New Jersey: Africa World Press. Retrieved April, 8, 2005.

Enfors, E. I., & Gordon, L. J. (2007). Analysing resilience in dryland agroecosystems: A case study of the Makanya catchment in Tanzania over the past 50 years. *Land Degradation and Development*, 18, 680-696.

FAO. (2013). *Resilient livelihoods disaster risk reduction for food and nutrition security* (2nd ed.). Rome: TCE/FAO.

Fals Borda, O. & Rahman, M.A. (1991). *Action and knowledge: breaking the monopoly with participatory action research*. London, UK: Intermediate Technology Publication.

Farmer, P. (2005). *Pathologies of power: Health, human rights, and the new war on the poor* Univ of California Pr.

Fine, M. (1994). Dis-stance and other stances: Negotiations of power inside feminist research. In A. Gitlin (Ed.), *Power and method* (pp. 13-35). New York: Routledge.

Fleming, J., & Ledogar, R. J. (2008a). Resilience and indigenous spirituality: A literature review. *Pimatisiwin*, 6(2), 47-64.

Fleming, J., & Ledogar, R. J. (2008b). Resilience, an evolving concept: A review of literature relevant to aboriginal research. *Pimatisiwin*, 6(2), 7-23.

Fletcher, D. (1993). *Helping community development workers learn: Designing a participatory action research experience for health staff in Nigeria* (M. Ad. Ed.). Antigonish, NS: STFX University.

Fletcher, D. (1995). Participation, poverty and politics: Working in international health into the 21st century. *Pearson Notes*, 8(5), 4-8.



- Fletcher, D. (2005). *Africa cultural values and people-centred sustainable development: A pilot qualitative study to explore complementarities*. (Field study report). Halifax: Dalhousie University IDPHD Program (Unpublished manuscript).
- Fletcher, D. (2006). *What is community resilience?: Constructing a transdisciplinary definition*. Halifax: Dalhousie University IDPHD Program (Unpublished manuscript).
- Fletcher, D. (2008). *Contextual / indigenous issues of community resilience in northern Ghana*. Halifax: Dalhousie University IDPHD Program (Unpublished manuscript).
- Fletcher, D. (2010). *Surviving and thriving: Findings on a preliminary study on indigenous and contextual issues influencing community resilience in northern Ghana*. Halifax: Dalhousie University IDPHD Program (unpublished manuscript).
- Fletcher, D. (2014). Learning about community resilience from the language of the dagara: Recognizing a conceptual space across gender and generations. In A. A. Apusigah (Ed.), *Bridging worlds: Interfacing indigenous and conventional knowledge for development in Ghana* (pp. 46-65). Accra: Sundell Services.
- Flyvbjerg, B. (2004). Five misunderstandings about case-study research. In C. Seale, G. Gobo, J. F. Gubrium & D. Silverman (Eds.), *Qualitative research practice* (pp. 420-434). Thousand Oaks, California: Sage.
- Fontana, A. (2002). Postmodern trends in interviewing. In J. F. Gubrium, & J. A. Holstein (Eds.), *Handbook of interview research* (pp. 161-175). Thousand Oaks: Sage.
- Ford, C. W. (1999). *Hero with an African face: Mythic wisdom of traditional Africa*. New York: Bantam.
- Frankenberger, T. (2012). *Enhancing resilience to food security shocks in Africa*. Tucson, AZ: TANGO International.
- Fraser Taylor, D. R., & Mackenzie, F. (1992). *Development from within: Survival in rural africa*. London: Routledge.
- Fraser, E. D. G. (2003). Social vulnerability and ecological fragility: Building bridges between social and natural sciences using the Irish potato famine as a case study. *Conservation Ecology*, 7(2), 9.



- Freudenberger, M. S., Carney, J. A., & Lebbie, A. R. (1997). Resiliency and change in common property regimes in west africa: The case of the tongo in The Gambia, Guinea, and Sierra Leone. *Society & Natural Resources*, 10(4), 383. doi:10.1080/08941929709381036
- Friere, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.
- Galtung, J. (1969). Violence, peace, and peace research. *Journal of Peace Research*, 6(3), 167-191.
- Galtung, J. (2005). Violence, peace and peace research. *Peace Studies: Critical Concepts in Political Sciences* (pp. 21-52). New York: Routledge.
- Garnezy, N. (1985). Stress resistant children: The search for protective factors. In J. E. Stevenson (Ed.), *Recent research in developmental psychopathology* (pp. 213-233). New York: Pergamon.
- Gatenby, B., & Humphries, M. (2000). Feminist participatory action research: Methodological and ethical issues. *Womens Studies International Forum*, 23(1), 89-105.
- Gaventa, J., & Horton, M. (1981). A citizen's research project in appalachia, USA. *Convergence*, 14(3), 30-41.
- Gaventa, J. (2006). Finding the spaces for change: A power analysis. *IDS Bulletin*, 37(6), 23-33. doi:10.1111/j.1759-5436.2006.tb00320.x
- Gaventa, J., & Cornwall, A. (2001). Power and knowledge. In P. Reason, & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 70-80). London: Sage.
- Gerrard, N., Kulig, J., & Nowatzki, N. (2004). What doesn't kill you makes you stronger: Determinants of stress resiliency in rural people of Saskatchewan, Canada. *Journal of Rural Health*, 20(1), 59-66.
- Ghana Statistical Service. (2002). *2000 population and housing census: Summary report of final results*. Accra: Ghana Statistical Service.
- Ghana Statistical Service (Ed.). (2013). *2010 population and housing census*. Accra: Ghana Statistical Service.
- Goody, J. (1956). *The social organization of the LoWiili*. London: H.M. Stationery Office.





www.udsspace.uds.edu.gh

Grigsby, W. J. (2001). *Community vitality: Some conceptual considerations*. University Park, PA: Northeast Regional Centre for Rural Development.

Gubbels, P. (2011). Escaping the hunger cycle: Pathways to resilience in the sahel. Retrieved 15 June 2015 from <http://www.groundswellinternational.org/wp-content/uploads/Pathways-to-Resilience-in-the-Sahel.pdf>

Gubrium, J. F., & Holstein, J. A. (2003). Postmodern sensibilities. In J. F. Gubrium, & J. A. Holstein (Eds.), *Postmodern interviewing* (pp. 3-18). Thousand Oaks, CA: Sage.

Gunderson, L. H., & Holling, C. S. (2002). *Panarchy: Understanding transformations in human and natural systems* Washington, DC: Island Press.

Guri, B. Y. (2003). Indigenous institutions: Potentials and questions. *Compas Magazine*, 9, 16.

Guri, B. Y. (2007). innovative approaches to international education—Indigenous knowledge and human capital formation for balanced development. Retrieved November, 20, 2010 from www.compasnet.org.

Guri, B. Y. (2008). *Importance of household interviews (personal communication)*.

Guri, B. Y. (2009). In Presentation at ABCD forum (Ed.), *What is the connection between endogenous development and ABCD?*. Antigonish: Coady International Institute.

Gyekye, K. (1997). *Tradition and modernity: Philosophical reflections on the african experience*. Oxford: Oxford University Press.

Hall, B. L., Gillette, A., & Tandon, R. (1982). *Creating knowledge: A monopoly? participatory research in development*. New Delhi: Society for Participatory Research in Asia.

Hamilton, N., & Bhatti, T. (1996). *Population health promotion: An integrated model of population health and health promotion*. Ottawa: Health Promotion Development Division, Health Canada.

Haverkort, B., Van 't Hooft, K., & Hiemstra, W. (Eds.). (2003). *Ancient roots, new shoots: Endogenous development in practice*. London: Zed Books.

Hawken, P. (2007). *Blessed unrest*. New York: Penguin.

- HeavyRunner, I., & Morris, J. (1997). Traditional native culture and resilience. *Research/Practice*, 5(1), 1-6.
- Henderson, N., Benard, B., Sharp-Light, N., & (eds). (1999). In Henderson N., Benard B. and Sharp-Light N. (Eds.), *Resiliency in action: Practical ideas for overcoming risks and building strengths in youth, families and communities*. San Diego, CA: Resiliency in action.
- Henderson, J. Y. (2000). The context of the state of nature. In M. A. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 11-38) Univ of British Columbia Pr.
- Henderson, J. Y. (2000a). Ayukpachi: Empowering aboriginal thought. *Reclaiming Indigenous Voice and Vision*, (pp. 248-278). Vancouver, BC: UBC Press.
- Henderson, J. Y. (2000b). Postcolonial ghost dancing: Diagnosing european colonialism. In M. A. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 57-76). Vancouver, BC: UBC Press.
- Hill, D. L. (2006). Sense of belonging as connectedness, American Indian worldview, and mental health. *Archives of Psychiatric Nursing*, 20(5), 210-216.
- Holistic Education Network. (2005). Transdisciplinary inquiry: Incorporating holistic principles. Retrieved 15 June 2015 from www.hent.org/transdisciplinary.htm
- Holkup, P., Reimer, T., Salois, E., & Weinert, C. (2004). Community-based participatory research: An approach to research with a Native American community. *Advances in Nursing Science*, 27(3), 162-175.
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4, 1-23.
- Holling, C. S. (2001). Understanding the complexity of economic, ecological, and social systems. *Ecosystems*, 4(5), 390-405.
- Holling, C. S., & Meffe, G. K. (1996). Command and control and the pathology of natural resource management. *Conservation Biology*, 10(2), 328-337.
- Hollis, V., Openshaw, S., & Goble, R. (2002). Conducting focus groups: Purpose and practicalities. *The British Journal of Occupational Therapy*, 65(1), 2-8.



- Hsu, L., du Guerny, J., & Marco, M. (2002). *Communities facing the HIV/AIDS challenge: From crisis to opportunity - from community vulnerability to community resilience*. Bangkok, Thailand: UNDP South East Asia HIV and Development Programme.
- Huberman, A. M., & Miles, M. B. (2002). *The qualitative researcher's companion* Sage Publications, Inc.
- Hughes, L. (2003). *The no-nonsense guide to indigenous peoples / lotte hughes* Retrieved from <http://parlinfo.aph.gov.au/parlInfo/search/summary/summary.w3p;query=Id:%22library/lcatalog/00116190%22>
- Iaccarino, M. (2003). Science and culture: Western science could learn a thin or two from the way science is done in other cultures. *EMBO (European Molecular Biology Organization) Reports*, 4(3), 220-223.
- Indigenous peoples of Africa co-ordinating committee. (2013). Who are the indigenous peoples of Africa? Retrieved 15 June 2015 from www.ipacc.org.za/eng/who.asp
- International Federation of Red Cross and Red Crescent Societies. (2004). *World disasters report: Focus on community resilience*. Geneva, Switzerland: International Federation of Red Cross and Red Crescent Societies.
- International Strategy for Disaster Reduction. (2006). Building a global network of NGOs for community resilience to disasters: Concept note. Retrieved from http://www.preventionweb.net/files/8719_BuildinganetworkofNGOs.pdf
- International Union for the Conservation of Nature. (2010). *Biocultural diversity policy brief*. Gland, Switzerland: IUCN.
- International Work Group for Indigenous Affairs. (2013). Who are indigenous peoples? Retrieved 15 June 2015 from www.iwgia.org/culture-and-identity/identification-of-indigenous-peoples
- IPCC. (2007). *Climate change impacts adaptation and vulnerability*. Geneva: IPCC.
- IRIN. (2012, Oct 15,). AID POLICY: Resisting the mantra of resilience. *IRIN Africa English Service*



- Jackson, S. F., Cleverly, S., Poland, B., Burman, D., Edwards, R., & Robertson, A. (2003). Working with toronto neighbourhoods toward developing indicators of community capacity. *Health Promotion International*, 18(4), 339-350.
- James, R. (2004). *Reflections on current thinking on spirituality in organizations*. Sundbyberg: Swedish Mission Council.
- Janssen, M. A. (2007). An update on the scholarly networks on resilience, vulnerability, and adaptation within the human dimensions of global environmental change. *Ecology and Society*, 12(2), Article 9.
- Janssen, M. A., Schoon, M. L., Ke, W., & Börner, K. (2006). Scholarly networks on resilience, vulnerability and adaptation within the human dimensions of global environmental change. *Global Environmental Change*, 16(3), 240-252.
- Jenkins, T. N. (2000). Putting postmodernity into practice: Endogenous development and the role of traditional cultures in the rural development of marginal regions. *Ecological Economics*, 34(3), 301-313.
- Jones, J. M. (2007). Exposure to chronic community violence. *Journal of Black Psychology*, 33(2), 125-149. doi:10.1177/0095798407299511
- Jones, L., Ludi, E., & Levine, S. (2010). *Towards a characterization of adaptive capacity: A framework for analysing adaptive capacity at the local level*. London: Overseas Development Institute.
- Katz, R. (2004). *Healing makes our hearts happy: Spirituality and cultural transformation among the kalahari ju!'hoansi*. Rochester, VT: Inner Traditions.
- Keinile, S. K. (2000). Promotion of Ghanaian languages and its impact on national unity: The Dagara language case. In Lentz, C.; Nugent, P. *Ethnicity in Ghana: The Limits of Invention*, London: MacMillan.
- Kelley, T. M. (2003). Health realization: A principle-based psychology of positive youth development. *Child and Youth Care Forum*, 32(1), 47-72.
- Kimhi, S., & Shamai, M. (2004). Community resilience and the impact of stress: Adult response to israel's withdrawal from lebanon. *Journal of Community Psychology*, 32(4), 439-451.





www.udsspace.uds.edu.gh

- Kincheloe, J. L., & Steinberg, S. R. (2008). Indigenous knowledges in education: Complexities, dangers and profound beliefs. In N. K. Denzin, Y. S. Lincoln & L. T. Smith (Eds.), *Handbook of critical and indigenous methodologies* (pp. 135-156). Thousand Oaks, CA: Sage.
- Kirmayer, J. L., Sehdev, M., Whitley, R., Dandeneau, F. S., & Isaac, C. (2009). Community resilience: Models, metaphors and measures. *Journal of Aboriginal Health*, 5(1), 62-117.
- Kleinman, A. M. (1977). Depression, somatization and the. *Social Science & Medicine* (1967), 11(1), 3-9.
- Kline, N. (2014). *This changes everything: Capitalism vs the climate*. New York: Simon and Shuster.
- Kolb, D. A. (1981). Learning styles and disciplinary differences. In A. W. Chickering (Ed.), *The modern american college* (pp. 232-255). San Francisco: Jossey Bass.
- Konadu, K. (2003). The cultural identity of Africa and the global tasks of Africana studies. *African Studies Quarterly*, retrieved 15 June 2015 from www.africaufi.edu/asq/v7/v7i4a3.htm.
- Korten, D.C. (1990). *Getting to the 21st Century: voluntary action and the global agenda*. West Hartford, CN, USA: Kumarian Press.
- Korten, D. C. (1995). *When corporations rule the world*. West Hartford, CN, USA: Kumarian Press.
- Korten, D. C. (2006). *The great turning: From empire to earth community*. San Francisco: Berrett-Koehler Publishers.
- Kretzman, J. & McKnight, J. (1993). *Building communities from the inside out: a path toward finding and mobilizing a community's assets*. Evanston, IL, USA: Institute for Policy Research.
- Kroma, S. (1995). Popularizing science education in developing countries through indigenous knowledge. *Indigenous and Development Monitor*, 3(3), 13-15.
- Kuba, R., & Lentz, C. (2002). Arrows and earth shrines: Towards a history of Dagara expansion in southern Burkina Faso. *Journal of African History*, 43, 377-406.
- Kulig, J. C. (1996). *Surviving and thriving: Resiliency in the Crowsnest Pass*. Lethbridge, Alberta, Canada: Regional Centre for Health Promotion and Community Studies, University of Lethbridge.

- Kulig, J. C. (2000). Community resiliency: The potential for community health nursing theory development. *Public Health Nursing, 17*(5), 374-385.
- Kulig, J. C., Edge, D. S., & Joyce, B. (2008). Community resilience as a measure of collective health status: Perspectives from rural communities. *Canadian Journal of Nursing Research, 40*(4), 92-110.
- Kulig, J. C., Edge, D. S., Townshend, I., Lightfoot, N., & Reimer, W. (2013). Community resilience: Emerging theoretical insights. *Journal of Community Psychology, 41*(6), 758-775.
- Laliberte-Rudman, D., & Moll, S. (2001). In-depth interviewing. In J. V. Cook (Ed.), *Qualitative research in occupational therapy: Strategies and experiences*. (pp. 24-55). Interdependence, KY: Delmar Thomson Learning.
- Larson, A., & Saggars, S. (2002). *Socioeconomic determinants of health: From measurement to policy*. Australia: HIRC Sustainable Communities Network.
- Lather, P. (1986). Research as praxis. *Harvard Educational Review, 56*, 257-277.
- Lavallee, B., & Clearsky, L. (2006). From woundedness to resilience': A critical review from an aboriginal perspective. *Journal of Aboriginal Health, 3*(1), 4-5.
- Laverack, G., & Wallerstein, N. (2001). Measuring community empowerment: A fresh look at organizational domains. *Health Promotion International, 16*(2), 179-185.
- Laws, S., Harper, C., & Marcus, R. (2003). *Research for development: A practical guide*. London: Sage.
- LeCompte, M. D., & McLaughlin, D. (1994). Witchcraft and blessings, science and rationality: Discourses of power and silence in collaborative work with Navajo schools. In A. Gitlin (Ed.), *Power and method* (pp. 147-165). New York: Routledge.
- Lederach, J. P. (2009). Resilience and healthy communities: An exploration of image and metaphor. In Woodrow Wilson International Centre for Scholars (Ed.), *Community resilience: A cross cultural study, revitalizing community within and across borders* (pp. 17). Washington, D.C.: Woodrow Wilson International Centre for Scholars.



- Ledogar, R. J., & Fleming, J. (2008). Social capital and resilience: A review of concepts and selected literature relevant to aboriginal youth resilience research. *Pimatisiwin*, 6(2), 25-46.
- Lentz, C. (2006). *Ethnicity and the making of history in northern Ghana*. Edinburgh: Edinburgh University Press.
- Lentz, C., & Erlmann, V. (1989). A working class in formation? economic crisis and strategies of survival among dagara mine workers in ghana. *Cahiers D'Etudes Africaines*, 113(29), 69-111.
- Lincoln, R., Boxshall, G., & Clark, P. F. (Eds.). (1998). *Dictionary of ecology, evolution and systematics*. Cambridge, UK: Cambridge University Press.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park: Sage.
- Little Bear, L. (2000). Jagged worldviews colliding. In M. A. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 77-85). Vancouver, Canada: UBC Press.
- Lochner, K., Kawachi, I., & Kennedy, B. P. (1999). Social capital: A guide to its measurement. *Health and Place*, 5, 259-270.
- Loppie, C. (2005). Learning from the grandmothers: Incorporating indigenous principles into qualitative research. *Qualitative Health Research*, 17(2), 276-284.
- Loppie, C. (2009). In David Fletcher (Ed.), *Commonalities of indigenous people*.
- Lothe, E. A., & Heggen, K. (2003). A study of resilience in young Ethiopian famine survivors. *Journal of Transcultural Nursing*, 14(4), 313-320.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- Lykes, M. B. (1997). Activist participatory research among the maya of guatemala: Constructing meanings from situated knowledge. *Journal of Social Issues*, 53(4), 725-746.
- Macy, J. (2000). The great turning. *Yes! A Journal of Positive Futures*, Issue 13, Spring 2000.
- Macy, J., & Johnstone, C. (2012). *Active hope: How to face the mess we're in without going crazy*. Novato, California: New World Library.



Magis, K. (2010). Community resilience: An indicator of social sustainability. *Society & Natural Resources*, 23(5), 401-416. doi:10.1080/08941920903305674

Maguire, P. (1987). *Doing participatory research: A feminist perspective*. Amherst, MA: Centre for International Education, School of Education, University of Massachusetts.

Malindi, M. J., Theron, A. M. C., & Theron, L. C. (2013). Toward an african definition of resilience: A rural South African community's view of resilient Basotho youth. *Journal of Black Psychology*, 39(1), 63-87. Retrieved 15 June 2015 from http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res_dat=xri:bsc:&rft_dat=xri:bsc:rec:iibp:00433802

Manias, E., & Street, A. (2000). Possibilities for critical social theory and Foucault's work: A toolbox approach. *Nursing Inquiry*, 7, 50-60.

Marshall, A. (2007). *Introduction to two-eyed seeing: Western science and Mi'kmaq science*. Eskasoni, Nova Scotia: Unimagi Institute of Natural Resources.

Martinot, S. (2003). *The role of racialization: Class, identity, governance*. Philadelphia: Temple University Press.

Maryboy, N. C., Begay, D. H., & Nichol, L. (2006). Paradox and transformation. *WINHEC Journal*, Retrieved 15 June 2015 from www.win-hec.org/docs/pdfs/Nancy%20final.pdf

Masoga, M. (2005). South African research in indigenous knowledge systems and challenges of change. *INDILINGA: African Journal of Indigenous Knowledge Systems*, 4(1), 15-29.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238.

Mathie, A., & Cunningham, G. (Eds.). (2009). *From clients to citizens: Communities changing the course of their own development*. Rugby, Warwickshire, UK: Practical Action.

Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based community development as a strategy for community-driven development. *Development in Practice*, 13(5), 474-486. doi:10.1080/0961452032000125857

Mathie, A., & Cunningham, G. (2005). Who is driving development? reflections on the transformative potential of asset-based community development. *Canadian Journal of Development*



- Mazzocchi, F. (2006). Western science and traditional knowledge: Despite their variations, different forms of knowledge can learn from each other. *EMBO (European Molecular Biology Organization) Reports*, 7(5), 463-466.
- Mbiti, J. S. (1969). *African religions and philosophy* (1. publ. ed.). London: Heinemann.
- McAslan, E. (2002). Social capital and development. In V. Desai, & R. B. Potter (Eds.), *The companion to development studies* (pp. 139-143). London: Arnold.
- McCubbin, L. D., & McCubbin, H. I. (2005). Culture and ethnic identity in family resilience: Dynamic processes in trauma and transformation of indigenous people. In M. Ungar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts* (pp. 27-44). Thousand Oaks, CA: Sage.
- McEwan, C. (2002). Postcolonialism. In V. Desai, & R. B. Potter (Eds.), *The companion to development studies* (pp. 127-131). London: Arnold.
- McKibben, B. (2010). *Earth: Making a life on a tough new planet*. Toronto: Alfred A. Knopf.
- Mignone, J., & O'Neil, J. (2005). Conceptual understanding of social capital in first nations communities: An illustrative description. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 3(2), 7-44.
- Mi'kmaq College Institute. (2006). Mi'kmaw research principles and protocols. Retrieved from <http://mrc.uccb.ns.ca/prinpro.html>
- Millar, D. (2004). Interfacing two knowledge systems: Local knowledge and science in Africa. Paper presented at the *Conference Proceedings of the Conference: Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Multi-Scale Assessments*,
- Millar, D. (2011). In David Fletcher (Ed.), *Who are indigenous?*
- Millar, D., Kendie, S. B., Apusigah, A. A., & Haverkort, B. (Eds.). (2006). *African knowledges and sciences: Understanding and supporting the ways of knowing in sub-saharan Africa*. Leusden, Netherlands: Compas ETC Foundation.



- Millar, D. (2005). Endogenous development: Some issues of concern. *Ghana Journal of Development Studies*, 2(1), 92-109.
- Millar, D. (2007). Ancestral guidance. ghana. *Compas Magazine*, 1, 4-6. Retrieved 15 June 2015 from www.compasnet.org/blog/wp-content/uploads/2010/11/EDM-1.pdf
- Millar, D. (2012). *Our sciences: Indigenous knowledge systems of northern Ghana*. Bolgatanga, UER, Ghana: Millar Open University.
- Millar, D., & Bonye, S. (2005). Policy dialogue process from an endogenous development perspective: The case of the bushfire law in Ghana. *Ghana Journal of Development Studies*, 2(1), 110-128.
- Millar, D., & Hiemstra, W. (2008). An evolving framework for endogenous development in africa: Walking the compas bushpath. In D. Millar, A. A. Apusigah & C. M. S. Boonzaaijer (Eds.), *Endogenous development in Africa: Towards a systematization of experiences* (pp. 23-34). Nerthalands: The Compas Network / ETC.
- Miller, F., Osbahr, H., Boyd, E., Thomalla, F., Bharwani, S., Ziervogel, G., Rockström, J. (2010). Resilience and vulnerability: Complementary or conflicting concepts. *Ecology and Society*, 15(3), 11.
- Miller, R. C. (1997). Interdisciplinarity vs. multidisciplinarity: What's in a name? Retrieved 15 June 2015 from www.sfsu.edu/~uic/intervsmulti.html
- Mills, R. C. (2001). *Applying the principles underlying health realization in community wide interventions*. Saratoga, CA: Health Realization Institute.
- Minkler, M. & Wallerstein, N. (2003). *Community based participatory research for health*. San Francisco, CA: Jossey-Bass.
- Monteiro, A. (2000). Being an African in the world: The Du Boisian epistemology. *Annals, AAPSS*, 568, 220-234.
- Montpellier Panel. (2012). *Growth with resilience: Opportunities in African agriculture*. London: Agriculture for Impact.





www.udsspace.uds.edu.gh

- Moore Lappe, F. (2011). *EcoMind: Changing the way we think, to create the world we want*. New York: National Books.
- Morgan, D., Krueger, & R.A. (1993). When to use focus groups and why. *Successful focus groups: Advancing the state of the art* (pp. 3). Thousand Oaks: SAGE Publications, Inc.
doi:10.4135/9781483349008.n1
- Narayan, K. (1993). How native is a "native" anthropologist? *American Anthropologist*, 95(3), 671.
Retrieved 15 June 2015 from <http://search.proquest.com/docview/198182120>
- Nel, P. (2006). Indigenous knowledge systems, local community and community in the making. *INDILINGA: African Journal of Indigenous Knowledge Systems*, 5(2), 99-107.
- Nicolescu, B. (1997). The transdisciplinary evolution of learning. Retrieved 15 June 2015 from www.learndev.org/dl/nicolescu_f.pdf
- Norberg-Hodge, H. (2009). *Ancient futures: Learning from Ladakh*. San Francisco: Sierra Club Books.
- Norman K. Denzin, & Yvonna S. Lincoln. (2005). *The sage handbook of qualitative research*. Thousand Oaks: Sage Publications, Inc.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41, 127-150.
- Ntsoane, O. (2005). African indigenous knowledge - an academic and socio-cultural exploration for indigenisation. *Indilinga African Journal of Indigenous Knowledge Systems*, 4(1), 89-109.
Retrieved from http://reference.sabinet.co.za/sa_epublication_article/linga_v4_n1_a9
- Nyerere, J. K. (1973). *Freedom and development*. Oxford, UK: Oxford University Press.
- Olsson, L. (1993). Desertification in Africa: A critique and an alternative approach. *GeoJournal*, 31(1), 23-31.
- Olsson, P., Gunderson, L. H., Carpenter, S. R., Ryan, P., Lebel, L., Folke, C., & Holling, C. S. (2006). Shooting the rapids: Navigating transitions to adaptive governance of social-ecological systems. *Ecology and Society*, 11(1), Article 18.

- Osbaahr, H., Boyd, E., & Ericksen, P. J. (2007). Resilience, realities and research in African environments. Report of Workshop. 18 June 2007. Oxford: Oxford University.
- Osbaahr, H., Twyman, C., Neil Adger, W., & Thomas, D. S. G. (2008). Effective livelihood adaptation to climate change disturbance: Scale dimensions of practice in Mozambique. *Geoforum*, 39(6), 1951-1964.
- Ostrom, E. (2005). *Understanding institutional diversity*. Princeton: Princeton University Press.
- Panelli, R., & Tipa, G. (2007). Placing well-being: A Maori case study of cultural and environmental specificity. *EcoHealth*, 4(4), 445-460.
- Paton, D., & Johnson, D. (2001). Disasters and communities: Vulnerability, resilience and preparedness. *Disaster Prevention and Management*, 10(4), 270-278.
- Peck, M. S. (1987). *The different drum: Community making and peace*. Toronto: Simon and Shuster.
- Pelling, M. (2011). *Adaptation to climate change: From resilience to transformation*. London: Routledge.
- Pettengell, C. (2010). *Climate change adaptation: Enabling people living in poverty to adapt*. Oxford: Oxfam GB.
- Pilgrim, S., Samson, C., & Pretty, J. (2009). Rebuilding lost connections: How revitalisation projects contribute to cultural continuity and improve the environment. *Interdisciplinary Centre for Environment and Society Occasional Paper, 1*
- Potter, J., & Wetherell, M. (1994). Analyzing discourse. *Analyzing Qualitative Data*, , 47-66.
- Pottier, J., Bicker, A., & Sillitoe, P. (2003). *Negotiating local knowledge: Power and identity in development*. London: Pluto Press.
- Preece, J. (2003). Education for transformative leadership in south africa. *Journal of Transformative Education*, 1(3), 245-263.
- Pretty, J. N. (2005). *The earthscan reader in sustainable agriculture*. London: Routledge Earthscan.
- Pretty, J. N., Guijt, I., Thompson, J., & Scoones, I. (1995). *Participatory learning and action: A trainer's guide*. London, UK: IIED.



- Prilleltensky, I., & Prilleltensky, O. (2005). Beyond resilience: Blending wellness and liberation in the helping professions. In M. Ungar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts* (pp. 89-104). Thousand Oaks, CA: Sage.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of american community*. New York: Simon and Schuster.
- Rauh, H. (2005). 'At-risk' concept. In B. Hopkins (Ed.), *The Cambridge encyclopedia of child development* (pp. 393-397). Cambridge, UK: Cambridge University Press.
- Ray, C. (1999). Endogenous development in the era of reflexive modernity. *Journal of Rural Studies*, 15(3), 257-267.
- Razack, S. H. (1998). *Looking white people in the eye: Gender, race and culture in courtrooms and classrooms*. Toronto: University of Toronto Press.
- Razavi, S. (1993). Fieldwork in a familiar setting: The role of politics at the national, community and household levels. In S. Devereux, & J. Hoddinott (Eds.), *Fieldwork in developing countries* (pp. 152-164). Boulder: Lynne Rienner.
- Reason, P., & Bradbury, H. (2001). Introduction: Inquiry and participation in search of a world worthy of human aspiration. In P. Reason, & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 1-14). London: Sage.
- Redclift, M. (2002). Sustainable development. In V. Desai, & R. D. Potter (Eds.), *The companion to development studies* (pp. 275-278). London: Arnold.
- Resilience Alliance. (2012). Assessing resilience in social-ecological systems: Workbook for practitioners, version 2.0. Retrieved 15 June 2015 from http://www.resalliance.org/index.php/resilience_assessment
- Resilience Alliance. (2013). Resilience. Retrieved 15 June 2015 from www.resalliance.org/index.php/resilience
- Richardson, G., Neiger, B., Dunn, D., & Ross, J. (1996). Helping communities become resilient. *Resiliency in Action: A Journal of Application and Research*, 1(3), 31-38.



Richardson, L. (2000). Writing a method of inquiry. *Handbook of qualitative research* (pp. 959-967) London: Sage.

Rodgers, S., Booth, M., & Eveline, J. (2003). The politics of disciplinary advantage. *History of Intellectual Culture*, 3(1), 1-20.

Rolfe, R. E. (2006). Social cohesion and community resilience: A multidisciplinary review of literature for rural health research. *Department of International Development Studies Faculty of Graduate Studies and Research Saint Mary's University, Halifax*,

Rostow, W. (1960). *Stages to economic growth*. Cambridge, UK: Cambridge University Press.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316-331.

Schiff, J. W., & Moore, K. (2006). The impact of the sweat lodge ceremony on dimensions of well-being. *American Indian and Alaska Native Mental Health Research: Journal of the National Center*, 13, 48-69.

Schnarch, B. (2004). Ownership, control, access and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary first nations research and some options for First Nations communities. *Journal of Aboriginal Health*, 1(1), 80-95.

Schumacher, E. F. (1973). *Small is Beautiful: Economics as if people mattered*. New York: Harper and Row.

Scoones, I. (1998). *Sustainable rural livelihoods: A framework for analysis* (72nd ed.). Sussex, UK: Institute of Development Studies, University of Sussex.

Scott, J. C. (1987). *Weapons of the weak : Everyday forms of peasant resistance*. New Haven: Yale University Press.

Secombe, K. (2002). "Beating the odds" versus "changing the odds": Poverty, resilience, and family policy. *Journal of Marriage and Family*, 64(2), 384-394.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.



- Sen, A. K. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford, UK: Claredon Press.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sheridan, J., & Longboat, Roronhiakewen "He clears the sky" Dan. (2006). The Haudenosaunee imagination and the ecology of the sacred. *Space and Culture*, 9(4), 365-381.
- Shiva, V. (2005). *Earth democracy: Justice, sustainability and peace*. Brooklyn, New York: South End Press.
- Sillitoe, P., Dixon, P., & Barr, J. (2005). *Indigenous knowledge inquiries: A methodologies manual for development*. London: Intermediate Technologies Development Group.
- Sloop, S. K. (2002). Resiliency. In N. J. Salkind (Ed.), *Child development* (pp. 346-348). New York: MacMillan Reference.
- Smith, D. E. (1987). *The everyday as problematic: A feminist sociology*. Toronto: University of Toronto Press.
- Smith, G. H. (2000). Protecting and respecting indigenous knowledge. In M. A. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 207-224). Vancouver, Canada: UBC Press.
- Smith, L. T. (2001). *Decolonizing methodologies: Research and indigenous peoples*. New York: Zed Books.
- Soanes, C. (Ed.). (2002). *Paperback Oxford English dictionary*. Oxford, UK: Oxford University Press.
- Some, M. P. (1995). *Of water and the spirit: Ritual, magic and initiation in the life of an african shaman*. New York: Arkana / Penguin Books.
- Some, M. P. (2000). *The healing wisdom of Africa: Finding life purpose through nature, ritual and community*. New York: Jeremy P. Tharcher/Putnam.
- Sonn, C. C., & Fisher, A. T. (1998). Sense of community: Community resilient responses to oppression and change. *Journal of Community Psychology*, 26(5), 457-472.



Spencer, P. U. (1990). A native american worldview. *Noetic Sciences Review*, 15, 14-20.

Stake, R. E. (1994). Case studies. In N. Denzin, & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 236-247). Thousand Oaks, CA: Sage.

Stake, R. E. (2003). Qualitative case studies. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (3rd ed., pp. 443-466). Thousand Oaks: Sage.

Starhawk. (2004). *The earth path: Grounding your spirit in the rhythms of nature*. San Francisco: Harper San Francisco.

Stehlik, D. (2002). Partnerships in sustainability: Human services and community resiliency. Retrieved 15 June 2015 from www.arts.cqu.edu.au/rsarc/home.html

Stewart, M., Reid, G., Jackson, S., Buckles, L., Edgar, W., Mangham, C., & Tilley, N. (1996). Community resilience: Strengths and challenges. *Health and Canadian Society*, 4(1), 53-81.

Strano, A. (2005). *Eastern thought for the western mind: Raj yoga meditation*. London: Brahma Kumaris Information Services.

Subramanian, S. M., Verschuuren, B., & Hiemstra, W. (2014). *Community well-being in biocultural landscapes: Are we living well?* Practical Action Publishing. Retrieved from 15 June 2015 <http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781780448381&uid=none>

Tedla, E. (1995). *Sankofa: African thought and education*. New York: Peter Lang.

Tengan, E. B. (1994). The social structure of the Dagara: The house and the matriclan as axes of Dagara social organization. *The Victor Series*, 3

Tengan, E. B. (2005). *Until death do us part: Traditional beliefs and rituals surrounding widowhood among the Dagara*. Wa, Ghana: Africa Research and Documentation Centre.

Theis, J. & Grady, H.M. (1991). *Participatory rapid appraisal for community development: A training manual*. London: IIED.

Thibeault, R. (2002). Occupation and the rebuilding of civil society: Notes from the war zone. *Journal of Occupational Science*, 9(1), 38-47.



- Thomas, D. S. G., Twyman, C., Osbahr, H., & Hewitson, B. (2007). Adaptation to climate change and variability: Farmer responses to intra-seasonal precipitation trends in South Africa. *Climatic Change*, 83(3), 301-322.
- Tisdell, E. J., & Tolliver, D. E. (2003). Claiming a sacred face: The role of spirituality and cultural identity in transformative adult higher education. *Journal of Transformative Education*, 1(4), 368-392.
- Townsend, E. (1997). Inclusiveness: A community dimension of spirituality. *Canadian Journal of Occupational Therapy*, 64(1), 146-155.
- Trosper, R. L. (2003). Resilience in pre-contact pacific northwest social ecological systems. *Conservation Ecology*, 7(3), Article 6.
- Tse, S., & Liew, T. (2004). New Zealand experiences: How is community resilience manifested in Asian communities? *International Journal of Mental Health and Addiction*, 2(1), 1-8.
- Turay, T. M. (2000). Peace research and African development: An indigenous african perspective. In G. J. S. Dei, B. L. Hall & D. G. Rosenberg (Eds.), *Knowledges in global contexts: Multiple readings of our world* (). Toronto: University of Toronto Press.
- Turner, B. L., Kasperson, R. E., Matson, P. A., McCarthy, J. J., Corell, R. W., Christensen, L., . . . Martello, M. L. (2003). A framework for vulnerability analysis in sustainability science. *Proceedings of the National Academy of Sciences*, 100(14), 8074.
- Ungar, M., Clark, S. E., Kwong, W. M., Makhnach, A., & Cameron, C. A. (2006). Studying resilience across cultures. *Journal of Ethnic and Cultural Diversity in Social Work*, 14(3-4), 1-19.
- Ungar, M. (2005). Introduction: Resilience across cultures and context. In M. Ungar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts* (pp. xxxix). Thousand Oaks, CA: Sage.
- United Nations Values Caucus. (2005). United nations values caucus home page. Retrieved 15 June 2015 from www.valuescaucus.org
- Uphoff, N. T. (1986). *Local institutional development: An analytical sourcebook with cases*. West Hartford, CT: Kumarian Press.



- Van Der Geest, K. (2004). *We're managing: Climate change and livelihood vulnerability in northwest Ghana*. (No. 74). Leiden: African Studies Centre.
- Van Der Geest, K. (2011). *The Dagara farmer at home and away: Migration, environment and development in Ghana*.(PhD). Leiden: Africa Studies Centre.
- Van der Poeg, J.D. & Long, A. (Eds.). (1994). *Born from within: Practice and perspectives of endogenous rural development*. The Hague, Netherlands: CIP-DATA Koninklijke Bibliotheek.
- Varadharajan, A. (2000). The “repressive tolerance” of cultural peripheries. In M. A. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 142-149). Vancouver: UBC Press.
- Verhelst, T. G. (1990). *No life without roots: Culture and development*. London: Zed Books.
- Vincent, K. (2007). Uncertainty in adaptive capacity and the importance of scale. *Global Environmental Change*, 17(1), 12-24.
- Walker, B. H., Anderies, J. M., Kinzig, A. P., & Ryan, P. (2006). Exploring resilience in social-ecological systems through comparative studies and theory development. *Ecology and Society*, 11(1), 12-24.
- Walker, B. H., & Salt, D. A. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington: Island Press.
- Walker, B. H., & Salt, D. (2012). *Resilience practice*. Washington: Island Press.
- Waller, M. A. (2001). Resilience in ecosystemic context: Evolution of the concept. *American Journal of Orthopsychiatry*, 71(3), 290-297.
- Wallerstein, N. (1999). Power between evaluator and community: Research relationships within new Mexico's healthier communities. *Social Science & Medicine*, 49(1), 39-53.
- Walsh, F. (2002). A family resilience framework for intervention and prevention. In A. R. Roberts, & G. J. Greene (Eds.), *Social workers' desk reference* (pp. 246-251). Oxford, UK: Oxford University Press.



- Wane, N. N. (2000). Indigenous knowledge lessons from the elders: A Kenyan case study. In G. J. S. Dei, B. L. Hall & D. G. Rosenberg (Eds.), *Indigenous knowledges in global contexts: Multiple readings of our world* (pp. 54-69). Toronto: University of Toronto Press.
- Wangaloo, P. (2000). Mpambo, the African multiversity: A philosophy to rekindle the African spirit. *Indigenous knowledges in global contexts* (pp. 265-277)
- Weil, M. O., & Gamble, D. N. (2002). Community practice models for the 21st century. In Roberts & Greene (Eds.), *Social workers' desk reference* (pp. 525-535). Oxford, UK: Oxford University Press.
- Welton, M. R. (1991). *Amateurs out to change the world: A retrospective on community development*. Halifax, NS: Dalhousie University, School of Education.
- Werner, D., & Sanders, D. (1997). *Questioning the solution: The politics of primary health care and child survival*. Palo Alto, CA: HealthWrights.
- Werner, E. E., & Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: McGraw Hill.
- WFP-MOFA (Ed.). (2013). *Comprehensive food security and vulnerability analysis*. Accra: Ministry of Food and Agriculture.
- Wheatley, M. J. (2002). *Turning to one another: Simple conversations to restore hope to the future*. San Francisco: Berrett-Koehler.
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Pearls, pith and provocation: Validity in qualitative research. *Qualitative Health Research*, 11(4), 522-537.
- Wilding, N. (2011). *Exploring community resilience in times of rapid change*. Fife: Carnegie Trust.
- Wilson, S. (2008). *Research as ceremony: Indigenous research methods*. Black Point, NS: Fernwood.
- Wilson, G. A. (2012). *Community resilience and environmental transitions*. London: Routledge Earthscan.
- Winter, B., Thompson, D., & Jeffreys, S. (2002). The UN approach to harmful traditional practices. *International Feminist Journal of Politics*, 4(1), 72-94. doi:10.1080/14616740110116191



Wolff, T. (2003). The healthy communities movement: A time for transformation. *National Civic Review*, 92(2), 95-111.

Wongtschowski, M., Verburg, M., & Waters-Bayer, A. (2009). *Strengthening local adaptive capacities: The role of local innovation in supporting climate-change adaptation*. Addis Ababa: Prolinnova.

Woodroffe, J. (2012). *Gender equality and the post 2015 framework*. (Gender and Development Network Briefings). London: Gender and Development Network Action Aid.

Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27(2), 151-208.

Working Group on Indigenous Populations African Commission on Human and Peoples' Rights. (2006). *Indigenous peoples in africa: The forgotten peoples?* Banjul, The Gambia: ACHPR.

World Bank. (2013). *World development report 2014 : Risk and opportunity - managing risk for development*. Herndon: World Bank Publications. doi:10.1596/978-0-8213-9903-3

Yin, R. K. (1989). *Case study research*. Newbury Park, CA: Sage.

Zeller, R. A. (1993). Focus group research on sensitive topics: setting the agenda without setting the agenda In Morgan, D. (Ed) *Successful focus groups: advancing the state of the art*. (pp. 167-183). Newbury Park: Sage.

Ziem, J. (2012). Northern women petition government over block farming project. Retrieved 15 June 2015 from <https://rumnet.wordpress.com/2012/02/13/northern-women-petition-government-over-block-farming-project/>

Zips-Mairitsch, M. (2009). *Lost lands?: (Land) rights of the San in Botswana and the legal concept of indigeneity in Africa*. Copenhagen, Denmark: International Work Group for Indigenous Affairs.



Synopsis of Preliminary Conceptual Framework of Community Resilience

SENSE OF COMMUNITY

Endowment – Natural and Physical Assets

- Ecosystem; Physical, geographic and natural (environmental) assets

Community Identity

- Sense of Community (shared interests, beliefs, values, oppressions, belonging)

Context and Culture

- Culture, historical and ideological context

ENVIRONMENT OF RISK AND DISTURBANCE

- Major acute disturbance, chronic oppressive conditions, or Internal disturbance / fracture

PROCESSES OF RESPONSE

- Community agency to survive and thrive within ecosystem
- Dynamic interplay drawing on community capacities to respond to unpredictable acute and chronic risks and surprises and achieve positive outcomes
- Negotiations with external actors, power, and everchanging context and culture

CAPACITIES FOR COMMUNITY TO RESPOND

Social Capacities

- Internal factors contributing to the functioning of the community
 - support for togetherness and cohesiveness
 - dealing with conflict or disagreements
 - maintaining peace
 - community process for solving problems
 - valuing diversity
 - community attitude
 - group supporting community development
- External factors protecting the community against threats
 - policies that support resilience
 - access to services and amenities such as health, education etcetera



Appendix B: Timeframe for Field Research (4.5 months total in the field, over 2 years)

Weeks	Research Assistants Activities (unless designated PI only)	Assumptions / Constraints / Comments
1–2	<ul style="list-style-type: none"> Arrival in Ghana (PI) Brief CIKOD and discuss logistics (PI) Travel to Lawra, UWR (PI) 	
3–4	<ul style="list-style-type: none"> Meet with and initial capacity building with research assistants; protocol visits (PI) Confirm rural community consent 1st household interview in Lawra district urban Key informant interview(s), Lawra district Group interview with elders 	<ul style="list-style-type: none"> assumes rural community gives consent issues outside control of the researchers may constrain entry to the community assumes assistants available and competent
5	<ul style="list-style-type: none"> Household interviews (2) in Lawra district rural 	<ul style="list-style-type: none"> assumes people available and willing to discuss during this time period assumes logistics run smoothly
6	<i>Break</i>	
7–8	<ul style="list-style-type: none"> Group interviews in Lawra Key informant interviews in Lawra 	<ul style="list-style-type: none"> assumes smooth set up of group interviews and attendance
9	<ul style="list-style-type: none"> Nandom district group interviews and informants 	<ul style="list-style-type: none"> assumes smooth process even though limited time to establish rapport
10	Sunyani household and informant (migration destination for seasonal and youth workers)	<ul style="list-style-type: none"> assumes smooth process even though limited time to establish rapport
11	<i>Contingency time</i>	
12	<ul style="list-style-type: none"> Travel to Accra and debrief with CIKOD; (PI) Departure (PI) 	
8 Months in Canada for Preliminary Data Analysis and Interpretation (PI in correspondence with research assistants)		
1–2	<ul style="list-style-type: none"> Arrival in Ghana and briefing (PI) Travel to Wa to brief ad-hoc committee Travel to Lawra (PI) 	<ul style="list-style-type: none"> availability of ad-hoc committee and community members
3	<ul style="list-style-type: none"> Community validation in Lawra rural Community validation in Lawra & Nandom Districts 	<ul style="list-style-type: none"> availability of community members familiar with previous year's work



4-5	<ul style="list-style-type: none"> • Probing Interviews in Lawra • Debrief with ad-hoc committee members 	<ul style="list-style-type: none"> • availability of ad-hoc committee and community members
6	<ul style="list-style-type: none"> • Community validation in Sunyani • Return to Accra; debrief and departure (PI) 	<ul style="list-style-type: none"> • availability of ad-hoc committee and community members



Appendix C – List of Full Data Set of Interactions with Dagara Participants (1 / 3)

DATE	LOCATION	SECTOR	males number	females number	AGE	
29-Apr	lawra	govern	1		mid	
29-Apr	lawra	govern	1		elder	
29-Apr	nandom	broad - ngo	1		elder	
29-Apr	nandom	govern	1		elder	
30-Apr	lawra	broad - ngo	1		youth	
1-May	lawra	broad - ngo		1	youth	
1-May	lawra	broad - ngo	1		youth	
1-May	lawra	school youth		1	youth	
1-May	lawra				mid	
3-May	lawra	community leader	1		elder	
4-May	wa	university	2		elder	
4-May	wa	university		1	mid	
4-May	wa	broad - ngo	1		elder	
5-May	lawra	community leader		1	elder	
5-May	lawra	community leader	1		elder	
8-May	mwangbull environs	community leader		1	elder	
8-May	mwangbull environs	community leader	1		elder	
8-May	lawra	community informant	1		mid	
8-May	lawra	community informant	1		elder	
9-May	lawra	urban compound	1		mid	
10-May	nandom	community leaders	6		elder	
10-May	nandom	school youth	10		youth	
11-May	mwangbull environs	community leader	10		elders	
11-May	lawra	community leader		1	mid	
13-May	nandom	community informants	4	3	mid	
15-May	lawra	urban compound		2	mid	
15-May	lawra	urban compound	2		youth	
17-May	hayeon environs	community group	8		mid	
17-May	hayeon environs	community informants		8		
17-May	hayeon	community leader	2		mid	
18-May	hayeon environs	school youth	5	5	youth	
18-May	hayeon environs	community leader	1		mid	
18-May	hayeon	rural compound d	1		elder	
18-May	hayeon	rural compound e	1	0	mid	
18-May	lawra	community leader		3	mid	
19-May	mwangbull environs	community informant	6		mid	
19-May	mwangbull	community leader	1		elder	
19-May	mwangbull	rural compound	1		mid	



Appendix C – List of Full Data Set (continued 2/3)

DATE	LOCATION	SECTOR	males number	females number	AGE	
19-May	mwangbull	rural compound	1		mid	
20-May	mwangbull	rural compound a	1		elder	
20-May	mwangbull	rural compound b		3	youth	
20-May	mwangbull	rural compound a		3	mid	
20-May	mwangbull	rural compound a	1		mid	
20-May	mwangbull	community leader	0		elder	
22-May	hayeon environs	community leader		1	mid	
22-May	lawra	urban compound		2	youth	
22-May	mwangbull	rural compound c	1		mid	
23-May	mwangbull environs	community leader	1		mid	
24-May	hayeon	rural compound d	1		elder	
24-May	hayeon	rural compound d			youth	
24-May	hayeon	rural compound e		3	mid	
25-May	hayeon	rural compound e	1		mid	
26-May	hayeon environs	community leader	1		elder	
26-May	hayeon	community leader	1		elder	
26-May	hayeon	community informant		1	mid	
26-May	lawra	govern	1		mid	
27-May	lawra	community leader	2		elder	
27-May	mwangbull	community group		10	mid	
27-May	mwangbull	community leader	0		elder	
28-May	lawra	govern		1	mid	
28-May	lawra	govern		0	mid	
29-May	lawra	broad - ngo	0		youth	
29-May	lawra	broad - ngo		0	youth	
30-May	mwangbull environs	community leader	1		youth	
18-May		rural compound e		4	mid	
22-May	mwangbull	rural compound c		3		
DATA COLLECTION 2010			85	58		
DATE	LOCATION	SECTOR	males number	females number	AGE	
12-Mar	wa	broad - ngo	1	1	youth	
13-Mar	wa	broad - ngo			youth	
15-Mar	lawra	broad - ngo			youth	
16-Mar	lawra	broad - ngo	1	1	youth	
17-Mar	lawra	broad - ngo	1	1	youth	
17-Mar	haiyeong	community leader	1		elder	
17-Mar	haiyeong	rural compound e	1		elder	



Appendix C – List of Full Data Set (continued 3/3)

DATE	LOCATION	SECTOR	males number	females number	AGE	
18-Mar	mwangbull	community leader	1		elder	
18-Mar	mwangbull	rural compound a	1	1	mid	
18-Mar	mwangbull environs	community leader	1	1	elder	
21-Mar	wa	university	1		elder	
23-Mar	haiyeong	community leaders	5	2	elder	
24-Mar	hayeon	community informants	6	6	mid	
24-Mar	hayeon	community informants		14	mid	
24-Mar	hayeong	rural compound e	1		elder	
24-Mar	hayeong	community leader	1		elder	
24-Mar	hayeong	hayeong environs	1		youth	
25-Mar	hayeong	broad - ngo	1	1	youth	
25-Mar	mwangbull	community leaders	5		elder	
25-Mar	mwangbull	community informants		5	mid	
26-Mar	mwangbull	rural compound a	1	1	mid	
26-Mar	mwangbull	rural compound b	1	1	mid	
26-Mar	mwangbull	community leader	1		elder	
26-Mar	mwangbull	rural compound c	1	1	mid	
27-Mar	lawra	urban compound	1	1	mid	
28-Mar	lawra	community informants	3	2	elder	
29-Mar	lawra	key informant	1		mid	
29-Mar	nandom	key informant	1		mid	
29-Mar	lawra	community leader	1		elder	
30-Mar	lawra	urban compound	1	1	mid	
30-Mar	lawra	govern		2	mid	
30-Mar	lawra	community informants	2		elder	
30-Mar	lawra	govern	1		mid	
31-Mar	wa	university	1		mid	
31-Mar	wa	university		1	mid	
1-Apr	techiman	broad - ngo	1	1	youth	
2-Apr	nkinkanso	community informants	2		youth	
2-Apr	akamanda	community informants	1		youth	
2-Apr	akamanda	community informants	4	4	mid	
3-Apr	nsoko	community informants	1		mid	
3-Apr	nsoko	community informants	4	4	mid	
4-Apr	nkinkanso	community informants		3	youth	
4-Apr	nkinkanso	community informants	1		mid	
5-Apr	techiman	broad - ngo	1	2	youth	
VALIDATION 2011			60	57		
GRAND TOTAL			145	115		



Appendix D - Protocol Guide for a Focus Group Interview

1. Context for this Instrument

The three guiding questions for this study are:

- ❖ What is community resilience in the context of the Dagara people?
- ❖ What is the experience held within Dagara communities that ensures or inhibits their resilience as communities?
- ❖ How does Dagara indigenous knowledge and practice sustain or constrain community resilience and well-being?

What follows is a qualitative interview guide for a group interview. This instrument will one of two utilized in this study. For both instruments the intention is to:

- Be appreciative
- Probe for in-depth qualitative information
- Share information and reflect on past experiences, and also to generate ideas for action and visions of the future
- Ensure the contextual environmental is documented
- Retain information in “the voice” of the people interviewed
- Be respectful, and enable people to heal and to learn

The group to be interviewed will be approximately 5 – 10 people.

2. Consent

The contact person will be asked to sign a consent form on behalf of the group. This form will ask for consent to conduct and record notes on the interview. The information will be anonymous and confidential. The form will describe how the information will be used and how the information will be gathered, stored and identified (eg. “male elder of the community”, “female schoolteacher”). All these issues will be discussed with the contact person in advance and s/he will discuss these issues when inviting people for the interview. These issues will be confirmed with the group orally before beginning the interview. The assumption in the template below is that this form has already been signed, the interviewer and research has been introduced.



3. Preamble to Interview

Thank you for agreeing to take the time for this group interview. I am eager to learn from you about your experiences and your ideas related to a topic that has intrigued me for a long time. I hope we can spend about an two-and- a-half hours together.

*Your community has been identified as one that is proud of its culture and is working hard to build sustainable livelihoods in spite of many challenges. I'd like to learn from you about your knowledge and understanding of the community and **what you think is working that is making a positive difference**. I would like to ask you some questions about your life as members of the community and how it relates to the **success or resilience of the community**. I am curious about the culture, belief systems and world views of the area, and the practicalities of everyday life. I would welcome any insights you could share with me to help me begin learning about those aspects of life here. Please share openly any thoughts you have – remember there are no right and wrong answers I am just trying to explore this topic to learn more about it..*

3.1 Identify Respondent.

ROUND: Before going on can you tell me your name, how long you've lived and worked in this community and a little bit about the kind of work you do?

4. Opening

4.1 Warm-up. Get Started.

What are three strengths of this community? Why?

4.2 Overview.

So, when was a time when you thought of this community as successful and resilient? Why do you say that?

4.2 Success Story.



www.udsspace.uds.edu.gh

Please, describe a particular time or incident when something happened in the community that you would say showed the community is successful / resilient.

Probes:

- What happened?
 - When did this happen? What circumstances led up to this incident?
 - Who were the major players involved? What did they do? What did they say?
 - What happened next?
 - Why do you consider this a “success story”?
 - What factors do you think contributed to the successful or resilient response of the community?
 - How did this “incident” influence people in the community differently? (men, women, young, old, rich, poor?)
- If the first story lacks in substance ask for a second story, and encourage elaboration.

5. Substantive Questions on Factors

Your story touched on a number of factors that contribute to the success and resilience of your community. I would like to discuss these in more detail.

OR

Other research has identified some additional factors that might contribute to success and resilience in communities. I would now like to ask you about some of these other factors.

- Ask questions 5.1 – 5.7 with probes if the factor came up in the original stories.

5.1 Physical

- What physical infrastructure or amenities do you think make this community strong?
- How does the environment and ecology of the area affect the community?

5.2 Community



www.udsspace.uds.edu.gh

- What makes you think of this place as a community? What gives you a sense of belonging? What supports or strengthens this sense of community?

5.3 Culture

- How does history or culture or ways of thinking influence the community? How do rites of passage influence the community?

5.4 Internal factors contributing to the functioning of the community

- How does the community support togetherness and cohesiveness? (What do people do? What do people say?)
- What does the community do if there is conflict or disagreements? (Give an example of a disagreement in the community in the last three months? How was it resolved?)
- How is peace maintained in your community?
- Describe the community process for solving problems? (Give an example of a problem in the community in the last three months? How was it resolved?)
- How would you describe the general attitude or atmosphere of the community? If a stranger came to the community what do you think s/he would tell others about the attitude of the community? What would you want her/him to tell others about the community atmosphere?
- Describe any groups in the community that support community development, any government services, or any agencies that support livelihoods. Give an example of how these groups are helpful. What would happen if these groups were not there?

5.5 External factors protecting the community against threats

- What policies support or hinder the success and resilience of this community?
- Does the community have access to services and amenities such as health, education? How would you describe the quality of these services? How do the services and amenities in this community compare to others?
- What opportunities are there for employment and sustainable livelihoods in the community? How do these compare to other communities?

5.6 People

- What characteristics of key people support the success and resilience of the whole community?
- How would you describe people in this community? What values are important to them? (Listen for self confidence, self efficacy, courage, humour, etcetera?)
- What talents do they have that are particularly helpful in making the community successful and resilient? (Listen for indicators of competence: knowledge/skills/talents)
- How important is leadership in this community?
- What are people in the community known for? (Are people in this community known for challenging authority? For resistance? For discipline? For creativity? For independence?) Give an example. Do you see this as good or bad? Why?



5.7 Meaning and Purpose

- What gives meaning and purpose to your life?
 - What kind of things do you do that make you feel good about yourself?
 - When do you most fully feel yourself?
 - When do you feel most competent and capable?
 - What things do you do that really make a contribution to the community?
 - What activities are important to you in your life?
 - What makes these important to you?
 - What motivates you? What steers you in your life's activities?

6.0 Substantive Questions on Response

Thank you for your time and ideas so far. I am learning a lot from you, and learning a lot about your community. Your stories and much of our discussion is based on the sense of your community being "successful and resilient". You've shared a number of factors that contribute to this.

6.1 Analogy of Rocking the Boat

- What are the major challenges facing your community? For example:
 - If your community were a boat, and the people in the community were in the boat, what would rock the boat? From the outside? From the inside?
 - What factors are unique, or happen only sometimes that rock the boat? (Emergency issues). What are issues that are affecting the boat most of the time? (Chronic issues)
 - How does the community respond when the boat is rocking?
 - What keeps the boat seaworthy?
 - What enables the community to respond effectively when the boat rocks?

7. Summarizing and Disengagement

- *You've shared a number of insights with me such as _____, _____, _____. To summarize, if you were asked to advise another community on how to become more successful and resilient what are the three things you would tell them that would help them most?*



8. Closure and Next Steps

Thank you!

Is there anything else you would like to share about building successful and resilient communities?

I am interviewing a number of other people in the community. I will put this information together and be back next year to share some of the things I learned from all of the people I talked with and maybe to have further discussions.

Do you have any questions for me?

9. Thanks

Thanks for sharing your experiences. This has been a valuable learning opportunity. I will provide a summary of some of the findings from this research when I come next year.



Purpose: for feedback to community on findings; for cross checking and validation of what we heard last year; and an opportunity for community members to share ideas to deepen analysis of findings

Intention: is the fora will reaffirm peoples own knowledge and strengths and that the sharing of stories from across the district will inspire communities to acknowledge and build their own resilience

Tentative Agenda:

A. Introduction and Welcome: (David with Zuma)

- ask for chiefs permission
- the research we've been doing; thanks to the people we've spoken with all across the district; valuable learning I will use in my courses in Canada and perhaps teach at UDS in the future; will produce a book and a summary in Dagara of what we learned
- we want to share things we heard in three sections – and then most importantly to hear back from you – is what we said correct? What additional points would you add? What stories can you tell to help us understand the issue(s) in more depth? (cross checking)
- the three sections we want to share about are: 1. the things people are proud of in the area; 2. The challenges and risks in peoples' lives; 3. how people respond to the challenges
- these three sections are all important – like the three stones we need for a cooking fire we have to talk about all of these things in order to share a true understanding of what we learned.

B. The Things People are Proud of in the Area – the first stone (Vida)

C. Challenges and Risks for People in Lawra District – the second stone (Zuma)

D. How People Respond to Challenges – the third stone (David with Vida)

We learned a lot of things about how people respond to challenges – we learned it is not just one kind of thing that is useful but a combination of different strategies that makes a difference – we call it the “hand of resilience” – people told us you need all these different things working together in



www.udsspace.uds.edu.gh

order to respond well – just one strategy will not work (like trying to eat okra soup with one finger) you must have all five strategies working together. The five strategies people told us about are:

1. Revitalizing culture and spirituality
2. Enhancing Sustainable Livelihoods
3. Strengthening the Ecological Environment
4. Remembering strengths and values in women and men
5. Overcoming Challenges

The three of us as researchers will share what we heard and what we think it means in these different sections:

E. Community Dialogue (following each finger of resilience)

– is what we said correct? Did we make any mistakes? What additional points would you add? What stories can you tell to help us understand the issue(s) in more depth?

F. Conclusion and Thank You!

- like our learning continues to grow; seedlings as small token of our appreciation for what you've shared; hope they will grow to provide shade and nourishment for the community





Examples of how the quality of the research was enhanced through relational accountability.	
Headmaster	<ul style="list-style-type: none"> ▪ Headmaster of one of the primary schools is in one of the illustrative communities ▪ He is Zuma's former headmaster when he was at primary school and they know each other ▪ Mutual respect exists, therefore when other researchers were introduced, it initiated the relationship on a more intimate footing
Brother of Senior Chief	<ul style="list-style-type: none"> ▪ A close personal friendship existed between the brother of the senior chief and Zuma's father ▪ This brother had conducted a ritual ceremony at the funeral of Zuma's father to pass on his friendship to Zuma ▪ This ceremony transfers this intimate relationship to Zuma and meant this man could now be relied upon into the future ▪ This relationship facilitated our discussions with elders in that community ▪ It provided insight into how friendships ties and generational relationships are established and maintained, thus bonding the community together ▪ This relationship enhanced possibility to see the senior chief and elders in another community
Peers	<ul style="list-style-type: none"> ▪ Zuma's peers, his friends knew he was working on this project ▪ He took the initiative to interview a group of his age mates about the concepts of resilience in Dagare ▪ Findings from this discussion were insightful in mapping and interpreting the language around resilience
Secondary School Students	<ul style="list-style-type: none"> ▪ Researchers decided to hold focus groups with in-school and out-of-school youth ▪ Zuma suggested the secondary school where he graduated ▪ A group of students were brought together and we able to conduct a successful focus group with these youth ▪ We were also able to reconnect with some of his former teachers ▪ Zuma had many stories to tell after this visit which helped in better understanding the context of the area and in articulating some of the issues and challenges for youth
Community Elder	<ul style="list-style-type: none"> ▪ An educated elder, recognized as a keeper of traditional wisdom in the community was known to Vida ▪ This relationship meant she could find the person and arrange an interview ▪ This interaction helped them catch up on family news and provided an opportunity for Vida to share with her family an update on the health condition of this respected gentleman ▪ His suggestions for questioning and follow-up provided some ideas and angles that had not come from other individuals

Husband	<ul style="list-style-type: none"> ▪ Vida's husband was a former director of disaster management in the district ▪ He was formally interviewed for the study ▪ Vida discussed ideas and updates from the research with him that resulted in new insights and ways of thinking that influenced researchers deliberations and the nature of some interpretations
Sister	<ul style="list-style-type: none"> ▪ Vida's sister ran a canteen where the researchers often had lunch during the fieldwork ▪ This connection provided nutritious food and grounded us in the community Ideas and plans were discussed around the lunch table with much laughter and camaraderie
Royal Household	<ul style="list-style-type: none"> ▪ Vida is a member of the royal household in the district where we were conducting the research ▪ This position added to the credibility of the work – especially with women ▪ The researchers had multiple meetings with women elders and women's groups with which Vida was associated ▪ Her relationships certainly influenced the effectiveness of these interactions
Women and girls	<ul style="list-style-type: none"> ▪ Vida's rapport with women and girls was natural ▪ This created many opportunities for deepening interviews and focus groups
Youth	<ul style="list-style-type: none"> ▪ Zuma was connected to youth in the research area ▪ These connections deepened our relationships in the Dagara community

