

# FOSTERING SUSTAINABLE ENGAGEMENT OF THE YOUTH IN THE AGRIFOOD SECTOR: OPPORTUNITIES AND CHALLENGES FOR YOUTH EMPLOYMENT IN GHANA<sup>1</sup>

<sup>1</sup>A.-H. Abubakari, <sup>2</sup>M.R. McDonald, <sup>3</sup>D. Ceplis, <sup>1</sup>K.G. Mahunu, <sup>4</sup>J. Owen, <sup>5</sup>I.A. Idun, <sup>5</sup>P. Kumah, <sup>6</sup>M. Pritchard, <sup>1</sup>G. Nyarko and <sup>5</sup>F. Appiah

<sup>1</sup>University for Development Studies, Tamale, Ghana; <sup>2</sup>University of Guelph, Guelph ON, <sup>3</sup>Minnedosa MB, <sup>4</sup>Agriculture and Agri-Food Canada, Bouctouche NB <sup>5</sup>Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, <sup>6</sup>Winnipeg, MB

**Contact:** A.-H. Abubakari ([halim7us@yahoo.com](mailto:halim7us@yahoo.com))

## ABSTRACT

The youth, who form the main active working force, constitute more than 30% of Ghana's population. The Ghana Institute of Horticulturists (GhIH) has over the last decade been working to address some of the main aspirations of the youth, which include improved nutrition, increased income and employment opportunities. This paper discusses the methodologies and results achieved by GhIH, through training young farmers and young professionals for employment in the agrifood sector. GhIH has addressed these issues at both the community and the organisational levels. At the community level, training methodologies have included Farmer Field Schools (FFS), Training of Trainer workshops (ToT) and on-farm demonstrations at five locations in the Upper West Region (UWR) of Ghana. At the organisational level, GhIH builds the capacity of young professionals through networking, conferences, communication, professional exchanges and youth mentoring. Results of these interventions included stronger farmer associations with 30% of the farmers aged 19-35 (male/female=16.0%/13.2%). Over 80% of farmers have learned and applied Best Management Practices (BMP) that resulted in a two fold increase in productivity compared to non project communities. Availability of fresh vegetables increased from 5 months to 9 months in project communities. At least 53% of the farmers reported increases in purchasing power as a result of increasing productivity and income. Thirty-two percent (32%) of male and 36% of female farmers have recognised vegetable production as a critical livelihood support system. The rural-urban migration was reported to have substantially decreased (11% decrease in 2006 and 20% decrease in 2010) over the five years of the project and appears to be evidence of the higher income. At the organisational level, vibrant student groups of GhIH (3 in 2006 and 8 in 2011) have been established and sustained. There have been increased skills among young professionals (who formed more than 60% of members) in project management, scientific writing and communication, and increased engagement between young professionals, student groups and agrifood value chain actors. Participation of female youth is evident in at least 20% female student attendance at Annual General Meetings (AGM) and at least 7% of authorship in three volumes of Ghana Journal Horticultural Science. Through south-south and north-south exchanges, the project has also built the capacity of young professionals (at least 10 members and 35 student executives each year) for sharing best practices and lessons on international agriculture development. Poor agricultural finance and poor integration of small-holder producers into national and regional markets are the main challenges in recruiting young farmers. Other challenges include high interest rates on loans, lack of social security for men and women in the informal sector and weak institutional support for small and medium enterprises. These opportunities and challenges need to be considered in developing a comprehensive policy for sustaining the engagement and employment of youth in the agrifood sector.

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## INTRODUCTION

In a country of 25.2 million, youth, aged 15 to 35 years, comprise 33% of Ghana's population (GLSS, 2008). The median age of Ghana is 21.4 years. While 49% of the population lives in rural areas, about 56% of Ghana's work force is engaged in agriculture, mostly as small-holders. Many are youth, rural or peri-urban and who have no formal education. Fifty-eight percent of people aged 15 years and over are able to read and write. Agriculture accounts for 28% of the Gross Domestic Product (GDP) (CIA 2012). The estimated income per capita is 397 Ghana cedis (about \$220 US dollars) nationally, and 106 Ghana cedis in the project area of the Upper West Region (the lowest) (GLSS, 2008).

Of the 227,533 square kilometres of land in Ghana, 17.5% are arable lands while 9.2% are in permanent crops. (CIA 2012). The agrifood sector in Ghana consists of three main groups of producers. The first is a large group of small-holder producers who are operating either individual production units or cooperative production units and focusing mainly on subsistence production of staple food crops and cash crops for local markets. They would typically reside in a village setting close to their production lands. Typical farm size is less than 0.5 hectare (Yeboah et al. 2002) in the project area. In a 2002 study in the project area, only 2.4% of respondents reached secondary level and above. The skills training and extension interventions provided by Non-Governmental Organizations (NGO's) can be a key stimulant for these farmers' productions systems to generate moderate income levels and offer sustainable employment opportunities for farming households and community members

The second group of producers consists of a small group of semi-skilled and medium-scale farmers who may be educated and who understand the principles of production and entrepreneurship. This production system, generates incomes, encourages public sector workers or wealthy business people, including market queens to directly engage themselves in it or invest in it. These producers operate on 3-4 ha or more and have the capacity to generate employment for five people or more. These groups of producers are sometimes engaged as out-growers for export oriented producers.

The third group of producers is made up of a few companies or individual producers backed by local business people or foreign investors with strong links to the export market. This group of producers may establish large commercial farms of hundreds of hectares and may also engage large numbers of small or medium-scale producers as out-growers. Good examples of these are the Integrated Tamale Fruit Company (ITFC) and Olam Ghana Limited. Commercial agricultural production includes crops such as cocoa, mango, oil palm, rice, cassava, groundnuts, maize, shea nuts, bananas and timber (CIA 2012).

The rural youth either have to contend with the existing opportunities in subsistence production or migrate to urban centres in search of alternative employment opportunities, for which they are under-equipped. The small percentage of the youth who are educated have typically not been attracted to opportunities in small scale production. This segment of the youth have the potential to be good entrepreneurs in medium-scale production but are constrained by the higher initial capital needed to invest in medium-scale production enterprises and they have limited production skills. The majority of the youth in the agrifood sector who have graduated (certificate, diploma, and bachelor's degree), and who are aware of the capital constraints in starting business in the sector look for employment opportunities in the large scale agrifood companies. However, the educational curricula of some of the educational institutions are not properly linked to the emerging opportunities in the agrifood sector. Hence many of the graduates in the agrifood sector join other graduates who are looking for opportunities in the public sector. Increasing the engagement of the youth in the agrifood sector, through education and skills training, is one of the surest ways of developing the human resources base for modernizing agriculture in Ghana (FAO, 2010 and FAO 2011).

Over the last decade, the GhIH has supported two key groups of youth in Ghana: young rural small scale vegetable producers in the Upper West Region (UWR) and students enrolled in post-secondary institutions offering horticultural studies.

Young, rural small scale vegetable producers in the UWR have been supported through education and skills training to increase production, and implement sustainable environmental practices, through the principles of horticulture and entrepreneurship. GhIH interventions in the UWR were triggered by a baseline survey in 2000, which identified constraints such as decreasing soil nutrient and organic matter reserves, high incidence of pests and diseases, high post-harvest losses and decreasing farm incomes. These constraints, combined with little agricultural production in the six month dry season from October to March, and limited markets, resulted in a higher incidence of migration of the youth in the UWR to southern Ghana in search for alternative livelihoods where they were under-equipped to face employment and living challenges.

In addition to the baseline information, GhIH also noted that the professional and technical training of students in formal educational institutions did not necessarily support strong engagement of the youth in the agrifood industry.

The GhIH has, over the last decade, been working to address some of the main aspirations of the youth, which include improved nutrition, increased income and employment opportunities. GhIH in collaboration with the Canadian Society for Horticultural Science (CSHS) took advantage of the Agricultural Institute of Canada's (AIC) International Twinning Partnership Programme, funded by the Canadian International Development Agency (CIDA), and initiated a project on Dry Season Vegetable Production (DSVP) in the UWR. A capacity building component of this project included graduate youth training and mentoring aimed at increasing their potential for employment in the agrifood sector. The objectives of the GhIH intervention include:

- Improving household income and food security through increased production and marketing of vegetables.
- Building farmers' capacity to implement successful environmental practices.
- Engaging the youth and women farmers as active participants and beneficiaries of horticultural interventions.
- Strengthening the capacity of GhIH to impact positively on the national regulatory framework on horticultural development in Ghana

This paper discusses the methodologies and results achieved by GhIH, through education and skills training of young rural farmers and young graduates for employment in the agrifood sector.

## **METHODOLOGY**

### **The GhIH project**

GhIH partnered with the CSHS, through the support of the AIC, via funding from CIDA for this project.

At the rural community level, GhIH adopted the Participatory Technology Development (PTD) and Transfer process that makes communities and farmers partners in the technology design and implementation chain. Through the PTD process, GhIH has been involved in organising FFS, the ToT workshops, multi-location trials and demonstration plots at five locations (Karni, Busa, Babile, Piina and Nandom) in UWR of Ghana since 2001.

The FFS involved ToT approach where specific topics were presented under a tree on the garden sites and the PTD approach was used in the generation and transfer of technology. Ministry of Food and Agriculture (MoFA) staff known as Agricultural Extension Agents (AEA) who are already stationed in those rural village locations in the UWR collaborated with GhIH in providing the FFS. Farmer participants are chosen by the communities themselves. The first FFS started in 2002 and the number of participants has increased over the last decade.

In the first phase (2001 to 2006), the project operated as a pilot programme involving a sizeable number of farmers (about 150) and four community dam sites. The concentration of the project was on entrenching vegetable production technologies. After successfully piloting the project, more farmers and communities joined the project between 2006 and 2010. Capacity building on Good Agricultural practices/Beneficial Management Practices (GAP/BMP) was intensified. Radio broadcasts of educational programs were added as a means of reaching out to more farmers and stakeholders.

At the organisational level, GhIH builds the capacity of young horticultural professionals through networking, conferences, communication and professional exchanges. Since 2001, GhIH has supported the establishment of vibrant student groups in public Agriculture Colleges and Universities. GhIH allocates about 10% of its annual project budget to student chapter activities. GhIH supports student meetings, seminars and subsidises the cost of student participation in national conferences, workshops and AGM. GhIH has offered mentoring programmes for students in scientific writing and presentation skills. Students have also been supported through their annual community outreach programmes to engage practitioners and stakeholders in the agrifood sector in awareness creation on nutrition, food safety and environmental quality improvements. Students have also been strongly involved in horticultural extension programmes and data collection and processing.

### **Sampling method for the 2010 evaluation**

A list of farmers was provided by the secretary of the Water Users Association at each community. The Project Management Committee in each community and the evaluation team selected names from the list at random for the purposes of this survey. A paper survey form was used by research assistants from University of Development Studies in Tamale in collaboration with AEA's who provided interpretation as needed with individual respondents. Interviews were held at garden sites or at home in the evening. The languages used during the interviews included English and Dagari

## **RESULTS AND DISCUSSION**

### **Project locations and farmers trained**

GhIH successfully piloted a vegetable production project between 2001 and 2005 in four communities in the Upper West Region. In 2006 the GhIH in collaboration with the CSHS, commenced an extension of its work in five target communities in the UWR of Ghana. The communities were Busa (Wa East district), Babile (Lawra District), Nandom (Lawra District), Karni and Piina (Lambusie-Karni District). Over the last five years, GhIH has directly trained 130 young farmers aged 19-35, in addition to 270 farmers over the age of 35 in five districts of the UWR (Table 1).

Through these training programmes over 650 youth and their families have received training from peer farmers in addition to 2000 farmers over the age of 35. Through the FFS, young farmers and their families have learned the fundamental principles of horticultural production and entrepreneurship, including an increased understanding of self-employment. Availability of fresh vegetables increased from 5 months to 9 months in project communities. Thirty-two

percent of males and 36% of females farmers have recognised vegetable production as a critical livelihood support system. At least 53% of the farmers reported increases in purchasing power as a result of increasing productivity and income.

### **Farmer group development**

The training programme has become the catalyst for the development of strong and viable farmer groups that are capable of responding to the needs of their members. Results of these interventions included stronger Farmer Associations with 30% of the farmers aged 19-35 (Male/Female=16%/13%). Through the ToT workshops, farmers from five districts developed a network that enables them to meet at least semi-annually to share experiences and also learn from experiences of resource persons from GhIH and other agrifood sector stakeholders. Over 80% of farmers have learned and applied BMP that resulted in a two fold increase in productivity compared to non-participating communities.

Through the interactions in the network, opportunities are emerging for farmers to specialise in the vegetable value chain. As a result, some young farmers are specializing in inputs supplies (e.g. onion seed production and sale, supply of agrochemicals and garden tools). Others are attempting to process what they can of the vegetable products that easily lend themselves to value addition. These developments have opened a vista of employment opportunities for the young farmers who would otherwise have migrated to southern Ghana in search for alternative job opportunities. According to the Ghana Living Standards Survey GLSS (2008), about 40% of those who migrate to other parts of the country for economic reasons are the youth (Table 2). The rural-urban migration was reported as a substantial decrease (11% decrease in 2006 and 20% decrease in 2010) over the five years of the project and appears to be evidence of the higher income. The farmers in the UWR are now exploring options for the establishment of district and regional value chain committees that would enable them to pull their supplies together so as to access the national and regional markets.

**Table 1. Profile of youth beneficiaries of GhIH project**

Location		Direct beneficiaries			Indirect beneficiaries	
District	Village	Name of group	No. males	No. females	Total no.	Total no.
Wa East	Busa	Busa Water User's Association	25	33	58	200
	Behii	Behii Water User's Association	6	3	9	70
Wa	Siiru	Siiru Water User's Association	-	-	-	70
Lawra	Babile	Babile Water User's Association	18	5	23	70
	Nandom	Nandom Water User's Association	7	5	12	50
Karni	Karni	Karni Water User's Association	7	20	27	133
	Piina	Piina Water User's Association	4	1	5	83
<b>Total</b>			<b>67</b>	<b>67</b>	<b>134</b>	<b>676</b>

Source: GhIH survey, 2010

**Table 2. Incidence of migration by age group in Ghana**

Age group	Male	Female	All
Less than 15	19.5	16.8	18
15-35	39.4	41.6	40.7
Above 35	41.1	41.6	41.3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: GLSS (2008)

### Improved nutrition, income and employment

**Table 3. Main crops grown by the youth in GHIH project communities (2010)**

Major crop	Gender		
	Male	Female	Total %
<i>Amaranthus</i> sp (Alefú)	0	1	2
<i>Phaseolus vulgaris</i> (Bean leaves)	0	1	2
<i>Brassica oleracea var capitata</i> (Cabbage)	1	0	2
<i>Solanum melongena</i> (White eggplant)	0	1	2
<i>Capsicum spp</i> (Sweet Green Pepper)	1	0	2
<i>Arachis hypogaea</i> (Groundnut)	1	1	4
<i>Zea mays</i> (Maize)	1	0	2
<i>Pennisetum glaucum</i> (Millet)	0	1	2
<i>Abelmoscus esculentus</i> (Okro)	2	5	14
<i>Allium cepa</i> (Onion)	1	4	10
Onion intercropped with Okro	0	1	2
<i>Capsicum annum</i> (Hot pepper)	6	1	14
<i>Lycopersicum esculentum</i> (Tomato)	15	6	42
<b>Total</b>	<b>28</b>	<b>22</b>	<b>100</b>

The survey of farmers indicated that, tomatoes, pepper, onion and okro were the major vegetables cultivated by 90% of the young farmers aged 19-35 years. These are the crops most likely to lend themselves to value addition and also most likely to earn young farmers the needed income at local markets.

In developing commodity value chains in the agrifood sector, the choice of crop is critical. The indigenous vegetables such as *Amaranthus*, *Phaseolus vulgaris*, and *Abelmoscus esculentus* are known for higher nutritional content, more likely to adapt to changing climates and growing conditions (CCAFS, 2012). However, these indigenous vegetables were thought to have very low market value because their recipes were not properly integrated in the fast food industry. There is a potential market growth area as consumers re-discover an appreciation for indigenous vegetables. The non-native vegetables such as cabbages, tomatoes, onions, hot pepper and green pepper have huge demand in the fast food industry because they can be eaten raw or cooked in a short time period. The youth therefore are more interested in growing the non-native vegetables as they appear to bring a good return on investment (Table 3). Therefore in supporting the engagement of the youth in the agrifood sector, the value chains of both indigenous and non native crops should be promoted, but with emphasis on crops that have huge market potential and are easily amenable to value addition.

**Table 4. Impact of the GhIH project on nutrition, employment and rural development**

<b>Impact of GhIH project on farmers</b>	<b>No. male</b>	<b>No. female</b>	<b>Percentage</b>
Food and nutrition security	<b>11</b>	<b>4</b>	<b>10</b>
Income, employment & livelihood	<b>54</b>	<b>61</b>	<b>77</b>
Environment	<b>3</b>	<b>0</b>	<b>2</b>
Rural community development	<b>6</b>	<b>1</b>	<b>4.5</b>
No response	<b>3</b>	<b>7</b>	<b>6.5</b>
<b>Total</b>	<b>77</b>	<b>73</b>	<b>100</b>

Source: GhIH survey, 2010

There appear to be gender differences in the changes noted as a result of project activities. More males than females noted the changes in increased food security, improved environment and rural community development. More women than men noted the change in income, employment and livelihood. The 10% of farmers who appreciate the project for improving food and nutrition security cite reduction in reported cases of malnutrition over the last five years. They also believe that the quality and diversity of vegetables they consumed improved their family's nutrition over the last five years. More than half of those who appreciate the project for food and nutrition security believe the increased production over the last five years has made vegetables more available and more affordable in the local market (Table 4).

Over 75% of farmers appreciate the project as sources of income, employment and livelihood. Out of these farmers, 35% believe the project is the key employment avenue in the dry season. About 25% of farmers believe the reported reduction in youth migration is due to the employment of the youth in the dry season vegetable production. Other farmers believe their ability to pay school fees, purchase household needs and register for National Health Insurance is evidence of sustainable employment and income resulting from the project. Protection of



water bodies and tree planting are some of the reasons some farmers appreciate the project in the community. Group formation and democratic structures, local market development are some of the evidence other farmers see as the result of the project in rural community development. Addressing the gender and youth dimensions in rural development is critical to achieving the millennium development goals (IFAD, 2010).

For the average young farmer, growing tomatoes, pepper or onion on less than a 0.05 of a hectare, with cost of production of less than 50 Ghana cedis, makes between 101 and 500 Ghana cedis a season (Table 5). The majority of the young farmers have per capita income equivalent or little higher than the regional average (Table 6). Also as indicated in Table 6, about one-third of the farmers have per capita income above the national average. In the small-scale NGO-supported projects, the farmer's biggest investment is his/her labour which has not been quantified. The farmers also pay 1.00 Ghana cedi a month for belonging to the Water User's Association or for using the water or for both.

The German Technical Cooperation (GIZ, 2009) recommended investment of 600-800 Ghana cedis per 0.4 hectares for irrigated pepper production in northern Ghana. According to GIZ, this investment, along with good GAP practices, can bring the farmer revenue of about 1,800 Ghana cedis after selling fresh produce. The revenue could triple if the farmer is able to dry, store and sell the pepper later in the lean season.

**Table 5. Income levels young farmer trainees resulting from increased vegetable production (GHIH survey, 2010).**

Gender	Income level (Ghana Cedis)				
	No income	1-100	101-500	501-1000	1001-2000
Male	2	2	30	18	4
Female	0	6	26	10	2
<b>Total</b>	<b>2</b>	<b>8</b>	<b>56</b>	<b>28</b>	<b>6</b>

**Table 6. Mean annual per capita household income in Ghana, GLSS (2008)**

<b>Region</b>	<b>Mean annual household income (Ghana Cedis)</b>	<b>Mean annual per capita income (Ghana Cedis)</b>
Western	1,222	393
Central	1,310	464
Greater Accra	1,529	544
Volta	913	272
Eastern	1,145	379
Ashanti	1,149	410
Brong Ahafo	1,202	443
Northern	1,452	296
Upper East	616	124
Upper West	606	106
Ghana	1,217	397

Source: GLSS (2008)

### **Improved professionalism**

Since 2006, GhIH have supported the establishment of student branches focussed on horticulture in three agriculture colleges and also at the five public universities in Ghana. There were eight student branches in 2011. GhIH runs mentoring programme for the young graduates that is aimed developing their professional and entrepreneurial skills. Some of the programmes include

- Lectures, seminars and workshops on sustainable horticultural production
- Annual outreach programmes or student week celebrations
- School gardening programmes for high schools
- Training on crop livestock integration
- Scientific writing and presentation skills
- South-south professional exchange

Quantitative data on the impact of the mentoring programme in fostering engagement of the youth in the agrifood sectors is not yet available; however, students and stakeholder meetings suggest that the mentoring programme has led to the establishment of vibrant student groups. There have been increased skills among young professionals in project management, scientific

writing and communication, and increased engagement between young professionals, student groups and agrifood value chain actors and beneficiaries. This is evident in at least 20% female student attendance at AGM's and at least 7% of authorship in three volumes of Ghana Journal Horticultural science. Through south-south and north-south exchanges, the project has also built the capacity of young professionals (at least 10 members and 35 student executives each year) for sharing best practices and lessons on international agriculture development.

## Challenges

**Table 7. Challenges facing young rural farmers in the GhIH project**

Challenges facing project farmers	No. male	No. female	Percentage
Access to agricultural inputs,	10	8	12.0
Start up funds and market	8	6	9.3
Environment & water management	12	4	10.7
Investment in time, skills and effort	30	30	40.0
No major problem	9	13	14.7
No response	7	13	13.3
<b>Total</b>	<b>76</b>	<b>74</b>	<b>100</b>

Source: GhIH survey, 2010

As shown in Table 7, 28% of the farmers did not respond or may not be facing serious challenges with their production system. Some of the farmers are known to have strong linkages with market queens and may not disclose much information about their finances. For the other 72% of farmers, access to agricultural inputs (labour, fencing materials, garden tools and agrochemicals), start up funds, market access, group action on environment/water management and the huge investment of time and skills are the major challenges facing their production systems. Twelve percent of them have poor access or do not have funds to procure the essential agricultural inputs and labour. About 9% of the farmers mentioned start up funds and market as the limiting factors and 10.7% mentioned inadequate group action on dam catchment protection and water use as a major challenge. As a result of the poor agricultural finance, many of the farmers (40%) invest a lot of their time, skills and effort to do the work which they could have paid others to do for them. The time, skills and effort required in this case limit the farm sizes that can be managed by the farmers. Market queens seemed to be the only soft source of finance and the only link between the farmers and the major regional markets. This arrangement put the market queens in a position to dictate prices to the farmers

Some farmers (about 60%) have taken various actions to address these challenges. Of these farmers 2.4% have gone for loans from rural banks and credit unions, but the higher interest rates (20 -30%, for 2010-2012) have served as a disincentive for other farmers. Crop failure due to bad weather and the lack of comprehensive social security for small scale producers are still major employment bottlenecks for youth in agriculture. Strong indication are emerging that the National Insurance Commission (NIC) is supporting stakeholders in the insurance industry to initiate crop insurance for farmers (Stutley, 2010). One such initiative is the launching of an insurance scheme by NIC and GIZ, for maize in the three northern regions for the 2011-2012

cropping season (Ghanaweb.com, 2011). Strong institutional linkages between Universities, MoFA, and development partners as demonstrated in the GhIH project are essential for sustaining the employment of the youth in the agrifood sector

### Opportunities for youth employment in the agrifood sector

- Increasing domestic demand for safe and nutrition food as a result of increasing awareness created NGO's in the agrifood sector
- Increasing demand in the international market for non-traditional agriculture commodities such as hot pepper and shea butter
- Continues national and donor support for capacity building in value addition and enterprise training

**Table 8. Income and labour estimates for household processing their own food**

<b>Agricultural item</b>	<b>Estimated no. of households processing items in the last 12 months</b>	<b>Estimated value of sales (Gh cedis)</b>
Cassava flour	58,510	50,000
Cooking oil	82,249	130,000
Flour from other grains	15,926	30,000
Gari	20,804	100,000
Groundnut paste	10,270	10,000
Home brewed drink	32,448	30,000
Husked/polished rice	4,984	No data
Maize flour	283,008	320,000
Processed fish	76,617	290,000
Processed meat	2,905	10,000
Shea butter	7,938	10,000
Cassava dough	76,416	70,000
Corn dough	9,582	20,000
Others (e.g. Vegetables*)	1,244	No data
<b>All</b>	<b>682,901</b>	<b>1,050,000</b>

**Source: GLSS (2008)** \* the example is authors addition

The huge numbers of households involved in processing indicates huge market opportunities for engaging the youth in agro-processing. Polishing of rice, shea butter extraction and processing of vegetables are emerging agricultural value chain opportunities (Table 8). Over 680,000 households processed the food they consume themselves. If we assume the minimum size of 5 persons per household, we could be talking of over 3,000,000 people benefiting from non commercial value added processes. Therefore more people stand to benefit and more employment opportunities would be generated if commercial value addition processes are exploited.

### **Lessons from GhIH projects for the implementation of national youth policy in the agrifood sector**

- Building on viable farmer groups with strong involvement of the youth results in better adoption of BMP
- Training on BMP's, GAP and Value addition can increase market access
- Intervention linked to Universities in Ghana have proven to be cost effective and more sustainable
- Strong partnership with the Ministry of Food and Agriculture and community leaders is critical for project sustainability
- Financing of innovative youth enterprises in the agrifood sector is the biggest challenge constraining sustainable employment of the youth

### **CONCLUSION**

Many of the small scale producers in the UWR of the GhIH project now cultivate a variety of African Indigenous Vegetables (AIV's), tomatoes, chilli pepper, onions and Orange-Flesh Sweet Potato (OSP). These young farmers who operate on less than 0.5 hectares of lands, use simple farm tools and are limited to small dams and wells for water, to support all year round vegetable production. They have reported achieving higher productivity, higher purchasing power, improved nutrition and stable employment through the intervention of GhIH.

Fostering engagement of the youth in the agrifood sector requires comprehensive and long term agricultural interventions through:

- Learning from the experiences of NGO such as GhIH,
- Using PTD methods to work directly with the beneficiaries, and partnering with MoFA, other government departments, and community leaders
- Support of public Universities and research institutions
- Harmonising NGO's interventions with national youth policies
- Improved agricultural finance, value addition to primary produce and integration of small holder producers into national and regional markets

The strategies, opportunities and challenges presented above need to be considered in developing a comprehensive policy for sustaining the engagement and employment of the youth in the agrifood sector.

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