

## **LINKING SMALL-MEDIUM LAYER FARMERS TO MARKETS THROUGH THE PRODUCER ORGANIZATION**

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**A CASE STUDY OF BEREKUM POULTRY FARMERS ASSOCIATION IN THE BRONG-AHAFO REGION OF GHANA**

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**Van Hall Larenstein University of Applied Sciences**

**In partial fulfilment of the requirements of a Masters degree in  
Agricultural Production Chain Management specializing in Livestock Chains**

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May the omnipotent and omnipresent shower his blessing on you all.

Shalom

**Dedication**

This thesis is dedicated to my Beloved wife Ellen Boateng and my son Nana Oduro Boakye-Yiadom for their prayers, patient, endurance and encouragement during my studies. I love you all. Not forgetting my Daddy Isaac Boakye-Yiadom for your prayers and encouragement during the difficult times of my studies. Daddy, I love you.

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**Acronyms**

DFID	Department for International Development
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
GNAPF	Ghana National Association of Poultry Farmers
GSS	Ghana Statistical Service
IFAD	International Fund for Agricultural Development
IIRR	International Institute of Rural Reconstruction
KIT	Royal Tropical Institute
MOFA	Ministry of Food and Agriculture
NGO	Non-Governmental Organisations
POs	Producer Organizations
SRID	Statistical Research and Information Directorate

## **Abstract**

The study was to link small-medium scale layer farmers through Berekum Poultry farmers association to market in the Brong-Ahafo Region of Ghana between July and August 2013. The objective of the study was to assess the effectiveness of the Producer Organization in order to improve its performance to link member farmers in the layer chain to market.

Field research was based on questionnaire for the survey with 30 farmers selected. The survey was to get challenges facing small-medium scale layer and their perception towards the performance of the Producer Organization. In the case study, a checklist was use to interview the chairman of the Producer Organization. The MIDCA tool was use to assess the performance of the Producer Organization. Another questionnaire was conducted to get insight into the perception of 8 traders on their relation with farmers and the Producer Organization.

The findings of the research show that all the farmers were dissatisfied with the performance of the Producer Organization in areas of membership organization, governance and leadership, stakeholder collaboration and network, provision of service to members and marketing. The research also identified a relationship between traders and farmers, where traders pre-finance farmers during production and farmers in-turn selling eggs to traders on an agreed price when laying starts. On the assessment of the Producer Organization, it was also found to be weak in all challenge areas like internal activities (Governance, financial management, and long term perspective) except the issue of long term vision and mission which has a positive remark, Production activities(membership, entrepreneurship and service) and marketing activities (sales and relationships).

It must be concluded that the majority of traders did not have trust in dealing with producer organization although they face mistrust in dealing with individual farmers. Farmers on the hand believe that most traders cheat them during bargaining especially when traders pre-finance their production and as such there is always mistrust between farmers and traders. The major challenges facing farmers were like lack of bargaining power, inadequate information on price, inadequate entrepreneurship skills and inaccessibility of farmers to finance and inputs. There is also a weak performance of the current Producer organization in its activities to member farmers which not address farmers' challenges. In conclusion, from the results, the PO in its current situation cannot perform its function of marketing eggs on behalf of its members nor can it link and negotiate on behalf of members for a reasonable price of eggs. The PO must position itself in the short term by strengthen their business capabilities by serving as a link between farmers and financial institutions and input providers and also serving as intermediaries between farmers and traders for price determination. With these capabilities in the long term, the PO could be in the position to market the eggs on behalf of members

Recommendations are therefore centred on strengthening the chain relation by re-organizing member farmers and re-positioning the producer organization as a link between farmers and financial institutions and inputs providers. Vertical coordination, by dialoguing with actors and traders in the chain for mutual understanding to determine prices for eggs and linking member farmers for services and markets.

## **CHAPTER 1.0: INTRODUCTION**

### **1.1. Background to the study**

Ghana, or the Republic of Ghana, is a West African country. Ghana covers a total area of 92,098 sq miles. The country is inhabited by 24,233,431 people (GSS 2010 estimate). The per capita nominal GDP is \$1,542. The official language of the nation is English. Nevertheless, the people of the country communicate in more than one indigenous language.

Agriculture is a way of life for most people in Ghana. Both young and old are involve in this sector. It is presumably the backbone of Ghana's economy, contributing about 59% of the total working force both formal and informal with about 25% of the country's GDP (GSS 2010). Majority of those engage in agriculture are the rural poor. Crops, Livestock and local poultry are the mainstay of the rural poor with most of them practicing subsistence farming. About 80% of agricultural production is from smallholder family-operated farms, mainly below one hectare (Khor 2006).

The poultry industry in Ghana is the most developed sector in the livestock sub-sector. In the 1970's up to the early 1990's the local industry supplied virtually all the chicken and eggs consumed in Ghana and hardly any imports of finished poultry products came in. Under a Structural Adjustment Program embarked upon in the early 80's most subventions to the industry and agriculture as a whole were removed. The net result has been import surge leading to dumping of subsidized poultry meat products on the local market creating unfair competition. This Led to a shift to egg production, consumption of which is low compared to other countries in the sub-region.

According to Gyening (2006), several layer farms have expanded their operation stock 50,000 birds or more and currently the Dormaa-Ahenkro district in Brong-Ahafo sharing a border with Cote D'Ivoire, is believed to be holding some 1.5 million layer birds. In Ghana the small-scale poultry farmers are among those that have been severely affected by the globalization process and trade liberalization (Chisenga J, Entsua-Mensah C and J Sam 2007).

Small-medium scale layer farmers in the Berekum municipality were not left out from the effect of the globalization. They continue to struggle in marketing their products after production. There is a complete fragmentation of the chain in which they operate leaving them to the mercy of intermediaries' exploiting them because of their low economic and bargaining power.

The medium-scale is 30 per cent while the small scale is made up of 50 per cent. The medium and small farmers relied on hatcheries for their day-old chicks and feed companies for their feed. The medium and small-scale category also produces primarily eggs but some broilers are produce during seasons like Christmas and Easter holidays. The medium and small-scale operators practice minimal bio-security. This sometimes allows free-range and wild birds to gain access to these poultry houses, predisposing these operations to diseases out-breaks such as Avian Influenza, Gumboro and Newcastle diseases.

Although there are a few large-scale commercial farms in Ghana, which are integrated with hatchery, production, feed mill marketing and sometimes processing units, none of these practice biosecurity levels that would qualify them for FAO Sector 1 status (Aning, 2006). The average contribution of Poultry to domestic meat production from 2000-2004 is about 25% (SRID MOFA, 2006).

Table 1: Egg production (2005)

REGIONS	NUMBER OF FARMS	ESTIMATE NUMBER OF EGGS(1000)
Greater Accra	487	323.2
Ashanti Region	498	1032.1
Brong-Ahafo	218	150.0
Central – Region	32	28.5
Western Region	58	36.2
Total	1075	1570.0

Source: MOFA (2005)

Estimates were based on stockholdings per farm and 66% egg production

Table 2: Egg demand and supply in Ghana (1000 tonnes)

Year	Production	Export	Import	Demand
2001	22.26	0	0.10	22.36
2002	23.32	0	0.08	23.40
2003	24.38	0.2	0.17	24.35
2004	25.18	0.17	0.14	25.15

Source: FAOSTAT, (2005)

## 1.2. Research Problem

The small-medium scale layer chain is a potential business opportunity in the Berekum municipality. Many Individuals (farmers) start production without knowing who and where to sell their products (eggs).

There is no formalised market in the small-medium layer chain in the Berekum municipality where prices are arranged and agreed upon by all actors. This eventually leads to surplus eggs on the market while traders also take advantage of the farmers' situation by offering low price and even purchasing the eggs on credit.

## 1.3. Problem Owner

The problem owner is the Producers' Organization (Berekum chapter).

#### **1.4. Research Objective**

To assessed the effectiveness of Producer Organization in order to improve its performance to link small-medium layer farmers to access markets.

#### **1.5. Research Questions**

To address the research objective, two main research questions were formulated. Equally a set of sub questions were formulated to answer the main questions.

##### **1.5.1. Research question 1.**

**What is the current market channels/outlet of egg producers being members of the Producer Organization in Berekum Municipality?**

1.1 Who are the actors and supporters of the chain?

1.2 What challenges do small-medium egg producers encounter in marketing their products?

1.3 How sustainable is the current market relation between egg Producers and traders?

##### **1.5.2. Research question 2.**

**What is the effectiveness of the producer organizations in the layer chain in Berekum Municipality?**

2.1 What is the governing structure of the Producer Organization?

2.2 What ways do the Producer Organization manage their internal activities?

2.3 What functions does the Producer organization provide for small-medium scale layer farmers?

#### **1.6. Need for the Study**

With the structural adjustment programme in the 1970s and 1980s, Government subventions to state own Poultry farms stopped, leading to the collapse of most of these state own farms.

With the rising demand for Poultry and Poultry products, Individuals decided to establish Poultry farms across the country. But with trade Liberalization, the import of cheap and subsidized poultry meat in the country led most small-medium farmers diverting to layer production (Gyening, 2006). This intervention although was useful to the economy did not go without challenges. One major of these is how these small-medium scale farmers could market their produce (eggs).

The establishment of the Ghana National Association of Poultry Farmers in 1995 was to plan the development of commercial poultry farming so as to attain national self-sufficiency in the poultry and poultry products.

Over the years the association has remain only tool to lobby Government on its intervention on Poultry sector thereby neglecting the foundation of which its name stand on.

Poultry farmers have worked individually to find appropriate market and to solve most of their constraints without looking at how their association could have a link in their activities.

According to Bienabe and Sautier (2005), horizontal cooperation between cooperatives and members are sure way to sustain maintain market access and not only a matter of cost sharing mechanisms or economic of scale. This was supported by Owuor et.al (2007) that market access are key determinants of exit from rural poverty. With this reasons the research will attempt through the Producer organization, what current role they play or what can they do in order to solve the issue of market for small-medium scale layer farmers.

### 1.7. Definition of terms

The following terms were used in the study and their operational definitions given.

**Bargaining power:** The ability to influence the price or terms of a business transaction and can enable producers to negotiate for better prices and terms, such as a long-term supply agreement or access to business services

**Chain relation:** Relationship between two or more chain actors (KIT and IIRR 2008).

**Market access:** Increased opportunity to market outputs regularly and at acceptable prices and increased opportunity to buy quality inputs and services at acceptable prices and results in market participation.

**Producer organization:** An organization of producers that helps smallholder farmers to collaborate, coordinate to achieve economies of scale in their transaction with input suppliers and buyers, access inputs, services, information channels and raise levels of knowledge and skills in agricultural production and value addition.(Bijman 2007).

**Small-medium scale layer farmer:** Poultry farmers with birds from 100-10,000 birds and average of 2,500 birds.

**Value chain development:** A multiple and participatory process that leads to coordinated interventions by chain stakeholders towards satisfying consumer and all actor's needs.

**Value shares-:** the percentage of the final, retail price that the actor earns (KIT and IIRR 2008).

## CHAPTER 2.0: LITERATURE REVIEW

### 2.1. Value chain concept

Stakeholders in the chain are group into three, as actors, supporters and influencers. Chain actors are those involved in producing, packaging, trading and consuming a particular agricultural product at a point own the product at within the chain, while chain supporters provide services but do not participate directly in the chain nor take risks. Chain influencers influence the business environment (government policies).

It is significant to note that the development of a value chain requires the contribution of all stakeholders. Kaplinsky and Morris (2001) added that value chain exists when all stakeholders in the chain operate in the way to maximise the generation of value along the chain. Adding activities like grading, sorting and storage can create value for producers in the value chain.

Vermeulen et al (2008) emphasized that in the project of recovering markets, a multi stakeholder process is recommended because in today's complex and highly interconnected world, innovation and change require different stakeholders to work together. Woodwill (2012) stated that no matter how knowledgeable and skilled an individuals or groups are, if this type of capacity cannot be coordinated for the common good, progress is improbable. Working with multi-actor systems not only complements and incorporates earlier training and organisational development approaches; it also has the potential to address development challenges more effectively and to create more self-sustaining forms of capacity (Capacity.Org 2010).

#### 2.1.1. Small-medium scale layer chain in Ghana

The small-medium layer chain in Ghana comprises of input suppliers (Feed companies, Hatcheries and medicines), Producers (small-medium layer farmers), Wholesalers (Traders), Retailers (Vendors, restaurants and hawkers) and consumers. There are supporters/ influencers (Extension/Veterinary service, Banks and Producer Organization see figure).

#### Actors in the chain

- **Input Suppliers:** They supply the farmers with feed, day-old chicks and drugs.
- **Producers:** Producers in the layer chain are made up of medium and small – scale poultry farmers. They are members of an association known as the Ghana National Association poultry farmers (GNAPF) an umbrella body with branches all over Ghana.
- **Wholesalers/Traders:** These are individuals who buy eggs from farmers. About 90 per cent are women. They travel from Kumasi and other parts of the country to buys from the farmers. They always insist on large volume, ask for discount on eggs and sometimes delay payments when they buy on credit.
- **Retailers:** Retailers purchase their eggs from wholesalers who bring them from farmers' gate. The retailers either sell their eggs in bulk or to others for one or few eggs for cooking. There are several retailers include shops, food vendors and Hawkers
- **Consumers:** These are medium or low and marginal income individuals who buy eggs from retailers. They buy raw eggs for cooking or already prepared eggs (boil, fried or mix with pastries for eating).

## Supporters and their functions

- **GNAPF:** An umbrella body for Poultry farmers in the country, championing the course of members. It has regional branches as well as district branches
- **Banks:** The Agricultural Development Bank was set up to provide financial support to farmers and other players in the industry to help them achieve their goals. Loans to farmers are given on low interest. Other rural banks also provide loans to farmers
- **Veterinary Service Department:** A department under the Ministry of Food and Agriculture which is task to provide health and safety service to the farmers. They also provide the needed medications the farmer needs
- **Feed Companies (AGRICARE):** One of the major players in the animal industry. Although their mandate is the provide feed, they also engage in capacity building of farmers.

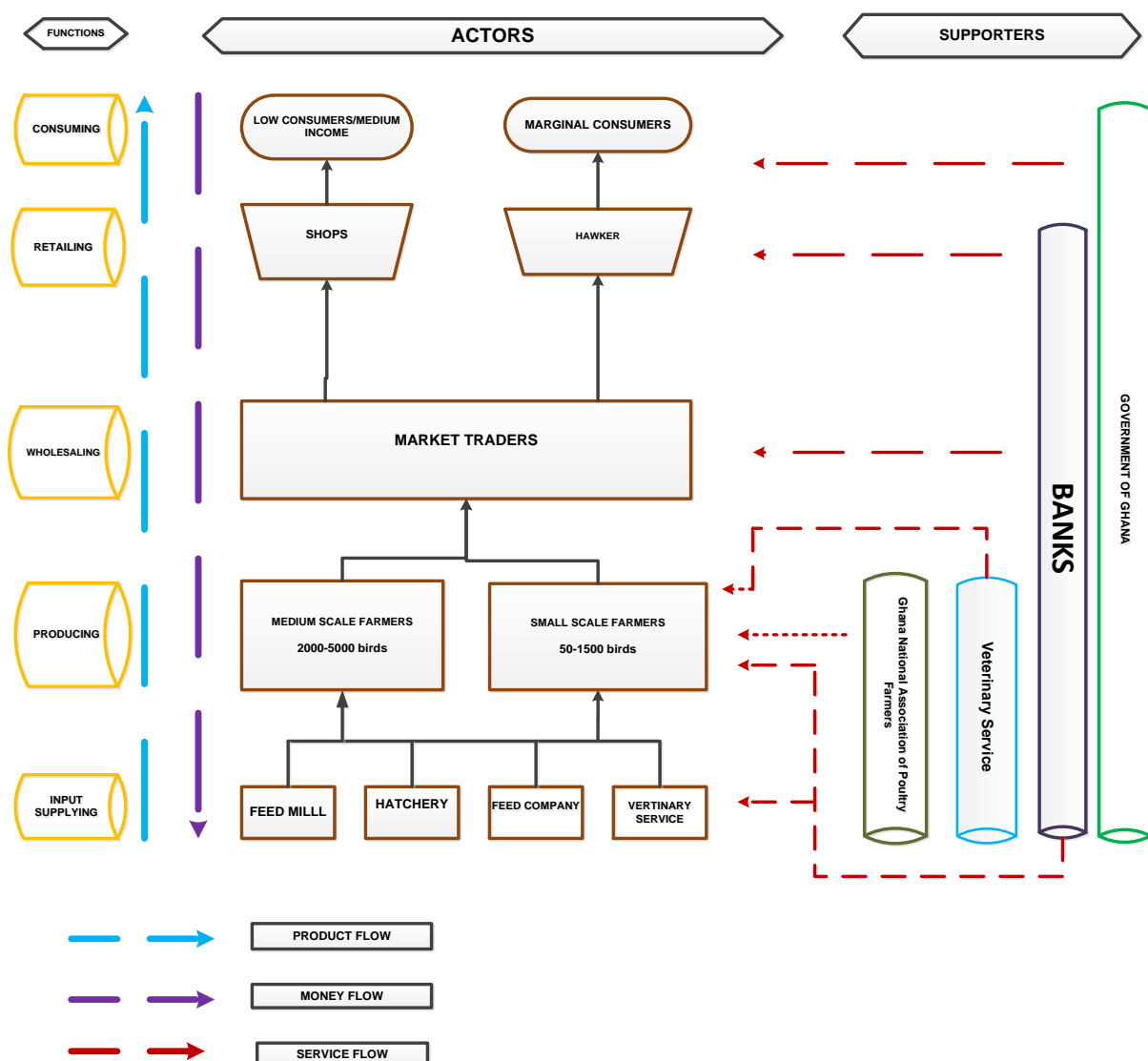


Figure 1: Current small-medium layer chain in Ghana

### 2.1.2. Value Chain Development

Value Chain Development describes the activities that take place in a business and relates them to an analysis of the competitive strength of the business, those that are directly concerned with creating and delivering a product. According to FAO (2010), value chain identifies the set of actors and activities that bring a basic agricultural product from production in the field to ultimate consumption, where at each phase value is added to the produce.

A value chain can be a vertical linked or a system between various autonomous business establishments and can involve processing, packaging, storage, transport and delivery (FAO 2010). Kaplinsky and Morris (2001) further stated that value chain exists when all the actors in the chain operate in a way that maximizes the generation of value along the chain. KIT et al. (2008) suggested that actors create linkages and seek to support each other with the objective of increasing chain effectiveness and competitiveness. Ruduner, (2007) argue that key issues on value chain include costs along the chain, importance of various actors/governance structure and where most value is added.

The aim of value chain systems is to place organizations in the chain to achieve the highest levels of consumer satisfaction and value while effectively developing the competencies of all organizations in the particular value chain (Brown, 2009).

### 2.1.3. Value chain upgrading strategies

Value chain upgrading is one which allows poor people to access viable value chains to improve their position in existing value chains (Mitchelle et al., 2009). Mitchelle et al., 2009 describe upgrading as a means of acquiring technological, established and market competences that allow resource-poor rural communities to improve their competitiveness and move into higher-value activities. They came up with 7 upgrading strategies below;

**Horizontal coordination:** Producers come together for achieving economies of scale and reduce transactional costs under set regulations and quality management.

**Vertical coordination:** the producers form longer-term inter-nodal relations with traders or processors like in contract farming. This strategy can result in certainty about the future but requires building of trust relations between partners for strong contractual commitment.

**Functional upgrading:** Producers can take up more functions like processing to add value. This is often picked up by horizontally coordinated institutions like cooperatives. Processors can also take up production functions.

**Process upgrading:** This involves improving value chain efficiency by increasing output volumes or reducing costs for a unit of output for example by applying good agricultural practices for improved quality.

**Product upgrading:** Changing the form of the product to the requirements of the market like packaging and branding etc to be more competitive.

**Inter-chain upgrading:** Use of skills and experience developed in one value chain to productively engage with another (usually more profitable) value chain.

**Upgrading the enabling environment:** Improvements to support, services and institutional, legal and policy framework, in which chains operate by development agencies.

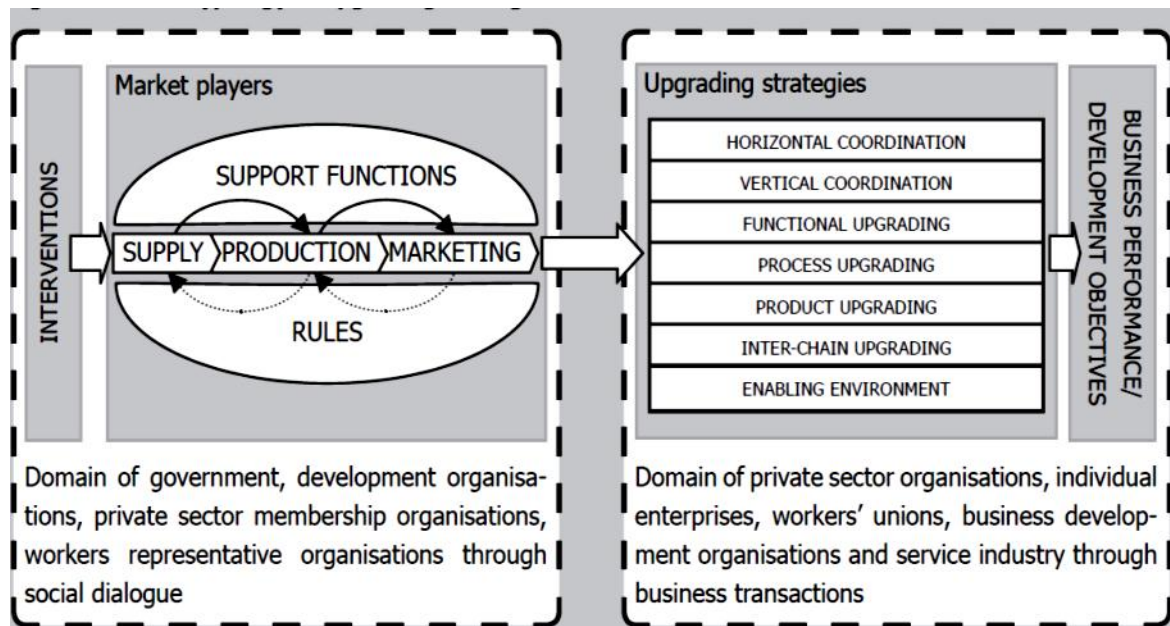


Figure 2: Typology of upgrading strategies.

Source: Herr and Muzira(2009)

## 2.2. Strengthening Chain relations

According to KIT and IIRR, (2008), farmers and processors in a chain are engaged in a chain relation. Strong chain relations are characterised by strong organizations, trust, open and frequent communication and cooperation for mutual growth. KIT and IIRR stated that weak chain relations are often characterised by farmers and buyers being fragmented, mistrust, fight over prices, few long term relationships, delivery of poor products and services. It is common that firm-farm relations operate between these two extremes whereby they cooperate to a greater or lesser degree.

Farmers and traders will benefit if they manage to make their chain relationships more stable, more transparent and better organized. KIIT and IIRR suggested that such chain relations will help both parties to reduce the costs, risks and market access that they facing in their business.

Five possibilities to improve chain relation as suggested by KIIT and IIRR 2008 are;

- Organisation of actors into a team with common understanding through strengthening of skills and upgrading products and services.
- Creating mutual understanding through open dialogue and exchange visits and by respecting each other roles in the value chain.
- Role specialisation to improve the product and services to strengthen the value chain.
- Chain coordination through continual communication. It can be steered by farmer/trader organisations, chain facilitators or service providers.
- Development of chain corporations through a shared vision and joint action plan to develop the performance of their businesses.

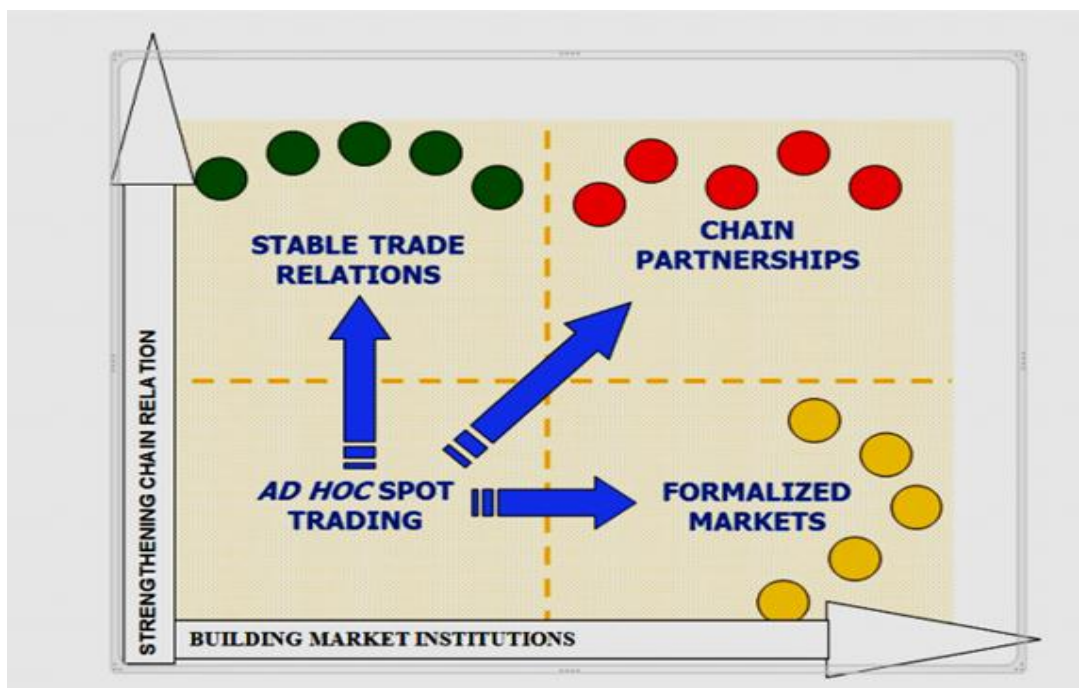


Figure 3: Movements in the market interactions matrix

Source: KIT and IIRR (2008, p 228)

### 2.3. Coordination and competition

There is always serious tension that exists between producers and buyers as to who get the higher share on the final products that reaches the consumer. Farmers always feel that they have not got the best of price from the products. According to Schrader (2012), farmer/suppliers want to have highest price for their product whereas buyers look for the lowest possible price. This is frequently characterized by competition within the chain. Farmers are unaware of most market information whereas buyers know the market well and have a lot of information pertaining to market. With this situation, there is a need to coordinate the chain. According to KIT and IIRR (2008), a chain coordinator restructures all activities and takes care of it at the level of the value chain and see to it development. They serve as guardians and as a source of inspiration to make the value chain a success. Their services are needed to allow the flow of products without any obstacles. The study further states that chain coordination can be in the form of Chain leader; a situation where an actor assumes the role of a chain leader, Joint organization; two or more actors join forces in the chain coordination and Third-party facilitation; this happens when an external chain facilitator has the advantage of working for the value chain as a whole (KIT and IIRR 2008). According to Martinez (2002), vertical integration of products can significantly improve the control of

### 2.4. Market Challenges in the chain

The major challenge facing the small-medium scale layer farmer is how to accessed ready market all year round for their products. Farmers sell to traders who move from individual farmers looking for the cheapest bidder. This situation is explained by Sturgeon (2008) as simple market linkages, governed by price. The researcher further stated that farmers don't have to deal with criteria before selling, they produce any quantity and quality and they have the option of selling to any supplier. KIT and IIRR (2008) also stated that volatility and Market integrations are some of the major challenges facing small-medium scale farmers. Deepak and Thapa (2006) stated that most intermediaries harassed and exploit farmers because of their weak bargaining power and poor economic condition. These researchers stressed that institutionalization and strengthening of the group marketing system could improve the

situation. Winter and Funk (1994), pointed out that challenges in marketing eggs arise from the location of the eggs with respect to consumption centres, their seasonal distribution relative to the time of consumption, and the maintenance of quality through the marketing channels while they are held or transported. These authorities claim that maintenance quality of eggs is a major problem in the industry. Since the production and consumption centres are widely separated, considerable time is required to transport these products to the retail market. Zuniga-Arias and Ruben (2007) argue that market selections are dependent on production system, price attributes and market context in that most smallholder farmers are unable to meet these criteria's. They further stress that the vertical integration market has a high rate of rejection by the buyers but there is a stable and reliable market outlet for producers. Schipmann and Qaim (2011) also pointed out that in addressing farmers access to market channels, one most important factor to consider is for farmers to personally know the buyers they are dealing with, which may be related to issue of trust not contract. But DFID (2011), stated that for more sustainable market, there is the need to employ a market systems approach so as to facilitate systemic change in the market business environment by addressing the underlying causes (rather than just the system) of weakness in the market system. It suggested the application of Making Markets Work for the Poor (M4P) framework in Box 1.

## **2.5. Producer Organization**

Producer Organization are individuals, who come together voluntarily for their own economic improvement. It is in the association where processes of democratic decision-making and informal communication take place, and it is by the enterprise that economic benefits for members of the association are gained (Bijman 2007). Bijman further stated that the main role of Producer Organization is to link Producers with customers, in other words to find a market for products that the members of the association produce. Bijman (2007) pointed out that there are eight characteristics of Producer organizations which are:

- Producer Organization is a form of collective action: Group of individual farmers coming together for the purpose of joint economic action.
- Producer Organization is established bottom-up: Membership is voluntary, and producers can join or resign as long as they comply with membership regulations.
- Producer Organization must have a democratic decision-making structure: All members have a voice and at least one vote.
- Producer Organization must be member-owned and member –controlled: This means that individual members cannot exert control over the PO. Both control and ownership are collective.
- Producer Organization is an economic organization: Its main purpose is to enable members to enter the market or enhance their position in the market, whether this is an input market or a farm product market.
- Producer Organization must be User-oriented firm: Members must make maximum use of the services provided by the Organization for his or her benefit.
- Producer Organization must have a medium or even long-term perspective: A time frame that both the associated producers and PO, supports common development norms and value.
- Producer Organization is an association of members: This implies that the organization is a social community, with social processes like commitment, identity, and solidarity and information exchange.

According to Bienabe and Sautier (2005), Producer Organization can fulfil five types of functions: economic, social, representation (advocacy and voice), information sharing/capacity building and coordination. The researchers emphasized that coordination is the key function since Producer Organization are in a position to establish linkages at all levels and to integrate the all the functions cited (Bienabe and Sautier 2007).

The establishment of Producer Organizations helps individual farmers to pool categories of resources together such as Logistics, Information sharing, finance and credit and Labour leading to economies of scale. But according to Bienabe and Sautier (2007), these Organizations can function in the commodity chain such as collecting, grading and storage. They stated that the bulk purchase or selling behalf of members can increase members bargaining power. The major challenge areas to Producer Organization are;

### **2.5.1. Producer Organization and horizontal cordination**

#### **Membership base**

Every Producer Organization has a clear rules and regulation that members and conditions for are clearly laid before members join. The aims and objectives and how to attract new members is formulated. Bijman (2007), stress that POs are association of voluntary membership and form for collective action. Shiferaw et al. (2006) stated that collective action occurs when individuals voluntarily cooperate as a group and coordinate their behaviour in solving a common problem

#### **Governance, Leadership**

POs should compose internal democracy, leadership be elected and responsibility of leaders well documented. Every member of the organization take part in electing leaders, have a voice and at least one vote (Bijman 2007). Each member of the association should be aware of his/her responsibilities, duration and mandate of a leadership position well defined, good collaboration between members and regular meetings for the association. FAO (2012), stated that a good leadership of POs has knowledge about target commodity markets, transparent financial management and operational system.

#### **Management of financial resources**

Good financial management is hall mark of any POs to be trusted by members. Members of the POs should be able to contribute dues to keep uplift the financial standing of the association. The POs should be able to function financially without outside support. All procurement by POs should be in agreement of all members. A treasurer of POs should submit regularly financial report to members as stipulated in the constitution.

#### **Stakeholder Collaboration and networks**

An important function of a PO is to link members' products to reliable market and also regular information within the chain, especially on market. POs should work together with local authorities, exchange ideas from other Organization and create a favourable link between producers and buyers. The linking of members to banks and input supplies also makes POs more efficient. POs continuously search for new ways to improve smallholders' competitiveness through joint actions such as bulk buying of inputs, collective marketing, negotiating of credit and contracts, and lobbying of policy-makers (FAO 2012). Bijman, (2007), stated that POs easily established vertical coordination within the chain.

#### **Service provision to members**

Most POs assist their members in adapting product quality to market needs, by providing extension service and a support structure to exchange experience and knowledge among members (Bijman, 2007). Bijman further stated that POs support members to make proper production choice (by setting requirements and providing technical support). According to FAO (2012), to retain and recruit farmers, PO membership must be perceived as being valuable by providing high-quality services, some of which may be subcontracted. These

services include documentation of market outlets, storage and transport provision, bulk input purchases and distribution, financial services, training, technical assistance and advice.

### **Entrepreneurial skills**

Entrepreneurship consist of doing things that are not generally done in an ordinary course of business routine, it is essentially a trends that comes under the wider aspect of leadership. In entrepreneurship, there is an agreement that we are talking about a kind of behaviour that include initiative taking, organizing or reorganizing of social economic mechanisms to turn resources and situations to practical account and acceptance of risk of failure. In doing this leadership and members of POs must be specialist in the field and must be able to identify market possibilities. With the expertise POs must be able to identify risks and opportunities for members. Bijman (2007) stated that well organised POs coordinate effectively by transferring certain decision-rights from individual producers to POs both horizontally among members and vertically between producers and customers.

### **Cost and marketing**

A well-coordinated PO must be able to assist members get the best of market information so as to sell their produce at all time and to maintain cost. POs must identify or search for new markets and make products of members more attractive.

## CHAPTER 3: METHODOLOGY

This chapter presents the study area, study design and data collection strategy and how the data which was gathered was processed. The research has a quantitative and qualitative approach and will be based on empirical data from survey and case study and secondary data from literature, documents and the internet.

### 3.1. Study Area

Geographically, Berekum is a Municipality located at the western part in Brong-Ahafo Region of Ghana. The Municipality according to the 2010 Population and Housing Census of Ghana has a population of 120,354 with 51.4% females and 48.6% males.

It lies between latitude 7°15' South and 8°00' North and longitudes 2°25' East and 2°50' West. Berekum, the Municipal capital is 32km and 437km North West of Sunyani, its regional capital and Accra the national capital respectively. Its total area; which is 1,635km<sup>2</sup> constitutes about 0.7 per cent of the entire 233, 588km<sup>2</sup> of Ghana, (1,635km<sup>2</sup>). Estimated cultivated land area is 373.35m<sup>2</sup> and uncultivated area is 117.15m<sup>2</sup>.

Livestock and Poultry production has a comparative advantage in the municipality due to the large volumes of foliage available all year round. Animal rearing is a very important sub-sector in the agricultural sector in the municipality. About 61% of animal farmers in the Municipality practice commercial farming (MOFA 2010).

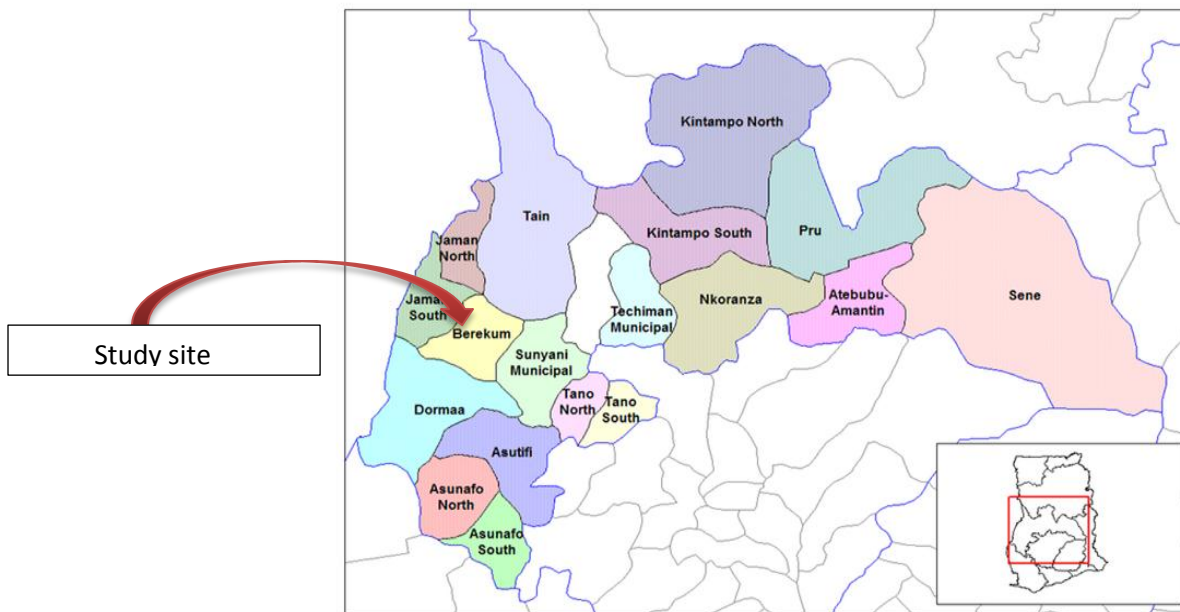


Figure 4: Map of Brong-Ahafo showing study site (Berekum).

Source: [www.mapsworld.com](http://www.mapsworld.com)

### 3.2. Study design and strategy

The strategy involved desk study, Survey from actors in the chain to gather information on the marketing system in the chain, relationship and perception of small-medium scale layer farmers of the Producer Organization (PO). The study looked at the sustainability of the current chain, its Structure, scope, service and internal organization of the PO. The PO was evaluated through interviews to find out how they could be involved in the marketing strategies of members.

Table 3: Summary of data, data source and tools

Sub-questions	Data	Data Source	Tools for data collection
1.1	Layer value chain, actors and supporters	Literature Farmers and Traders	Questionnaires,.
1.2	Market challenges such as membership, network and information, services, weak bargaining power, price fluctuation, volatility and market integration	Literature: Internet, Articles, Journals and books Small-medium scale layer farmers,	Questionnaires,
1.3	Sustaining chain relations: Market supplies, relationship with farmers.	Literature: Internet, Articles, Journals and books Traders	Questionnaires
2.1	Structure and scope of POs, , Governance, internal democracy leadership style financial management, and long term vision	Literature: Internet, Articles, Journals and books Executive/Chairman of PO	Interview (checklist)
2.2	Internal activities of POs ,membership base, entrepreneurship development services, linkages, risk and opportunities	Literature: Internet, Articles, Journals and books Executive/Chairman of PO	Interview (checklist)
2.3	Functions given by POs such as information sharing, linking to market, Extension and training, relationship with stakeholders	Literature: Internet, Articles, Journals and books Executive/Chairman of PO	Interview (checklist)

### 3.2.1. Conceptual framework

The framework of this research is based on value chain analysis. The research intervention is focus on the Producer Organization to assess its performance in order used it as a link to access market for small-medium scale layer farmers. The research also looked at the perception farmers on how the PO is functioning and the challenges these farmers have. The framework also looked at the perception of traders in dealing with Producer Organization.

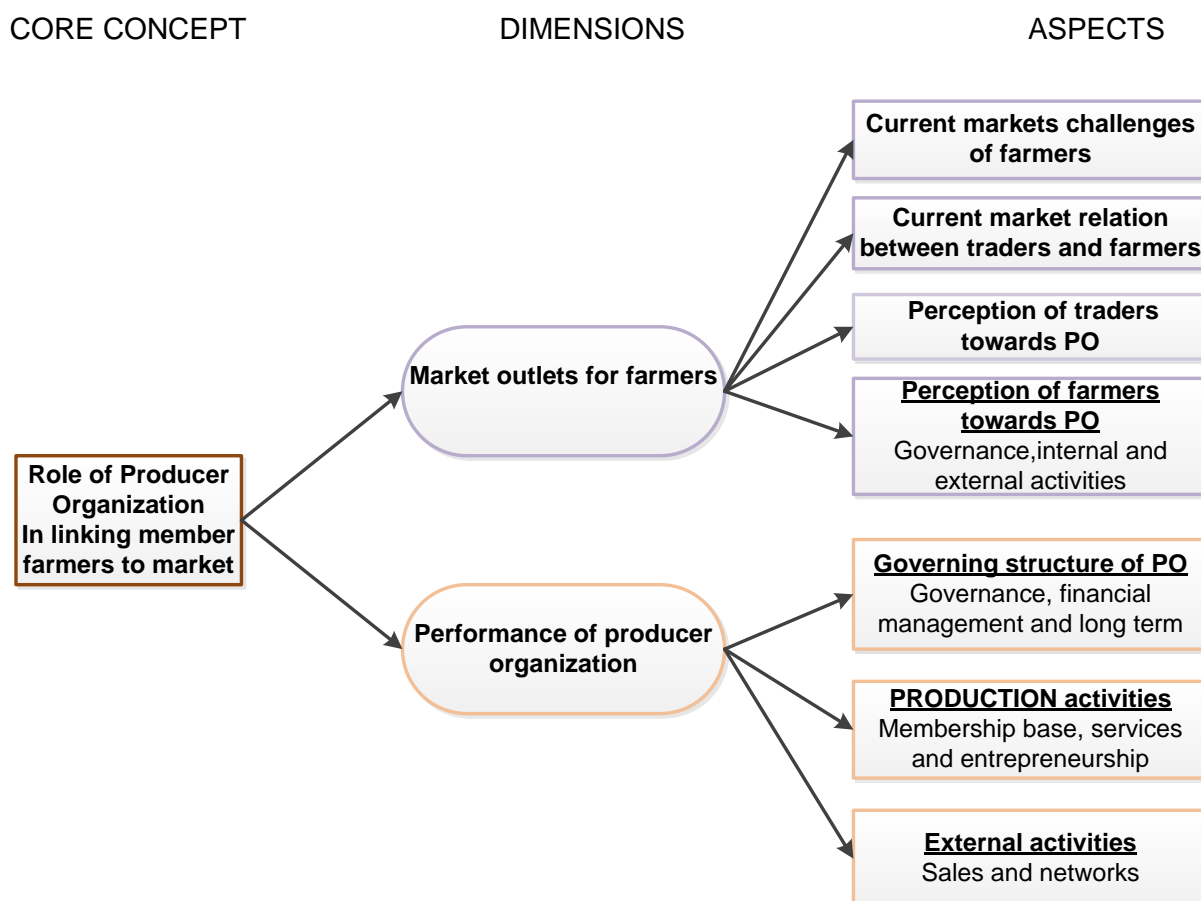


Figure 5: Conceptual framework

### 3.2.2. Desk research

Desk research was used to collect data from existing literature that's necessary to establish information for the research. The sources for desk research data are: articles, journals, international and national reports such as Ministry of Food and Agricultural reports, Ph.D. thesis and the internet.

### 3.2.3. Survey

The survey was carried on small- medium scale farmers in the Berekum Municipality of the Brong-Ahafo Region because of vibrant nature of small-medium scale poultry industry.

Thirty (30) famers were selected randomly and a semi-structured questionnaire was administered to collect the data (15 from each group). This method was also used by Modderman, (2010) in a research to explore future prospects for three dairy cooperatives in Musanze district Rwanda. The questionnaire was designed to meet the objectives of this study. This questionnaire was to get insight into the perception of members towards the POs.

These were challenging areas such as membership base; Governance, leadership and internal democracy; Management of financial resources; stakeholder collaboration and networks, service provision to members, entrepreneurial skills and cost and marketing.

The Likert-style rating scale was used to assess if the respondent agreed or disagreed with the statement and if they are satisfied with the performance. The respondents will rate the statement, ranging from one (1) to four (4) where one (1) was: I totally disagree with this statement, and four (4): I totally agree with this statement. In order to make sure the respondent clearly indicated negative and positive positions with regards to the statement, even number of possibilities was considered against statement (Saunders *et al* 2007). Questionnaires was also use for other actors like the traders and retailers to also know their perception about the layer market and their share in the chain, how, where and when do they purchase eggs.

### **Sample size**

Thirty (30) farmers were selected for the questionnaire base on two categories

- The first category was those with 50-2000 birds as small scale layer farmer.
- The second category was those with 2100-10000 birds as medium scale farmers.

Eight (8) Egg traders were also selected to know their relationship with farmers and their perception towards PO.

### **Data interpretation for survey**

The idea of interpreting data was obtained from Modderman, (2010) using the mean (average score) of the total statements.

Less than 50% or Mean score 2 or lower: a very low score, caused by the disagreement of the respondents with the statements. Meaning that the aspect of the PO performance was unsatisfactory and there is a need for improvement or change.

60% or Mean score 2.1-2.5: an average score, satisfaction of the respondents is present; but improvement is necessary to meet the needs and wishes of the respondents.

75% or Mean score 2.6- 3: a positive score. The satisfaction of respondents is not optimal. Improvement of the PO performance is not obligatory, but advisable in order to increase satisfaction among members.

85% or Mean score 3.1-3.5: The respondents are satisfied with the PO performance. Adjustments could be made to lift the level of satisfaction to the final stage.

90% and more or mean score 3.6-4: A very high score, the average respondent fully agrees with the statement and indicates a high level of satisfaction. Change or improvement is not needed.

### **3.2.4 Interview**

A strategically selected Executive of the organization was interviewed using a checklist to gather relevant data on the structure, scope, services and internal activities of the organization. The results and recommendation of this study is to be learning point for other POs.

## **Observation**

The first interview was done at the premises of an Executive of the association; a face to face contact gave the researcher an opportunity to observe issues been mentioned at first hand.

## **Data interpretation for interview**

The idea of this data interpretation was derived from MIDCA using the statements and criteria for scoring every statement. The total percentage score for the performance was 100% with an average of 50%. A score of YES=5(Positive statement), 3(need improvement), NO=0 (Negative statement). A statement is given a score not on direct answer but further probing to get relevant facts prove.

A score of 0-49%: Weak and poor performance of PO, needs change

A score of 50%-70%: meaning that aspect of the PO is average/optimal and need improvement

A score of 75%: Improvement is not obligatory but it could help.

A score of 76-100%: No need for change or improvement

## **3.3. Data processing and Analysis**

The final data gathered during the survey was processed on the layer small-medium scale farmers. The data collected from the individual farmers concerning respondents' statements score from (1) totally disagree to (4) fully agree were entered into the computer and analysed using Microsoft Office Excel. These scores were converted into percentages and mean (average score) enabling the analysis and interpretation of results as Modderman, (2010) also used. The data from the interview of the PO were analysed using the (MIDCA) tool.

## **3.4. Limitations of the research**

Initially farmers did not want to speak to the researcher in that there has been several research undertaken but then there has not been any improvement or direct benefit that has come out of all these research.

Most farmers too as you mention your reasons for coming thought that the researcher was coming to strengthen their association but it was explain that the findings would be made available to help them improve upon their conditions.

During the interview with the Chairman of the PO, it was observed that there were no documents to show membership standings and strategic long term vision and mission of the PO although he insisted they have.

## CHAPTER 4: RESULTS

This chapter describes results of current small-medium scale layer chain, self-assessment survey, results of survey on egg traders, the case study on the performance of Berekum small-medium scale layer farmers association undertaken during the research in Berekum Municipality.

### 4.1. Small-medium scale layer chain in Berekum municipality

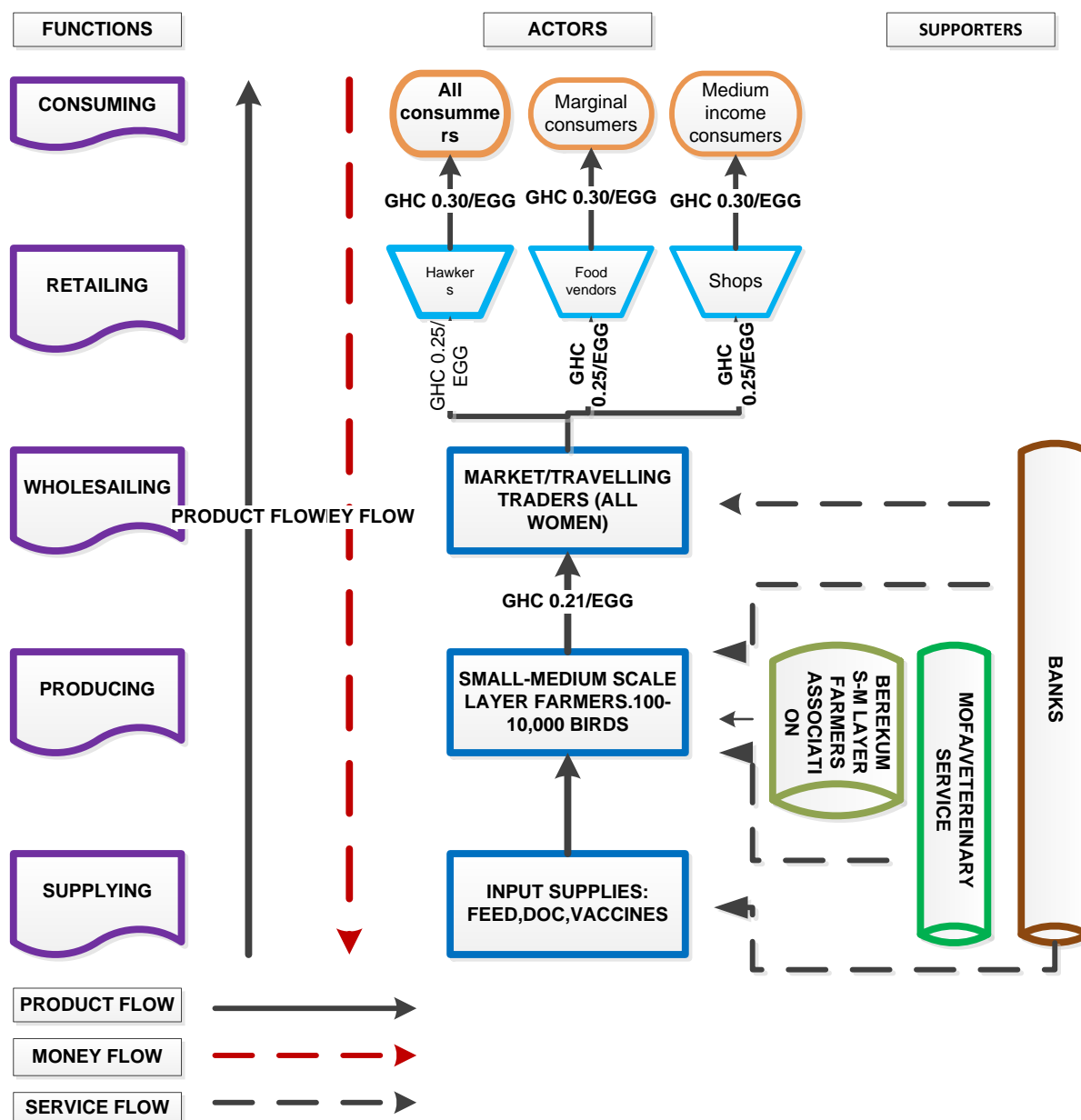


Figure 6: Current small-medium layer chain in Berekum

#### Producers: Small-medium scale layer farmers

The survey was carried out 30 small-medium scale layer farmers with an average of 2,500 layers. All respondents questioned were males with an average age of 25years. Majority of the farmers, about 90% have had high school education with 10% being illiterate.

## Wholesalers: Traders

This is an area in the chain which is dominated by women. They have an average age of 35years. Majority have no formal education with few having a basic education.

## Retailers: Hawkers and food vendors

These actors within the chain were not part of the survey undertaken but there was the need to get their views on where, when and how do they get their supply of eggs before reaching the consumers. They are both male females in this category. They operate from lorry stations to road sides to meet their consumers throughout the day. Their eggs are supplied by the traders as they are unable get direct contact with farmers due to huge volume they are expected to buy.

## Consumers:

End users of the products (eggs): They are segmented in rural and urban consumers as well as low and medium income earners. Consumers are major actors and have an important influence on how other players perform.

### 4.2. Survey Results (small-medium layer farmers)

This section looks into the results of survey based on perceptions by 30 farmers' all males on their satisfaction towards their PO.

#### 4.2.1. Overall assessment results

The overall results depicted below for the challenge areas show a less than 50% satisfaction of the members towards the PO in all areas.

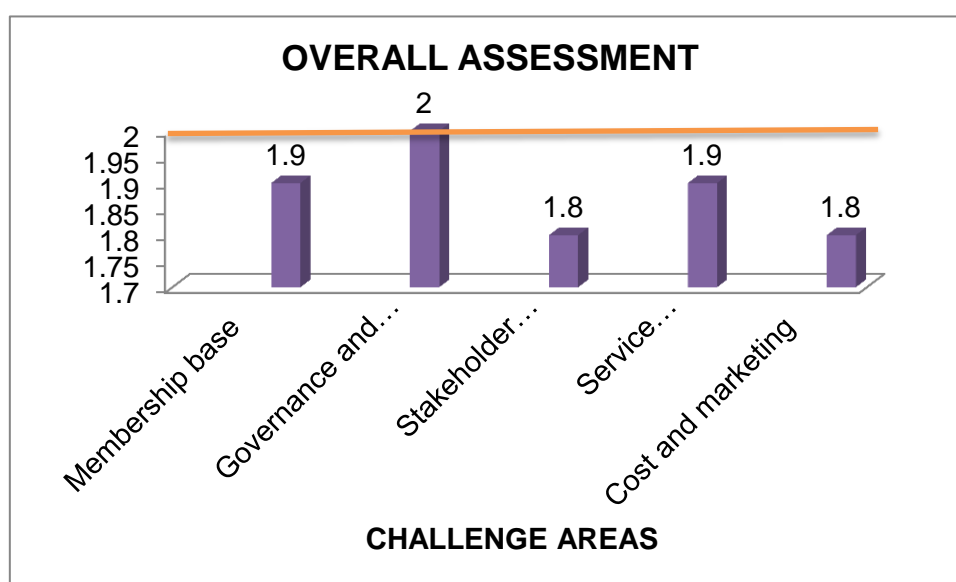


Figure 7: Overall results in the challenge areas

From the graph above it is evidently clear that the farmers have very strong dissatisfaction about the PO on all areas such as membership base, governance and leadership, stakeholder collaboration, service provisions and cost and marketing.

#### 4.2.2. Membership base

On a scale of 1-4, the membership base performance score per assessment of 30 respondents are as follows:

Table 4 : Membership base statements

No	Statement
	Membership base
1.	The condition for adhering to our organization are clearly defined
2.	Our farmer's organization has clearly formulated the objectives it wants to reach
3.	These objectives are shared with all individual members
4.	All farmers who want to, can be member of our farmers' organization
5.	I regularly pay membership fees
6.	I actively participate in the activities of our farmers' cooperative
7.	Our organization seek the adherence of new members
8.	The organization knows how many birds each member has
9.	Our Organization knows the quantity of eggs produce by members weekly

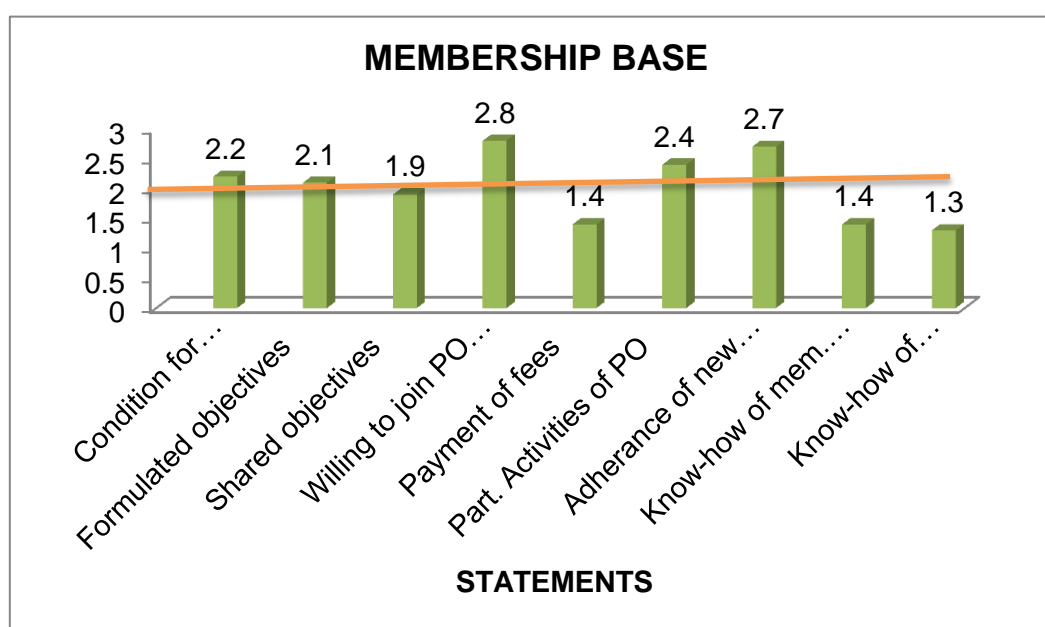


Figure 8: Membership of Berekum Poultry Farmers Association

From the results, there were very low scores on statements 3 (shared objectives), 5 (payment of dues), 8 (knowledge on number of birds for each farmer) and 9 (quantity of egg produce by each farmer) respectively. This shows a strong disagreement from the respondents. There were average scores for statements 1(conditions for adhering to the organization), 2 (All farmers who wants to can join the PO) and 6 (participation of activities of the PO) shows a satisfaction from the respondents in these areas. The respondents were positive about statement 4 and 7 (Joining and seeking new members).

### 4.2.3. Governance and Leadership

On a scale of 1-4, the governance and leadership performance score per assessment of 30 respondents were as follows:

Table 5: Governance and leadership statements

No	Statement
	Governance, leadership and internal democracy
1.	The internal regulation of our organization are well documented
2.	All members know the internal regulation of our organization
3.	The governing board of the organization has been democratically and transparently elected
4.	The duration of the mandate of a leadership position is well defined
5.	Each member is aware of his/her responsibility
6.	Internal communication within our farmers' cooperative is well organized: members are well informed about whatever is happening
7.	Collaboration between members is good
8.	Every member in our farmers' cooperative has the same decision rights
9.	Women and youth are sufficiently represented in the elected bodies of our organization
10.	There is regular meetings by the organization
11.	During meetings all participants share their of view
12.	Every year, our organization elaborates a plan for the year

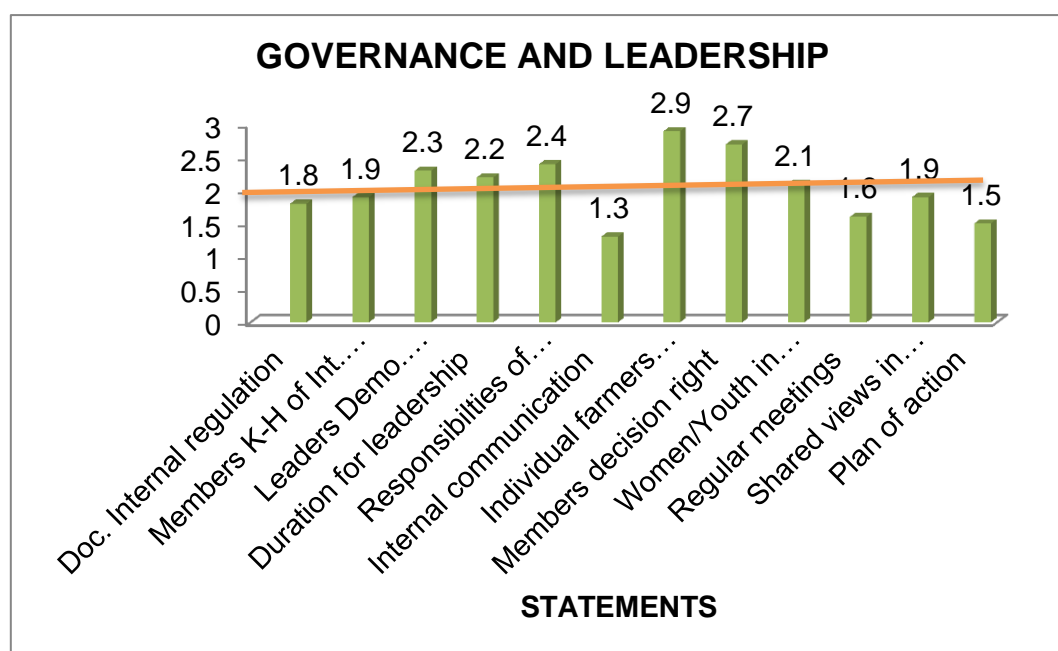


Figure 9:Governance and Leadership of Berekum Poultry Farmers Association

There was a significant disagreement from the respondents on statements 1(documentation of internal regulation), 2 (members knowledge on internal regulation), 6(internal communication), 10(regular meetings), 11(participating in meetings), and 12(plan of action) from the results as shown in the graph above. This means that those aspects were totally unsatisfactory to the respondents. The respondent were also satisfy with statements 3(democratic elected leaders), 4(duration of leadership tenure), 5(responsibility of leaders) and 9 (women and youth in leadership) respectively. However the respondents give a positive score for statements 7, (individual collaboration) and 8, (member decision right).

#### 4.2.4. Stakeholder Collaboration and Network

On a scale of 1-4, the stakeholder collaboration and network performance score per 30 assessments were as follow

Table 6: Stakeholder collaboration and network statements

No	Statement
	Stakeholder collaboration and networks
1.	In the past, we have had exchange visits with other poultry farmers' organization
2.	Our farmers' organization has formal agreements with banks facilitating members' access to credit
3.	Our farmers' organization has established good agreements with input providers,
4.	Our farmers' organization actively participates in meetings of other farmers organization
5.	If our farmers' organization could engage in collective marketing at a better price, I would be happy to contribute cash for the benefit of the farmers' cooperative
6.	We work together with local authorities
7.	In the past years, our organization has approached institutes, NGOs, research centres and extension workers to find answers to questions we had
8.	Our organization has established good agreements with Traders to buy and transport our eggs
9.	We know that quality requirement of our buyers and consumers in different markets
10.	We discuss delivery contracts with Traders/buyers

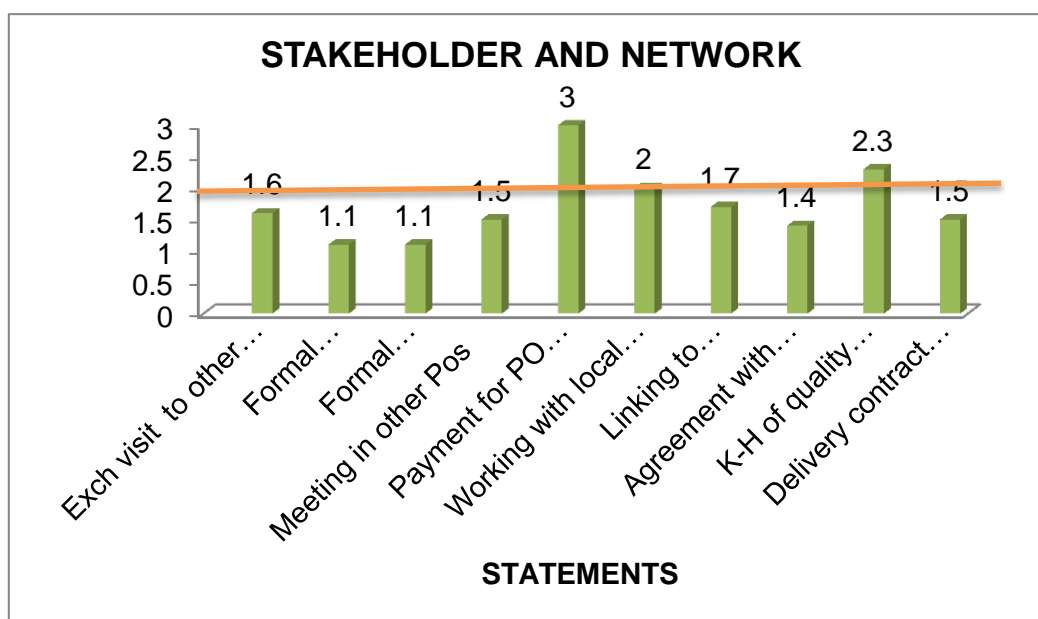


Figure 10: Stakeholder networks for Berekum Poultry farmers association

As depicted from the graph above, the results found out that the respondents were negative on for statements 1,(exchange visits to other POs), 2,(formal agreement with banks), 3(good agreement with input suppliers), 4,(participating with other POs meetings), 7,(Collaborates with NGOs and research centres) and 8 (agreement with traders) respectively, scoring very low marks. The very low score meant that the respondent's perception on these statements was unsatisfactory. Respondents' shows satisfaction, average scores for statements 9(quality requirement of buyers) and 10 (delivery contract). A positive score was recorded for statement 5 (appreciate if PO can help market eggs).

#### 4.2.5. Service Provision to members

On a scale of 1-4, the service provisions for members performance score per 30 assessments are as follows:

Table 7: Service provisions statements

No	Statement
	Service provision to members
1.	The services of the farmers' organization respond to my needs as a poultry farmer
2.	I think our farmers' organization is efficient in providing information and training to the members
3.	New members are well adopted in organization and receive proper assistance
4.	I am benefiting from trainings organized by the organization that make me more professional farmer
5.	Our organization has the habit of asking members if they are happy with service render to them
6.	By being a member of this organization, I am earning more
7.	I am aware of the opportunities that we as farmers have to be joined in an association

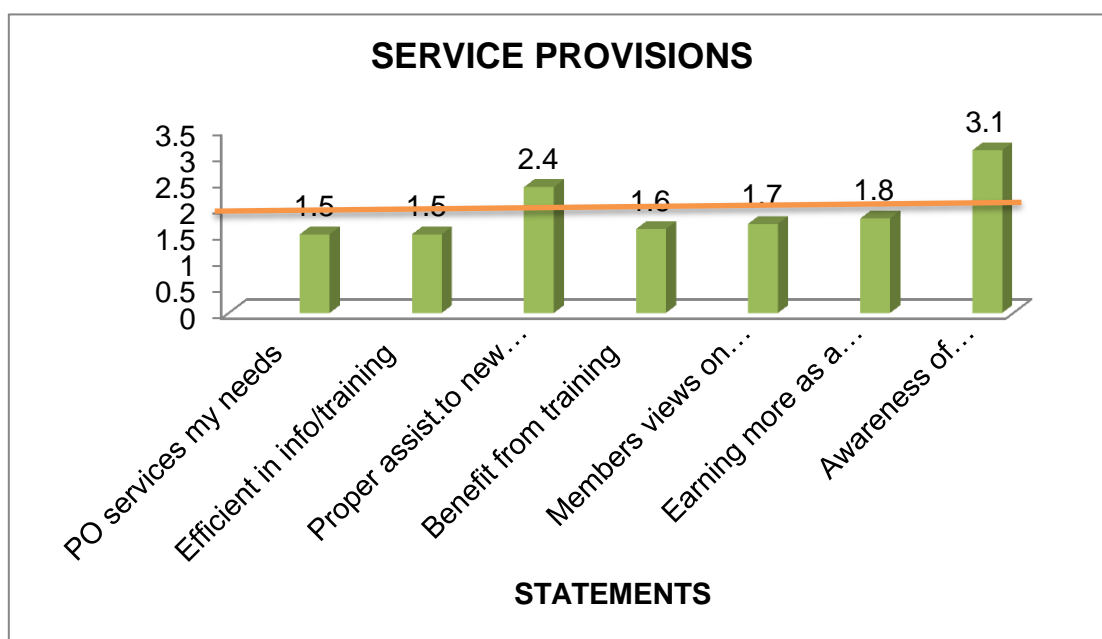


Figure 11: Service to Berekum Poultry Farmers Association

From the results in the graph above, it was found out that the respondents showed a strong disagreement with statements 1(service needs to farmers), 2 (Provision of information), 4(Benefits of training from PO), 5 (information on members activities), and 6 (earning more as a current member) respectively, showing an unsatisfactory perception by the respondent's. The respondents however were satisfied with statement 3(adoption of new members) and a positive score for statement 7(farmers being aware of opportunities when a member of PO).

#### 4.2.6. Cost and Marketing

On a scale of 1-4, the cost and marketing for members performance score per 30 assessments were as follows:

Table 8: Cost and marketing statements

No	Statement
	Costs and marketing
1.	I am always able to sell my eggs
2.	The organization provides enough information about where/who and when to sell my eggs
3.	I know eggs prices at different markets in Ghana
4.	In case there is little market to sell my eggs, our organization searches for new markets
5.	Even if there is market for the egg, the organization is still active searching for markets
6.	I always get the same price I get for my eggs
7.	I am happy with the price I get for my eggs
8.	I am happy with the payment methods of my eggs
9.	My production cost are covered by the sales of eggs

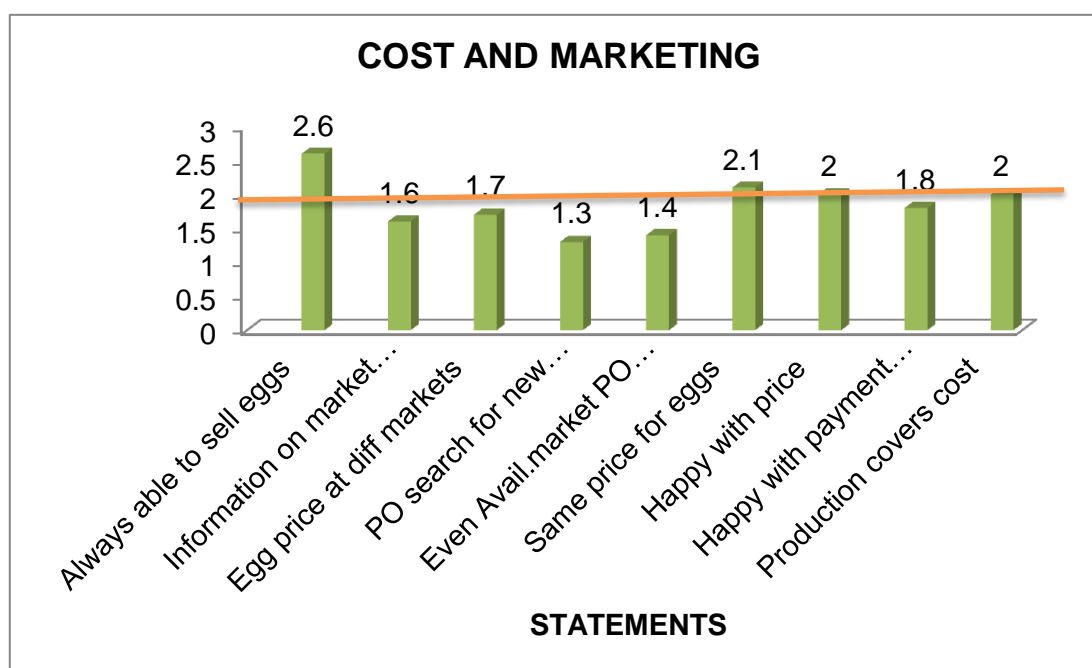


Figure 12: Cost and marketing of Berekum Poultry farmers association

Results from cost and marketing indicate that respondents were positive about statements 1 (they are always able to sell their eggs). Respondents however show a strong disagreement in statements 2 (information on market), 3 (knowledge of egg price), 4 (new market search), 5 (available market but still searching) and 7 (happy with the price of eggs) 8 (happy with payment method) 9 (Production cost are covered) respectively. An average score recorded for statements 6 (always getting the same price for eggs). The score on statements 6 mean that respondents were satisfied.

### 4.3. Survey results of egg Traders

This chapter represents the marketing segment of egg traders and their perception towards POs. Eight traders were questioned with each given their view on the two themes stated.

#### 4.3.1. Sustaining traders and farmers relation

##### Supplies

From the results, 8(eight) traders were questioned with all respondents been females. All of them started doing this egg business ranging from 4months-15years. All of them alluded that farmers approach them for pre-financing of their production, sometimes they also search for the farmers themselves and through personal relationships with the farmers they could get their supplies.

Half of the respondents said during the survey that, they do not get the quantity of eggs required while the remaining half said they do get the quantity they want. On quality requirement 1/3 (One third) ie.3 of the respondents said they do get the quality they want while 2/3(two third) ie.5 of the remaining said they are unsatisfied with the quality of eggs they get.

Majority (7) of the traders said their supplies are from different sources (farmers) with only 1 trader saying she is new in the trade and as such gets her supplies from only one source (farmer). Except for quality and quantity, they all agree that regular supply is not a problem.

##### Transportation

Majority of the respondents stated that the distance to various layer farms were far and most of the road networks leading to these farms were in bad states. But they do not have problems with transport. All of them alluded to the good relationship with the farmers.

##### Cost and Price

Their major complaint was the constant increases of egg prices by the farmers without their knowledge which they say make the business unstable. They normally purchase a crate of egg (30eggs/crate) at a cost ranging from GHC 6.50-7.00 with the current price at GHC 6.50. They sell the eggs currently at GHC 7.50. They traders explain that they spent cost on transport, rent, electricity, tax and loading and off-loading of the eggs to and from the vehicle. The table below a current value share of each actor in the chain.

Table 9: Showing value shares of actors in small-medium chain

Actors	V. Cost	Revenue		Gross Income	Added Value	Gross margin	Value shares	
		Selling price		Rev-Cost		Rev-Prev actor rev	Gix 100/Rev	Added Vx100/Final Price
Farmers	0.13	0.21		0.08	0.21		39%	70%
Traders	0.2	0.25		0.05	0.04		20%	13%
Retailers	0.26	0.3		0.04	0.05		13%	17%

€1.00= GHC 2.5 (30eggs=1 crate =GHC 6.50 at farm gate)

## Egg Traders Perception of Producer Organization

On the issue of POs, the results found out that 6 out of 8 egg traders stated that they would prefer to deal with individual farmers rather than POs. Their reasons were as below;

As quoted from traders during the survey,

i). *“Farmers could unite for uniform and constant increases in price of eggs”*

ii) *“They could get products (eggs) from individual farmers on credit due to the long term relationship with them, but with POs it will be difficult to access such facility for eggs. They said it will be easier to deal with individual farmers than POs”.*

However 2 of the traders said, dealing with POs is the best way to do business. They emphasised that dealing with the group could enhance business through,

As quoted from traders during the survey;

i) *“Easy and direct access to products (eggs) at one place rather than when farmers are scattered”.*

ii) *“They can get regular information on products and negotiate on reasonable prices from the POs instead of the current fluctuation and different price quoting from individual farmers”.*

All the respondents questioned belong to associations whose objectives are to get reliable market and stable price.

Below is a picture of interaction with a trader during the survey on traders to get her views on the issue raise above.



Picture 1: Interview with an egg trader

#### 4.4. Results of the interview with the Producer Organization (Current situation)

This chapter represents findings of the structure and assessment performance of the Berekum Poultry Farmers Association. The results gathered from interviewing the chairman (one of the executive) of the association on the current situation of the PO.

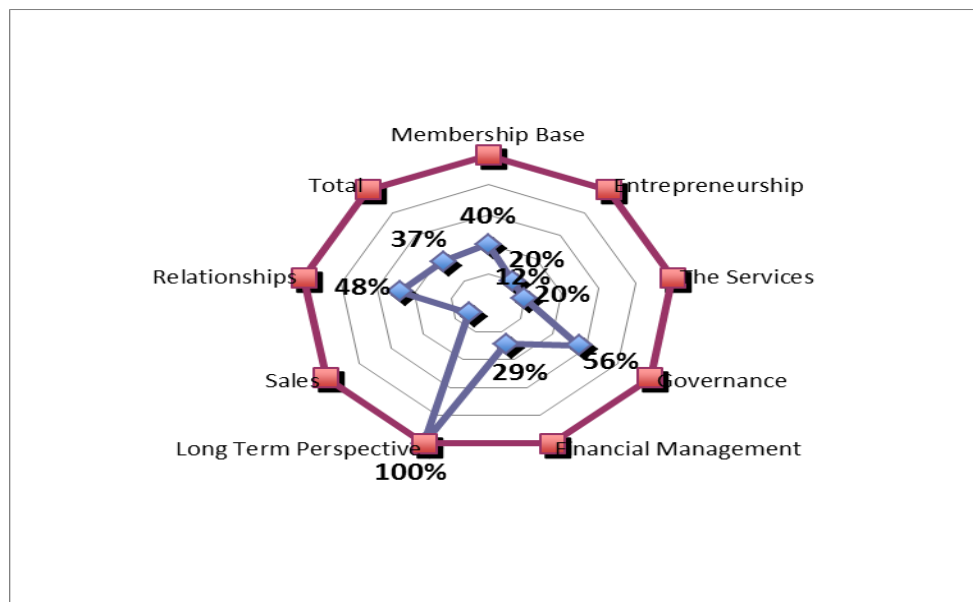


Figure 13: Berekum Poultry Farmers Association performance chart

The figure above shows the MIDCA (Spider web) tool used in assessing the effectiveness of the PO during the study. A YES from each statement gives a score of 5, not sure statement gives 3, while a NO statement gives 0. Evident from the respondent also gives judgement on each answer from the statements.

##### 4.4.1. Assessment of Internal Organization of the PO.

Table 10: Assessment of Internal Organizational of the PO.

Internal Organization	Governance	25	14	56%
	Financial Management	35	10	29%
	Long Term Perspective	15	15	100%

**Governance and Leadership:** Selection of leaders was democratically done from the results but documentation and internal regulation needs improvement. Women and Youth were not sufficiently represented in the leadership and there was the need to improve collaboration with members and the structure of the organization. A 56% score was recorded for this segment of the PO. This is a little above average and there is the need for leadership to improve in this area.

**Financial Management:** From the results, it was found out that, the organization has no access to local financial resources from banks. There has not been any auditing for the past years. Liquidity and solvency ratio was poor while there was no funding from outside. The results showed that, the organization has a Treasurer and finance was solely from members. A very low score of 29% was recorded.

**Long-term Perspective:** The vision and mission, long term strategy and strategic financial vision of the PO were very positive according to the results, scoring 100% in this area. Although management could not show me any writing documents to prove that they have a long term vision and mission.

#### 4.4.2. Assessment of Production activities of the PO

Table 11: Assessment Production activities of the PO

Production	Membership Base	15	6	40%
	Entrepreneurship	30	6	20%
	The Services	15	3	20%

**Membership Base:** From the results presented in the table above, it was found out that there were few active and certified members. Activities to increase membership were absent. This resulted in the current member participation in the PO being far below average, 40% score recorded. This represents an unsatisfactory score and there is urgent need for improvement or change or change.

**Entrepreneurship Skills:** Most of the leaders did not have the expertise to run the association and, they are unable to identify potential market for members. They only on few occasions draw members' attention to risks and opportunities. Training of members on poultry production is absolutely absent. A score of 20% was recorded for this area which is one of the pillars of any organization. This picture presents a far unsatisfactory and weak score, which needs for an urgent change in the activities and the kind of leaders handling the PO.

**Service Provision to Members:** Information to members was only done when there is an outbreak of disease. Provision for inputs used and other services were totally absent. A very low score of 20% was recorded for services that are being rendered to members by the association from the table above.

#### 4.4.3. Assessment of external activities of the PO.

Table 12: Assessment of external activities of the PO.

Market	Sales	25	3	12%
	Relationships	25	12	48%

**Sales and Marketing:** From the results it was observed that the PO does not perform any marketing activities, identify and diversify client base and they do not have any knowledge about farmers' marketing channels. The PO is only aware of average sales by members. The results from the table above indicated a score of 12% for this area.

**Relationship with Stakeholders:** From the results it was found out that the PO relationship with Producers, Clients and Supporters in terms of constructive co-operation, transparency, trust, mutual respect and win-win needs improvement. There was no link with financiers. This area recorded a 48% score.

## **CHAPTER 5: DISCUSSIONS**

This section presents discussion and argument based on results from data collection of field survey and case study in Berekum municipality. It shows the layer chain and its stakeholders, market challenges and the perception of farmers towards their PO and the role of the PO in Berekum and what strategies to improve the situation.

### **5.1. Current marketing channels of small-medium scale layer farmers**

The current market channel for all 30 farmers questioned were through market traders who they farmers look for themselves or sometimes the traders come to look for the supplies (eggs). These traders come from different part of the country's markets for with individual requirements on quality and quantity. They (traders) negotiate directly with farmers when they pre-finance the farmers' production. They both agree on this term base on mutual understanding of long term business between the two parties. Reason why Kaplinsky and Morris (2001) added that value chain exists when all stakeholders in the chain operate in the way to maximise the generation of value along the chain.

#### **5.1.1. Current marketing challenges of small-medium scale layer farmers**

Challenges faced by small-medium scale layer farmers in marketing their products were lack of bargaining power, inadequate entrepreneurial skills, inadequate information on market and inaccessibility to services like finance and inputs. This explains why KIT and IIRR (2008) also stated that volatility and Market integrations are some of the major challenges facing small-medium scale farmers. Winter and Funk (1994), also pointed out that challenges in marketing eggs arise from the location of the eggs with respect to consumption centres, their seasonal distribution relative to the time of consumption, and the maintenance of quality through the marketing channels while they are held or transported.

#### **5.1.2. Perception of Small-medium scale layer farmers towards their PO**

##### **Membership base (current standing)**

From the 30 small-medium scale layer farmers questioned, it was clear that all of them were dissatisfied with the way the PO is organizing members. Members' responses were all below average. It shows an urgent need for improvement in the way the PO manages its activities to attract and retain members, because joining POs is a voluntary will. This is the reason why Bijman (2007), stress that POs are associations of voluntary membership and form for collective action. The activities of leaders such as lack of trust, entrepreneur skills and self-centeredness are actions that make the ineffectiveness of members within the PO. This according to Shiferaw et al. (2006) could only be achieved if collective action occurs when individuals voluntarily cooperate as a group and coordinate their behaviour in solving a common problem.

##### **Governance and leadership**

Member farmers of Berekum small-medium scale layer association disagree with the way the PO is being governed. They were dissatisfied with the internal regulations and documentation and the way leaders were selected. This Bijman (2007) stated that POs can function well if Leaders are democratically elected by members with each member having a voice. Members' response indicated that internal communication and regular meetings were lacking on the part of the leadership. But Bienabe and Sautier (2005, stated that one of the five functions on PO is regular information sharing and capacity building. A total dissatisfaction on the leadership style by members shows a need for improvement.

## **Stakeholder collaboration and network**

The self-assessment results from the members to the PO clearly indicates that all the farmers were not satisfied with the level of which the PO work in linking them to other stakeholders within and outside the chain. This is because members have to source for financial resources, inputs and negotiate for their own market for the eggs. These issues observed were contrary to Bijman (2007) who stated that POs can easily established vertical coordination within the chain than individual farmers. This was also supported by Bienabe and Sautier (2005) that POs are in a position to establish linkages at all levels in the chain to integrate social, economic, representative, information sharing and coordination for its members. This notwithstanding from the results, farmers were willing to contribute in any form if their association could guarantee them reliable network for their businesses.

## **Provision of Services to Members**

The study reveals that all the farmers were dissatisfied with the services rendered by the PO to its members. Members were not happy with the level of information flow and training for members and new members to be better in the poultry business. They expressed strong dissatisfaction of the knowledge the association has about their activities and how they are coping. This is also opposite to Bijman (2007) who stated that POs are supposed to assist their members in adapting to product quality for market needs, by providing extension services and training to help them make proper production choices. This is supported by FAO (2012) report which states that to attract more farmers into a PO, the PO must be seen as valuable by providing high quality services such as training, technical assistance/advice, and bulk input purchase and distribution and sometimes financial service. From the study all the farmers were aware of the opportunities that they will derive when they are members of a PO.

## **Cost and marketing**

A major and important area for small-medium scale layer farmers in Berekum municipality is how to market or find reliable market for their eggs. A well-functioning PO must provide documentation of market outlets for members FAO (2012). Bienabe and Sautier (2007) also emphasized that the bulk purchase or selling behalf of members can increase Farmers bargaining power. This was absent from the results during the survey. Farmer sells their own products, search for their own buyers and new markets and do the bargaining themselves. This put the farmers in a disadvantage position as traders take advantage of them when they realize that the farmers do not have one voice. The farmers were very dissatisfied with the way the organization manage their cost and marketing.

### **5.2. Current relation between egg traders and small-medium layer farmers**

This section discusses the findings of the survey on egg traders and their market channels and the relation between them and farmers and their perception towards POs.

#### **Market relation**

From the results, it was observed that all 8 (eight) respondents (traders) agree that they have personal good personal relations with the farmers. Therefore, they are able to pre-finance the farmers on production who in return sell the eggs to them on an informal contract at a specific price when production of eggs begins. This situation is supported by Scipman and Qaim (2011) that in addressing farmers' access to market channels; they (farmers) must personally know the buyers they are dealing with, which may relate to trust not contract. This situation is also in tandem with Mitchell et al (2009) in one of their upgrading strategies (Vertical coordination), which states that some producers forming a long term relations with

traders like a contract which can results in certainty about the future but requires building of trust relations between partners for strong contractual commitment. But the traders were most often not happy with the farmers for not fulfilling their side of the bargain when they (farmers) realised that prices of eggs have increased on the market thereby diverting the product to other buyers who could buy at higher price. This is reason why Deepak and Thapa (2006) stated that most intermediaries harassed and exploit farmers because of their weak bargaining power and poor economic condition. Sturgeon (2008), explain this situation as simple market linkages, governed by price.

### **Perception of egg traders on the role of Producer Organization**

Most of the egg traders, (6) questioned disagrees in dealing with POs when it comes to purchasing their products (eggs). They stress that dealing with POs they would not have opportunity to buy eggs on credit; POs could unite and determine a price for the products. It will mean they (traders) won't be the position to pre-finance the farmers as usual thereby breaking the personal relation between them and the farmers. This could mean that buyers would want the lowest possible price for the eggs. This was supported by Schrader (2012), who noted that farmer/suppliers want to have highest price for their product whereas buyers look for the lowest possible price. Only 2 (two) out of the 8 (eight) egg traders prefer to deal with POs, because they believe that would coordinate and stabilised the chain (work together to strengthen the relationship between farmers and their association and also to find common grounds for setting standards (quality, standardize volumes) in the trading of eggs with actors in determining price for stability and market information).

The egg traders and farmers alluded to the relationship existing between them, but they were quick to stress their unhappiness about the fluctuation in egg prices. The farmers were not happy with the exploitation by traders as most traders demand eggs at a cheaper rate when they pre-financed their production. The traders also complain of farmers diverting eggs to other buyers when prices surge, although they have oral contract by pre-financing their initial production. This is the reason why Boomsma (2008), stated that for sustainability to be realised, the indicators in the value chain analysis should include the commitment of all the primary actors.

### **5.3. Current performance of Producer Organization**

The findings on the interview with the chairman of the Berekum small-medium scale layer farmer association is discussed in this section looking at the PO internal organization, internal activities and marketing strategies.

#### **5.3.1. Internal Organization (Governing structure)**

##### **Governance and Leadership**

From the results selection of leaders was democratically done but documentation and internal regulation needs improvement. But the results from the survey indicated that members were in disagreement with how the leadership selection was done. Women and Youth were not sufficiently represented in the leadership and there was the need to improve collaboration with members and the structure of the organization. This aspect was in agreement with what individual farmers express during the survey.

## **Financial Management**

From the results, it was found out that, the organization has no access to local financial resources (bank, financial institutions etc.). There has not been any auditing for the past years. Liquidity and solvency ratio was poor while there was no funding from outside. The results showed that, the organization has a Treasurer and finance was solely from members. This result was not supported with FAO (2012) report which stated that a good leadership of POs must have knowledge about transparent financial management and operational system.

### **5.3.2. Production activities**

#### **Membership Base**

The results observed from the interview conducted on the PO reveal that there are few certified and active members in the association. There were no strong actions by the association to attract and retain members. This makes the PO weak in its activities. This situation does not support the view of Shiferaw et al. (2006) who stated that collective action occurs when individuals voluntarily cooperate as a group and coordinate their behaviour in solving a common problem. With few and uncertified members, the results observed did not also support the views of Mitchell et al (2009) on horizontal coordination within the chain where producers come together for achieving economic of scale and reduce transactional cost under set regulations and quality management. This result is also in tandem with the results on the survey conducted on the 30 small-medium scale layer farmers on their perception of the PO.

#### **Entrepreneurship Skills and service provision to members**

The result from case study reveals that the leaders of the PO did not have any skills and expertise to run the activities of the association and, they are unable to identify potential market for members. They only on few occasions draw members' attention to risks and opportunities. Training of members on poultry production is absolutely absent. Information to members was only done when there is an outbreak of disease. Provision for inputs used and other services were totally absent. These situations were not different from the survey on individual farmers' perception on training and services rendered to them by the PO. The state of this current area did not support the views of Bijman (2007) who stated that well organised POs coordinate effectively by transferring certain decision-rights from individual producers to POs both horizontally among members and vertically between producers and customers. Bijman further stated that POs support members to make proper production choice (by setting requirements and providing technical support). According to FAO (2012), to retain and recruit farmers, PO membership must be perceived as being valuable through the provision of high-quality services to members, some of which may be subcontracted. The report stated that these services include documentation of market outlets, storage and transport provision, bulk input purchases and distribution, financial services, training, technical assistance and advice.

### **5.3.3. External activities (Marketing)**

#### **Sales and Marketing**

From the results it was observed that the PO does not perform any marketing activities, identify and diversify client base and does not have any knowledge about farmers' marketing channels. The PO is only aware of average sales by members. This was also shared by farmers during the survey that they search for market themselves and do the marketing individually. Most of them stated that they are unable to diversify client base because most traders pre-finance their product and are compare to accept the price previously agree on the two parties. The result did not support Bijman (2007) view which states that; Producer Organization is an economic organization; its main purpose is to enable members to enter the market or enhance their position in the market, whether this is an input market or a farm product market.

#### **Relationship with Stakeholders**

From the results it was found out that the PO relationship with Producers, Clients and Supporters in terms of constructive co-operation, transparency, trust, mutual respect and win-win needs improvement. They had no link with banks and other stakeholders to support the activities of members. The farmers alluded to this same situation during the survey. Farmers search for their own finances, create their own network in order to get their business running. And for every organization stakeholder collaboration is essential for economic improvement. This to Bienabe and Sautier (2005) that Producer Organization can fulfil five types of functions: economic, social, representation (advocacy and voice), information sharing/capacity building, and coordination and establish linkages at all levels within the chain. POs continuously search for new ways to improve smallholders' competitiveness through joint actions such as bulk buying of inputs, collective marketing, negotiating of credit and contracts, and lobbying of policy-makers (FAO 2012). Bijman, (2007), stated that POs easily established vertical coordination within the chain.

## CHAPTER 6: CONCLUSIONS

The research study had an objective to assess the effectiveness of Producer Organization in order to improve its performance to link small-medium Farmer in the layer chain of the Berekum municipality to access market.

From the study and results obtained, it is therefore concluded that the major channels for small-medium scale layer chain in the Berekum municipality to market their produce is through individual farmers identifying individual buyers (traders) who approached the farmers for products (eggs) or the vice versa. This leads Farmers in establishing relationship with the traders for pre-financing and pre-arranging and supplying of eggs at an agreed price.

The major challenges facing most small-medium scale layer farmers in the Berekum municipality to access market were lack of bargaining power due to lack of capital to continuously manage the business, inadequate price information and lack of entrepreneurial skills (production, financial management and book keeping). The lack of entrepreneurial skills on the part of most farmer make them unable to show reasons why they should be given improve price for the eggs as previously agreed upon. Most farmers eluded that because of this situation they have no choice than to ask traders to pre-finance their production until laying starts which they have to give the eggs at the previous price agreed upon although there could be higher price in the market.

From the results of this study in answering to sustainable market relation between egg traders and farmers, it therefore can be concluded that the relationship between some farmers and the traders were not in a win-win situation. This is because farmers tried to divert the eggs to other buyers when they realise that current price is higher than as agreed upon during the pre-financing. Traders would also want to stick to the agreed price although they realised prices of eggs has increase. This situation makes the chain relation unstable.

In conclusion, the current market for egg producers is not effective and cannot be sustained in a long term as indicated from the results as both farmers and traders do not trust each other by agreeing reasonable price for the eggs.

In answering to the question of the effectiveness of the Producer Organisation in layer chain, it can be concluded that there was a weak performance, in the governing structure, Production and the role the PO plays in providing services to its members.

**Governing structure:** The performance of governance/leadership and financial management were very weak as found out in the results. Member farmers during the survey were disappointed in how these aspects were being managed. Although the results show a positive score for long term perspective there could not be any evidence to show in documentation that it actually exists.

**Production:** On question of ways PO manage their internal activities, it must be concluded that management did not have the ability to attracting and retaining members and there were no adequate records on certified and registered members, entrepreneurship skills was also weak.

**External role of PO:** On the question external role provided by PO to its members, this section of the performance was woefully insufficient. PO has no knowledge about how individuals bargain and market their eggs; management could not identify potential or improved upon existing market for members. There were no relationships with other stakeholders like financial and input providers for members. Individual farmers identify and create their own link to improve upon their business. .

It can be concluded that the weak performance of the PO in the layer chain in Berekum municipality is the reason why most farmers lack information on price and have weak bargaining power as most farmers lack adequate capital to run their business. This situation is a result of inadequate entrepreneur skills by farmers and weak network linkage of PO for member farmers.

In conclusion, from the results, the PO in its current situation cannot perform its function of marketing eggs on behalf of its members nor can it link and negotiate on behalf of members for a reasonable price of eggs. The PO must position itself in the short term by strengthen their business capabilities by serving as a link between farmers and financial institutions and input providers and also serving as intermediaries between farmers and traders for price determination. With these capabilities in the long term, the PO could be in the position to market the eggs on behalf of members.

## CHAPTER 7: RECOMMENDATIONS

Based on the conclusions drawn from the study, there are challenges in the small-medium scale layer chain in the Berekum municipality which need to be addressed. To also improve the performance of the PO and to assist farmers' access market and improved their financial standings and ultimately stabilize price of eggs in the small-medium scale layer chain of the municipality. Identifying and using the available opportunities will contribute to improved incomes for these small-medium layer farmers. The following recommendations are made to the PO in a short term for adoption and implementation:

- There has been a total mistrust between member farmers and their leadership. Therefore a re-organization of the PO for new leadership. There should be a strong effort to include youths into the leadership as majority of farmers are averagely around 25years of age. This will give a new hope and direction to members. The veterinary department of MOFA (Berekum municipal directorate) can facilitate this initiative as the department has link with individual member farmers.
- The newly elected leaders must endeavour to re-register all members to have an adequate record on all members.
- Development of chain corporations through a shared vision and joint action plan to develop the performance of their businesses. The leaders in agreement with all members must re-write and adopt a constitution with clear vision and mission to guide the PO. The association must be registered and a new accounts open.
- The PO must collaborate with training and research institution like Wenchi Farm Institute for the training of member farmers on entrepreneurship skills to enhance their business capabilities.
- Training of leaders of the PO must be undertaken for to improve their management capabilities and entrepreneurial skills.
- Accessibility to credit was found to be weak; this is the reason why most farmers rely on traders for pre-financing of their production. There is need to strengthen the POs-driven scheme as a link for members to banks and other micro-financial Institutions to enable farmers access credit with low interest to develop their enterprise and improve member farmers' economic potential. Farmers should be trained on credit management so as to have credible investment plans.
- The PO must serve as a link and collaborate between PO and stakeholders and other actors within the chain (upgrading the enabling environment) like input supplies i.e feed and day old chicks and other support services like extension and training. The PO must link-up in contract with maize farmers for the supply of maize and bulking when price is affordable.
- Chain coordination through continual communication: There must be constant stakeholder dialogue between the PO and traders to determine and agree upon price of eggs when the need arises. This will strengthen the relationship not only with individual farmers but with the PO as a whole for everyone within the chain to know their stake and importance each play. This will stabilised the chain and reduce the ad-hoc trading been practice.
- PO should involve inter-chain upgrading by interacting with other profitable chains for skills and experience to its members.
- The leaders must organised regular meetings to keep members abreast with issues on the association, be accountable to members during the meetings. These regular meetings could provide information on market and price to members. At meetings experience on production can also be shared among members. This could encourage members to regularly contribute and pay their dues for the improvement of the PO.

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## ANNEXES

### Annex 1: Questionnaire for members of Berekum Poultry farmers association

Questionnaire number:

Personal information:

Gender (F/M) ----- Age----- Education level-----

Number of birds .....

Questionnaire /statements, Part 2

Below, you'll find a list of statements. For every statement, please make up your mind and determine to what extent you disagree or agree with the statement. Please give your opinion on the statement by asking yourself: "Is this statement true or not true?" " And: To what extent is this true or not true? "

You can give a score ranging from 1 to 4. A score '1' means: I totally disagree with the statement. A score '4' means: I fully agree with the statement. The scores 2 and 3 are in between

Please clearly indicate the scores you give (circle the chosen scores). Please answer all statements

Scores 1= I totally disagree with the statement.

2= I disagree with the statement

3= I agree with the statement.

4= I totally agree with the statement

No	Statement	Score			
1	Membership base				
1.1	The condition for adhering to our organization are clearly defined	1	2	3	4
1.2	Our farmer's organization has clearly formulated the objectives it wants to reach	1	2	3	4
1.3	These objectives are shared with all individual members	1	2	3	4
1.4	All farmers who want to, can be member of our farmers' organization	1	2	3	4
1.5	I regularly pay membership fees	1	2	3	4
1.6	I actively participate in the activities of our farmers' cooperative	1	2	3	4
1.7	Our organization seek the adherence of new members	1	2	3	4
1.8	The organization knows how many birds each member has	1	2	3	4
1.9	Our Organization knows the quantity of eggs produce by members weekly	1	2	3	4

No	Statement				
	Governance, leadership and internal democracy				
1	The internal regulation of our organization are well documented	1	2	3	4
2	All members know the internal regulation of our organization	1	2	3	4
3	The governing board of the organization has been democratically and transparently elected	1	2	3	4
4	The duration of the mandate of a leadership position is well defined	1	2	3	4
5	Each member is aware of his/her responsibility	1	2	3	4
6	Internal communication within our farmers' cooperative is well organized: members are well informed about whatever is happening	1	2	3	4
7	Collaboration between members is good	1	2	3	4
8	Every member in our farmers' cooperative has the same decision rights	1	2	3	4
9	Women and youth are sufficiently represented in the elected bodies of our organization	1	2	3	4
10	There is regular meetings by the organization	1	2	3	4
11	During meetings all participants share their of view	1	2	3	4
12	Every year, our organization elaborates a plan for the year	1	2	3	4
No	Statement				
	Stakeholder collaboration and networks	1	2	3	4
1.	In the past, we have had exchange visits with other poultry farmers' organization.	1	2	3	4
2.	Our farmers' organization has formal agreements with banks facilitating members' access to credit	1	2	3	4
3.	Our farmers' organization has established good agreements with input providers,	1	2	3	4
4.	Our farmers' organization actively participates in meetings of other farmers organization	1	2	3	4
5.	If our farmers' organization could engage in collective marketing at a better price, I would be happy to contribute cash for the benefit	1	2	3	4

	of the farmers' cooperative				
6.	We work together with local authorities	1	2	3	4
7.	In the past years, our organization has approached institutes, NGOs, research centres and extension workers to find answers to questions we had	1	2	3	4
8.	Our organization has established good agreements with Traders to buy and transport our eggs	1	2	3	4
9.	We know that quality requirement of our buyers and consumers in different markets	1	2	3	4
10.	We discuss delivery contracts with Traders/buyers	1	2	3	4
No	Statement				
	Service provision to members				
1	The services of the farmers' organization respond to my needs as a poultry farmer	1	2	3	4
2	I think our farmers' organization is efficient in providing information and training to the members	1	2	3	4
3	New members are well adopted in organization and receive proper assistance	1	2	3	4
4	I am benefiting from trainings organized by the organization that make me more professional farmer	1	2	3	4
5	Our organization has the habit of asking members if they are happy with service render to them	1	2	3	4
6	By being a member of this organization, I am earning more	1	2	3	4
7	I am aware of the opportunities that we as farmers have to be joined in an association	1	2	3	4
No	Statement				
	Costs and marketing				
1	I am always able to sell my eggs	1	2	3	4
2	The organization provides enough information about where/who and when to sell my eggs	1	2	3	4
3	I know eggs prices at different markets in Ghana	1	2	3	4
4	In case there is little market to sell my eggs, our organization searches	1	2	3	4

	for new markets				
5	Even if there is market for the egg, the organization is still active searching for markets	1	2	3	4
6	I always get the same price I get for my eggs	1	2	3	4
7	I am happy with the price I get for my eggs	1	2	3	4
8	I am happy with the payment methods of my eggs	1	2	3	4
9	My production cost are covered by the sales of eggs	1	2	3	4

*Thank you for taking time in filling up this survey.*

## **Annex 2: Questionnaire for Traders**

Questionnaire number:

Personal information:

Gender (F/M) -----

Age-----

Education level-----

### **MARKET**

1. How long have you been doing this business?
2. How do you identify your farmers?
3. Do you always get the quantity of eggs you required? YES { } NO { }
4. Do you always get the quality of eggs you required? YES { } NO { }
5. Do you purchase eggs from different farmers? YES { } NO { }

If NO, why? .....

If YES, why? .....

6. How do you see the following issues in your egg trade?
  - i. Distance to farmers.....
  - ii. Transportation.....
  - iii. Relationship with your farmers.....
  - iv. Price of eggs.....
  - v. Regular supply of eggs.....
7. What is the cost of crate of eggs at farm gate?.....
8. How much do you sell a crate of eggs?.....
9. How much do you spent on transport by crate of egg?.....
10. What other cost do you incurred during trading of eggs?.....

## PRODUCER ORGANIZATIONS (POs)

1. Do you prefer to buy eggs from?

- a. Individual farmers
- b. POs

Reason .....

2. Do you belong to an association? YES { } NO { }

If yes: what benefit do get?.....

If No why? .....

3. Do you think you can have good relationship with POs? YES { } NO { }

If yes why? .....

If No why? .....

## Annex 3: Check list of interview PO executives

Checklist for the selected representative of Berekum small-medium scale layer farmers association

### Membership base

Are all members active?

Are all members certified by the association?

The actions to increase (active) membership are appropriate and have resulted in increments of active membership?

### Entrepreneurship skills

Do leaders have the expertise to run the organization?

Our organization is very good in identification of market possibilities

Our organization is able to identify risk and opportunities well

We organize regular training for members to update their skills in poultry production

In taking risk, we analyse properly

The organization has taken risks and the results came out as plan

### Service provision to members

Organization provide adequate information on market to members

The organization has training for use of inputs by members

Internal clients (producers) are satisfied with the services provided by the organization

### **Governance structure evaluation**

There is democratic way of selecting leaders

There is sufficient documentation and internal regulations are known to all members

The needs of gender and youth has been taken care of

Does the current organization has a good collaboration between members

Is the current governance sufficient and does it performs well?

### **Financial management**

There is a treasurer that keeps the organization finance

The organization has access to local bank/financial institutions to cover their financial needs

Financial information of the last three years is available and audited

Good score on solvency ratio above 30%

Good score on liquidity ratio, every month

The organization depends on members' dues for its own budget and/or financial resources.

The organization depends on outside sources of grant funding

### **Long-term perspective**

There is a written declaration of the organization vision and mission

There is a long term strategic plan

The organization has a clear vision on building capital and becoming financially self-sufficient in the long term.

### **Sales and marketing**

Average sales price received for eggs sold increases all year round for members

The organization efficiently executes marketing activities to broaden the client portfolio.

Time from laying to sales is the appropriate and allows the organization to function properly and fulfil obligations to internal and external clients.

The organization searches for new markets.

The organization has a sufficiently diversified client portfolio so that they are not overly dependent on a few clients.

### **Relations with stakeholder**

What is the relationship with of the Organization with Producers, Clients, Financiers, Supporters/NGOs and Community in terms of?

Constructive cooperation, Transparency, Trust, Mutual respect, Win-win and Long- term.





