## **Poultry Value Chain in West Amhara**

(Bahir Dar Zuria and Libokemkem Woredas)



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Commissioned by Programme for Agro-Business Induced Growth in the Amhara National Regional State

August, 2018 Bahir Dar, Ethiopia

## List of Abbreviations and Acronyms

AgroBIG - Agro-Business Induced Growth program

BDS - Business Development Service

CSA - Central Statistics Agency

DI - Detail Interview

ELSA - Ethiopian Livestock Sector Analysis

ETB - Ethiopian Birr

FGD - Focus Group Discussion

GTP II - Second Growth and Transformation Plan

ILRI - International Livestock Research Institute

Kg - Kilo gram

KII - Key Informants Interview

LMP - Livestock Master Plan

MFI - Micro-Finance Institutions

MoLF - Ministry of Livestock and Fishery

VC - Value Chain

VCA - Value Chain Analysis

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#### **Executive summary**

**Background and Objective:** Agro-Business Induced Growth programme is a bilateral agribusiness development program of the Ethiopian and Finish governments, which mainly operating in Amhara regional state. The programme first phase was implemented in Fogera and Mecha Woredas, that ended in 2017, the second phase is running for four and a half years until 2021. The second phase covers North Achefer, South Achefer, North Mecha, South Mecha, Bahir Dar Zuria, Dera, Fogera and Libo Kemkem Woredas. From livestock value chains, dairy, small ruminant fattening and poultry added and the project intended to address bottlenecks hindering producers, traders, processors, retailers and consumers to get the best value from their participation using the Value Chain Development Approach. The study conducted to assist actors in poultry VC to identify their business opportunities and competitive advantages, and to address the shortcomings that pose a risk for their business initiatives to prosper.

**Methodology:** The study used both primary and secondary data sources using Participatory Value Chain Analysis with Gender, Green and Governance Lens (PVCA+G3). For the primary data collection two sample Woredas (Bahir Dar Zuria and Libokemkem Woredas) taken mainly for the upstream actors. Conducted interviews and group discussions with actors at different segment of the value chain that includes small-scale producers, day old chicken growers, processors, supermarkets, hotels, different sector offices and experts from Kebele to national level. To assess the overall existing situation, Ethiopia and other countries trends and benchmarks thoroughly reviewed.

Value Chain Situation: Demand for poultry products-chicken meat and egg is expected to increase significantly through 2013-2028 according to the nation's LMP, mainly due to population growth, consumption pattern change and urbanization. The consumption level is estimated to grow, on average, to about 14.8 million kg of chicken meat and 105.7 million kg of egg in the years ahead. The study identified three poultry market segments on which more than 600,000 residents, and about 32 big hotels and many more restaurants.

Value Chain Constraints and Interventions: The main constraints identified in all segments of the VC includes, shortage of medical supplies and limitations on timely health service, increasing feed price and quality feed supply, limited financial supply, less productive production management system, market seasonality and weak linkage, and exhibited poor coordination within the sector. To address the constraints, improving public and private health/vaccination service, supply of known parent stock/breeds for chicken meat and egg production, promotion of local poultry feed suppliers, train/demonstrate optimum use of feed mix and management, promotion of saving and credit groups, developing financial services, contextualized poultry housing construction technologies promotion, encouraging better market linkages, products collection and distribution arrangements, and promotion of shared public-private vision among the poultry industry actors in the region proposed as part of the interventions.

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#### 1. Introduction

#### 1.1. Programme Background and Assignment Objective

Programme for Agro-Business Induced Growth in Amhara regional state (AgroBIG) is a bilateral agribusiness development programme of the Ethiopian and Finnish governments. The first phase of AgroBIG (2013–2017) was implemented in Fogera and Mecha woredas in the Amhara region. The second phase of AgroBIG runs for 4.5 years (2017–2021) and is designed to sustain the gains and achievements of Phase I, and further strengthen agribusiness development within the Tana sub-basin.

The geographical focus of the second phase of AgroBIG is 89 kebeles in eight woredas: North Achefer, South Achefer, North Mecha, South Mecha, Bahir Dar Zuria, Dera, Fogera and Libo Kemkem, falling under the Koga-Gilgel Abay, Gumara and Rib catchments. The Programme targets approximately 300,000 direct beneficiaries classified into three main groups: (1) Individual farmers and farming household members; (2) Agricultural cooperatives and associations; and (3) Other private sector value chain actors.

AgroBIG uses the Value Chain Development Approach, addressing the bottlenecks that hamper producers, traders, processors, retailers and eventually consumers to get the best value from the product they are either producing, processing, trading or consuming. In addition to promoting vegetable and crop value chains, AgroBIG II is intended to include other potential value chains from within the livestock sub-sector for the Programme support to help the targeted beneficiaries diversify their income sources. The initial assessments made by the Programme team suggest that small ruminant fattening, dairy and poultry production have the desired potential for job and income generation, considering women and youth in particular.

Based on the team identification the poultry value chain analysis designed to produce comprehensive analyses to assist the AgroBIG implementers to identify their business opportunities and competitive advantages, and to address the shortcomings that pose a risk for their business initiatives to prosper. The results of the analysis will also guide AgroBIG decision makers and management to ensure resources for interventions that have the best potential to help developing the value chain. The poultry value chain analysis conducted taking Bahir Dar Zuria and Libokemekem as sample areas.

The specific objective of the VCA analysis were:

- a) To determine potential activities for increased income related to poultry value chain that enhance the attainment of the targets of AgroBIG.
- b) To identify the potential of the poultry value chain at their all stages to create jobs, with specific focus on women and youths.
- c) To review the support packages and operational guidelines developed by the Livestock Promotion Agency to assist youth groups' engagement in livestock production. Assess the potential and observed challenges of the respective support and interventions in job creation for youth.
- d) To identify the existing and potential value chain actors, supporters and enablers (focused on downstream) having capacity to create sustainable markets for the Programme beneficiaries (smallholder farmers, their cooperatives, service providers, women and youth groups).
- e) Carry out in-depth analysis on various aspects of the value chain opportunities, constraints, show causes & effect of the chains (root-immediate causes), propose market-based solution (interventions) and the actors expected to be part of the solution.
- f) To indicate the value addition activities along each node of the value chain(s).
- g) Include successful business models or cases to ensure chain optimization.

#### 1.2. Methodology

Both primary and secondary data sources used for the study.

**Secondary sources**: Review of secondary information conducted to assess existing value chain situation, country specifics and trends, other countries benchmarks.

Primary sources: Interview and key informant discussion conducted with primary value chain actors,

existing different private and public providers service using semistructured questionnaire and guiding questions. Representative respondents' type identified at the beginning of the study and additional actors added during the process of the study to get more comprehensive opinions and information. respondents include producers, cooperatives multipurpose and unions, hotels, butchery, brokers,



FIGURE 1. FOCUSED GROUP DISCUSSION

different sector offices and experts from Kebele to national level. In consultation with the project team and partners for upstream respondents the following Kebeles and samples taken for primary data collection.

Table 1. Number of Respondents from Different VC Actors

Woreda	Sample Kebele	FGD - in	KII from different	Individual
		selected	segments and	producers DI
		Kebeles	organizations	
Libokemkem	Bura; Shina Tsion	2	16+	5
Bahir Dar	Yigoma andasa; Robit	2		
Zuria				

**VCA data collection and analysis process:** for data collection and analysis process Participatory Value Chain Analysis with Gender, Green and Governance Lens (PVCA+G³) frame used. Both quantitative and qualitative data collection tools employed. For actors' data aggregation and estimation summary format and excel sheet employed. Detail method used and data collection instruments attached as annex in the report.

## 2. Market (Demand and Supply)

#### 2.1. Main Market Segments and Driving Factors

In the national livestock master plan, demand for both egg and chicken is expected to increase in the coming periods. The expected consumption growth of chicken meat and egg is about 80% and 356% respectively in the succeeding 15 years' time.

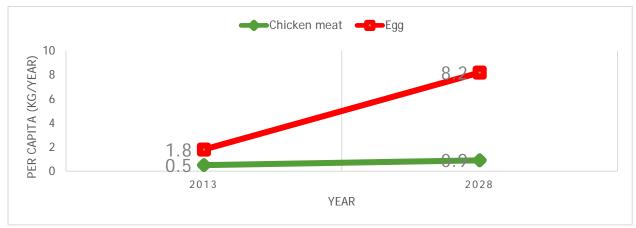


FIGURE 2. NATIONAL CHICKEN MEAT AND EGG CONSUMPTION PROJECTION (2013-2028)

Data source: ELSA-MoLF-ILRI, 2017

As confirmed with the producers' interview and group discussion in the study area, there is continuously increasing demand for egg. Existing buyers are individual consumers and collectors that supply to big towns like Bahir Dar. Similar to the national trend, consumption of egg is expected to increase at regional level due to urbanization, and emerging market in peri-urban community. Farther the demand increment exacerbating with life style changes for many youth groups that are joining in peri-urban areas, who likes to consume products like egg as a quick easy food to prepare.

The consumption of chicken meat and egg in Amhara region is estimated to be 14.8 million kg and 105.7 million kg respectively (Table 2), according to the national chicken meat and egg per capita consumption estimate.

TABLE 2. CONSUMPTION ESTIMATE OF CHICKEN MEAT AND EGG (KG PER ANNUM1)

TABLE 2. GONGOM TION ESTIMATE OF OTHER MEAT AND EGG (NOTER ANNOW)						
	Ethiopia	Amhara	South Gondar	West Gojam		
Population (2017)	94,351,001	21,134,988	2,484,929	2,542,221		
Poultry meat (Kg) per				1,779,555		
annum	66,045,701	14,794,492	1,739,450			
Egg Kg per annum	471,755,005	105,674,940	12,424,645			
				12,711,105		

Source: Own Computation

TABLE 3. LOCAL MARKET SEGMENTS AND BUYERS REQUIREMENT

Market Segments	Market Size and Demand Driving Factors	Requirement and Procurement Process/Qualifying Factor
Individual Buyers in Urban Village and Woreda Town	On average, there are more than 250 thousand population (about 30-45 thousand urban dwellers) in each Woreda. There is local demand for egg on holidays and in regular non-fasting days while the main demand season for chicken is holidays.	Holiday time and regular market day
Individual Buyers at Bahir Dar Town	There are about 362,297 residents in Bahir Dar as per CSA projection; There is regular weekly demand for egg and chicken; however, the demand becomes higher following holiday seasons. Few consumers buy slaughtered chicken in small quantity from supermarkets, as indicated by supermarket owners'.	Egg and chicken meat of local breed is preferred for the taste; while cross breed's egg and chicken preferred for their size and size ratio.
Hotels and Restaurants in Bahir Dar Town	There are about 32 big hotels <sup>1</sup> and many more restaurants in Bahir Dar town that regularly buy chicken and egg. The big hotels buy about 30Kg chicken meat per week and the quantity increases to about 50Kg/week, in hot tourist season (1 chicken in a range of 2.8-3Kg).	Use regular suppliers that supply slaughtered and prepared chicken meat, and buy on weight basis. For most dishes, the big hotel prefer the exotic breeds' meat except for some special occasions to prepare "Doro Wot" where they prefer the local breed.

Source: Survey

## 2.2. Production and Supply

From the 59.5 million national poultry population (19.9 million laying hens), about 31% are in Amhara region. South Gondar and West Gojam zones contribute about 27% of the poultry population of Amhara region.

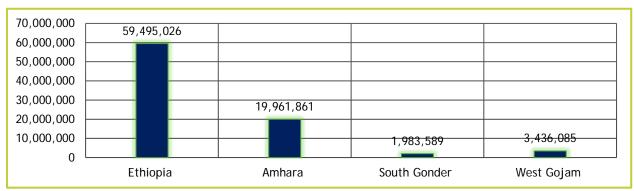


Figure 3. Poultry Population, 2016/17 (Ethiopia, Amhara, South Gondar and West Gojam) *Source CSA, 2017* 

 $<sup>^{\</sup>rm 1}$  Pays 110ETB/kg for chicken and 4.5ETB for egg

Poultry is the highest livestock in number in both South Gondar (1.98 million) and West Gojam (3.436 million) Zones (Figure 3). Considering the sub-sector's significant contribution in reducing poverty and malnutrition within rural and urban poor, and positive impact on the national income, the LMP in second GTP has considered to improve family poultry with semi-scavenging crossbreds and substantial increases in the scale of specialized layer and broiler operations (LMP, 2015).

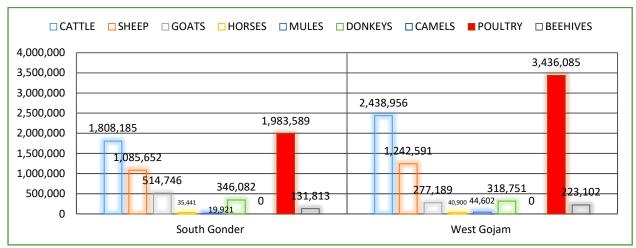


Figure 4. Livestock Population in South Gondar and West Gojam Zones

Source: CSA, 2017

South Gondar and West Gojam Zones has significant share in poultry population (Figure 4) from among the project target Woredas. As indicated in Figure 5, the number of poultry estimated at the smallest 107,362 in Bahir Dar Zuria and the largest 279,037 in North Mecha woredas. The local breeds have more than 93% except in Fogera (66%) and Dera (86%) where there is more percentage of cross breeds.



Figure 5. Number of Poultry in Target Woredas

Source: Woreda Livestock Office

The annual national production of egg from local, hybrid and exotic breeds estimated at about 127 million (73% from local, 10% form hybrid and 17% from exotic breed) from which Amhara region contributes about 33% (Figure 6). South Gondar and West Gojam Zones contribute about 25% of the regional egg production (10% South Gondar and 15% West Gojam). The share of egg production from hybrid and exotic breed in South Gondar is 37% and 27% in West Gojam. In South Gondar, hybrid and exotic breeds' egg production have more share than the national average.

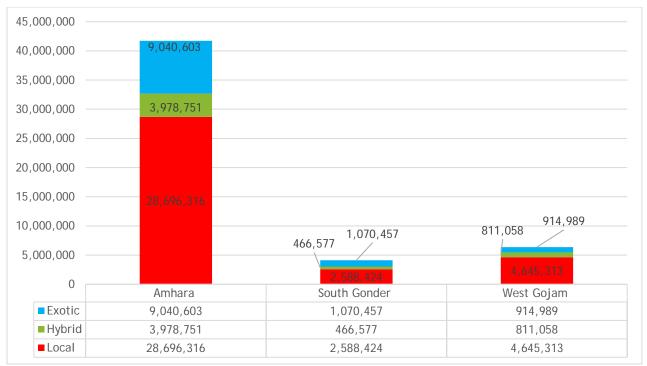


Figure 6. Number of Annual Egg Production in Amahara Region, and South Gondar and West Gojam Zones (2016/17)

With planned interventions in GTP II, annual chicken meat and egg production in the country projected to rise to 164,000 tons and 3.9 billion respectively, which is a 247% increase in chicken meat production by 2020. This would bring the production-consumption surplus for chicken meat from 18,000 to 102,000 tons between 2015 and 2020. The combined interventions would also result in 828% increase in chicken egg production, bringing the egg surplus to 3.1 billion eggs during the GTP II period. As per the strategy document, such accomplishments would enable Ethiopia to meet the chicken meat and egg demand for its growing population, and produce a huge significant surplus for domestic industrial use or export. The surplus eggs could be processed into egg powder and used domestically for new or additional industrial uses (e.g. in the baking industry), or be exported to generate foreign exchange earnings (LMP Brief, 2015).

#### 3. Functions and Actors in the Value Chain

The poultry value chain map of the study area is indicated in Figure 7.

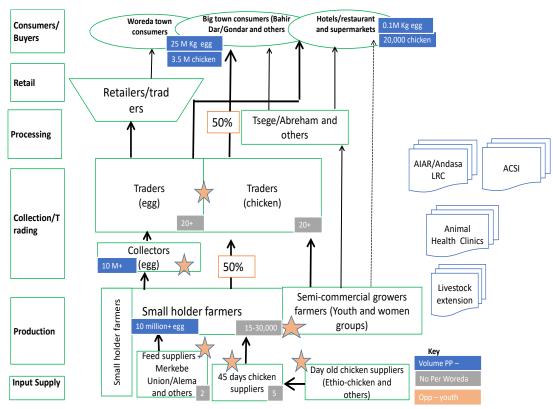


Figure 7. Poultry Value Chain Map of South Gondar and West Gojam Zones

#### Input Supply 3.1.

Farmers get the local chicken mainly from the nearby market, from other (neighbouring) farmers or hatch from their own stock. Access to hybrids usually facilitated through the coordination of Woreda livestock office from 45 day chicken suppliers/pullet producers, mainly youth organized by Woreda offices.

Pullet Producers: There are five or more groups/individual enterprises in a Woreda that are engaged

day-old chicks growing. groups/enterprises grow the day old chicks to 45 days or in some cases to 4-5 months old, then supply to farmers by Woreda livestock office facilitation or sometimes the groups sell by themselves to interested farmers in nearby areas or bring to market place like Woreta town. Pullet producers get day-old chicks mainly from Ethio-chicken that was based in Mekelle and recently near Andasa Research Center. The Ethio- Zuria Woreda



opened branch in Bahir Dar Zuria Woreda FIGURE 8. CAGE OF DAY OLD CHICKS GROWER IN BAHIR DAR

chicken assigned individuals in some villages as "Ambassadors" to facilitate the promotion and distribution of day-old chicks.

**Feed Suppliers**: Poultry managed dominantly with semi-scavenging practice. The semi-commercial farms and some farmers buy grains or by-products from mill houses (*bitare*). Giving crushed sorghum, maize, millet, rice buying from market or from own farm is the practice case respondents mentioned. Mill houses in Woreda town and near to the farmers' village sell crushed grain or leftovers from the grinding service. Feeding left over of family food is a common practice in a number of households. Merkebe union supply poultry mixed feed and with some disruption through member cooperatives. Alema poultry farm that based in Bishoftu/Deberzeit sometimes supply feed via local distributors. There are feed suppliers that are based in Bahir Dar town like Wongele. The feed supply is mostly disrupted with input availability and cost increase.

**Health Service**: Similar to other livestock, farmers get health service for their poultry from government assigned staff and buy some medicine (vaccination and others) from private vet drug shops that are located at Woreda, Zone, and Bahir Dar town.

#### 3.2. Egg and Chicken Production

Scale and Type: Poultry production promoted in the region with two type of packages. (i) With regular package for farmers to keep up to 25 chickens (ii) with package called – modality for well-organized farmers, youth or women groups with a scale of 25-500 chickens. There are limited groups mainly youth that are engaged in the second package due to limitations in loan and other support facilitation. Most farmers keep less than 25, commonly 5-15 improved and local combined or one type of breed (Figure 9). Even though it is a combined one, production of egg seems the more dominant objective than the chicken meat production. As observed in the cases assessed, there are individuals that keep only crossbreed, mixed and local breed with a dual purpose or focused in egg production (Figure 9).

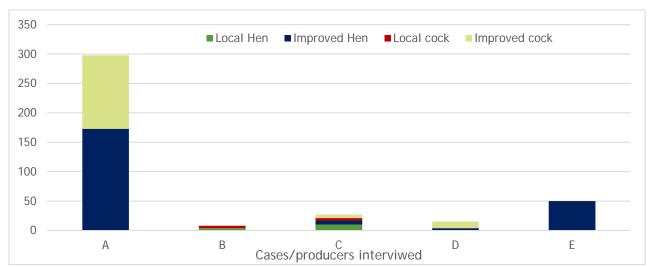


Figure 9. Poultry Stock Types in the Study Area

Source: Individual Interview

The main reason for not expanding the improved breeds is supply problem and mortality.

**Market Supply**: As per the group discussion and KI interview with household, more than 90% of the egg production is supplied to the local market.

**Management and Feeding**: The common feeding practice is open scavenging with supplementing feeding 3-4 times a day. Farmers usually use feed grains from their own farm left over. Grain the feed includes sorghum, rice, millet and maize and other feed from by-products of the mill house. Some of the farmers' constructed separate house using local material for housing during the night time. The

farmers interviewed not convinced constructing separate better house with existing scale of operation. Mortality rate reported by the respondents is significant. All the respondents in the case confirmed mortality as a problem. All of the case interviewed has basic training and exposure in poultry management by the agriculture office, chicken supplier (Ethio-chicken) and other organizations working in poultry farm. Disease and better vaccination service, supply of improved chicken, feed and starting capital are the main cross cutting constraints mentioned by farmers.

#### 3.3. Collectors and Traders

Most of the farmers sell their egg or chicken directly to consumers or collectors/traders. Egg sold on weekly markets to collectors or consumers. Chicken sold mainly during the holiday season. There are traders that supply chicken and egg to big towns like Bahir Dar collecting from Woreda markets directly or through collectors. More than 20 traders are engaged in poultry and egg trading in each Woreda that operates at different scale as per the team estimate. Semi-commercial growers tried in the past to supply to hotels and consumers/public service staffs during holidays.



FIGURE 10. EGG COLLECTORS AT THE MARKET ENTRY

Getting big volume of chicken mentioned as a problem especially for the semi-commercial growers. Traders transport chicken and egg using public transport which is not comfortable and results in death incidents of many chicken in some cases.

## 4. Supporters and Enablers

#### 4.1. Financial Service Providers

The capital required for small-scale poultry can be mobilized from own saving or family members. To start with reasonable scale like that of modality package with better management for youth and women groups need starting capital from formal or informal financial sources. Farmers mentioned during the group discussion that they did not showed interest and made any follow-up on MFI to get loan because of their huge interest rate.

# 4.2. Technical and Other Business Development Service (BDS) Providers

Livestock extension team, projects and Andasa research center are promoting improved poultry business in the area to diversify the livelihood options. Disease control system need strengthening with required quick vaccination and treatment service.

## 5. Economic Analysis

## 5.1. Egg Production Enterprise Profitability

Based on the assessment results, egg production may considered as possible viable business option for smallholder farmers and youth groups in most locations. Specialized chicken meat market size is limited, as a result farmers mostly focus on egg production whereas supplying chicken meat take as secondary product and parallel business. On the current practice observed in the area, with scale of 10, 25 and 500 egg chicken in one-year time can generate Birr 2,033, Birr 5,081 and Birr 77,625 respectively not considering the mortality and final sale value of the chicken. Chicken for meat can be promoted as a side business while the egg production as focus of the business with better market linkage. Starting capital for the new entrants, improved chicken management especially disease

management, feeding, construction of house to protect from predators and manage disease infection should be well integrated in the support side. Exposure for business skill and linkage with feed and others inputs suppliers is much required.

TABLE 4. SIMPLIFIED GROSS MARGIN FOR EGG PRODUCTION AT DIFFERENT SCALE PER ANNUM (ETB)

Scale	Unit cost (Birr)	10	25	500
Sales <sup>2</sup>	3	5,355	13,388	267,750
Costs				
Buying of hen (45 days)	60	600	1500	30000
Feed (10.5 month)	236.25	2362.5	5906.25	118125
Medication	24	240	600	12000
Other - housing	12	120	300	6000
Labour				24000
Gross margin per		2,033	5,081	
annum (Birr)				77,625

Source: Own Computation

#### 5.2. Cost of Production

Cost: the main cost element (about 75%) is feed as indicated in Figure 11, followed by cost of pullet buying.

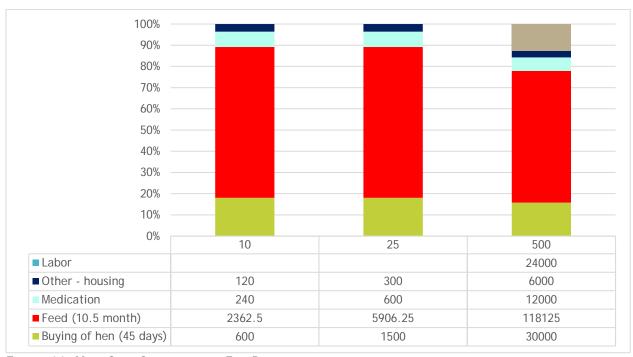


FIGURE 11. MAIN COST STRUCTURE OF EGG PRODUCTION

## 5.3. Business Opportunity for Youth and Women Groups

Three type of enterprises are selected in poultry for youth and women job creation in the regional livestock agency package. The proposed business ventures include:

<sup>&</sup>lt;sup>2</sup> Productivity estimate 85% laying egg for 7 month

- Pullet producers: to organize pullet producers enterprises and link with farmers
- Egg production enterprises
- Meat chicken production/growing and supply: production and slaughtered chicken supply to consumers

All the proposed enterprises are possible business ventures for youth and women groups. The assumption made and cost estimate are acceptable with possible adjustment in each locality with price update. The establishment of enterprises needs to follow the market response and opportunity created. Especially the pullet producers and chicken meat growers needs market assurance, as the market needs good linkage and promotion.

As indicated above, feed supply and health service provision for smallholder farmers can be promoted as business opportunity for graduates in the field as complementing service of their operation or as separate service, to enhance the poultry value chain development.

Starting capital for new entrants, improved chicken management especially in disease management, feeding, construction of house to protect from predators and manage disease infection should be well integrated in the support side. Exposure for business skill and feed mixing, linkage with other inputs suppliers required in the business development support.

#### 6. Gender, Environment and Governance

**Gender**: Besides it's being as a good source of income for women, it will contribute in family protein source.

**Environment:** Small-scale poultry systems are important in food-insecure and resource-poor areas as they have limited environmental impact and can contribute to ecosystem nutrient cycling. They are important source of genetic biodiversity and maintain indigenous breeds. With intensification and scale increase the environmental impact need to be well managed.

**Governance**: As a very short chain with limited actors, the relationship is based on one time transaction that depends on demand and supply situation in the market. There is no organized entity or platform to address joint issues for better competitiveness.

## 7. Recommendation/Interventions

TABLE 5. MAIN CONSTRAINT AND SHORT, MEDIUM AND LONG-TERM INTERVENTION MATRIX

Area/segment	Constraint	Short term proposed Solutions/Interventions	Medium and long term proposed Solutions/Interventions	Potential partner/lead organizations
Health Service	<ul> <li>Timely health service provision</li> <li>Shortage of medical supply</li> </ul>	<ul> <li>Improve health and medication service/vaccination in the areas by assuring effectiveness and timely service provision by public and private providers</li> <li>Enhance public animal health service delivery, better service incentive and accountability development</li> <li>Lobby and facilitate timely required critical medical supply</li> <li>Promote recognized private animal health service providers (refreshment training and recognition of service)</li> </ul>	• Promoting local women and youth health service providers: women and youth in the area that have basic training in animal science or veterinary service or related field to engage in poultry commercial health service provision that may be expanded to other livestock health services. To be engaged in provision of the service gradually with start-up service and sale of appropriate vaccination/medicine for possible diseases like New Castel Disease (NCD), fowl cholera, fowl typhoid and infectious bronchitis. With backup service linked from experienced health service providers	<ul> <li>Livestock Agency at different level</li> <li>Trained private service providers</li> </ul>
Breed Improvement	• Known quality breeds and confirmed sex timely supply for meat and egg as per demand	<ul> <li>Assuring organized supply of known disease resistant breeds/reliable and continuous supply as per farmers demand (for meat, egg and dual)</li> <li>Enhance existing day old chicken supply system to make it more organized and efficient</li> <li>Enhance capacity of women and youth pullet suppliers: by strengthening existing and selecting more ready women groups for raising day-old chickens to 45 days to 5</li> </ul>	<ul> <li>Known parent stock supply for meat and egg preferred breeds for local hatching</li> <li>Engage well trained and experienced youth groups in hatching and other inputs supply business</li> </ul>	Livestock office and private day old chicken suppliers (Ethio-chicken, Genesis, Alema and others)

Area/segment	Constraint	Short term proposed Solutions/Interventions	Medium and long term proposed Solutions/Interventions	Potential partner/lead organizations
Feed Supply	• Feed price increase, farmers willingness to pay and feed quality;	months-old pullets to be sold to egg and chicken producers. Can be organized in clusters to facilitate peer learning, better supply and support. Provide appropriate practical training and will be linked with trusted day-old chicken suppliers.  • Local feed supply promotion: Engaging local miller or existing cooperative or youth groups or better performing poultry farms in the area for supply of poultry feeds with appropriate guidance for the feed mix using available feed sources in the area and appropriate supplementing vitamins.  • Train and demonstrate optimum use of feed and improved management systems	<ul> <li>Feed suppliers quality feed production capacity and distribution system development with business model refinement and facilitation of investment expansion</li> <li>Enhance production efficiency of feed mills by improving technical and business management, increasing scale of feed production through increased bulk contracting, increasing bulk purchasing by cooperatives and farmers organizations and by increasing purchases of by products by feed manufacturers</li> <li>Lobby for better incentives from government in the feed industry and promote the business venture to potential investors</li> </ul>	Primary     cooperatives or     youth     groups/associations     or poultry farms;     Livestock Agency at     different level
Financial Services	• Limited financial service	<ul> <li>Promote saving and credit groups to mobilize starting capital for better scale poultry production at farmers level</li> <li>Work with financial service providers for day old chicken growers, possible</li> </ul>	potential investors	<ul> <li>Credit and Saving Cooperatives;</li> <li>MFI-ACSI and others/Credit and Saving Unions</li> </ul>

Area/segment	Constraint	Short term proposed Solutions/Interventions	Medium and long term proposed Solutions/Interventions	Potential partner/lead organizations
		hatching business, feed suppliers, youth groups medium scale commercial poultry production		
Production	Traditional management	Women friendly practical training approach (time, content and approach): simple trainings material preparation and delivery with consultation of women to decide the training place, time and duration of training to make it more convenient for them	Contextualized housing and sheltering technologies promotion and inputs access: by engaging local workshops fabrication and supply of average household poultry sheltering with affordable prices	Livestock Agency at different level
Collection and Market Linkage	Market seasonality mainly for chicken	<ul> <li>Encourage better market linkages, collection and distribution arrangements with peri-urban dwellers, nearby towns hotels and institutional buyers (Bahir Dar and Gondar university, hotel and restaurant owners in Bahir Dar and Gondar) and big traders in Bahir Dar</li> <li>Awareness creation and encouragement of egg and poultry meat consumption at household level to improve the nutritional status</li> </ul>		Trade, Industry and Market Development Office
Sector Coordination and Enabling Environment		Promote shared public-private vision among the Poultry industry actors in the region	Work with sector actors to have shared vision and effective platforms for public-private dialogue for identified critical issues and facilitate coordination and collaboration between the various value chain actors in poultry value chain	• Sector stakeholders

## Annexes

Annex-1: Stakeholders Proposed Interventions Prioritization (Impact and Time/Urgency)

Area/segment	Proposed Solutions/Interventions	Impact - High (Green), Medium (Yellow), Low(Red)	Time - Short (Green), Medium (Yellow), Long(Red)
	Lobby and facilitate timely required critical medical supply	High	Short
	Improve health and medication service/vaccination in the areas by assuring effectiveness and timely service provision by public and private providers	High	Short
	Enhance public animal health service delivery, better service incentive and accountability	High	Short
Health Service	Promote recognized private animal health service providers (refreshment training and recognition of service)	Medium	Medium
	Promoting local women and youth health service providers: women and youth in the area that have basic training in animal science or veterinary service or related field to engage in poultry commercial health service provision that may be expanded to other livestock health services. To be engaged in provision of the service gradually with start-up service and sale of appropriate vaccination/medicine for possible diseases like New Castel Disease (NCD), fowl cholera, fowl typhoid and infectious bronchitis. With backup service linked from experienced health service providers	High	Medium
	Assuring organized supply of known disease resistant breeds/reliable and continuous supply as per farmers demand (for meat, egg and dual)	Low	Long
	Engage well trained and experienced youth groups in hatching and other inputs supply business	Low	Long
Brood	Enhance existing day old chicken supply system to make it more organized and efficient	Low	Long
Breed Improvement	Enhance capacity of women and youth pullet suppliers: by strengthening existing and selecting more ready women groups for raising day-old chickens to 45 days to 5 months-old pullets to be sold to egg and chicken producers. Can be organized in clusters to facilitate peer learning, better supply and support. Provide appropriate practical training and will be linked with trusted day-old chicken suppliers.	Low	Long
	Known parent stock supply for meat and egg preferred breeds for local hatching	High	Long

Area/segment	Proposed Solutions/Interventions	Impact - High (Green), Medium (Yellow), Low(Red)	Time - Short (Green), Medium (Yellow), Long(Red)
	Local feed supply promotion: Engaging local miller or existing cooperative or youth groups or better performing poultry farms in the area for supply of poultry feeds with appropriate guidance for the feed mix using available feed sources in the area and appropriate supplementing vitamins.	High	Short
Feed Supply	Enhance production efficiency of feed mills by improving technical and business management, increasing scale of feed production through increased bulk contracting, increasing bulk purchasing by cooperatives and farmers organizations and by increasing purchases of by products by feed manufacturers	High	Medium
	Train and demonstrate optimum use of feed and improved management systems	High	Short
	Feed suppliers quality feed production capacity and distribution system development with business model refinement and facilitation of investment expansion	High	Medium
	Lobby for better incentives from government in the feed industry and promote the business venture to potential investors	High	Long
	Promote saving and credit groups to mobilize starting capital for better scale poultry production at farmers level	High	Medium
Financial Services	Work with financial service providers for day old chicken growers, possible hatching business, feed suppliers, youth groups medium scale commercial poultry production	High	Short
Production	Women friendly practical training approach (time, content and approach): simple trainings material preparation and delivery with consultation of women to decide the training place, time and duration of training to make it more convenient for them	High	Medium
	Contextualized housing and sheltering technologies promotion and inputs access: by engaging local workshops fabrication and supply of average household poultry sheltering with affordable prices	High	Short
Collection and Market Linkage	Encourage better market linkages, collection and distribution arrangements with peri-urban dwellers, nearby towns hotels and institutional buyers (Bahir Dar and Gondar university, hotel and restaurant owners in Bahir Dar and Gondar) and big traders in Bahir Dar	High	Medium
	Awareness creation and encouragement of egg and poultry meat consumption at household level to improve the nutritional status	High	Medium

Area/segment	Proposed Solutions/Interventions	Impact - High (Green), Medium (Yellow), Low(Red)	Time - Short (Green), Medium (Yellow), Long(Red)
Sector Coordination and Enabling Environment	Promote shared public-private vision among the Poultry industry actors in the region	High	Long
	Work with sector actors to have shared vision and effective platforms for public-private dialogue for identified critical issues and facilitate coordination and collaboration between the various value chain actors in poultry value chain	Medium	Long

### References

CSA, 2016, Agricultural Sample Survey 2015/16 (2008E.C.) Report on Livestock and Livestock Characteristics, Addis Ababa

CSA, 2017, Agricultural Sample Survey 2016/17 (2009E.C.) Report on Livestock and Livestock Characteristics, Addis Ababa

Melkamu Bezabih and Wube Atalel, 2013, Constraints and Opportunities of Village Chicken Production in Debsan TiKara Keble at Gonder Zuria Woreda, North Gonder, Ethiopia, International Journal of Scientific and Research Publications, Volume 3, Issue 9

Shapiro, B.I., Gebru, G., Desta, S., Negassa, A., Nigussie, K., Aboset G. and Mechale. H. 2017. Ethiopia livestock Sector Analysis. ILRI Project Report. Nairobi, Kenya: International Livestock Research Institute (ILRI)

USAID-AGP, 2013, Value Chain Analysis for Ethiopia: Meat and Live Animals Hides, Skins and Leather Dairy, USAID-AGP-Livestock Market Development Project