

African Cashew Initiative (ACi), Research Paper

**Socio-economic Development and Income Diversification of Cashew
Farmers in Rural Ghana
Case Study from Brong Ahafo and Northern Region**



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List of Abbreviations

ACi	African Cashew Initiative
FAO	Food and Agriculture Organization of the United Nations
FBO	Farmer based Organization
FGD	Focus Group Discussion
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GHI	Global Hunger Index
GIZ	German Federal Enterprise for International Cooperation
IFPRI	International Food Policy Research Institute
MoFA	Ministry for Food and Agriculture in Ghana
PIA RCN	Poverty Impact Assessment Row Cashew Nut
UNDP	United Nations Development Program
SSA	Sub-Sahara Africa

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Abstract

Cashew production in Ghana is an emerging business, gaining relevance for broad-based income potential. Cashew is considered as a key crop that offers the possibility of enhancing rural development and supporting the livelihood of smallholder farmers. However, high dependency on a particular cash crop such as cashew implies idiosyncratic risks due to volatile world market prices.

The African Cashew Initiative (ACi), which was launched in 2009, maintains that sustainable development entails the redistribution of knowledge on better entrepreneurial practices, farming techniques and the provision of agricultural resources. These interventions lead to empowerment of vulnerable groups and thus, contribute to rural development and poverty reduction.

This case study aims to analyze the impact of cashew farming and ACi interventions on food security, gender relations and poverty reduction, among smallholder farmers in rural Ghana.

To address these issues, focus group discussions and individual interviews were conducted with male and female cashew farmers in Brong Ahafo and Northern Regions of Ghana, because of their current and future importance for the Ghanaian cashew sector.

Findings from the focus group interviews show, that cashew production appears to be a driving factor for upward socio- economic movement. Incomes generated from selling Raw Cashew Nuts (RCN) significantly contribute to the moving-up. However, cashew alone may not propel farmers to bigger steps – it is the combination of cashew, other tree and food crops as well as applying business skills when investing the additional income.

The study also shows that farmers are aware of their vulnerability to market volatility and food insecurity. While investments into cashew production significantly contribute to their families' well-being, they continue to cultivate food crops beyond their own consumption needs. Therefore, by diversifying activities on the farm, they achieve long term food security and welfare. Male and female farmers confirmed the use of a substantial part of their income from cashew production for paying for their children's education. Thus cashew production helps to reduce intergenerational transmission of poverty.

1. Introduction

In Ghana, cashews are harvested during the so called “hungry season”¹, and thus serve as a key source of income for financing family needs. The planting of food crops helps rural poor households to diversify their income and manage the problems associated with food insecurity. Cashew also provides a high level of survival and income possibilities on marginal lands. Cashew trees grow in savannah type regions, are vulnerable to drought and tolerate a wide range of moisture levels and soil types. As precipitation levels are expected to decrease due to climate change in Ghana, the cultivation of other water-intensive cash crops such as cocoa could decrease. It is hoped that cashew production, will “buffer” climate change effects on food crops.

The African Cashew Initiative (ACi), a multi stakeholder venture implemented by GIZ in Benin, Burkina Faso, Côte d’Ivoire, Ghana and Mozambique, aims to exploit the potential of cashew production to address poverty reduction and rural transformation. ACi is led by the conviction that promotion of cashew farming contributes to sustainable development of communities. ACi advocates for more access to land for cashew farming in regions where sufficient land is available, with the intensification of production for yield increase given the highest priority. To achieve this goal, particular attention is attributed to the distribution of knowledge and skills which enables farmers to improve their production potentials and hence contributes to poverty reduction.

However, critics call for restraint in the promotion of cashew farming, stressing the risks of food and labor shortages, land disputes and growing gender and socio-economic inequalities. Therefore, the general objective of this study is to evaluate the effect of cashew farming and ACi interventions in particular on the situation of farmers in rural Ghana. The study focuses on two regions: Brong Ahafo – Ghana’s main cashew producing region and the Northern Region- which has the highest potential for cashew production in the future.

The study was structured as follows. The next section explains the theoretical background of the study and describes activities of ACi in Ghana leading to the introduction of the study’s objectives. Chapter 3 presents demographical and socio-economic characteristics of the study locations, Brong Ahafo and Northern Region. In chapter 4 the used methodology is described. Study results and findings are presented in chapter 5. The study closes with a discussion on the findings with regard to the study’s objectives and the literature considering implications for further research.

¹ The “hungry season” is the time of the year when food crop have not yet yielded, however, cash is needed to satisfy basic human needs.

2. Theoretical Framework

2.1 Poverty reduction initiatives

Through the introduction of the Millennium Development Goals in 2000, the international community placed special emphasis on the eradication of extreme poverty and hunger². While this agreement manifests a world-wide consensus on poverty reduction as an overriding goal of development, the definitions of poverty are manifold³.

Extreme poverty widely refers to a monetary definition of earnings of a least USD 1.25 per day (in 2005 prices) set by the World Bank⁴. In the context of this definition, extreme poverty in Ghana has been reduced, according to the African Economic Outlook, from 51.1% in 1990 to 18.2% in 2010 - against a target of 18.3%⁵. The latest United Nations Development Organization (UNDP) report presents more moderate figures, indicating that the worldwide populations below the income poverty line of USD 1.25 in 2012 amounting to 28.59%⁶.

The perception of poverty is strongly linked with the question of food security and hunger. According to the Global Hunger Index (GHI) 2014⁷ Ghana is only one out of five countries in Sub-Saharan Africa (SSA) which substantially decreased its GHI scores by 71%, since 1990. Ghana reduced child underweight and child mortality by more than 40% and slashed the proportion of the undernourished population from 44% in 1990–1992 to less than 5% in 2011–2013.

Although recent statistics on poverty reduction in Ghana paint a rather positive image, the reduction of poverty is not linear as the rural areas remain the poorest regions⁸. This assertion is also reflected by a Gini coefficient of 42.8⁹. The deficient state of rural infrastructure, and rural livelihoods as well as youth unemployment is key drivers of rural poverty and inequalities in Ghana. Although the World Development Indicators 2014 report a growth rate of an average of 5.6% (or 7.9% absolute) of their gross domestic product (GDP) per capita in Ghana (2012), in rural regions severe poverty accounts for 12.1%¹⁰.

The agricultural sector growth was 3.4% in 2013 (and thus beyond the target of 4.9%) and was far behind the industrial sector and service sector growth indicating a growing disparity between the rural and urban regions of Ghana.

According to Ghana Statistic Services¹¹, poverty is by far (71%) highest among farmers, and their

² See <http://www.unmillenniumproject.org/goals/>

³ Laderchi et. al. 2003 – Caterinaa Ruggeri Laderchi, Ruhi Saith and Frances Stewart: *Does it Matter that we do not Agree on the Definition of Poverty? A Comparison of Four Approaches*. Oxford Development Studies, vol. 31, no. 3.

⁴ Martin Ravallion, Shaohua Chen & Prem Sangraula (May 2008) (PDF), Dollar a Day Revisited (Report). Washington DC: The World Bank. Retrieved 10 June 2013

⁵ AEO 2014 – *African Economic Outlook: Ghana 2014*.

http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2014/PDF/CN_Long_EN/Ghana_ENG.pdf

⁶ UNDP *Human Development Report*, 2014

⁷ In this publication “Hunger is usually understood to refer to the distress associated with lack of food. The Food and Agriculture Organization of the United Nations (FAO) defines food deprivation, or undernourishment, as the consumption of fewer than about 1,800 kilocalories a day—the minimum that most people require to live a healthy and productive life” It includes the dimensions of undernutrition and malnutrition. The GHI is been calculated by the International Food Policy Research Institute (IFPRI) for 120 countries. See http://www.ifpri.org/sites/default/files/ghi/2014/feature_1812.html

⁸ According to *Human Development Report 2014* (UNDP 2014), Ghana remains since 2012 on rank 138 (out of 187).

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ghana Living Standards Survey Round 6 “About a quarter of Ghanaians are poor whilst under a tenth of the population are in extreme poverty. Although the level of extreme poverty is relatively low, it is concentrated in Rural Savannah, with more than a quarter of the people being extremely poor. Overall, the dynamics of poverty in Ghana over the 7-year period indicate that poverty is still very much a rural phenomenon, thus reducing rural poverty is a panacea to Ghana’s poverty, if poverty reduction is to achieve the desired levels for Ghana as a middle income country” (p.17).

contribution to national poverty is disproportionately high¹². By contrary, export farmers are much better off, with a significantly reduced poverty incidence¹³.

The promotion of export-oriented cash crops has been associated with their direct potential contribution to agricultural productivity and smallholder farmer incomes. Proponents of a value-chain oriented approach to rural development stress the important role of cash crops in propelling a transformation out of semi-subsistence, low-input, low-productivity farming systems which are prevalent in many parts of rural Africa¹⁴. The potential of cash crops to drive rural development is mainly attributed to their direct contribution to agricultural productivity, by facilitating access to farm inputs, and improving smallholder farmers' incomes.

Furthermore, food crop production may benefit from regional and household-level spill-over effects such as easier access to farm inputs, and increase of human capital through participation in trainings and investments in the regional market infrastructure. However, critics (example: Evans et al.¹⁵) argue that promoting export-oriented cash crops may lead to scarcity of land and labor for food crop farming, and eventually result in a rise of prices in local food markets and food shortages.

A case study by Evans et al.¹⁶ in Brong Ahafo links the expansion of cashew plantations on family land to concerns about food security, poverty alleviation, gender, intergenerational equality and environmental pressures. The effect of an expanded cashew production on food security is cited as a key concern of farmers in the region. Furthermore, the expansion of cashew plantations is considered a contributing factor for land disputes and conflicts which reinforce existing gender and class inequalities¹⁷. Following the observations of Evans et al. this research examines the extent to which the promotion of cashew cultivation by ACi contributes to socio-economic development in rural Ghana.

According to the Food and Agriculture Organization of the United Nations (FAO)¹⁸, smallholders have historically proven to be key players in meeting rural food demands and thus crucial for food security. Therefore, during this study, the effects of intensified cashew production on food security were the central topic in all focus group discussions and individual interviews. Additionally, land rights and gender were taken into account.

2.2 Overview African Cashew Initiative (ACi)

This study was conducted in the context of the programs of the African Cashew Initiative (ACi) in Ghana. The African Cashew Initiative (ACi) started its activities in Ghana in April 2009. The program's objective is to increase the competitiveness of African cashew production and to achieve a sustainable reduction in poverty among smallholder cashew producers in ACi project countries¹⁹. ACi is led by the conviction that sustainable development implies the redistribution of knowledge,

¹² Ibid "Household heads who are farmers are not just the poorest in Ghana, but they contribute the most to Ghana's poverty" (p.25).

¹³ ACi. 2010 – African Cashew Initiative: *Poverty Impact Assessment – PIA. Case Study Ghana*.

¹⁴ Goevereh and Jayne 2002 – Jones Goevereh and T.S. Jayne: *Cash cropping and food cropping: synergies or trade-offs?* Agricultural Economics, vol. 28 (2003), pp. 39-50.

¹⁵ Evans et al. 2014 – Ruth Evans, Simon Mariwah and Antwi Kwabena Barima: *Cashew Cultivation, Access to Land and Food Security in Brong Ahafo Region, Ghana: Preventing the intergenerational transmission of poverty*. Walker Institute for Climate Research, Research note 6.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Food and Agriculture Organization of the United Nations (FAO), 2012. "Contribution of agricultural growth to reduction of poverty, hunger and malnutrition" <http://www.fao.org/docrep/016/i3027e/i3027e04.pdf>

¹⁹ ACi was launched in 2009 with a broad-based multi-stakeholder partnership approach. The initiative is mainly financed by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Bill & Melinda Gates Foundation (BMGF). ACi's is working in Benin, Burkina Faso, Côte d'Ivoire, Ghana and Mozambique.

teaching farmers about better entrepreneurial practices and farming techniques, providing resources which in turn lead to empowerment of the vulnerable and thus contribute to poverty reduction.



Figure 1 African Cashew Value Chain

When ACi started in 2009, farmers' incomes in Ghana were low (USD 100 per year²⁰) as a result of low yields, poor quality cashew nuts, and lack of business skills. The agronomic reality necessitated the inclusion of improved planting materials so that farmers could increase their potential peak yields. Producers were fragmented, disconnected from markets, and had poor production practices, along with lack of access to training, as well as weak linkages to processors and buyers. ACi introduced a structured value chain approach, defining the gaps in the supply linkage from market to production, as indicated in Figure 1. ACi promoted and supported research for improved cashew planting materials, which led to increased yields of more than 700 kg/ha²¹. Moreover, ACi encourages farmers to intercrop food crops with cashew trees by recommending appropriate planting techniques favorable to crop production, including groundnut, soya, cassava, yam, peppers, ginger as well as cereals. These crops have high potential for food security and income generation and diversification. By August 2014, 40,409 individual farmers (about 25% women) in Ghana have been trained in Good Agricultural Practice (GAP)²².

Furthermore, ACi provides advisory and funding support to national public and private extension services, as well as national governmental actors in order to strengthen their capacity in the cashew sector. Extension Officers of the Ministry for Food and Agriculture (MoFA) are now training and advising cashew farmers on GAP.

3. Research Objectives

The overall objective of this study was to analyze the effect of ACi intervention in cashew production in the Brong Ahafo and Northern Regions. Brong Ahafo Region represents the highest proportion of cashew production in Ghana, whereas the Northern Region now holds the highest potential.

Taking into account the cultural, climatic, and socioeconomic differences of these regions, the study examined development over time in the Jaman North and Wenchi Municipal Districts in Brong Ahafo as well as in Jama and Blema in the Northern Regions (see Figure 2).



Figure 2 Brong Ahafo and Northern Region of Ghana

²⁰ ACi statistics. The income has gradually increased by USD 205.88 in 2014

²¹ ACi yield survey, 2014 records an average of 733 kg/ha.

²² Trained by ACi standard is someone who has undergone at least two different training sessions.

The study addressed the following issues:

- **What is the role of cashew farming in poverty reduction?**
- **What is the interplay between cashew cash crop and food crop production in enhancing food security?**
- **What role do women play in Cashew Farming?**

4. Life in Brong Ahafo and Northern Region

While Ghana's overall poverty rate has declined, the three regions in the North have experienced marginal decreases. Poverty rates in the North are two to three times higher than the national average, and chronic food insecurity remains a critical challenge to rural communities (see Table 1²³). Poverty is highest among food crop farmers, whereas export crop farmers are much better off, with a significantly reduced poverty incidence²⁴.

Table 1 Comparison of Poverty Incidences by Region

	Ghana	Brong Ahafo	Northern Region
Upper poverty line: Poverty incidence by region (% of total population)			
1991/92	52	65	63
1998/99	40	36	69
2005/06	29	29	52
2012/13	24.2	27.9	50.4
Lower poverty line: Incidence of extreme poverty by region (% of total)			
2005/06	18	15	39
2012/13	8.4	6.6	22.8
Population share			
2005/06		9	12
2012/13		42256	10
Contribution to national poverty (%) (Upper poverty line)			
2005/06		10	23
2012/13		11.4	20.8

²³ Source: 1991-2006: ACI. 2010. "Poverty Impact Assessment – PIA. Case Study Ghana" 2012/13: Ghana Statistical Service. 2014.

²⁴ IFAD (2015): <http://www.ifad.org/operations/projects/regions/pa/factsheets/gh.pdf>

Unlike the south, where there are two growing seasons, the northern plains record single rainfall season. Thus it is drought-prone and vulnerable to climate change and this presents relatively limited economic opportunities. Except food crop productions, some trees are also primary cultivated for economic gains. Among such trees is cashew tree which grows in savannah regions and shows a high level of drought resistance and tolerates a wide range of moisture levels and soil types. Thus, climate change in terms of low rainfall records and increasing temperatures is expected to provide opportunity for expansion of cashew production, as well as to “buffer” climate change effects on food crops²⁵. In Figure 4²⁶ the green areas exemplary indicate the best suitability for cashew cultivation in Côte d’Ivoire and Ghana.

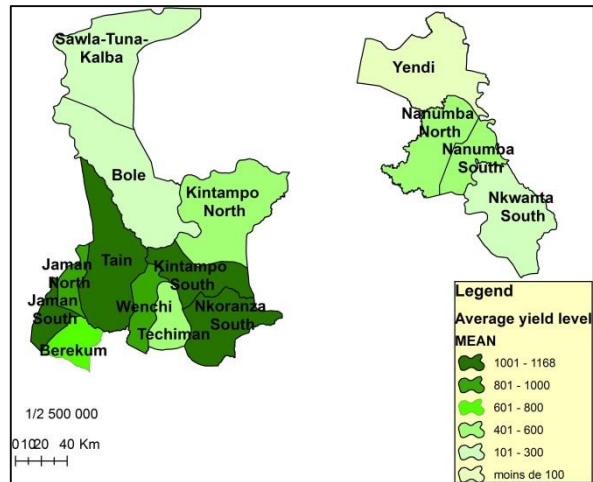


Figure 3 Yield Levels in Ghana 2014

According to MoFA, agriculture is predominantly a smallholder enterprise in the throughout Ghana. About 90% of farm holdings are less than two hectares, and most food crop farms are intercropped²⁷. Smallholders are particularly important for two reasons: 1. Efficiency due to the inverse relationship between farm size and production per unit of land and 2. Equity and poverty as small farms are

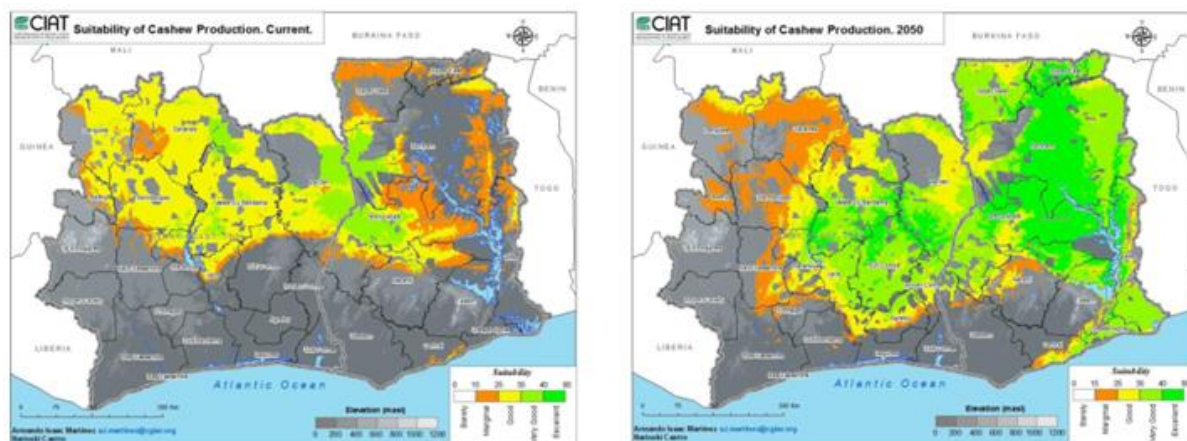


Figure 4 Current Situation in Ghana and Côte d’Ivoire and Suitability in 2050

²⁵ Roudier, P. et al., The impact of future climate change on West African crop yields: what does the recent literature say? *Global Environ. Change* (2011), doi:10.1016/j.gloenvcha.2011.04.007

²⁶ Predicting the impact of climate change on cashew growing regions in Ghana and Ivory Coast”, International Center for Tropical Agriculture on behalf of BMGF, 2010.

²⁷ Statistics, Research and Information Directorate (SRID) (2011). *Agriculture in Ghana. Facts and figures 2010*. Ministry of Food and Agriculture. Accra. Ghana.

mostly operated by poor people using family or rural labor. Implementing policies that address the rural economic development by enhancing smallholders' agricultural productivity have proven to be a particularly successful strategy for poverty reduction and economic growth.

4.1 Brong Ahafo Region

The Brong Ahafo Region covers 39,554 km² and has about 2.31million inhabitants with an average household size of 4.7 in 2010²⁸. Total cultivable land area in Brong Ahafo Region is estimated at 30,400km² out of which 3,706km² is planted with cocoa whilst land under cashew cultivation is estimated at 1,367km² and represents the highest proportion of cashew production in Ghana. Staple crops cultivated in the region include maize, cassava, plantain, yam and cocoyam, whilst cash crops are mainly cocoa, cashew, cotton, tobacco, coffee, oil palm, mango and oranges.

In the Brong Ahafo region, Jaman North and Wenchi Municipal District were selected for the study because of their current importance in the cashew sector and high level of intervention by Aci and MoFA. The Jaman North District area covers 640km². The estimated population is 100,633 with a population density of 111.4inhabitants/km². The Forest-Savannah Transition agro-ecological zone of Ghana, within which Brong-Ahafo region is located, is most suitable for cashew production, in terms of climatic conditions and soil characteristics²⁹.

Wenchi Municipal District, is the largest in Brong Ahafo, and covers 1,296km² with a population density of 77.5 inhabitants/km².

4.2 Northern Region

The Northern Region consists of the northern savannah which occupies about 40% of the land area of Ghana, and has diverse topography with an arable land area of about 6.1million ha, of which about 1.54 million ha are already cultivated. The area has a uni-modal and erratic rainfall season and is very much prone to drought and floods.

According to the Ghana Living Standards Survey³⁰ the Northern Region is home to about 2.66 million people with an average household size of 5.4 people. Each of the two districts chosen for this survey has an area of more than 4,500km² (Bole: 4,800km² and Sawla-Tuna- Kalba: 4,601km²) and a population density of about 14 inhabitants/km². Agriculture forms the main occupation of about 70% of the population in the selected districts. Characteristics of farming in this district include: Low farm productivity resulting from over- dependence on rain-fed agriculture, declining soil fertility; and inappropriate farming practices are main reasons for the high incidence of poverty. The cropping methods usually employed in farming systems are poly-culture, where two or more crops are cultivated on the same land, and monoculture. Mixed cropping and intercropping are the main variations of the poly- culture system. Due to increase in marginal lands as a result of climate variability, farmers are inclined to expand in cashew production to diversify their current and future means of income. In order to exploit the full agricultural potential of the Northern region, the following challenges have been addressed by ACi and MoFA aiming to contribute to resolving them:

²⁸ Ghana Statistical Service (2013): 2010 Population and Housing Census: Regional Analytical Report. Brong Ahafo Region. http://www.statsghana.gov.gh/docfiles/2010phc/2010_PHC_Regional_Analytical_Reports_Brong_Ahafo_Region%20.pdf

²⁹ Dedzoe, Senayahand Asiamah (2001): Suitable agro-ecologies for cashew (*Anacardium occidentale*L.) Production in Ghana. In: West African Journal of Applied Ecology, vol.2; 2001

³⁰ Ghana Statistical Service 2014.

suboptimal agricultural practices, low crop yields and value of harvest, lack of farmer organizations, low organization of farmers and poor, limited linkage with other value chain actors, low access to critical information and other inputs, difficulties of tree crop production due to severe water shortages, bushfires and inadequate planting material.

5. Study Methodology



Figure 5 Sharing main points of discussion in a plenary session- Sampa

Given the exploratory nature of this study, a qualitative approach to research was chosen to capture individual experiences and opinions of cashew farmers in the two study regions. Therefore face-to-face focus group discussions³¹ with open ended-questions were conducted in the four communities of the project area as presented in Table 2.

Taking into consideration the socio-cultural structure of the selected communities, separate group discussions were conducted by gender and age-cohorts. A semi-structured questionnaire was developed to serve as a guideline for the interviewer (see Annex 1). However, the interviewers were encouraged to create an atmosphere of an informal setting with a natural conversation by phrasing questions in a way that they seemed to be evolving naturally within the discussions. Additional and more detailed information was gathered in one-on-one interviews, which took place after the group discussions.

All interviews and discussions were conducted in the local language to create a sense of familiarity, accompanied by a more open conversation. Each group had two facilitators who were MoFA and ACi-staff. Each facilitator was trained beforehand along a guideline containing the main topics of the focus group discussion, the main purpose of each topic and questions to support the discussions flow. Also, for training a test run was conducted in Fetentaa community in Brong Ahafo.

5.1 Sampling Methods

The survey communities were selected in the Brong Ahafo and Northern Region, as cashew production expanded in both regions in the last decade. However, there are also significant differences in the socio-economic structure of the societies, competitive income opportunities, land availability, as well as agro climatic zones, which will be discussed more detailed in chapter 6.

The selection process in Jaman North and Wenchi Municipal Districts in Brong Ahafo Region and Bole, as well as Sawla-Tuna-Kalba Districts in the Northern Region was organized with the support of MoFA extension officers who informed local Farmer Union Organizations as well as chiefs to gather for meetings. The local dignities seemed to accord high importance to these meetings and in some cases took an active part in the focus group discussions.

In Brong Ahafo Region the approach adopted was to obtain a broad overview by choosing Sampa in Jaman North and Wenchi being the District's capital for community meetings. By adopting this approach, we were able to assess cashew producers from 27 different communities (ten in Jaman North Region³² and 17 in Wenchi³³). Per contra, due to the broad location distribution a disproportional high number of male participants took part in the discussion, and only few women (5 out 69 in Sampa and 12 out 94 in Wenchi).

For the Bole and Sawla-Tuna-Kalba Districts in the Northern Region the approach was modified and

³¹ In Wenchi, Jama and Blema four focus group discussions were conducted, whereas in Sampa only three focus groups were formed.

³² Sampa, Morle, Adadiem, Goka, Kabile, Kokua, Duadaso, Amanfaso, Seketia, and Suma Ahenkro

³³ Subinso Nr. 1, Subinso Nr.2, Koase, Nchiraa, Pena, Atuna, Asuano, Beposo, Wenchi, Nkonsia, Akete, Klurompo, Ayaayo, Tromoso, Nchiraa, Buanu, Wurompo, Amponsah Kuran.

the team of facilitators went directly to the smaller cashew communities, in Jama and Blema, to achieve the studies target of getting more gender balanced information. By working directly with the producers’ home community, and with some participants from neighboring communities (4³⁴ in Sawla-Tuna-Kalba District), female participation ratio raised to an average of 40% (42% in Jama and 39% in Blema).

Each society is striving for better future for their children. By including children and youths as part of the research, it was hoped to obtain a valuable perception to which extent income generated from cashew cultivation contributes to their well-being. However, for various reasons, the planned strong involvement of the youth and children did not materialize to the desired intensity.

In Sampa, the discussion took place in the morning where the youth were still in school. In Wenchi, eight students came after school and at the same time as they were visualizing their thoughts about “*what do I like about cashew*” and “*what don’t I like about cashew*” also engaged into a conversation along prepared guidelines. In Jama, the local school system required students to return to school after lunch break, thus not allowing time for a discussion. However, in Blema, 22 children and youth were involved in the study (s. Table 2³⁵). Participants identified themselves to a high percentage as farm owners, tenants represented a minority – however, some farmers owned land and at the same time were tenants on another land. Due to the selection and information process in the communities, day laborers were not part of the focus group discussions and thus, their views in regard to vertical income distribution are lacking.

Table 2 Participant Overview

cohort	Jaman District	Wenchi District	Jama	Blema
Younger men	39	20	25	65
Middle age men		30		
Older men	25	21	16	75
Younger women	5	15	11	61
Older women			19	29
Children and youth		8		22
Total	69	94	71	222

Trust and mutual respect was built up at the beginning of each meeting by introducing the research team and explaining in detail the purpose of the study. After introduction, focus groups were formed by gender and wherever possible according to age. This process provided the needed level of confidentiality and space for an open discussion. The participants represented a high age range: between 20 and 90 years. Interestingly, 23% of those who took part in the discussion in Wenchi, and 17% in Sampa were above 60 years old, and thus above the average life expectancy in Ghana³⁶.

³⁴ Jemme, Monaa and Blema, and old Blema.
³⁵ An exact separation according to age was not possible, as especially those participants, who were late joint the group of their choice. In general: younger person – below 40; middle age men – between 40 and 60 and older person – above 60 years.
³⁶ According to the World Bank life expectancy in Ghana is 60,9 years (2012), see

Table 2 provides an overview of the study participants³⁷. Additionally, 25 more in-depth one-to-one interviews³⁸ (6 in Sampa, 7 in Wenchi, 6 in Jama and 6 in Blema) were conducted to get a deeper insight and a more personal perspective into cashew cultivation. At the beginning all participants were introduced to the study objective and received a name tag. At the end of each group discussion, all participants were brought together to present their results. In Sampa, each group had identified a speaker who presented the results of the discussion to the plenary. In Wenchi, a rather general summary was preferred, as many participants here needed to attend prayer time.

Judging by the intensity of the discussions (an indicator: no phone calls were answered during the discussion) and intensive involvement of almost all participants in the group discussions as well as the feedbacks at the end, the structure of the discussion was perceived as a helpful instrument for self-reflection and reflection upon changes in socio-economic structures and the effects of community development.

Participants mentioned that this was the first time, that ACi and MoFA staff visited the community to ask for their experiences and opinions.

5.2 Data Collection and Analysis

Based on Townsend's understanding of relative poverty³⁹ the decision was taken to focus on local perceptions of social-economic statuses rather than on a purely monetary definition. Instead of determining the interviewees' social statuses based on their income, the participants in the group discussion defined indicators for being very poor, poor, less poor, wealthy, rich and very rich. The indicators were written down on a poster, visible for all participants.

Due to use of local language an adjustment in different attributions along the socio-economic line of *very poor – poor – less poor – wealthy – rich – very rich* had to take place as the term "less poor" did not exist in the local language spoken in Bole.

As no significant differences between "rich" and "very rich" could be observed – here again, as with all other attributions, the definition was pointing to a local comparison – those two categories were combined. Finally, the socio-economic line was defined as follows: *very poor – poor/less poor – wealthy – rich/very rich*. The results from these discussions are categorized and summarized in chapter 6.1.

After a common understanding of what being "very poor", "poor/ less poor", "wealthy" or "rich/ very rich" means, participants were asked to classify their views on this self-defined poverty line at four different points in time: (1) when started farming, (2) when started growing cashew, (3) current status, (4) which status they desire to achieve. Since almost all participants wished to be rich/ very rich in the future this point was not analyzed in detail.

To better allow isolate factors in relation to ACi/MoFA intervention, a timeframe of 20 years- compared to six years (ACi project duration) was introduced. To understand, if cashew cultivation is

<http://data.worldbank.org/indicator/SP.DYN.LE00.IN/countries/GH?display=graph>

³⁷ As not all participants expressed their opinion to a particular research topic, each finding discussed indicates the number of those who de-facto responded to a research topic.

³⁸ Questionnaire – see Annex 2

³⁹ Abel Smith and Townsend 1965 – B. Abel Smith and P. Townsend: *The Poor and the Poorest*. London: Bell. Townsend's conceptualization of poverty is referred to as relative poverty, the definition of which can vary over time and will change according to the prevailing norms of any given society.

competing with other food crops, participants were invited to name all food crops they had cultivated since starting farming, why they decided on cashew production and for which crop they currently use their farm land.

Furthermore, main sources of income throughout the year as well as their distribution were discussed. Special attention was paid to gender and age differences in the participants' perceptions. Particular emphasis was given to the issue of arable land availability and the question if the experienced increase in cashew production is likely to cause land disputes or conflict.

6. Results and Discussion

In the following section the results of the interviews are discussed. The characteristics and multi-dimensionality of socio-economic structures are illustrated in detail, whereby the perception of poverty and social mobility by the farmers are explained and the question addressed, if cashew cultivation can lead to a socio-economic development.

6.1 Perception of Poverty and Social Mobility

As poverty is a multidimensional, relative concept with a variety of indicators including levels of consumption, social markers, and indicators of socio and political vulnerability, successful poverty reduction depends on understanding these dimensions through inviting those who - by economic standards - might be perceived as being poor to actively participate in defining a poverty line. Moreover, the relevance of direct questioning on subjective aspects of life is more and more recognized. The OECD Guidelines on Measuring Subjective Well- Being states: "Subjective well-being measures are, however, unique in that they provide a relatively robust empirical source of information on what affects how people feel about their lives, which is an important component of overall well-being. By examining the level of subjective well-being actually achieved as a result of different decisions or approaches, policy-makers and individuals can better understand what matters to people on an empirical (rather than anecdotal) level. For example, subjective measures can be used to test more specific hypotheses about what aspects of policy are most important to people."⁴⁰

The assessment and monitoring of well-being is also the major focus in the broader field of Quality of Life Research⁴¹. Beyond the construction and application of indicators for social monitoring and reporting, Quality of Life Research is also concerned with more general problems of welfare measurement, conceptual considerations and the analysis and explanation of interrelations between the 'objective' and 'subjective' components and dimensions of the complex phenomenon of quality of life. This concept goes beyond the limits of "having" by encompassing the "doing" and "being".⁴²

⁴⁰ OECD (2013), OECD Guidelines on Measuring Subjective Well-being, OECD Publishing. <http://dx.doi.org/10.1787/9789264191655-en>

⁴¹ Noll: Social Indicators and Quality of Life Research: Background, Achievements and current Trends.

⁴² Ibid., p. 11

In the conducted focus group discussions, during this study, a broad range of different connotations and variety of different characteristics attributed to each of the given socio-economic statuses⁴³ was observed. The variety of contributions is summarized in Table 3⁴⁴.

Table 3 Characteristics and Multi-Dimensionality of Socio-Economic Structures

Very poor	Poor/ less poor	Wealthy	Rich/ very rich
<ul style="list-style-type: none"> • not able to provide regular meals for the own family • recognizable as poor by his clothes (no/ tattered clothes) and body hygiene • does not own land, gets income from begging/ hawking • depends on other people but has no family support/ no family • can't send own children to school • lives in extreme poverty due to either external causes (sickness/ 	<ul style="list-style-type: none"> • struggles to provide (quality) food but has just enough to live on/ is self-sufficient • has small amounts of land but struggles with poor soils and bad inputs and/ or works as hired laborer • works very hard but yields no profit • lacks management skills and knowledge as well as access to profitable markets • has no safety net and is vulnerable to economic shocks (harvest loss/ health problems) 	<ul style="list-style-type: none"> • eats regular meals and a balanced diet • can afford primary and higher education for own children • hires labor to work on own farm where different crops are cultivated • is a good manager who can afford quality farm inputs and agrochemicals • is self-sufficient and owns a house and may own a bicycle or motorcycle • is respected and a public figure in the community 	<ul style="list-style-type: none"> • eats a balanced diet • can afford primary and higher education for own children • has a large farm and easy access to land but probably does not personally farm • has more than one house, owns cars and lives a luxurious life • lives in a block house with zinc roofing (Northern Region)

To complement the information obtained on the characteristics of poverty, respondents were requested to identify the causes of poverty and activities undertaken by them to generate wealth.

The responses revealed that in Brong Ahafo, diversification into non-agricultural activities took place, including owners of small grocery shops, small-scale trade, whereas in the Northern region a significant number of non-agricultural activities mentioned ranged from “pito” local beer brewing, selling of “kose” locally fried bean balls, as well as burning and selling of charcoal. Other agricultural activities were: animal husbandry, keeping of birds and small ruminants, livestock, including cattle,

⁴³ Women in BA tend to attribute a rather economic connotation defining the different social status. However, as they represented only about ca.10% of all participants, it is too small a number to proof a trend.

⁴⁴ Examples compiled from the most frequent answers. The building structure in the Northern Region differs from Brong Ahafo and the responses indicate a high correlation between building structure and perceived social status.

donkeys and pigs. In Brong Ahafo mismanagement of financial assets and lack of knowledge in regard to cultivation was mentioned several times as a cause of poverty. In the Northern Region, external circumstances seem to factor more like lack of customers/ markets, sickness, lack of capital. The poor are also described as hardworking; whereas, the perception of being poor appears more negative in Brong Ahafo, as possibilities for growth are not apparent.

All answers were embedded in the immediate social and cultural environment where participants live and interact. Besides attributes pointing to economic and social development, numerous statements, point to character/ behavior. Whilst the most dominant description for very poor people is mainly negative (lazy, wasteful, lack of vision, does not listen to advice) indicating their economic situation as self-inflicted, poor and less poor people were described as hardworking though yielding no profit (negative attributes like lazy, wasteful, ignorant were mentioned by few).

It was noted that none of the respondents mentioned a certain monetary income to describe poverty or wealth. They rather referred to certain assets that could be afforded (for example housing, food, labor, land, education). Nevertheless, the descriptions of poverty differentiated “very poor” and “poor” based on the ability to cover basic needs. Therefore, it can be argued that the category of very poor correlates with the international perception of extreme poverty, whereas “poor”/“less poor” refers to what is internationally described as “poverty”.

It appears, that the social condition of “very poor” is less influenced by skills/ knowledge but rather a static condition caused by unforeseen circumstances such as illness/ disability/ accidents, and personal incapacity/ unwillingness to engage, voiced as laziness⁴⁵/ lethargy.

These findings are consistent with the conclusion of, Korsi Ashong and Rider Smith (2001) in “Livelihoods of the poor in Ghana” that: Within the specific context of Ghana, the most vulnerable to external shocks are the rural poor, who rely heavily upon natural resource asset base, and are thus susceptible to environmental events, whether one-off, seasonal or part of long-term trend.⁴⁶

Agricultural activities were not mentioned in the definition of the “very poor” (one exception: “crop failure”), only begging and hawking are cited as income-earning activities. Furthermore, those who are referred to as “very poor” have neither land nor property, but work as hired labor on other fields. People who are perceived as “very poor” seem to be excluded from agricultural earnings. This is all the more remarkable because some respondents who describe themselves as farmers and also generate income from farm activities placed themselves in the category “very poor”. Economic shocks (harvest loss, health problems, bush fire) are only mentioned in the categories “very poor” and “poor/ less poor” which shows their vulnerability to risks. This may correlate with the absence of a safety net which is also attributed to these two categories.



Figure 6 Cashew Farmer, Wenchi

⁴⁵ Surprisingly, in all seven focus groups in Brong Ahafo, regardless of gender and age, “lazy” was an attribute to “very poor” and still four times to “poor”. By comparison, in the Northern Region, out of eight focus groups, only both groups of older men in Jama in Blema mentioned “lazy” in regard to “very poor”, and the younger men in Blema interlinked “lazy” and “poor”.

⁴⁶ Korsi Ashong and David Rider Smith (2001) Livelihoods of the poor in Ghana

Although respondents perceived the state of being “poor/ less poor” as being influenced by factors such as unfertile land/ poor soils/ bad inputs, the personally attributed lack of management skills/ knowledge seems to be a major factor (mentioned 8 times in the discussions). While people perceived as “poor/ less poor” may experience food shortages, they are described as having “just enough to live on” and in multiple instances as “self-sufficient”. Unlike the very poor, possibilities for growth are indicated for poor/ less poor (Slow improvement in farming activities, reinvestment, steady growth).

The category “wealthy” was associated with positive connotations stressing status and respect in the community (“good public speaker”, “chairman in church”, “has a lot of people around him”, “does not depend on people”, “easily gains property and succeeds”, “gets hired labor earlier than others”). Being “rich/ very rich” is mainly defined by the possession of material goods (“they have good houses”, “they have a number of cars”, “they use machines on their farms”, “buy agrochemicals in large quantity”). Someone who is considered rich or very rich is not perceived as a full time farmer but rather a manager/entrepreneur who hires workers/ employees and undertakes other investments (stores, small transport business) in addition to farming. Although a luxurious and abundant life with negative characteristics (“selfish”, “wicked”,) is sometimes attributed to rich/ very rich people, these descriptions in general mostly related to quality/quantity as perceived in the particular social environment (“quality education”, “hardworking”, “assists others in the community”). Access to land and possession of land as an indicator of poverty seem not to be as important in the Northern Region as it is in Brong Ahafo.

6.2 Climbing the Socio-Economic Ladder

All respondents were invited to review their personal agro-economic histories during the last 20 years with a particular attention given to the question: Has starting or increasing cashew cultivation led to socio-economic development⁴⁷? Is it perceived as being the main cause of a change in the socio-economic status?

Out of 74 respondents who were open to positioning themselves within the socio-economic ladder in Brong Ahafo, 11% seven women (all in Wenchi) and one older man (+60) in Sampa) defined themselves as having been “very poor” when they started farming, 8% (6 men in Sampa) regarded themselves as being “very poor” despite cashew production. It is important to note the apparent contradiction in what was commonly agreed as defining “very poor” and the selection of attributes describing their own situation (for example nobody perceived him- or herself as having been “lazy”).

The overall movement is very significant: In Brong Ahafo, 61% of respondents regarded themselves at present as wealthy or rich (46% in Jaman North and 63% in Wenchi) moving up at least one step, however the younger men, in Wenchi and Sampa move faster (in Sampa, four men moved from “very poor” when they started with cashew production to “wealthy” at present. In Wenchi, nine

⁴⁷ Though the term development usually refers to economic progress, it applies throughout this study to social progress as well, as changes in less-tangible factors, such as reputation, are also considered (e.g. “has a lot of people around him” or “often chairman in church”). Shift or changes in the meaning of “development” over time have impacted on the definition of poverty and how it is measured.

men started from “less poor” when they started with cashew production to now “rich”). An indicator that proves the assertion made by respondents reflected in the high percentage of house owners, and those who have improved their living conditions through additional income from cashew. Only 4% still find themselves as being “very poor” (2 women and 1 man in Wenchi), attributing their status to bushfires or low harvest due to the use of poor planting materials or a combination of both. These answers confirmed the finding of the Poverty Impact Assessment Study Ghana, that the main risk for cashew producers remains uncontrolled bush fires which destroy the cashew trees.⁴⁸

Because of the bigger group sizes in Jama and especially in Blema, respondents in some focus groups were hesitant to disclose their socio-economic development. In some cases, it became apparent that the openly stated position does not always reflect the reality. This is best illustrated by one woman disclosing in the individual interview, that she perceived herself presently being at a higher status than publicly indicated. Her reason for this difference in perceived status was: not to provoke envy by other members of the group. Also, in Jama, the younger women group discussed this topic but abstained from visualization. This behavior has been described by the socio- psychological concept of social desirability as a “need for social approval and acceptance and the belief that this can be attained through culturally acceptable and appropriate behaviors”.⁴⁹

With a few exceptions, respondents, climbing up the social ladder go step-by-step. An overwhelmingly majority expressed the desire to become either rich or very rich in the future. Other business engagements like owning a provision store or gainful employment (teacher) were major factors for faster movement along the socio- economic ladder.

In all focus group discussions, participants identified factors that were responsible for escaping from poverty and movement to the next step of the socio-economic ladder. These successes were mainly attributed to: diversification of income; access to land; and adoption of good agricultural practices (GAP). Other factors identified by farmers include intercropping or dedicating extra land to food crops to contribute to sustainable income or a combination of these two. These identified factors were important to farmers because in some cases, income resulting from selling food crops was higher than income from cashew. None of the respondents indicated hints to socio-cultural exclusion and inequality of those who move slower or are left behind.

⁴⁸ As such already stated in the Poverty Impact Assessment Case Study (ACi 2010).

⁴⁹ Marlowe, D. & Crowne, DP. Social. Desirability and Response to Perceived Situational Demand. *Journal of Consulting Psychology*, 1961,25, page 109

Figures 7 and 8 indicate the self-assessed socio-economic situation differentiated by age and gender of the farmers related to the chronology of agricultural activities. Each line in the graphs represents the situation of an individual farmer. The dashed lines serve as fill-in for missing information about the socio-economic situation in regard to the question of the socio-economic situation at the beginning of cashew production activities.

Figure 8 Movements on Socio- Economic Ladder in the Northern Region

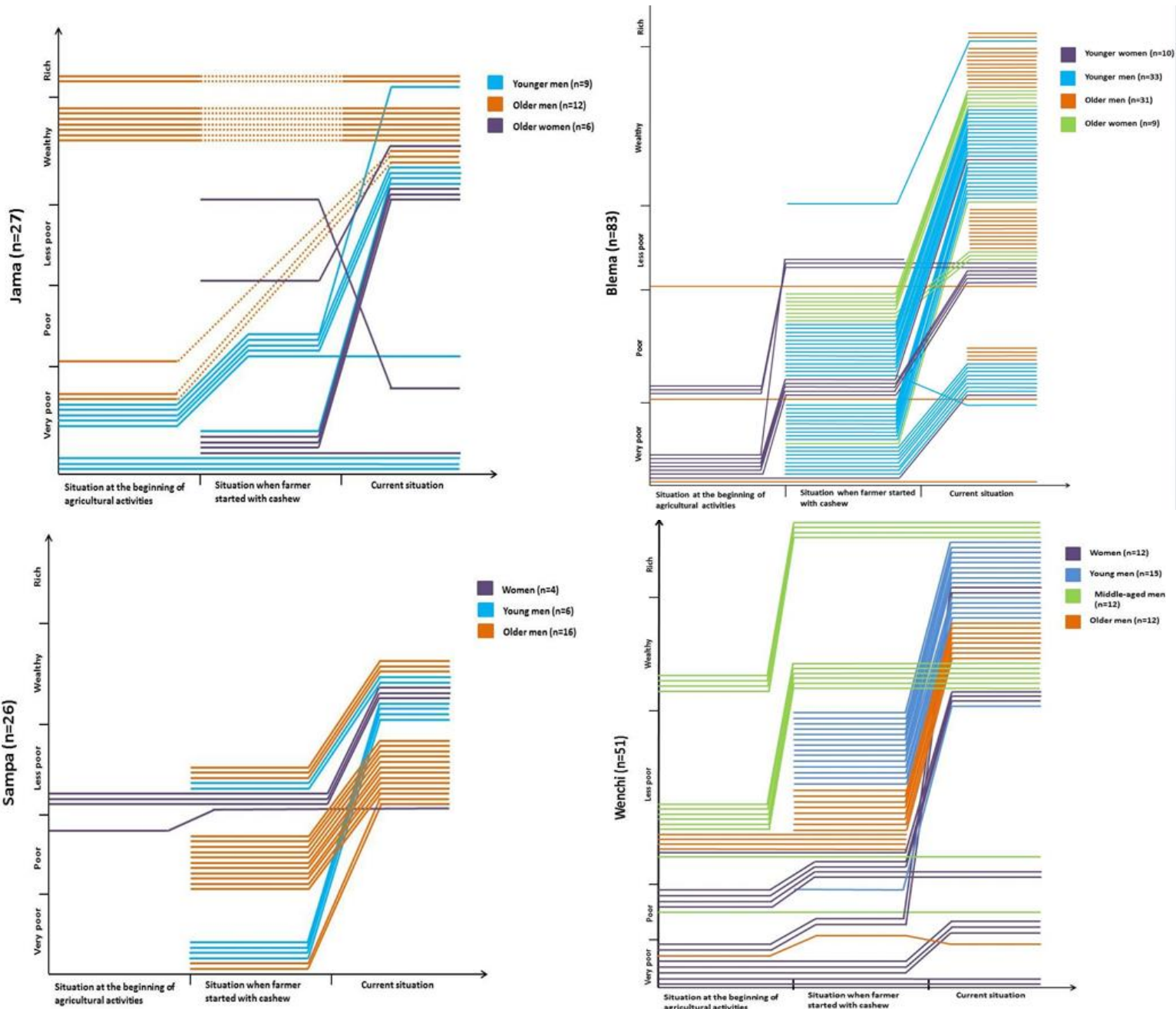


Figure 7 Movements on Socio- Economic Ladder in Brong Ahafo

The graphs show a clear upward mobility for most of the groups. From the definitions which were earlier discussed within the group the most considerable shift appears to be from “poor/ less poor” to “wealthy” – it is almost a paradigm shift from negative to positive attributes as summarized in Figure 9. Thus, the cultivation of cashew is considered a vehicle to escape poverty.

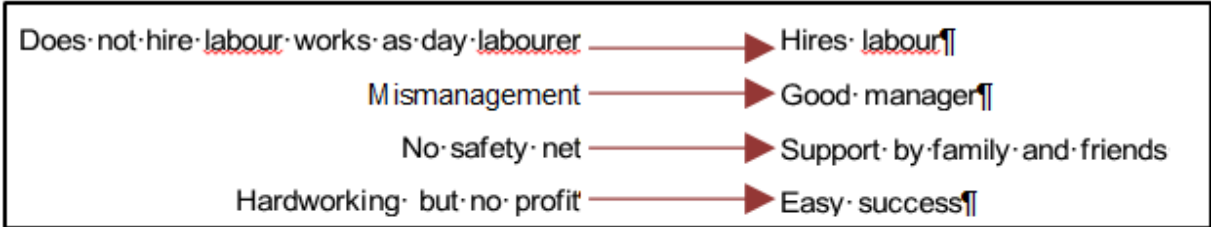


Figure 9 Paradigm Shift of Attributes

In Sampa and Wenchi, 61%⁵⁰ of the respondents disclosed that they had managed to cross the “poverty line”, positioned themselves as either being “wealthy” or “rich”, and the most movements were observed between the categories “less poor” and “wealthy”. As illustrated in Figure 10, this trend also confirms ACi observation of farmers’ increased income⁵¹ due to cashew cultivation.

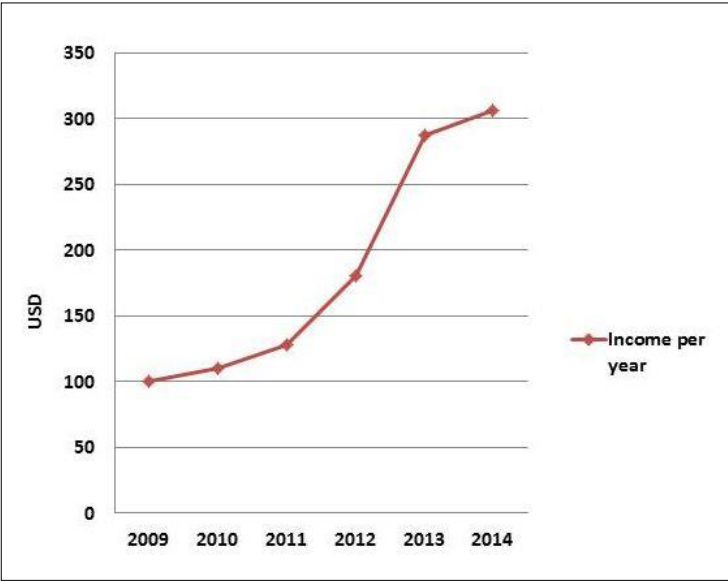


Figure 10 Development of Income per Year

⁵⁰ 46% in Jaman North and 63% in Wenchi

⁵¹ ACi has developed a “Vision of Success model”. The model does not take into account variations in cashew price volatility. According to this model the income base-line for Ghanaian cashew farmers in 2009 was USD 100. The yield survey 2014 showed (by sample) an income increment for ACi trained farmers by USD 205,88 amounting to USD 305,88.

6.3 Distribution of Wealth

The overall perception gained in all focus groups indicates that cashew cultivation becomes more and more economically attractive, leading wherever possible, to expansion of cashew farms holdings and more intensive care of cashew plantations. As a result, cashew farmers employ more laborers – on a daily, monthly or yearly basis. There are different dimensions to labor activities in the selected communities within the same region.

In Jama and Blema in the Northern Region, two different payment systems were operated as follows: either a laborer earned between 5-14GHC, including food (approx. 2- 5GHC) for 6-hours of work on the farm. Or a laborer was paid by the acre and different assignments with a high variation in payment: 1 acre = 60 – 100GHC for land clearing - 120GHC.

In Sampa and Wenchi in the Brong Ahafo Region, farmers hired their laborers on a daily basis, and farmers worked along with them. Here, mostly a kind of an accord principle was used: laborers collected raw cashew nuts (RCN) into a pan and received 4GHC per pan or basket. It was not uncommon to compensate in cashew, meaning that whatever the laborer collected, one quarter of the harvested RCN would be his wage. In addition, food for laborers was also provided in Sampa.

Whereas in the Northern Region all daily engaged laborers originated from the same community as the employer, laborers in Brong Ahafo were partly seasonal migrants from the North and were selected based on recommendation of other farmers. Their tasks included spraying cashew trees with agro-chemicals, harvesting, and weeding. The laborers were usually paid in cash immediately after completing their work.

In Blema, older men narrated that they sometimes practice “noboam”, loosely translated as “help to weed”. In other words, farmers get together and help each other to weed their farms. In this case, there is no payment, only provision of food and pito (local alcoholic drink).

Cashew farmer’s testimonies regarding engagement of daily labor supported the assumption that more people are being gainfully employed due to expansion and increased cashew cultivation. Thus, an increased income derived from cashew farming has led to expansion of cashew farms. This has contributed to employment of unskilled workers and migrants.

7. Cash Crop versus Food Crop?

Land ownership is a significant factor in efforts to reduce poverty and move up the socio-economic ladder. Land in Ghana is held from various stool/skin lands, families or clans, which are the allodial owners. These lands are known as customary lands, which cover 80% of land in Ghana according to Appiah⁵². There are also public lands, forming the remaining 20%, which are made up of state lands and vested lands. State lands mean that the state holds this area by acquisition from traditional allodial owners.

7.1 Access to Arable Land

The situation of land availability notably varies between the Northern Region and Brong Ahafo. Within Brong Ahafo, land availability for farming significantly differs between districts. The differences in land availability were confirmed by statements of respondents in all four communities. While in Bole and in Sawla-Tuna-Kalba Districts land is available for “everybody who wants to come and cultivate” as “the size of your farmland depends on your strength and ability to farm” (Woman, Jama) the situation in Brong Ahafo is different.

In Sampa, land availability has changed over time as shown by the following statement:

“Twenty years ago, any land you weed becomes yours but now you can have access to only family land. Outsiders, without family land become tenants” (Man, Sampa).

Sampa, or those communities where respondents in this study were domiciled in Jaman North Region, witnessed a tendency towards arable land scarcity especially for non-natives.

There seems to be “no virgin land for cashew” (Man, Sampa) meaning that only family land which is been passed on from the parent generation, is being cultivated. This statement is backed by a man in Sampa who said “there is easy access to land if the person is part of the family.”

In contrast to Sampa, the vast majority of the focus group participants in Wenchi stated that their

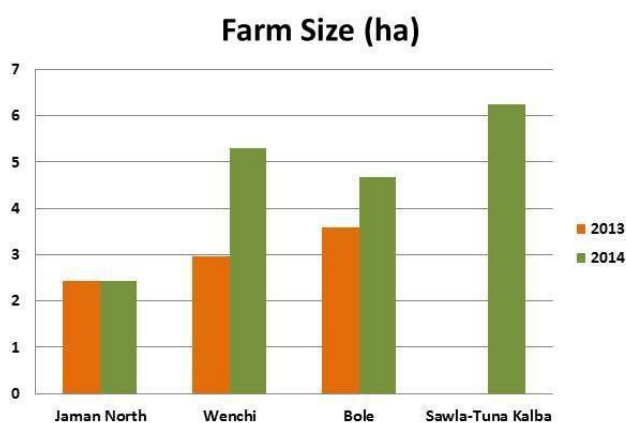


Figure 11 Sizes of Cashew Farm Lands

district does not experience scarcity of arable land. However, they also made a distinction between indigenes and foreigners:

“There is easy access to land by the indigenous” (Man, Wenchi). *“We have mainly family land”* (Man, Wenchi).

Yet the possibility to use agricultural land also exists for migrants coming to the region: an older man in Wenchi stated that migrants or urban settlers can hire or buy land legally with

⁵² Appiah 2011 - M. Appiah: *Land Disputes Resolution in Ghana- The Role of Customary Land Secretariats (CLS)*. Case of Gbawe Customary Land Secretariat.

documentation from chiefs and family heads.

According to the respondents, during this study, the ratio by which farmers cultivate food and cash crops depends on their individual priority in areas they want to focus their production. But there are restrictions based on the district's land law: The older men in Wenchi pointed out, that according to the Wenchi new land law, land bought with money can be used to plant cashew, but land leased can only be used to grow food crops (*the Abunu system*⁵³). This statement is unique and different from the statements by all other focus groups.

Differences in land availability are also reflected in the expansion of cashew farm size. While the average farm size in Jaman North has remained at 2,43ha in the past two years, farms in Wenchi are expanding from an average of 2,97ha in 2013 to 5,31ha in 2014. In Bole District the farm size has increased from 3,58ha to 4,67ha, whereas the average farm size in Sawla-Tuna-Kalba district was 6,24ha in 2014⁵⁴ (see Figure 12)

Respondents in Sampa stated that those who desired to start or expand their cashew farm, moved to "*neighboring communities to farm*" (Man, Sampa). An indication for this trend might be the distance between place of residence and farm, which has often been reported to be longer in Jaman North and Wenchi Municipal Districts compared to both Districts in the Northern Region.

The adoption of Good Agricultural Practices (GAP) appeared to be another significant factor contributing to increases in crop yields and income. In all focus groups respondents stressed the practice of GAP as the main reason for increases in cashew yields. Training in GAP practices conducted by ACi, included topics such as the GAP: clearing of land, spraying with weedicides, planting, pruning, weeding, fertilizer application, pest/insect control, harvesting, drying in shady areas. Farmers, who would like to intercrop for a longer period of time, are advised to plant grafted seedlings using a spacing 12m x 12m.

Introducing GAP training resulted in a change of mind set for many farmers and abandoning what was perceived as ancestral practice, trust in what was perceived as new and modern knowledge. When asked, most of the farmers confirmed that were not afraid at the beginning that they might lose financially if they try new agricultural practices. However, some voiced concern about applying new technologies. In Sampa, a farmer gave the example of how following the GAP advice and pruning by cutting cashew branches caused a problem with his wife, as she was thinking that he was destroying the farm – only when the results of improved yield were achieved, the peace restored.

The focus of GAP was on increases in cashew yields. Admittedly, yield increase is important for all farmers involved in cashew production, but gains even a higher significance for those, who experience land availability restrictions.

7.2 Land-Tenure Rights

The lack of clear land-tenure rights constrains the development of competitive agro- production and agro-business. There are two differences between a landowner and a tenant – the Abunu system and the Abusa system. The traditional system is oriented towards poverty reduction, as it secures

⁵³ Abunu system: a customary share contract agreement by which the harvest or the land are divided into two parts – for the landlord, one for the tenant. Abusa system: an older customary contract arrangement by which shares in either crop or land are divided into three parts. The tenant receives two-third of the crop in return for developing the whole land.

⁵⁴ ACi statistics. For the Sawla-Tuna-Kalba District only 2014 data.

rights to cultivate the land over an agreed period, and also provides access for those who would otherwise remain landless. Furthermore, according to customary law, by planting trees the farmer obtains the right to cultivate the land as long as the main crop is being harvested from trees. This traditional land tenure system was explained by the focus group participants as follows:

“Cashew trees on a piece of land are permanent. Even if the chief wants to take the land, he cannot take all. He has to leave a portion due to cashew trees on it. Growing cashew therefore serves as a form of security for land acquisition” (Younger Man, Jama)

“Cashew is used to claim lands, the bigger your cashew land, the bigger your property.” (Younger Man, Sampa).

During the interviews, respondents confirmed that it is unusual to hold a legal title proving land ownership. In some parts of the region, for instance in Sampa and also in Wenchi, due to tenuous situations regarding arable land availability, legally recorded property rights are not common. However, some respondents who took part in the individual interviews voiced their achievement or desire to acquire ownership title to their farms.

The construction of the Bui Dam in Jama community illustrates the significance of individual rights embedded into customary tradition. The Jama community is affected by the construction of the Bui Dam, situated on the Black Volta River. Because of this project, many farmers have been relocated, and lost their farm land. It is noteworthy, that compensation was only paid to those farmers with tree crops, whereas food crop farmers were ignored. This procedure indicates that in Northern Region the perception and social status of a tree crop farmer is more privileged compared to a purely food crop farmer.

7.3 Investment in Cashew Farming

Are cashew producers guided by the awareness that cash crops are possibly competing with food crops, which would consequently negatively impact on household food security?

To approach this question, farmers were asked when they started cashew farming and what they initially planted⁵⁵. During the focus group discussion, the focus of the farmers was on the commencement of cashew farming and its perceived impact on food crop farming.

Figure 12 presents the answers of respondents in different communities regarding the question of when they started cashew production. Although the number of farmers involved in the focus group discussions, was high, not all of the people present answered the question. Hence the difference in total number of answers (n=205) and total respondents (n=486). The main observations resulting from the discussions were:

- The number of farmers that started cashew production after the beginning of ACI project activities in 2009 is not higher than of those who started before. Yet there are regional differences which will be discussed below.

⁵⁵ In a focus group discussion, it cannot be expected that everybody gives her/his data and/or opinion, therefore the ascertained information does not reflect the total number of answers.

- The responses of female farmers in Sawla-Tuna Kalba indicated that women predominately started cashew production within the last 10 years.

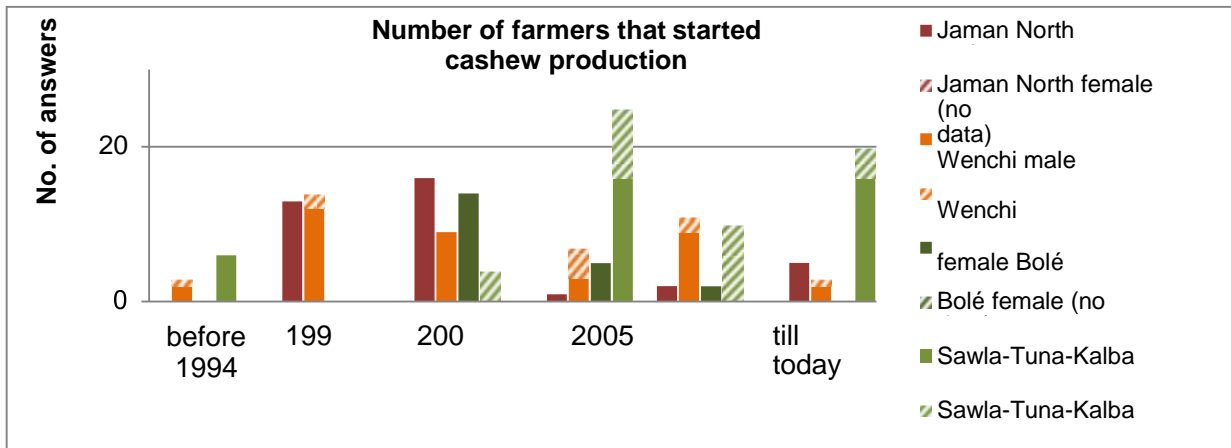


Figure 12 Numbers of Farmers that started Cashew Production

Figure 13 presents the cumulative responses compiled for the Brong Ahafo and Northern Region.

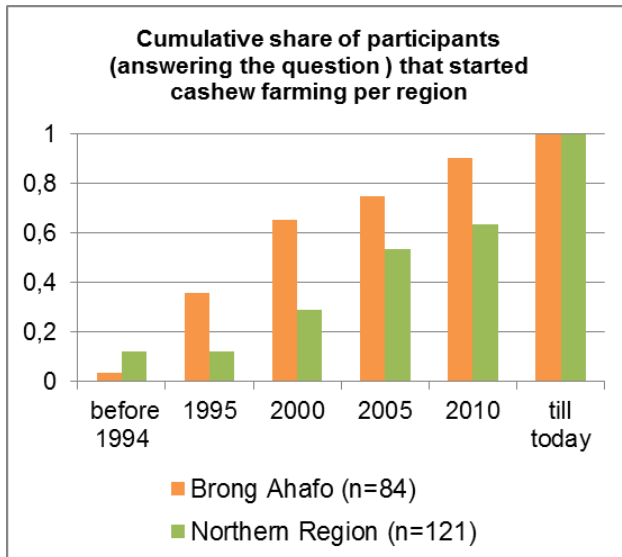


Figure 13 Starting with Cashew Farming

Whereas more than 60% of the respondents in Brong Ahafo indicated having started with cashew cultivation before the year 2000, nearly 40% of the Northern Region stated that they had only begun to produce cashew from 2010. This confirms the finding by ACi that Brong Ahafo is a more traditional region for cashew production, whereas the cultivation of cashew has only recently become important in the Northern Region.

A significant number of farmers in Brong Ahafo were engaged in cashew as well as cocoa farming, thus generating income from two different cash crops. The increase in the number of farmers that grow cashew only partially explains the total expansion of cashew production.

Most participants in both regions confirmed, that due to considerably high income, they extended their cashew production— either by allocating more land to cashew and/or carefully applying GAP.

Since all participants had stated that they were cultivating food crops prior to their engagement in cashew production, these findings are easily interpreted as a confirmation of the assumption that expansion of cashew production reduces the amount of food crops produced. Yet participants were asked why they had started cashew cultivation and whether this had led them to stop the cultivation of any food crops, the assumption was refuted.

7.4 Reasons for Continuous investment in Cashew Farming

All participants were asked why they engaged in cashew farming. Some typical responses are:

“Cashew can be harvested every year without going through the stress of planting. The harvesting period of cashew is unique and does not interfere with the harvesting of any other crop.” (Older Woman, Jama)

“Cashew is very helpful in the lean season and can withstand climate change.”
(Younger Man, Sampa)

In Wenchi, focus group participants discussed their experience with the cultivation of cocoa, when a sudden price decrease had severely impacted the food security of the community. Based on this experience they had learned to reserve land for food crops:

“The chief introduced the community to cashew cultivation in 1992 and reserved land for them based on the experience from the cocoa sector.” (Younger Man, Wenchi)

“He, who plants cashew, has a vision that in near future it would bring money.”
(Man, Sampa)

7.5 Diversity of Crop Production

As investment in cashew cultivation proves to be lucrative, what is happening to those food crops which form the backbone of diets? Do rural populations practicing mostly subsistence farming have sufficient foods for their households?

Many farmers were cultivating food crops and only added cashew at a later stage. The addition of cashew has contributed to moving up the social ladder, but what are the effects upon comestible goods?

In all communities and all focus groups farmers stated that they did not stop planting food crops when they started cultivating cashew.

When participants were asked about the main food crops they cultivated, they named a variety of vegetables, cash crop trees, including cocoa as well as livestock farming.

Focus group participants in Sampa cultivate: yam, onion, pepper, cocoyam, plantain, yam, garden eggs, cassava, maize, beans/peas, and sorghum. It appears that a significant percentage of cashew farmers also cultivate cocoa, mostly in Ghana’s Western Region. They also grow oil palms, groundnuts, teak, and to a lesser extent: calabash and coffee.

In Wenchi the variety of food crops cultivated consisted of: cocoa, yam, maize, cassava, okra, onion, tomatoes, beans, plantain, groundnuts, orange, cowpea, cocoyam, millet, sorghum, pepper, cocoyam, sweet potatoes, banana, pear⁵⁶, plantain. And also: tobacco, cotton, teak, cocoa, sugar cane, tiger nuts, orange, mango, and cola nuts. The ownership of livestock and poultry is also a source of income in Wenchi.

In Jama and Blema in the Bole District, the variety of food crop differs slightly due to climatic conditions. Cashew farmers also cultivate agushi, groundnuts, cassava, yam, maize, sorghum, cowpeas, tomato, pepper, okra, millet, beans, Bambara beans, garden eggs, soy, rice, sweet potatoes, mango, soya beans, aerial yam, shea nuts. Teak and oil palm were also cultivated.

One result from all focus groups discussions is that even as allocation of farm land for cashew cultivation is increasing, growing food crops remains an important activity for all respondents. The

⁵⁶ “Pear” most likely points to “avocado” as that is the common name in Ghana for this vegetable.

issue of the interplay between cashew farming and food security was discussed at length in the younger men's group in Sampa. Here, farmers elaborated on the incidences they faced when, at the time of the cocoa boom, high investment in cocoa was sometimes at the expense of food crops farming. Some of them recalled, that even with the revenue gained from selling cocoa, they found it difficult to provide their families with enough food throughout the year. This was due to the compounding effects of increased food prices as well as large distances to the markets. As these experiences are still fresh in their memory, they considered measures that would secure a certain level of food crop production when starting or intensifying cashew cultivation.

"Food crops are for the whole year. Cashew is just for a period of time." (Man, Wenchi)

Most focus group participants, independent of their origin, stated that they intercropped cashew with food crops. Only in Jama, where access to arable land is not an issue, respondents said that more often cashew and food crops are cultivated on separate plots.

Most respondents in Sampa said that they intercropped cashew with yellow yam (plantain, pepper, okra, cocoyam,



Figure 14 Participants in the young men group discussion, Wenchi

tomatoes, maize, cassava and groundnuts. This is likely influenced by the land scarcity in the region. As stated by According to one female focus group participant:

"We do not want wasting of land, and get different food stuff" (Woman, Sampa).

In Wenchi, farmers favored intercropping because adopting this method provided them with sufficient food and it *"reduces costs of labor"* (Man, Wenchi). The commonly grown foods intercropped with cashew trees were: cassava, yam, okra, maize, cocoyam, beans, tomatoes, garden eggs, pepper, and plantain.

However, some farmers thought that cassava and beans were not suitable for intercropping as these crops were affected by diseases which could potentially be transferred to cashew trees. A farmer in Wenchi shared his experiences of high crop yields obtained by intercropping with ginger, and highly recommended it. The children of the Wenchi farmers also confirmed the practice of intercropping on their parents' farms.

In Jama, community farmers stated that they had good experiences with growing black pepper, cocoyam and ginger under the closed cashew canopy. In Blema, women intercropped the cashew with beans, yam, groundnuts, soya beans, sorghum, maize, millet, pepper, and tomatoes for the first three years, before the canopy closes. Some reasons given for intercropping: were (i) *"Intercropping fixes nitrogen into soil e.g. groundnuts and cowpeas"* (Man, Blema) and (ii) the *"Ability to get both food crops and cash crops from the same piece of land"* (Man, Blema).

Once the cashew canopy closes it becomes difficult to intercrop – the implications and challenges thereafter differ in Sampa, as well as in Wenchi District compared to Bole and Sawla-Tuna-Kalba Districts due to issues of land availability.

In Sampa, farmers are aware, that *"using all the land to plant cashew can have a negative effect on*

food crop production but if we observe GAP training well especially, spacing, pruning and clearing our farms as ACi and MoFA trains us, we will be able to intercrop our cashew farms with our traditional food crops to avoid low or no production of these crops.” (Woman, Sampa)

Farmers in Sampa apply intercropping as long as the cashew tree canopy does not close and food crop production is profitable, but also *“use patches of land for planting food crop” (Man, Sampa)* or *“reserve land for other crop” (Younger Man, Sampa)*. In Sampa, there seemed to be a trend of moving from cocoa towards cashew, or, when continuing cultivating both cash crops, putting more emphasize upon cashew. *“I stopped planting cocoa because the land is no longer good for it.” (Man, Sampa)* – an indicator, that while investing in cash crop remains highly important for farmers in Sampa District, they are carefully observing the external factors, e.g. climate change and allocate their land to the economically most promising crop.

In Wenchi, land scarcity is not as pressing as in Sampa District, as farmers have more land at their disposal. As already mentioned, the allocation of new land for food crop cultivation is not an issue in Bole District, *“The size of your farmland depends on your strength and ability to farm” (Woman, Jama)*.

Responses from the focus group interviews regarding cash and food crops are presented in tables 4 and 5. The respective number of farmers is indicated as n.

Table 4 Food Crop / Cash Crop Cultivation in Brong Ahafo

		Food crop / Cash crop					Source of income	Use of income		
		Food crops	Cash crops/ livestock	Food crops for sale	Intercropping	Stopped cultivating				
Brong Ahafo (n=77)	Wenchi (n=51)	Women (n=12)	<ul style="list-style-type: none"> • Yam • Maize • Cassava • Okro • Onion 	<ul style="list-style-type: none"> • Tomato • Beans • Plantain • Groundnut • Orange 	<ul style="list-style-type: none"> • Cocoa • Cashew • Orange 	<ul style="list-style-type: none"> • Yam • Vegetables • Maize • Cassava 	<ul style="list-style-type: none"> • Yam • Cassava • Cocoyam • Vegetables 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • School fees • Health care • Investments in farm • Chop money • Living expenses 	
		Young men (n=15)	<ul style="list-style-type: none"> • Tomato • Cassava • Yam • Maize • Cowpea • Okro 		<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Maize • Vegetables • Groundnut • Cassava 	<ul style="list-style-type: none"> • Cassava • Yam • Okro • Maize 		<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • Motorbikes • School fees • Buildings • Farm maintenance • Funeral donations • Hospital fees • Alcohol • Chop money
		Middle-aged men (n=12)	<ul style="list-style-type: none"> • Yam • Maize • Cassava • Groundnut • Beans • Millet • Sorghum • Tomato • Okro • Cola 	<ul style="list-style-type: none"> • Pepper • Plantain • Cocoyam • Sweet Potato • Taro • Banana • Pear • Oil Palm • Sugar Cane 	<ul style="list-style-type: none"> • Tobacco • Teak • Cocoa • Cashew • Beekeeping • Poultry 	<ul style="list-style-type: none"> • Mango • Maize • Cassava • Yam 	<ul style="list-style-type: none"> • Pineapple • Ginger • Cocoa 		<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Livestock • Beekeeping 	
		Older men (n=12)	<ul style="list-style-type: none"> • Sorghum • Maize • Millet • Yam • Cassava • Cocoyam • Plantain • Tigernut • Vegetables 	<ul style="list-style-type: none"> • Pineapple 	<ul style="list-style-type: none"> • Cashew • Livestock • Poultry 	<ul style="list-style-type: none"> • Yam • Maize • Beans • Groundnut • Pepper • Cassava • Plantain 	<ul style="list-style-type: none"> • Yam • Maize • Beans • Groundnut 		<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Livestock/Poultry 	<ul style="list-style-type: none"> • School fees • Building materials • Support of family • Housekeeping • Bank savings • Purchase of motorbike • Funeral donations • Festive clothes • To eat well
	Sampa (n=26)	Women (n=4)	<ul style="list-style-type: none"> • Yam • Onion • Pepper • Mango • Groundnut 		<ul style="list-style-type: none"> • Cocoa • Cashew 	<ul style="list-style-type: none"> • Yam • Groundnut • Onion • Pepper 	<ul style="list-style-type: none"> • Yam • Yellow Yam • Groundnut 	<ul style="list-style-type: none"> • Mango • Cocoa 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Petty trading • Selling Kenkey • Selling Charcoal 	<ul style="list-style-type: none"> • School fees • Funeral expenses • Housekeeping • Basic needs • Hired labour
		Young men (n=6)	<ul style="list-style-type: none"> • Cassava • Yam • Maize • Oil palm • Cocoyam • Plantain • Garden egg • Groundnut 	<ul style="list-style-type: none"> • Bean • Sorghum 	<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Maize • Cassava • Yam • Plantain • Pepper 	<ul style="list-style-type: none"> • Cassava • Yam • Maize 	<ul style="list-style-type: none"> • Groundnut • Bean/Pea • Cereal • Sorghum 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • School fees • Building • Farm maintenance • Funeral donations • Chop money • Savings • Soft loans to other farmers • Hired labour
		Older men (n=16)	<ul style="list-style-type: none"> • Maize • Yam • Cassava • Cocoyam • Plantain • Vegetables • Calabash • Groundnut 		<ul style="list-style-type: none"> • Cashew • Livestock • Coffee • Teak 	<ul style="list-style-type: none"> • Yam • Maize • Groundnut • Pepper • Cassava • Okro 	<ul style="list-style-type: none"> • Yellow Yam • Maize • Groundnut • Pepper • Cassava • Okro • Livestock (grazing between plants) 	<ul style="list-style-type: none"> • Cocoa • Calabash 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • School fees • Building house • Funeral expenses • Other farming

Table 5 Food crop / Cash crop cultivation in the Northern Region

Northern Region (n=119)		Jama (n=36)		Blema (n=83)						
Northern Region (n=119)	Jama (n=36)	Young men (n=7)	<ul style="list-style-type: none"> • Agushi • Yam • Sorghum • Cassava • Maize • Cowpea 	<ul style="list-style-type: none"> • Tomato • Okro • Pepper 	<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Agushi • Groundnut • Cassava • Livestock 	<ul style="list-style-type: none"> • Sorghum • Yam • Groundnut • Cowpea 	<ul style="list-style-type: none"> • Calabash • Cotton • Aerial yam • Millet 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Livestock 	<ul style="list-style-type: none"> • School fees • Hired labour • Medical bills • Building materials • Paying utilities
		Middle-aged & young women (n=11)	<ul style="list-style-type: none"> • Yam • Cassava • Maize • Bean • Cowpea • Bambara bean 		<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Groundnut • Bean • Agushi • Cassava • Millet • Sorghum • Maize 		<ul style="list-style-type: none"> • petty trading • Working as hired labourer • Selling of food crops • Selling of cash crops • Fishing/trade in fishing 	<ul style="list-style-type: none"> • School fees • Reinvesting in farm • Renovation of buildings • Housekeeping • Savings 	
		Older men (n=12)	<ul style="list-style-type: none"> • Maize • Yam • Cassava • Sorghum • Agushi • Bambara bean • Cowpea • Groundnut 		<ul style="list-style-type: none"> • Cashew • Teak 	<ul style="list-style-type: none"> • Cassava • Groundnut • Yam 		<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Processing Cassava (Gari, Kokonte) 	<ul style="list-style-type: none"> • School fees • Reinvesting in farm • Support household 	
		Older women (n=6)	<ul style="list-style-type: none"> • Cashew • Yam • Tomato • Pepper • Cassava • Maize • Groundnut • Agushi 		<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Yam • Maize • Pepper • Sorghum 	<ul style="list-style-type: none"> • Yam • Maize • Agushi • Teak 	<ul style="list-style-type: none"> • Sorghum 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • School fees • Funeral donations • Loans or advanced payments for labourers • Agro-chemicals (weedicides, herbicides) • Reinvesting in the farm • Clothing
	Blema (n=83)	Young men (n=33)	<ul style="list-style-type: none"> • Yam • Sorghum • Maize • Groundnut • Pepper • Rice • Oil palm • Bambara bean • Millet 		<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Groundnut • Sorghum • Oil palm • Rice • Bambara bean • Millet • Yam 	<ul style="list-style-type: none"> • Sorghum • Yam • Cowpea • Maize • Soy 	<ul style="list-style-type: none"> • Cotton • Thorny potato • Red bambara bean • Tigernut 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • School fees • Bills • Building block houses • Clothing • Pay labourers • Social gatherings (weddings, funerals) • Expansion of farm • Agro-chemicals (pesticides, weedicides)
		young women (n=10)	<ul style="list-style-type: none"> • Yam • Cassava • Maize • Bean • Sorghum • Millet • Tomato • Okro • Pepper 	<ul style="list-style-type: none"> • Rice • Soy • Garden egg 	<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Yam • Pepper • Tomato • Maize • Sorghum • Rice • Groundnut • Bean • Garden egg 	<ul style="list-style-type: none"> • Groundnut • Bean • Millet • Sorghum • Maize • Soy • Yam 		<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Shea nut picking • Selling of Charcoal 	<ul style="list-style-type: none"> • School fees • Farm inputs (e.g. fertilizer) • Clothing • Food • Funeral donations • Hair
		Older men (n=30)	<ul style="list-style-type: none"> • Maize • Yam • Cassava • Sorghum • Groundnut • Agushi • Oil palm • Bambara bean 	<ul style="list-style-type: none"> • Rice • Pepper • Tomato • Sweet Potato • Mango • Millet 	<ul style="list-style-type: none"> • Cashew 	<ul style="list-style-type: none"> • Groundnut • Yam • Rice • Bambara bean • Agushi • Pepper • Plantain 		<ul style="list-style-type: none"> • Yam • Sponge • Lentils 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops 	<ul style="list-style-type: none"> • School fees • Building houses • Maintaining houses • Purchase of motorbike • Finance farm • Savings for a car • Housekeeping
		Older women (n=10)	<ul style="list-style-type: none"> • Yam • Millet • Bambara bean • Rice • Agushi • Maize • Groundnut • Soy • Shea nut 		<ul style="list-style-type: none"> • Cashew • Teak 	<ul style="list-style-type: none"> • Yam • Maize • Pepper • Sorghum • Groundnut • Agushi • Soy 	<ul style="list-style-type: none"> • Yam • Maize • Agushi • Teak • Groundnut • Millet • Beans • Shea nut 	<ul style="list-style-type: none"> • Sorghum 	<ul style="list-style-type: none"> • Selling of food crops • Selling of cash crops • Petty trading • Shea butter processing 	<ul style="list-style-type: none"> • School fees • Funeral donations • Festive clothing • Clothes to wear at night (to please the husband) • Food • Housekeeping • Drugs • Building house

7.6 Source and Distribution of Income

As shown in table 6, sources of income in the two study regions are very scarce or non-existent between June and September, with a peak in June-July. In the male focus group in Wenchi some respondents stated that, by highly diversifying their means of income, they had assured income resources throughout the year. This particular group had a strong Farmer Union (or Farmer Based

Organisation, FBO) which is an indication that Corporate Associations tend to work as an important vehicle to include poor farmers, share knowledge among members and gradually develop a corporate identity contributing to a collective self-confidence as agro-business men.

Table 6 Source of Income

			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Brong-Ahafo	Wenchi	Women	Cashew				No			Cocoa				
		Younger men	Cashew				No income			Food crops				
		Middle-aged	Low	Cashew				Most				Low		
		Old men	Cashew				No income			Food				
	Sampa	Women	Cashew				No income			Food crops				
		Younger men	Cashew				No income			Cocoa				
		Older men	Cashew				No income			Livestock/Poultry				
Northern region	Jama	Younger men	Cashew				No income			Low income		White		
		Younger women	River	Cashew				Low income		No	Food			
			Petty Trading							River Fishing/Trading				
		Older men	Cashew				Low income			Groundnuts				
			Processing Cassava							Yam				
		Older women	Cashew				No			Low income				
	Blem	Younger men	Cashew				No income			Cowpea				
		Younger women	Cashew				Shea Nut Picking			Low income		Sorghum		
			Burning & Selling											
		Older men	Cashew				Yam			Food				
		Older women	Cashew				Low income			Petty Trading				
			Groundnuts							Shea Butter				
	Pito Brewing							Processing						
	Shea Nut Picking													
	Burning & Selling Charcoal													

All focus groups members had an income from cashew in the first half of the year. Phases with no or almost very low income are mainly from June to July. Often food crops are not only cultivated for home consumption, but also for economic reasons as “they make quick money” (Woman, Sampa). For some farmers, food crop remains the main source of income. Even in Jama North District, where there are cases of land shortages reported by focus group participants, crops such as cassava, yam, plantain, maize as well as pepper were cited as contributing to their family’s income. In Wenchi, the picture is broader, where a group of “agro-business men” stated that they generate income from the cultivation of a variety of food crops for home consumption. In Jama, selling of

egusi⁵⁷, groundnuts, cassava, sorghum, millet, yam, maize, and pepper contributed to family income as confirmed by respondents. In Blema, families' financial resources were derived through the sale of varieties of food crops, such as: sorghum, oil palm, groundnuts, rice, bambara beans, millet, yam, pepper, tomatoes, maize, garden eggs, egusi, plantain, and soya beans.

The food security issue was also addressed by focusing on the variety of food crops which is sold in the local market to contribute to general food availability as farmers were asked if there were any plants they stopped cultivating because of cashew.

Even as this was negated in general, in all focus groups, in some communities with land scarcity for instance, Sampa some farmers reduced the cultivation of food crops meant for sale, such as beans, peas, sorghum and only grew the quantity needed for their own family consumption. Farmers in all districts stopped cultivating calabash as there is no market for this product. In the Bole District, changes in weather conditions seem to have affected cultivation of millet and led to lower harvest. In Blema, farmers stopped growing thorny tomatoes, red bambara beans, tiger nuts, sponge, and lentils because their taste preference had changed or there was no market for these products. The increased income generated from cultivating cash crops eases the household's budget constraints and increases resource allocation to other purchases⁵⁸. Food crops, however, are serving as complementary income sources for a considerable period of the year.

Access to market does not seem to be a problem for cashew farmers as both regions have an over-demand than oversupply of cashew. However, from responses to questions at individual interviews, it appears that farmers who work in cooperatives have better access to markets with better bargaining power leading to higher income.

As the cashew market is prone to high price volatility, ACi introduced an information system on prices. Focus group discussion results showed that the majority of the participants observe price information at least for selling part of their cashew crop. The advantages of being organized and thus not only learning from each-other in a more structured manner, but also having a stronger collective bargaining power for selling their products, is now well recognized and appreciated by cashew farmers. However, it appeared that Farmers Union members had not yet been able to convince a large number of farmers. Interestingly however, when at the end of the meeting in Sampa, one of the older farmers commended the advantages of a FBO membership, he got much attention and high request for further information. This might be an indication that FBO membership can be encouraged through positive personal testimonies.

At Bole and Sawla, some participants explained that they were founding members of a FBO as they were convinced that they would be able to benefit through joining forces together.

7.7 Improving the Living Standards

The results of this study have shown that the cultivation of cashew leads to poverty reduction through increased income and employment generation. Subsequently, respondents were asked to indicate how they use their incomes. Most of the responses include extension of their houses or investing in better living conditions, for example building of block houses and improving personal

⁵⁷ Egusi seeds are fat- and protein-rich seeds of certain cucurbitaceous (squash, melon, gourd) plants.

⁵⁸ According to the weekly newsletter, Cashew Week (n'kalo.com 2015), a meeting between the Ghanaian cashew stakeholders organized by the Ministry of Agriculture and Ghanaian Cashew Association decided the farm-gate price of raw cashew nut in shell for the crop 2015 at 2.7GHC per kg (reported on 21.3.2015. This minimum price is about 40% higher than in Côte d'Ivoire and 50% compared to Benin).

appearances which were mentioned in Jama and Blema.

An example of an important socio-cultural event in the Ghanaian Christian tradition with considerable financial implications is a funeral. Farmers, especially in those areas, which are more dominated by Christian influence, confirmed that money earned from cashew helped to finance funerals according to traditional requirements. Money is also spent on weddings and other social gatherings, as well as for clothing to look good, so that the external appearance will lead to the perception of being like the city dwellers. The additional income contributes to health care, such as paying medical bills and is reinvested in agricultural development that includes buying pesticides.

Farmers confirmed that part of their income gained from cashew yields was retained as savings, thus contributing to long term planning. Other additional income was used to expand own farmlands or the development of alternative non-farm livelihoods like establishment of provision stores. Under the prevalence of hardly functioning credit systems, cash crop income is a vital source to accumulate capital for investments or purchase of productive farm assets. *“If we would not have cashew money we would have gone for a loan.”* (Man, Sampa)

8. Women and Cashew Production

According to the FAO study⁵⁹, gender inequalities in rural employment persist. The agricultural sector is the main employer for rural women and men. Nevertheless, rural women are well represented in wholesale, retail, and marketing enterprises. However, rural women are more likely to be engaged in unpaid family work and in non- agricultural self-employment activities than rural men.

In several public discussions and publications, legal reforms and development initiatives aim at promoting equal access to land for women and men. However, different gender perceptions are still prominent in rural settings as our research reported here shows.

Once the interview approach was changed to going directly into the communities instead of assembling farmers from a larger area – women were represented in considerable numbers. Their foci groups were facilitated by ladies, which led to engaged and open discussions.

Indications of women's empowerment observed: moving up the socio-economic ladder, earning their own income through marketing of raw cashew, as well as food crops, completely or partly making decisions on income distribution. Part of the income is used to cater for personal well-being, like buying clothing for special occasions. With regard to the socio-cultural importance of funeral celebrations, women spent part of their income for donation to funeral ceremonies. As the amount of a donation is usually made public, a higher donation contributes to a higher self-esteem and reputation. Income from cashew has a positive influence on the application of a balanced diet, for example.

Women in Sampa told us: "Before cashew came, our eating was poor (malnourished) and we did not have much profit from selling food crops, so we engaged in 'Barter Trading', exchanging our groundnuts for maize" (Woman, Sampa)

Except at Fetentaa, a much lower rate of unionization with men was observed. This is explained by the fact that in communities with high Muslim population, women seem to be more dependent on male decision making and less expected to contribute development concepts. However, women in



Figure 15 Participants of the women group discussion in Blema

Sampa told us, that they assume an FBO-membership would limit their individual preference for decision making and implementation.

In Bole, men tend to have several wives and children living in the same compound, and so women invest money into housekeeping and sometimes money is invested into housing. Generally, women are small farm holders, harvesting small quantities. The cashew selling method differs: in Jama, where women told us that they do not aggregate their cashew harvest, but rather sell cashew in much smaller quantities,

⁵⁹ FAO 2012 - Food and Agriculture Organization of the United Nations: *Gender Inequalities in Rural Employment in Ghana*. http://www.statsghana.gov.gh/docfiles/Gender/FAO_GHANA_COUNTRY_PROFILE_FINAL2012.pdf

for example in bowls shortly after harvest, *“when the buyers come”*. The situation for older women in Blema was different: Here women study the price development before selling their RCN. Only in emergencies, like sickness, would these female farmers sell their harvested cashews immediately. Women confirmed that they attend to a large variety of chores, domestic work as well as farming or trading to earn income for contributing to family income. This demands careful time management. Older women in Jama as well as women in Wenchi told us, that cashew represents *“less work on the farm as compared to other cash crops”* (Women, Wenchi), so that besides continuing with growing food crops they started cultivating cashew because *“cashew can be harvested every year without going through the stress of planting”* (Older Women, Jama).

Cashew significantly contributes to income, as all women confirmed getting most income between January/February and March/April, which is the cashew harvest period. In Bole District, additional income throughout the year is derived from charcoal, shea nuts, and sales in the informal sector. Women in Jama obtain additional income from Black Volta River fish trading and selling food crops such as egusi, maize, yam, groundnuts. In Wenchi, women earned income from food crops complemented with the cultivation and sale of cocoa and orange.

Women in Jama explained that they are not entitled to own land and have to farm with their husbands. As they still kept talking about *“my farm”*, it can be assumed that a portion of land might have been transferred from their husband into women’s care without any legal title accorded to this transfer. This would explain, why, contrary to the women’s statement, men are convinced that men and women, have equal access to land. From the responses by focus group participants, it can be inferred that women are responsible for the complete chain of cultivation events on land that is accorded to them – they plant, pay for labour, harvest and sell. They also manage their incomes and expenditures. The same pattern applies for women in Wenchi, who shared the opinion of having equal access to land as their husbands, although most of them were farming on family land.

In Brong Ahafo Region, the tradition is that men cater for their children’s education, whereas in Bole District this is the duty of the children’s mothers – their husbands only provide occasional support. However, regardless of who is primarily responsible, children’s education is a high priority among cashew farmers in both regions (see Textbox below).

I am Anna and have been living in Wenchi for more than 50 years.

A fellow church member talked me into cultivating cashew about 12 years ago. The soil on my farm is not very fertile, so that my food crops are only producing an average yield.

I farm on our family land of about 3 ½ acres, less than 1 km away from home. I was fortunate to be able to compensate my family with money, so that this farm land now belongs to me. It is me, who sees to every activity on the farm, working there 6 times a week, except if I am sick or have to attend to urgent matters. As soon as I realize that weed is getting out of control, I engage day laborers. It can be as many as four people, all from our village but originated in the North. They work on my farm 6 hours a day and 4 days a week being daily paid GHC 10.

For my family, I always need to have food available, so I don’t waste land. Before the canopy of the cashew tree closes, I intercrop my cashew farm with yam, cassava, cocoyam and vegetables. And I keep part of my land for cultivating food crop. Part of the yield is meant to feed my family, but we also manage to sell some and increase our income. During the cashew harvest season, I

try to observe the price trends, but sometimes I need cash urgently and have to sell right after the harvest. It is true my main income comes from cashew. So during or shortly after the harvest season from February to April catering for my family is easier than in July, when there is no food crop to sell and I depend on my savings from cashew. Cashew money particularly helps me to pay school fees and invest in my housing.

Women in Sampa, although small in number, represented a highly heterogeneous group: a school teacher, also being a cashew farmer, a MoFA officer, and three female farmers, two of them being married to the same man. In the discussion it became clear, that these women, who regarded themselves as being “wealthy” (except for one = “less poor”) see the secret of how to achieve wealth in *“find a land and grow cashew”* (woman, Sampa).

Starting with cashew cultivation over 20 years ago, these women were initially not encouraged to grow cashew because of low prices and unavailable market. Now, the situation has changed for these women in several aspects through ACi intervention, MoFA training and the application of GAP which are already highly rewarding and good market prices show promising future benefits. Women, and men, have started to divert cocoa farms to cashew farms. All women in Sampa indicated that embracing on cashew production helped them to take their wards to higher formal education, especially university, so their children *“can take urban works and not to farm”* (woman, Sampa). Children who are not interested in education will continue working on the farm.

The training I received in Good Agricultural Practice (GAP) from the Ministry of Food and Agriculture and the African Cashew initiative caught my attention and interest, but I must admit that at the beginning, I was afraid to lose money if I would try to apply this new knowledge. I needed some conviction by others who had increased their cashew yield to also start applying my GAP knowledge. It was worthwhile – my yield has increased! (man, Sampa)

Statements of a male farmer indicated that cashew production possibly influences the inheritance system in communities with matrilineal inheritance. According to the matrilineal tradition men will inherit the property to their sisters’ son. Farmers expressed that they would prefer to pass on their cashew farm to their biological children indicating a possible shift to patrilineal inheritance. Whereas this could be favorable for widows, as biological children traditionally are expected to cater for them, further research on the influence of cashew farming on the inheritance system and the access of women to land is required.

9. Children and Youth

“We don’t practice child labour, we only teach our children how to maintain a farm.” (Man, Wenchi).

The recent UNDP report (2014) indicates that on average children in Ghana spend seven years in school (female 5.9 and male 8.1 years). This is far below the expected 11.5 years that would allow continuing to tertiary education. The literacy rate amongst youth is at 85.7%. Fifty percent (50%) of a given age cohort attend secondary school, and 12% opt for tertiary education.

This analysis was conducted for children in the Brong Ahafo and Northern Regions, and presented in

Table 7⁶⁰:

Table 7 Household Deprivation Status in Child School Attendance and Primary School Completion

		Total Hous	Household child school <u>attendance</u> deprivation status		Total Hous	Households deprived in <u>primary</u> school completion	
Brong Ahafo	Nr. of households	490515	452606	37909	261685	98250	163435
	% of total		92.3	7.7		37,5	62,5
Northern Region	Nr. of households	318119	220424	97695	276970	77483	199487
	% of total households		69.3	30.7		28.0	72.0

In view of the high deprivation in school attendance of about one third of households in the Northern Region, allocation of cashew money to education becomes even more important. Special attention is also given to the information obtained from all focus groups and confirmed by individual interview partners, that farmers earning additional income from cashew cultivation are committed to see their wards completing primary school education.

However, it is not only about attending school but also about quality of acquired knowledge. Here it becomes an issue of teaching material and availability of time dedicated to learning.

All adult participants, children and youths confirmed that they attend to their tasks on the farm after school or during the weekends, school holidays. This might be an indicator, that farm work does not influence their academic work. Boys in Wenchi (8) and youth in Blema (22) were invited to express what they liked about cashew cultivation. In Blema, their age range was between 7 – 14 years old and all participants were part of the public school system attending classes from 1 to 6. In Wenchi, the participants' age ranged between 11-15 years, attending classes 4 to Junior High School 1.



Figure 16 Youth drawing what they like and what they do not like about cashew, Wenchi

All the children confirmed their support in farm activities being very regular, usually from afternoon till sunset (1 pm – 6pm) five days a week, except during the examination period, their tasks on the farm mostly consisted of weeding, sweeping and clearing the farm before harvest, and picking cashew nuts during harvest. This high engagement in farm activities – going beyond engagement only on the cashew plantation -shows negative effects upon academic achievements.

In Blema, most of the youth narrated that they failed to complete their homework. School assignments were mostly done in the morning, because the youth were tired from afternoon work on the farm and walking home on long distances (farms were often 3- 4miles from home).

⁶⁰ Source: Ghana Statistical Service, 2010 Population Housing Census Report (p.27)

Furthermore, there were frequent cuts in electricity supply, which restrained them working on their homework after sunset. In Wenchi, due to better access to electricity, students can complete their school assignment in the evening, provided they still have the energy needed. The time dedicated for seriously pursuing educational goals might reflect on the academic achievements and thus the advancement⁶¹. All students confirmed liking school, because of their *“teachers and sporting activities”*.

The youth did not indicate that they disliked working on their parents' farms. When asked what they disliked about cashew, they referred to specific problems like the nuisance caused by insects and other pests during harvest season, or scorpions, ants and snakes hidden under the big cashew leaves. Even if some complained about the hard work on the farm, they joined their peers by agreeing about their share of benefits from cashew cultivation. *“We are happy to be helping on the cashew farm because of the benefits it brings us”*. The benefits referred to consists of income their parents use to meet their needs, and to buy books, pens, slippers, and daily money for schools. Cashew money is also about guaranteeing a future in pursuing education. Attending public schools doesn't require school fees from their parents at the moment. However, all students seemed to be very confident to be continuing their education at a higher level, taking their siblings who are now either in Junior High School or in further education.

In Blema students also sell cashew apples to *“make little money”*. From the students' responses, the parents in Wenchi had a higher status of living than those in Blema – as their investment also went into more expensive items, such as buying a taxi or a bus for commercial use or building bigger houses. The boys were convinced that their parents have acquired wealth through cashew cultivation, and expressed as follows: *“my father has big money”*.

9.1 Would these children want to become cashew farmers?

In Blema, almost all the children and youth participants aspired to be lawyers, doctors, footballers, or work in banks rather than to become cashew farmers. In their reasoning; *“there is no big money in farming; we don't want to be poor like our parents. We want to go to the cities and make more money, build nice houses and be rich”*.

At the first glance this appears to contrast what they had voiced before (by stating that their parents were rich). The definition of *“poverty”* and *“rich”* is considered beyond the local context, enriched with anticipation and/or knowledge about the possibilities exceeding local boundaries, and to this extend matching their parents' aspiration of almost a paradigm change in life style of the future generation.

It seems that this trend is only slowly taking roots. In Wenchi and Blema, some of the students were not averse of becoming cashew farmers as their parents *“because my father has built a nice house with cashew income and has bought a motorbike for himself and bicycle for the house”* (boy, Wenchi) indicating that their socio-economic development is rather embedded into the local context.

⁶¹ An indicator is the age compared to class. However, with the available probands this can only be viewed as an orientation.

10. Lessons Learnt from the Study

10.1 What is the role of cashew farming in the reduction of poverty?

Cashew cultivation contributes to moving farmers up on the socio-economic ladder. However, even as in most cases cashew income significantly contributes to the moving-up on the socio-economic ladder, the study establishes that cashew alone may not propel someone to bigger steps. Movement up the socio-economic ladder results from the combination of the production of cashew, other tree crops, food crops and the application of business skills that leads to the generation of income.

The perception of participants on poverty in Brong Ahafo and Northern Region has been that the poverty has reduced, in many cases, substantially. However, it was detected through the focus group discussions and interviews that men perceive a faster climbing the socio-economic ladder than women as a result of for example, easier access to land, better financial resources and means to decide about their distribution.

In all focus groups, participants considered diversification of income, access to land, and adopting GAP to be the main factors contributing to reducing poverty levels and improving one's status on the socio-economic ladder. Intercropping or dedicating extra land to food crops contributes to sustainable income. In some cases, income resulting from selling food crops was assessed to be higher than income from cashew. It also became obvious that even as allocation of farm land for cashew cultivation is increasing because cashew cultivation proved to be lucrative, farmers continued to produce the cultivation of food crops, thereby proving the point that cultivation of cashew does not deter farmers from growing other crops to meet their nutritional needs.

The primary assumption of the Poverty Impact Assessment (PIA) analysis commissioned by ACI was⁶² that most smallholder cashew farmers benefit from increased production through the adoption of Good Agricultural Practices (GAP) which leads to higher income. This was confirmed by the focus group participants who stated that GAP trainings conducted either by MoFA extension officers or ACI personnel significantly contributed to increase in yield and thus leading to higher income. Furthermore, the promotion of intensification of cashew cultivation mitigates negative effects of cashew on food crops where land is scarce. In this context, GAP training of farmers through direct project interventions in collaboration with national extension network is yielding positive results as confirmed in interviews throughout all focus groups to be one of the main reasons for cashew yield increase.

In the guidelines for the focus group discussion as well as in our individual questionnaire special attention was paid to the participant's perception on whether cashew has contributed or caused any conflicts. It is noteworthy, that the mentioned examples rather referred to conflicts within the nuclear family (husband-wife) upon application of GAP. These conflicts were resolved, when the results due to GAP application proved the measure right. Conflicts over land use or land distribution were mentioned as having occurred and resolved by the chief or family head. It appears that neither the participants in the focus group nor individual interviewees attributed a high significance to this question. Cashew can be considered as a key crop with the potential of enhancing rural development supporting livelihoods and empowering the vulnerable groups involved in cashew production. Through increased cashew cultivation, employment of unskilled labor has increased.

⁶² ACI 2010 – African Cashew Initiative (ACI): Poverty Impact Assessment – PIA. Case Study Ghana

However, it is currently difficult to say, if distribution of wealth is proportionally shared, especially as it does not appear that there has been an increment in payment.

Money earned from Cashew cultivation is about guaranteeing a future by enabling farmers to afford the education of their children. It was the most mentioned use of cashew income. Given the high deprivation in school attendance of about a third of households in the Northern Region, allocation of cashew money to education provides hope for the future generation. The reason for this prioritized, unique and high investment is nurtured by the expectation that educated children will get a well-paid job in urban areas.

It is noteworthy that the overall perception from individual interviews is that even those farmers, who perceive themselves as wealthy or rich did not wish that their children return to their home villages either for larger scale farming or contributing to rural development.

Education definitely contributes to personal and consequently to societal development and enables individuals to move up to a locally perceived higher social status. In a society with deeply rooted and traditionally established obligation to cater for your parents and close family members, a financially well-established family member provides a safety net and is expected to cushion any negative repercussions in the future.

However, the reality in the targeted communities shows, that even though children attend (public) schools, intensive support on the farm might influence performance in school due to little time for homework. It appears that the definitions of “poverty” and “rich” given by children and youth extended beyond the local context, enriched with anticipation and/or knowledge about the possibilities exceeding local boundaries and to this extent matching their parents’ aspiration of almost a paradigm change in life style for the future generation.

However, it seems that this trend is only slowly taking roots. In Wenchi as well as in Blema, some of the students were not averse of becoming cashew farmers as their parents.

10.2 What is the interplay between cash crop and food crop production in enhancing food security?

The transformation of the agricultural sector from one of a low-productivity, subsistence farming system towards a diversified system, in which cash crop and food crop cultivation complement each other, remains highly important for addressing food security and sustainable livelihoods. This approach has compelled farmers to move from low productivity; mostly subsistence agriculture and being “very poor” or “poor” to higher diversified agricultural income generating activity combining food and cash crop cultivation. This is as a result of increased productivity and production for home consumption as well as for the local and export markets.

High dependence on a particular cash crop such as cashew bears the risk of high dependence on volatile world market prices. In case the price for cashew significantly drops for several years, mono cultivation of only cashew could lead to poverty. For smallholder farmers, risk mitigation measures lie in complementarity of cultivating cash and food crops, and thus not allowing cash crop to expand at the cost of food crops. As the study shows, farmers are well aware of the necessity and, while investment into cashew production significantly contributes to their families’ well-being, they continue to cultivate food crops beyond their own consumption needs. In this way, diversification assures long term food security and welfare.

Increasing food production could follow either *extensification* (converting forests, grasslands and other 'natural' ecosystems into cropland) or *intensification* (increasing the amount produced per hectare within existing cropland). Intensification is generally preferred by the focus group participants as it spares other ecosystems from agricultural use. The effects of promoting cashew cultivation on access to and security of land could be ambiguous in districts with tendencies to arable land scarcity. Intensification is the preferred approach in Jaman North District, and to some extent this activity is practiced in Wenchi Municipal District. In Bole and Sawla-Tuna-Kalba Districts where there is still high available arable lands, both approaches (extensification and intensification) need to be promoted. It should be recognized that when farmers originate from districts where there is shortage of arable land, they may be convinced to farm in different regions with a strong emphasis on promotion and support of cashew cultivation in the North (win-win).

To meet food demands, intensified agriculture will also need to close the so-called “yield gaps”— the difference between current yields and those obtainable under optimal management — in ways that prevent, or in some cases reverse, environmental harm. It appears that farmers have understood this challenge.

10.3 What is the role of women in cashew farming?

The research has shown that cashew production provides the opportunity to improve the socio-economic status of women. Whereas women in all communities lack access to legal land titles, women in Jama and Wenchi cultivate cashew trees on plots for which they are individually responsible. They manage all stages of production and market the nuts independently. In all communities, cashew production enabled women to increase their incomes, which they use to fulfill basic needs of their families (education, food and housing), but also for social obligations (funeral donations). Cashew nuts were also stored to serve as insurance in case of emergencies, for example to pay for medication. Women favored cashew production because it is less labor-intensive than the cultivation of other crops. It was noted that only few women were engaged in

farmer based organizations. This might be due to social norms that restrict women's public engagement, but women also expressed that they preferred to work and make decisions independently from others.

Based on these findings, project activities should continue to advocate women's participation in farmer training and investigate further the causes that prevent women from profiting from the participation in farmer based organizations. Further research is needed to develop recommendations on measures to improve women's access to land. The results from this study indicate that while women lack official land titles, they are able to cultivate their independent plots within the traditional system. The statements of male farmers in matrilineal communities indicate that planting of cashew trees raises the value of land and therefore creates an incentive for them to inherit their land to their biological children and thus disregarding the traditional system of land tenure. It needs to be investigated how this will influence the access to land for girls of the next generation.

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Pictures used in this study:

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(ACi) Data collected: January – February 2015

Annexes

Annex 1: Facilitators Guide

Brief introduction to why this meeting has been called (research purpose) – 10 min

Main Purpose: get an idea of the socio-economic structure – if possible over time – in the research community

Try to find out, what the participants define as being poor (what do they have/ what not? What kind of food do they eat? What do they lack? Access to land? Work conditions? Etc.

Very poor poor less poor wealthy/rich very rich

Can you give examples, how somebody managed to move from one status to another?

What impact did this movement have on those left behind? Changed the perception of the person who has escaped poverty? Changed his behavior? Did it create tension?

Development over time

Main purpose:

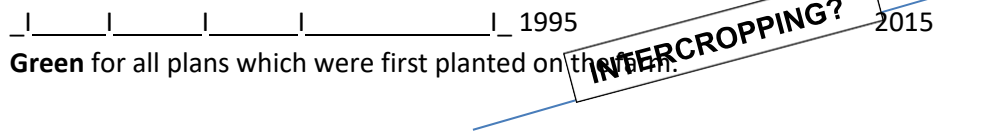
Find out the reason for starting cashew farming.

Does cashew compete with food crop? Impact of land use? Food security?

Is cashew been perceived as complementary to food crop (using inter-cropping)?

Note for facilitators: Please, draw 3 time lines on 1 brown paper. Please, make sure that you can allocate the process over time to a person.

Red for the year of planting cashew



Green for all plans which were first planted on the farm.

When did you start farming?

What did you plant?

In which year did you start planting cashew?

Why did you decide to plant cashew?

Did you plant cashew on a new plot of land or rather use the one already available for other crops?

What happened to the original crops? – did you abandon crops? Why? Or do you use them for intercropping...?

Which crops do you use for intercropping and why?

Which crops do you consume yourself (mark in **black**) and which rather sell on the market (**blue**).

Did you intensify cashew production? Since when? Why? HOW? Do you use more land for cashew? At the expense of other crops? If so, what kind of consequences would you envision?

Why did you decide to plant cashew?

Did you plant cashew on a new plot of land or rather use the one already available for other?

Note for Facilitator: please try already hereto touch upon the topic “access to land”

has access to land changed? If so, is it easier now or more difficult? Same situation for men and women?

If it has become more difficult, what could be the reasons – does increasing cultivation of cashew tree have anything to do with these changes?

In the last 5 years – who, in your observation is rather buying land? (*Rather those who already have land or tenders becoming land owners?*)

Do you recall any disputes over access to land? How were they resolved?

WHEN do you sell your harvested cashews? (black) when food crop? – indicate on the timeline but you may also want to tick off the following)

Right after harvest

When a buyer comes

When I need cash urgently

Observe the price development and sell when the price seems to be highest?

Wait for recommendation by my cooperation

Other reasons...

If you could, would you have sold at a different time? Why?

Social Status and possible reasons

Main purpose:

Understand how the social status of an individual changed since starting with farming Understand the different “speed” and reasons for it

Identify sources of conflict

Understand if growing cashew slowed down the general trend of urbanization

Facilitators: please prepare a “wealth-line”. Design a scale between 1-5 to each attribution (e.g. very poor; poor, etc...) Turn the board around. For each of the below mentioned indicators, participants are called one-by-one for marking their status.

Each participant gets a

Red sticker to mark the distance. Where were you in relation to these 3 people when you started farming? **Green** sticker to mark the distance, where do you place yourself when cashew came up?

Blue sticker to mark the distance, where are you NOW?

Yellow sticker to mark the distance, where you would like to be? Participants need to indicate the distance they are covering with a pen.

Observation:

When moving from **red** to **green** and to **blue** – some moved faster, some moved slower. Can you please give us examples, why your moving had different speed?

Facilitators: please, try to capture what is been said. Try to guide the discussion towards the following topics:

ACCESS TO LAND

How is your /the farm from your home? Regular work on the farm? (daily, etc.) **Can also be done by drawing if time permits** Do you own it? If so, could you already expand due to income from cashew? To what extent?

Questions to owners:

What kind of challenges did you have to overcome buying the land?

Are there any differences if it is a woman or a man who wants to buy land? Any special challenges for one or the other?

Did you need a credit from a bank? From somebody else? Interest rate?

Did you buy all the land you are cultivating at once – or rather expand?

If land is inherited

Patrilineal or matrilineal inheritance? **(try to allow some elaboration on this subject as it could have an effect on widows and their children)**

Did the extension of cashew plantation have an impact of the established inheritance system?

Was it leading to dispute and conflict within families and villagers? **(here again, deeper insight would be helpful!)**

If land is for family use, how do you deal about using part of the land?

Question to tenants: How do you compensate the owner (cash, in-kind, Abusa, Abunu system)?

FARM MANAGEMENT

LABOUR

What kind of farm practices do you normally engage in (rotational bush fallow, crop rotation, mono cropping etc)?

What type of labour (human, herbicides or machines) do you use in order to carry out these tasks?

How many people on the average do you recruit for each activity?

Do you have an idea about their residency status (indigene, migrant whether permanent or seasonal)?

On which basis do you recruit labour?

On average, how many hours are these people working for you in a day?

How do you compensate their task they have carried out?

PRODUCTIVITY AND ACCESS TO MARKET

Higher productivity due to training and applying GAP?

What made you convinced to apply what you had heard/learned?

Did you face financial problems when applying GAP?

Were you afraid at the beginning that you might lose financially if you try a new agricultural practice?

Other effects

Did the increased income from cashew allow you to remain in your community? What would have been the alternative?

Children and youth

Main purpose: Find out and understand the effects of cashew production on children and youth

Facilitators: allow the group to draw on a bid brown paper what they like about cashew? And what they don't like about cashew? Either by dividing the paper in 2 parts or 1 topic = 1 paper while they draw, please also address the following questions (take note)

When do you go to work on the farm?

|_____|_____|_____|_____|_____|_____|

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

When you help out on the farm, what are your tasks?

How long do you stay on the farm? (Morning till evening? After school? Etc.) Is there a time in the year when your help is more needed?

Does working on the field effect your achievements in school?

Do you miss classes because you have to help on the farm?

Do you have enough time to do your homework? What kind of school do you attend? Public – Private

Do you like your school? What do you like best about your school?

Can you please give us your age and in which class you are?

What are your plans for the future? Would you like to become a cashew farmer?

Annex 2: Questionnaire individual interviews

Stakeholder analysis:

If you remember the definition of poverty we undertook in the WS – where would you see yourself?

Very poor

Poor

Less poor o Wealthy o Rich

Very rich

Development over time

If you reflect upon the time when you started farming (up to 20 years) – could you describe the development (in crops, in size, in income, in ownership rights) of your farm over the whole time?

How long have you been living in this community?

Since when do you cultivate cashew?

And why do you cultivate cashew?

Now, please single out the last 6 years and try to give more precise info:

What kind of crops have you cultivated (maize, yam, cocoyam, cassava, plantain, beans, fruit, vegetables, such as okra, tomatoes, garden eggs, pepper etc.)?

Which of these crops do you grow for own consumption?

Which do you partly/mostly sell on the market?

How did the yield change over time? How do you explain the changes?

Do you cultivate different crops on the same farm land or do you rather separate cashew from other food crops?

Do you practice intercropping?

With what kind of crops do you intercrop?

What made you choose these particular crops?

What are your experiences with intercropping?

Have you abandoned some crops over time? If so – why? When?

Did you intensify the cashew production? How?

By attributing more land to cashew (that was formally used otherwise); **if so, it needs to be taken up later under “land rights”**

By getting training and applying GAP?

When did you get training?

Who provided the training (**could it also be by radio broadcast, visual training material, etc.**)?

What were you trained on?

What made you convinced to apply what you had heard/learned?

Were you afraid at the beginning that you might lose financially if you try a new agricultural practice?

By using improved planting material?

??

(try to attribute these answers to the farmers’ status, e.g. extremely poor farmers, better-off-small-scale to medium cashew farmer, and farmer farming other crops than cashew)

What are your main tasks on the farm? (**could be quite different for men and women**)

Where do you see the biggest challenges? (**price volatility, uncontrolled bush fire, lack of credits, etc...**) How do you meet them?

At the end, try to get a feeling how cash crop and food crop are being perceived – complementary? Otherwise?

Access to land

What is the size of your farm? (**Maybe how many trees? And other crops?**)

How far is your farm from the place you live? How often can you work on your farm (**daily, x-times a week...**)

Who owns the land where you cultivate you crop? (**Are you the owner or a tenant?**)

If the farmer owns the land and has bought it:

When did you buy it?

What kind of challenges did you have to overcome buying the land?

Did you need a credit from a bank? From somebody else?

Did you buy all the land you are cultivating at once – or rather expand? **(what are the intervals of expansion? Which factors contributed to your expansion?) (Hint to wider inequalities?)**

What were the payment terms?

If land is inherited

Patrilineal or matrilineal inheritance? **(try to allow some elaboration on this subject as it could have an effect on widows and their children)**

Did the extension of cashew plantation have an impact of the established inheritance system?

Was it leading to dispute and conflict within families and villagers? **(here again, deeper insight would be helpful!)**

If land is for family use, how do you deal about using part of the land?

If tenant:

Which system did you apply in your agreement with the landlord (abunu = ½ or abusa = 1/3)?

Why did you decide for one or the other?

Do you sometime pay rent for the land?

Let's step back again for a moment and look at the development of your community over the last 20 years

Has access to land changed? If yes, is it easier now or more difficult?

If it has become more difficult, what could be the reasons – does increasing cultivation of cashew tree have anything to do with these changes?

In the last 6 years –in your observation: who is rather buying land? **(rather those who already have land or tenders becoming land owners?)**

Who is becoming a tenant?

Do you recall any disputes over access to land? How were they resolved?

From today's perspective – was it worth investing in your farm? What kind of revenue do you get out of it?

Employment

Employing others on your farm

Do you employ people?

For how long?

For which tasks (e.g. planting/transplanting?)

Where are those people from – your village?

Seasonal workers?

How many people do you employ?

How often do you pay them – daily? Weekly? Is your payment all in cash or also partly in-kind?

Being employed by a processing company (in a factory or at home)

Since when have you been employed?

Temporarily or throughout the year?

What do you usually buy with your income?

Do you work at home (e.g. cracking nuts for a processing company) or go to the factory every day?

Does the contract include any social benefits? – if so, please name them

Has your salary changed (increased – decreased) since you started your job?

If possible, ask for the salary they receive depending upon the task, and if there was any negotiation involved prior to fixing the contract/wages?

Income and Revenue

Where does your main income come from? (**income from cash/food crops / income from being gainfully employed – in the cashewsector?**)

Could you try and quantify? (**Income form cashew? Income from selling cassava, etc.? Salary?**)

How is this income to be seen throughout the year?

Regular?

When more when less?

Times with no income at all?

Which are the most difficult months in the year and why?

Cashew Farmer:

When do you sell your harvested cashew?

Right after harvest?

Whenever a buyer comes?

Whenever I need cash urgently?

Observe the price development and sell when the price seems to be highest?

Wait for recommendation by my cooperative?

Are there any factors that might have let you to have chosen a different selling time? **(e.g. would have sold later, but was in extreme need for money to pay for food, schooling, etc. OR relied on someone whose advice wasn't helpful, etc. – could be an indicator that high price volatility in the cashew sector closely reflects upon the living standard)**

If you try and remember the time when you started farming, how has the price for cashew developed?

Other crop you cultivate?

Where did you experience fluctuation in price?

How do you deal with it?

Where is the increment highest? **(Quality? Certification? Buyer? Location?)**

What do you mostly buy with your income?

Institutional embedment

Are you a member of a cooperative - Farmer Based Organization (FBO)?

If so, why? What is the advantage?

Who can become member of your cooperative (***try to find out: if membership is bound to a financial capacity, e.g. very poor farmers are not allowed to become members***)

Did you become member right from the start (or even co-founded this FBO) or join later?

How did you learn from the advantages of getting organized as an FBO?

Did the FBO live up to your expectations? (***examples of better bargaining power against traders and processors as well as against actors supporting the District Assemblies or well-structured cooperatives may access credit using cashew trees as possible collateral***)

How is your FBO organized? What is your experience with the leadership?

At the very end of our gathering could you please briefly point out at the most remarkable changes that left their traces in your village – over let's say a time period of 20 years and a much shorter one – 6 years?

Has there been a widening gap of income?

Have you witnessed tensions? Conflicts? Which you attribute to this gap? Can you elaborate on this?

Did cashew cultivation have any influence on your decision to remain in your community?