

**Farm Income Diversification Programme (FIDP)
Phase II - Agribusiness**

**Improved livelihoods through sustainable intensification
and diversification of market oriented crop-livestock systems
in southern Malawi.**

**Innovation Platform inception workshops
Thyolo, Chiradzulu, Balaka districts**

20-28 June 2017

DRAFT REPORT

by

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Summary:

The improved livelihoods through sustainable intensification and diversification of market oriented crop livestock systems (CLIM2 Project) is being implemented in Southern Malawi (Balaka, Chiradzulu, Thyolo districts) with the main aim of improving incomes and livelihoods of smallholder, rural poor, youth and women farming households through sustainable intensification and diversification of affordable plant and animal based food and fuel production, through (i) improving farmers' access to resources, technologies, information and markets by characterizing and strengthening selected crop and livestock value chains, (ii) increasing productivity of smallholder crop-livestock farming systems by identifying and adapting technologies and associated production and harvest management practices and (iii) improving the value chain enabling environment at all levels including targeted capacity building to enhance group performance and stimulation of small and medium scale enterprises. Main expected outputs include development of integrated and diversified crop-livestock systems, establishment of innovation platforms (IP), development of strategies to reduce post-harvest losses and increase on- or near farm value addition of both crop and livestock products. The project adopts an innovation systems approach, engaging smallholder women and men farmers, rural youth and rural poor, small scale business entrepreneurs and other value chain actors, to come up with solutions and procedures for sustainability outcomes suitable for the project areas and self-perpetuating beyond the projects life span. This report provides first a synthesis of the critical issues discussed, leading to a series of actions through the IPs, and then in detail narrates the discussions held at each of the platform meetings.

The project conducted 2-day meetings in Chiradzulu, Thyolo and Balaka districts in Southern Malawi from 20 -28 June, 2017. The purpose of the meetings was to establish the IPs in each of the project's districts. The aim of the meetings was to (i) develop the visions and goals for the different actors in each of the project sites, and how IPs can help achieving those, (ii) identify potential value chains in the target EPAs and districts, (iii) identify the relevant actors in those value chains and (iii) identify the major constraints and opportunities on which the project could focus on. The meetings engaged a broad range of participants, farmer representatives, government support services, private sector actors, project team and non-state actors working in several agricultural value chains (crops and livestock). The design of each meeting day was purposely flexible, responding to the composition of participants and knowledge gained to prepare for the structure of each day.

Mr. Alfred Fisombero, the Program Manager, opened each of the meetings and introduced the CLIM² research team to all participants. The project team leader Dr. Andre Van Rooyen introduced the project by highlighting the key project components of intensification, diversification, integration, markets and resilience. The meetings were structured in such way that they started with self- introductions by participants, where they were coming from, their primary area of expertise. Clustering participants by expertise gave a good overview on the participants' composition. This was followed by an introduction of the project, its goals and objectives and a description of the agenda for the meeting. The core of the meeting was a series of participatory exercises, starting with 1. challenge identification, 2. visioning and goal setting, 3. value chain mapping and 4. mapping the way forward for the IP.

The initial findings from these meetings indicate that actors in agricultural value chains are aware of their problems/ challenges, most of them have a vision of where they would like to be in the

near future, they are able to identify the possible means to achieve that vision and that value chains existing for most crops and livestock are characterized by poor information flows and lack of trust among value chain actors, low quantities and poor quality of products, inconsistent and poorly synchronized demand and supply of products, inadequate extension and support services and poorly developed post-harvest, storage, and marketing infrastructure in the value chains, limiting farmer opportunities for diversification, intensification and value addition.

1. Challenges in agriculture:

The problem analysis exercise done in all three districts provides valuable information for developing the CLIM² project. Most of the problems identified by the participants were centered on input-output markets, access to input markets, access to credit, poor enterprise selection, inadequate extension and support services, mostly beyond the immediate control of the farmer. On the external front most participants noted climate change, poor road infrastructure, declining soil fertility and small landholding sizes as their biggest challenges. At farm level, this resulted in challenges such as poor organization in production to market processes, poor management and husbandry practices.

Farmers: Lack of knowledge and capital, farmers would not necessarily target their activities to fulfill market requirements. They remain stuck at low levels of productivity and income, and do not benefit adequately from growing demand for food. This prevents them to gain capacity in market oriented production.

Traders: Although traders should fulfil important functions, with poorly developed markets the relation between farmers and traders remains weak and lacks trust, i.e. between goat producers and processors. For a win-win situation farmers and traders should collaborate towards higher volumes and better quality products. Higher revenue for farmers implies income opportunities for private sector, positive development of the overall sector.

Support services: Support services that do not contribute to linking farmers to markets, actually perpetuate a situation, where farmers operate below productivity and income.

2. Visions and goals:

Across the sites, the visions of value chain actors were different although interdependent upon the actions of other actors within the same value chain. For example, the vision of producers focused on increased yield, increased income, formal market participation, farming as a business, better livelihoods (i.e. housing, education, health, nutrition), adequate support from agriculture service providers, and incorporating hard work into their farming systems. Those of buyers and input suppliers focused on reliable supply of quality products from producers, increased markets share and increased value addition.

- a. **Farmers:** Producers from the three districts have similar visions in terms of how they want their livelihoods to be in future i.e. five years' time. Most producers want to be in a state where they will be realizing higher yields from their farming enterprises, they want to be living in modern houses, with basic transportation means and their families enjoying good health. The producers envisage they would reach their goals through intensifying their production, adopting extension messages they get, being organized in functional groups, accessing financial services and participating in reliable markets.

- b. Traders: The traders main vision was also to live an improved life in their homesteads. In terms of their business enterprises they want growth, by sourcing good quality products in large quantities and consistently, at one place and being able to meet the demands of their customers. The traders believe they can achieve their goals by accessing business skills training.
- c. Support services: The goal of service providers is to see farmers adopting modern agricultural technologies that will enhance agricultural productivity, the farmers being organized in groups that would assist them to have easy access to different services and easy marketing of their produce. The service providers see that their vision can be achieved by addressing the capacity needs of the producers and other extension service providers.

3. Value chains:

The meetings identified several value chains with high potential based on market potential and needs of buyers, producer practices and potential to reduce production costs, and relevant at large scale. The value chains were grouped into three main clusters, livestock, legumes and cereals.

- a. Livestock: The high potential livestock value chains identified were chickens, goats, sheep, dairy cattle and pigs. Even though there is clearly a high and growing demand for livestock products, and many actors engaging in aggregating and processing activities, lack of grading and quality processing facilities, producers sell below value and there is limited value addition. Livestock farmers continue complaining about low prices for their goats, while butchery operators stated that quality influences prices significantly. Enhancing information from consumers to processors to farmers could change the production system as well as the income generated by farmers.
- b. Legumes: The legume value chains included pigeon peas, groundnuts, cow peas, Mucuna (Velvet beans) and red beans. The demand for the legumes is for commercial and consumption purposes. Buyers of legumes are available, and require farmers to fulfil market criteria, quality, quantity and consistency in produce supply. In Balaka farmers testified that production of pigeon peas is high, through farmer clubs and associations. The biggest market for legumes was Transglobe and Export Trading Group. In Thyolo farmers highlighted that they are not benefitting adequately from pigeon peas, because of unscrupulous traders (mostly Indian) and processors (like Rab) who manipulate the prices. Shoprite buys large volumes of high quality pigeon peas from local farmers. AHL Commodity Exchange buys all types of legumes at 1-ton minimum quantity. AHL can link farmers to six banks for loans. The meetings highlighted various projects and investors in legume value chains as opportunity. Yet, the challenge for farmers was that the links to markets were still weak, because most projects focus more on production than market developments.
- c. Cereals: Maize and sorghum were identified as important for food security but with limited income opportunities. Government and food security programs prioritize increasing cereal production, productivity but market linkages for cereals are however weak.

4. Key process lessons:

Overall, the IP meetings provided quick and comprehensive insights about the current situation of agriculture in the target districts. Understanding goals and visions of participants was important for strategizing the CLIM² project's implementation, responding to local aspirations and needs, rather than imposing interventions that were designed outside of the projects context.

- Developing product storage capacity was identified as critically important, so that farmers can keep their produce, and instead of selling immediately after harvest, when prices are usually low, sell at times when the markets are more favorable.
- Enhancing farmer organizations (groups, clubs) was also critical so that they can produce and process sufficiently large quantities and improved qualities of produce.
- Enhancing value chain actors' capacity, engaging extension and support service providers, would be required for more efficient synchronization of product, information and income flows. For instance, cowpeas farmers in Balaka suggested training that can help them migrate from associations to cooperatives.
- All three districts identified opportunities to develop small and medium enterprises (SMEs), which would address some of the production to market constraints. Entry points for SMEs include feed formulation and processing, livestock breed improvement, local level input supply, value addition for crops and livestock, development of market infrastructure for crop and livestock products. In Balaka farmers want to be assisted in developing a well-established market for pigeon peas and horticulture. In Thyolo, developing processing plants for pigeon peas was proposed so that farmers can add value locally, e.g. as livestock feed, and be trained to formulate feed for livestock.

5. Way forward:

The meetings provided a clear direction as to how the CLIM² project is likely to intervene with lasting impacts through building capacity of platform members, development of markets for the selected value chains, increasing on-farm or near-farm value addition, increasing participation of youth and women in market-led agriculture and the development of small and medium enterprises.

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1 Background

2.1 Context for mixed crop livestock farming in southern Malawi

Malawi agriculture is largely based on small holder systems, which cultivate close to 80% of the land, generate about 75% of Malawi's agricultural output and provide for 85% of the labor force. However more than 2/3 of the small holdings cultivate less than one hectare of land, and with limited investment of inputs, yields per hectare are lower than expected. This is a result of high human population densities leading to overutilization of land and poor soils, poor access to markets and support services, while post-harvest losses are estimated to be around 40% of production (ref). Livestock ownership per household is very low compared to regional standards, yet farmers place a lot of value on their herds. Performance of the livestock sector is also affected by poor livestock support services as well as by low productivity of the cropping sector. Access to financial services is severely restricted. Poor rural people are unable to diversify their agricultural based income and to access off farm income, therefore remain underemployed for most part of the year. It is a challenge to provide food security even at household level. Per capita meat consumption and animal protein intake are low, contributing to poor nutrition among children.

Currently, smallholder farming systems in southern Malawi are mostly focused on subsistence agriculture with little or no surplus for sale. Crop production (mostly maize) is food security oriented, with limited production of crops alternative than maize restricting more nutritious and profitable crop value chains to take off. Livestock production (mostly small stock) is a secondary activity and is only sold to meet the immediate need for cash (food, education and human health). While farmers are eager to use livestock for cash income, on-farm production should still provide for household consumption. Local traders form the link between producers and the larger buyers in urban areas. Small-scale entrepreneurs operate mostly on an informal basis, which poses significant risks. Although input suppliers and support services are widely available in Malawi, there has been limited success in unlocking market opportunities for farmers widely.

2.2 Why investing intensification, diversification and market oriented farming systems?

Intensification, diversification and market integration strategies are urgently required to develop pathways out of poverty. Market integration is paramount in making farming economically more attractive, to stimulate investments in inputs, post-harvest and value addition, empower women and retain rural youth through increased economic opportunities. To make this transformation and effective and sustainable strong private sector involvement is crucial.

The government of Malawi, supported by the EU through FIDP II, through increased and diversified agricultural production, and better market access, seeks ways for improving the livelihoods and nutritional status of rural households in Malawi.

2.3 How will the CLIM² project support farming systems development?

The CLIM² project will test and develop an inclusive market oriented approach. It will engage a wide spectrum of value chain actors (input suppliers, producers, output markets, support services, policy makers) already working in the districts to identify and address the challenges and opportunities within an array of crop and livestock enterprises. Most promising value chains will

be identified and analyzed using an IP process to facilitate the interrelated and mutually supporting institutional/socio economical and technical interventions based on commonly agreed visions and buy-in by key stake holders. Special attention will be given to the development of existing and new (if appropriate) viable small and medium enterprises (SME) and support services already operating within the target districts to develop diversified and integrated crop-livestock systems with strong market linkages. The project, enabling smallholder farmers to increase their income from crop and livestock activities, will not only increase their cash incomes from selling produce and improve their nutritional status but also enable long term planning and reinvestments to improve their farming business. Up-scaling of, and transitions towards more sustainable systems requires effective re-organization of all system actors including farmers.

2.4 What outcomes and impacts do we expect to achieve?

The project processes and activities were divided into several steps (see Figure 1). The first stage revolves around improving the knowledge of the system, the perceived challenges and the goals of the system. There are several data collection activities planned to obtain the different types of information that will inform the IP activities. At least one IP (including producers, input suppliers, middlemen, traders and agro-business entrepreneurs, researchers and other development agents) will be established in each district.

The IP will facilitate the interventions on farm and through SMEs along value chains, cross-scale dialogue and knowledge sharing across the VCs. This will be translated into capacity building and improved self-organization of value chain actors including farmers, agro-dealers and other entrepreneurs and extension staff using conventional co-learning and ICT approaches. The IP will also assess impact and change (M&E).

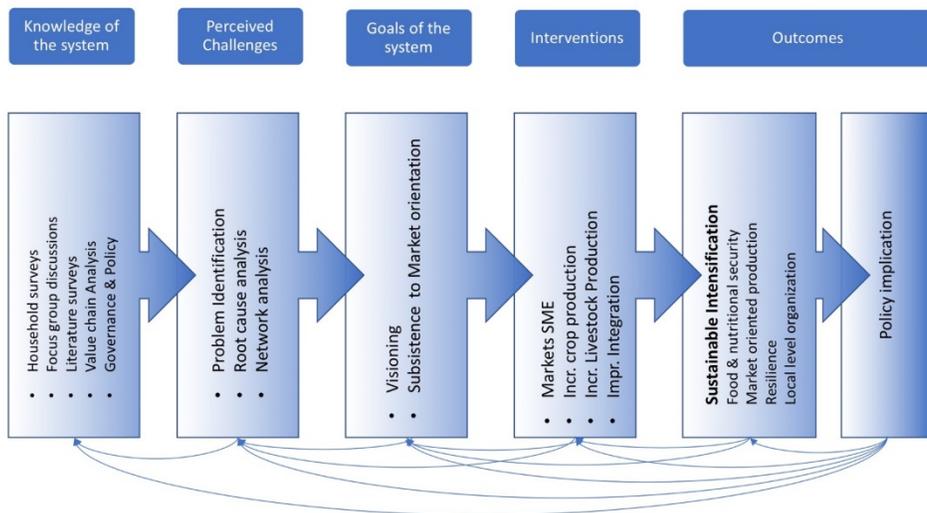


Figure 1 Schematic representation of project processes and activities.

Objective of this report

1. Understand IP methodologies for facilitating market oriented development and sustainable intensification processes in the context of smallholder farming systems of southern Malawi
2. Document the establishment of the 3 innovation platforms in the project districts Balaka, Chiradzulu, Thyolo
3. Characterize the challenges and goals of the farming systems, diagnostic of the current situation as base for defining interventions and achievable outcomes

2 The innovation platform methodology

The overall goal of the Innovation Platform (IP) is to bring relevant stakeholders within a specific area or specific value chain together in order to identify and address problems. The critical difference between this and many other participatory processes is that VC chain based IPs done well, address systemic problems rather than individual technical or institutional problems in a linear way. Bringing together a wide array of relevant stakeholders contributes to a greater understanding of the challenges a system face at various levels in order to address problems which may have negative impacts in other places or where feedback loops are preventing progress, while engineering feedback loops into the systems which will bring about positive reinforcements and aims at working towards longer term sustainability.

The IP therefore strives to create new and functional constellations among actors which will ensure that investments leads to real returns, where, inputs are rewarded at the market place and where information flow and learning leads to improved decision-making and overall system efficiency. In the process of building such systems, the IP provides a space for discourse, innovation and learning regarding solving critical issues identified by IP actors themselves, which without the IP would be too risky or costly. The IP therewith ensures that actors themselves address their issues, learn how to deal with the complexities of the systems, which ultimately results in learning, experimentation and capacity development, where adoption leads to adaptation in a continuous cycle, increasing the overall adaptive capacity of the larger system.

The methodology used in this project followed a similar protocol as described by van Rooyen et al. (2017). Here we explain the four-stage process for initiating and IP, starting with (i) problem definition, (ii) visioning, (iii) value chain identification and analysis and (iv) priority setting.

1. 2.1 Problem identification and linkages between problems

The goal of the exercise was to help participants identify the problems in the different parts of the production cycle and value chain, and to illustrate the logical linkages (cause and effect relationships) that could help all stakeholders better understand and address the problems at hand. Participants were asked to write their most important problems, one problem per card, and only three or four cards per participant. Facilitators were prompted to ensure that participants are be as specific as possible, add detail and if not provided, ask for more information during feedback sessions.

Once most people completed writing, participants were invited to an area suitable for laying out the cards in related groups. Participants circled the floor area where everybody could observe and participate. Cards were read out, and placed on the floor, all similar cards together and dissimilar once at a distance. All cards were read out, even if they were the same, that ensures that everybody's voices are heard. Where required, cards were translated. New cards were used to describe the headings/titles of the clusters of similar cards. Once all the cards were placed, individual cards were arranged in smaller groups within the larger cluster.

Once all cards were ordered, out causal relationships between groups of cards were identified to "tell the story". The different cards/problems are the individual words of the story – but strung together, finding the causal relationship between these will allow you to relate the sequence of events that leads to larger systemic problems. Reading the story one way, may reveal the negative

relationships between clusters of problems, but reversing the sequence it may illustrate the most likely entry points and process required to bring about the changes required.

Identifying and linking the problems beyond the farm gate and within the context of the larger system helps to illustrate the issues that impacts at producer level and defines the role of the other IP participants.

2. 2.2 Visioning and related narrative

The second part of the visioning process was to define the aspired future, the goal state. Participants were split by farmers, extension and support services. Farmer were asked to sit back and relax, think about their exiting situation – what their farms look like; crops, livestock, infrastructure, the immediate and important environment surrounding the homestead/village. Following this, participants were asked to envision a new improved world, where do they want to go? What changes do they aspire to and what improvements needs to be made? These “rich pictures” are very important in establishing what is the status quo is, and what the new future situation/scenario should look like. Participants are then asked to explain in their own words (write a narrative) of how they will move from the current situation to the new situation, what needs to change and how they will change it (this needs to be further refined). Extension and support services were given two questions on how they envision farms to improve and what their contribution would be.

The importance of this visioning lies in where the goal situation is, this needs to be clearly defined so all participants are able to understand that. This brings into the context the problems identified in the first exercise and the what and how to reach the desired future state. It is important to draw out the new scenario first so that participant’s aspirations are not limited by their inability to decipher a route towards the goal. Once the goals are set, routes towards that become the core of the innovation process.

In fact, the innovation process lies between the problems and the change narrative. The problems often relating to the technical “fixes” so often applied, and the process oriented change narrative.

3. 2.3 Participatory value chain mapping and associated problem identification

The value chain map is useful to identify main actors, their roles and contributions, illustrating the sources of inputs, and the different possible pathways products are transported, and processed (value addition) from the farm gate to the consumer. Once mapped by the stakeholders present, the problems at each point in the value chain were identified. The value chain maps provide a good overview of how the value chains function, what the challenges and opportunities are to improve on. The maps can be refined throughout the project stage by engaging with the VC participants.

4. 2.4 Priority setting

The fourth stage during an initial IP meeting is the main aim of this report; to combine all information gathered during the diagnostic activities and produce a list of priority areas for the IP to engage in. The baseline survey will provide further inform and substantiate these priorities which will form the basis of the next phase of the IP work.

4. Project sites

The project target areas were set by the EU Call, but specific sites were selected during a meeting with senior government officials. The table below provides a list of specific agro-ecological zones within the three districts that were selected through a participatory process involving government and project staff supported by district level secondary data.

Table 1 Project sites, districts and EPAs

	Balaka	Chiradzulu	Thyolo
EPA	Phalula Utale	Thumbwe	Thekerani Masambanjati

5. Innovation platform meetings

5. 5.1 Thyolo innovation platform meeting

Date: 20-21 June 2017

Venue: Catholic Women Organization Centre, Nantipwili, Bvumbwe, Thyolo

2.5 Introduction

The program manager for the CLIM² project, Mr. Alfred Fisombero welcomed all participants, introduced the project team and the team leader. The meeting was attended by several value chain actors including;

- 20 farmer representatives, members of goat, pig, chicken and pigeon pea farmer groups/cooperatives. 10 farmers came from Thekerani EPA and 10 from Masambanjati EPA;
- 8 private sector actors; 2 from the Agriculture Trading Company (ATC), 2 financial service providers (FINCA and COMSIP), 2 goat buyers, 1 food processor from Annie's Lodge, and 1 from Shoprite, a supermarket chain.
- 11 government extension staff (5 district agriculture office, 3 from Thekerani EPA and 3 Masambanjati EPA),
- 1 Thyolo NGO network representative
- 8 CLIM² project team members.

The meeting had a total of 45 participants 13 women and 32 men. The women included farmer representatives, 2 women from the private sector, women extension staff from the government and 2 from the CLIM² project team.

2.6 Challenges in agriculture

“These are stories that you wrote, and links between what is happening – we now know what the problems are, and we can address them. You have to do it.” Andre Van Rooyen (Project Team Leader)

The problem analysis exercise was facilitated by the project team, engaging farmer participants, government extension workers and other value chain actors. Each participant listed 3 or 4 priority problems independently. Extension listed what they believed are farmers' most critical problems. Their cards were marked to identify their specific view points, and contributions. Thereafter, the entire group gathered in a circle where the facilitator and team collected each problem at a time from individual participants and grouped them according to similarity of the problem. By just reading the cards they were grouped according to topics, so that one could easily tell the “story” or sequence of events. The contents of the cards were then read in reverse, changing challenges into a motivating story for providing solutions. Table 1 summarize the problems/challenges.

The problem analysis showed that despite the heterogeneity among participants in the innovation platform meeting, their main challenges gravitated around the same thematic problems and challenges. Clustering and linking the challenges illustrated a rich story to participants on how

challenges influenced each other, resulting in the current state of agriculture. While interventions tend to focus on promoting agricultural production, the greatest challenges and far reaching impacts were found around markets. Developing markets on the other hand has huge potential to attract investments in production, positive feedback between markets and production.

Table 2: Frequency of challenges in Thyolo District

Challenge	Frequency (n)	Narrative on challenge
Input market	26	<ul style="list-style-type: none"> • Limited access to high quality feed • Inadequate livestock drugs • High cost of drugs and other farm inputs • Long distances to access drugs and pesticides • Limited access to high quality seed • High cost of chemicals (herbicides) • Poor access to/cost of fertilizer
Output market	25	<ul style="list-style-type: none"> • Unorganized markets for livestock (goats) • Unreliable markets (Pigeon pea) • Poor prices • Limited market information
Land	7	<ul style="list-style-type: none"> • Limited land size for farming • Inadequate land for grazing
Climate change	7	<ul style="list-style-type: none"> • Short rainfall period • Crop disease types increase
Capital	5	<ul style="list-style-type: none"> • Limited cash to buy adequate inputs (zero budget farming) • Lack of enough capital to transport produce to market • Inadequate capital to buy hybrid stock
Disease and pest	5	<ul style="list-style-type: none"> • High disease outbreak in pigs • High mortality rate in chicken • Chemical resistant pest
Extension and support services	2	<ul style="list-style-type: none"> • In adequate extension workers • Lack of mobility means of E. workers • Poor meat inspection services • Poor incentives to extensional workers
Low yields and productivity	2	<ul style="list-style-type: none"> • Poor local breed in pigs and chicken • High mortality rate • Poor farmers' organization groups • Farmers don't know timing on when to use farming Inputs. I.e. apply fertilizer 3 days soon after germination. • Farmers have little knowledge on how and what pesticide to use
Transport	2	<ul style="list-style-type: none"> • Poor road network • Lack of adequate means to transport livestock to urban market
Attitude	1	<ul style="list-style-type: none"> • Farmers do not take livestock as a profitable business
Irrigation schemes	1	<ul style="list-style-type: none"> • There is need to increase irrigation farming in Thyolo district • There is a need for provision on adequate inputs to use for irrigation i.e. pipes
Value addition	1	<ul style="list-style-type: none"> • Limited knowledge on feed formulations
Business management	1	<ul style="list-style-type: none"> • Lack of input and profit analysis skills

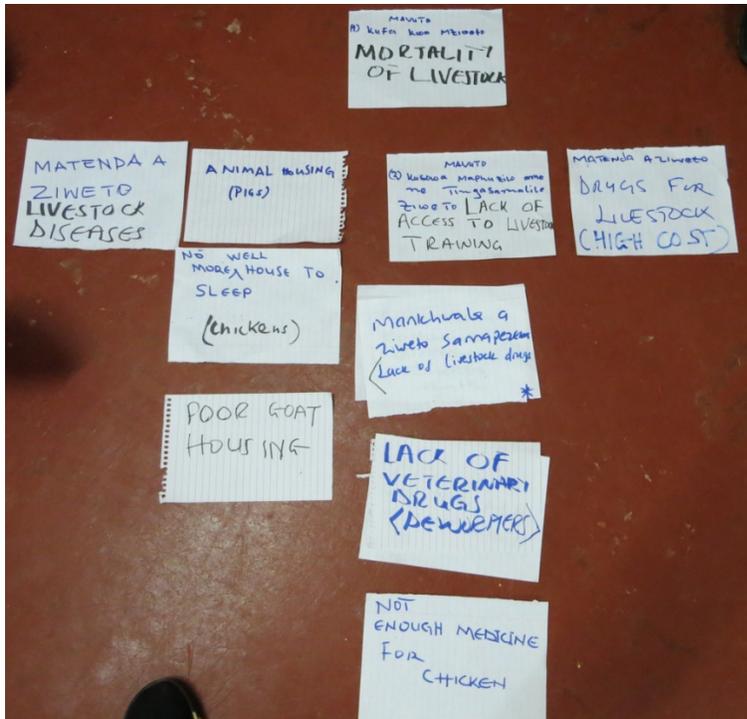


Figure 2. Example of challenges listed by participants and grouped under livestock mortalities.

The participants developed the following story line for challenges in agriculture:

- **Enterprise selection:** We do not always produce the right agricultural commodities; enterprise selection is crucial in ensuring food security and income. Selecting an enterprise, we must ensure that markets are available, and that the gross margins of the enterprise warrants investment in production. Poor enterprise selection often results in low profitability and failure to deliver to markets.
- **Markets:** With the right enterprises, we will get higher prices and revenues and will be able to afford the inputs. If we can afford the inputs, we will have higher production. Some value chains may need outside support to make them more lucrative.
Manipulation of markets: Once agricultural production has increased the risk is that traders and buyers start influencing the prices. As the project is working with support services, we can address this. The most important point is to work on market information. Farmers need to know the current prices, and the risks associated to it.
Post-harvest management and storage: Surprisingly, post-harvest management and storage did not come out as challenges during the meetings. After good harvest yields increase, prices decline. Farmers need to store crops until prices increase again – the project should investigate in post-harvest losses and storage facilities, determine their importance for increasing income.
Links to buyers: There are no formal linkages between producers and buyers, hence leaving producers susceptible to unfair vendors in the market. The project will work on improving the producer relations and trust with buyers based on market information, collective marketing and associated bargaining power.
- **Inputs:** Access to inputs is a challenge in both crops and livestock value chains. Cost of inputs are high, inputs are inaccessible as the suppliers in some cases are not within reachable

distances, and there is also lack of knowledge on input use. Producers do not procure inputs on time. Most producers lack the capacity to buy inputs, also because they do not receive adequate money from their produce. Conversely, if producers do not invest their money in necessary inputs, they end up in low productivity (quantity and quality). The problems or challenges around inputs can also be addressed as follows:

Knowledge to use inputs: Farmers have limited knowledge and skills on how to use inputs. Most farmers commented that they walk long distances to access the chemicals; sometimes they are not sure if chemicals are expired. Due to limited knowledge and access to chemicals farmers use any type of pesticides found on local stores. Most farmers rely on inputs provided by government/NGO support programs which are often arrive late with limited information. Therefore, the project will need to work with SME to provide information on proper uses, and also to back up sales. Training of agro dealers in local trading centers can help to improve pesticides access, quality and use.

Capacity to buy inputs: Costs of inputs are high and inputs are inaccessible as the suppliers are often not within reachable distances. It is critical to note that producers cannot buy inputs if they do not receive adequate revenue from their produce. To enable producers investing in the necessary inputs, and increasing productivity (quantity and quality), the project will illustrate returns on investments for farmers, business opportunities for agro-dealers who make inputs available in large volumes at the right time, eventually linked to outputs markets, win win for agro-dealers and farmers.

- **Crop management:** Producing high volumes of good quality products require good management skills from production to post harvest management. It was observed that due to limited capital and technical know-how on crop management, most farmers produce crops of poor quality and quantity. There is a chance to improve if farmers are trained and linked to access finance.

Soil fertility management: The issue of soil fertility was a challenge for the crop value chains. Most of the producers need training on soil fertility management, on the appropriate use of inorganic fertilizer and manure for improving production.

- **Livestock management and husbandry practices:** The lack of training, poor livestock housing, and unaffordability of veterinary inputs results in high mortality of livestock. It was agreed that if producers can reduce the mortalities and sell the animals through better developed markets, producers will be able to afford the drugs. Reducing mortalities requires good management, there is a need to build good housing for livestock and prevent diseases through vaccination. Producers need training to be able to understand the need and then to apply the inputs correctly. To improve livestock production in Thyolo the project will work with private sector and support services to concurrently improve markets and reduce mortality, through improved animal nutrition and appropriate animal housing.
- **Financial support:** Producers lack capital to fund profitable enterprises, however, on the other they need access to functional markets to ensure that they can pay back the loans. Financial service providers such as banks remain reluctant to provide credit. The project will work with financial institutions for farmers to obtain loans. To facilitate loans successfully, producers must increase yields and improved market access allow for higher income. The project will work with the markets actors so that then financial institutions will be able to provide their services to the benefit of everybody.

- **Extension services:** Low productivity is partially a result of farmers not valuing extension services. “As long as we complain about markets, and we don’t have income, we cannot buy the inputs, the extension officer does not have a job. He/she can talk, but we cannot do what they preach as farmers don’t have the money to buy the inputs”. When you fix the markets the demand for information goes up. When your income goes up you want to make more money. You need information and training. The extension officer can provide that. If the market incentive works, extension services will be more efficient and will work harder. The number of extension services is very low. Previously extension officers talked to each farmer individually. Today we can extend knowledge through farmers via new channels, e.g. cell phones, farmer-to farmer learning. Most farmers learn from farmer-to farmer learning. Good lessons must be promoted.
- **Land:** Land landholding sizes are small, against a booming population and competition among land use ends. The reality is that land is finite and there is nowhere to get more land. The only opportunity lies in intensification and integration. With the same land and labor there is a need to produce more food and feed. The question for producers is how to balance competing needs for a finite land resource. With the limited land and goal of raising livestock, where is the feed for livestock going to come from? A possible solution is to grow dual purpose crops for grain and feed. The same piece of land and the same labor can produce food and feed. The manure will contribute to soil fertility, the feed goes back to livestock, integration. This issue extends to grazing land. The project will help with grazing management improvement and the district coordinator will also support estimation on rangeland availability.
- **Poor transport:** There is nothing the project can do about roads, but the project can work on improving transport arrangements to increase efficiency. Government will not improve the roads as long as productivity is low. We can only pay for transport if productivity is high enough.
- **Drought and climate change:** This challenge is an external environment issue. The best way the project will assist on this is by ensuring that varieties and species being promoted are more resistant to climatic and weather shocks.
- **Irrigation and water:** Producers indicated a desire to work in irrigation projects and also to secure water resources for livestock production. The best option is to work on other proposals that can cover that. If there are many farmers investing in irrigation, we can investigate that. The district field coordinator for Thyolo will report back on irrigation development needs.

Process lessons and conclusions

- Despite the importance of livestock rearing for livelihoods in Thyolo, the majority of smallholder production and marketing remains confined to the traditional informal sector. Average ownership and marketing of livestock per household is also low. This is because of:
 - a) Poorly coordinated marketing systems that link farmers to urban consumer markets
 - b) Limited disease and bio-safety management at all stages of the value chain;
 - c) Low input husbandry techniques, including limited adoption of animal confinement, leading to high levels of animal mortality and low productivity;
 - d) Low capacity to comply with sanitary and phyto-sanitary regulations, leading to limited market opportunities.

The ability of smallholder producers to benefit from the growing demand for animal products in Malawi depends on strengthening the performance of the production and marketing system utilized

by smallholder animal producers and integrating the traditional sector with the commercial sector. Through the process followed, farmers increasingly recognize that increased cooperation, in sourcing inputs and collective marketing and partnership can help them address critical issues that go beyond immediate operation. By utilizing insight gained throughout the innovation platform we all learned about the opportunities and challenges of agribusiness engagement.

It was concluded that the project will work on fixing the markets, help farmers to access the inputs and train on the use. We can organize trainings, but farmers must apply the knowledge to increase production and be able to sell to markets. There is a lot that farmers can do. The work must be done by farmers. Through the project, we work with extension services, link them with farmers and work on all those issues raised at the same time. Many projects fail because we don't look at the real issues. Everyone has to play their role, for the success of this project. Farmers should demand for their services. They should demand from the extension services.

In the past farmers were beneficiaries. Today farmers are stakeholders, they are in the center of the activities. The stakeholder is the man who holds the iron in the fire, sometimes the iron gets hot. The work can be hard. We will also fail. As we fail we stand up again.

2.7 Visioning and goals

A visioning and goal setting exercise was used to illustrate farmer's aspirations, goals and objectives for the future. This would help participants to formulate their own strategies how they could move forward. Participants were split in groups by EPA. First, each group developed a graphic representation of their current situation as well as their desired future state. Then the groups defined strategies how they could get to the future state. A separate group was created for support services formulating their vision for supporting smallholder farmers. Presenting the results to the group created opportunity for comments and discussion. Private sector participants individually presented their perspectives and market requirements to farmers.

Farmers, Masambanjati EPA, group 1

Current situation 2017: Currently, the average dwelling units (houses) are in poor condition, with thatched roofs and no proper sanitation facilities. In terms of crop and livestock production farmers are producing few varieties of crops and the productivity is low, the condition of animal housing is poor and the farming practices on the crop fields are not in line with environmental conservation.

The vision 2022: Farmers will be dwelling in good houses, built from good building materials with iron sheets on their roofs and with good sanitation facilities. Farmers will raise several livestock species in larger numbers and the animals being kept in properly constructed kraals. The yields from crop enterprises such as pigeon peas and maize will increase. Supply of agricultural inputs



Figure 3 Farmer participant explains current and future scenarios to the group

and output markets will be readily available as agro-dealers will be found in the area. The children will be able to have different toys to play, with even bicycles.

Strategies to achieve the goals and the vision:

- Practice new methods of farming
- Access to reliable markets
- Hard work in the farming enterprise
- Cooperation in farmer organizations

Aspirations/needs

- More training on farming
- More markets
- Processing machinery for pigeon peas and soya beans
- Good transport services and good road networks



Figure 4: Future vision, farmers from Masambanati EPA, group 1

Farmers, Masambanjati EPA group 2

Current situation 2017: People are living in grass thatched houses, their children are going to school hungry. Livestock are being kept in ground kraals (not raised above the ground), and the productivity of crop and livestock enterprises is low. There are no proper planting methods in their fields and the manure from the livestock is not applied in the fields.

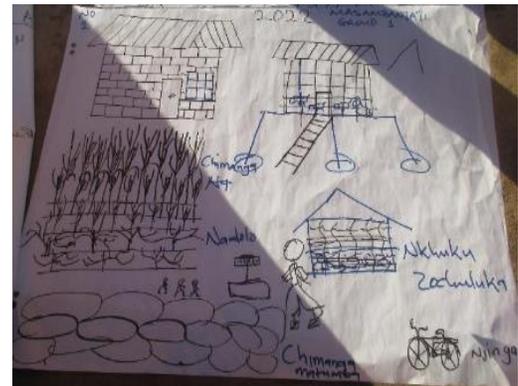


Figure 5. Current situation, farmers in Masambanjati EPA, group 2

The Vision 2022: Farmers will have bumper harvest, raise more livestock in properly constructed kraals. Their houses will be connected to electricity power lines and their children will be going to school and in good health condition.

Strategies to achieve the goals and the vision:

- Using modern farming technologies
- Practice irrigation farming
- Find reliable markets
- Practicing good crop husbandry practices like early planting, applying manure in the field and weeding.
- Putting into practice methods taught by extension service providers
- Working in collaboration with the service providers
- Constructing proper livestock housing
- Treating and vaccinating their livestock



Figure 6 Future vision, farmers in Masambanjati EPA, group 2

- Selecting crops that suit the local environment

Farmers, Thekerani EPA, group 1

Current situation 2017: The houses are in poor condition with no sanitation facilities. Children are currently attending primary school only. They are raising a few chickens and keep a few cats, no other livestock. The yields from crop farming are low, with only a few bags (5) of maize realized from their farming. The farming practices are not appropriate, for example farmers plant at a spacing of 100cm apart with more seeds per planting station.

The vision 2022: The houses in the area will be of iron sheet roofing, kitchens and toilet facilities. The livelihoods of the people will have improved, they will have more clothes, and the children will attend secondary school. Farmers will not just keep chickens but they also will be raising larger animal species like cattle. Farmers will practice better farming methods, for example the one seed per planting station (Sasakawa) method, crop production will increase, and farmers will grow more animal feed. The diversity of crops will also increase. Farmers will not just grow maize but also pigeon peas, bananas and sugarcane among other crops.

Strategies to achieve goals and vision:

- Constructing proper housing of livestock
- Applying manure from livestock in the crop fields
- Administering proper injections to livestock by following guidance from veterinary extension staff
- Using the income realized from the increased numbers of livestock to purchase inputs like fertilizer, livelihoods will therefore improve.

Farmers, Thekerani EPA, group 2:

Current scenario 2017: People are dwelling in thatched roof houses, sharing houses with their livestock and there are no additional facilities like toilets and kitchens. They raise few livestock. The farmers are not realizing enough yields from their crop production. There are few farmer organizations and the general livelihood of the people is in poor condition.



Figure 7: CLIM District program officer presenting the vision for the year 2022, Thekerani EPA



Figure 8: Current situation, farmers in Thekerani EPA, group 2

The vision 2022: People will live separately from their livestock; in properly constructed houses, livestock will be raised in improved kraals. Crop production will increase and diversified, farmers will be growing maize, pigeon peas, groundnuts, chilies, vegetables and other crops. Farmers will also be growing fodder for their livestock. Farmers will be more organized into groups, there will be more reliable markets. Livelihoods and nutrition will improve, children will be in good health, families will have more assets including motorcycles for their transport.

Strategies to achieve goals and vision:

- Diversifying into several crops
- Market oriented farming
- Following modern ways of farming
- Producing and selling as a group
- Receiving training and extension messages



Figure 9: Future vision, farmers in Thekerani EPA group 2

Extension agents and support services

Extension agents and support services worked on two questions:

1. What are the issues that need to be addressed so that farmers can realize their visions and goals?
2. What is the role of extension and support services in addressing those issues?

Extension and support services highlighted the core issues for agricultural systems and strategies that they could employ to address those issues. The main issues revolved around marketing, including access to and use of information and inputs, as well as management of crops and livestock. Table 3 summarizes major issues and role of extension in addressing these. Table 4, 5 and 6 list further detailed how extension and support services could assist farmers more effectively in marketing crops and livestock and accessing inputs.

Table 3: Extension roles in addressing agricultural challenges

Major issue	The role of extension
Disconnect between market demand and supply, producers not clear on demand for their commodities, while demand fluctuates seasonally	<ul style="list-style-type: none"> • Conduct market research and share results • Set up stock/auction markets for livestock
Poor functioning, weak linkages and coordination in the value chain, unscrupulous market practices by some middlemen	<ul style="list-style-type: none"> • Offer capacity building support on marketing • Provide training on gross margin analysis • Conduct stakeholder meetings to connect value chain actors
Poor access to market information, producers unable to access information on product markets and prices	<ul style="list-style-type: none"> • Offer capacity building support on marketing • Provide market information on how, what, to whom and when farmers should supply to markets
With poor farmer organization, unfair market actors taking advantage of farmers	<ul style="list-style-type: none"> • Offer capacity building support to farmers • Provide training on group management and group social dynamics
Poor quality quantity and timing of produce brought to markets. There is a mismatch between farmer's practice and marketing grading standards.	<ul style="list-style-type: none"> • Offer capacity building support to farmers • Train on post-harvest management, value addition and storage.

High livestock mortalities	<ul style="list-style-type: none"> • Capacity building of farmers and extension staff on management and animal health • Improve on availability of inputs • Sensitization on animal welfare
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Table 4 Extension and support services support for farmers in marketing crops.

Challenges	How extension can help address	How, who, when?
Market information	<ul style="list-style-type: none"> • Facilitate the development of market information systems 	<ul style="list-style-type: none"> • Government announce minimum price early before harvesting time
Poor value chain coordination	<ul style="list-style-type: none"> • Trainings on group management and strategic partnership 	<ul style="list-style-type: none"> • Government and NGOs field staff
Unscrupulous buyers	<ul style="list-style-type: none"> • Work with reliable buyers • Encourage aggregate selling 	<ul style="list-style-type: none"> • Facilitate partnerships and contract farming before planting
Price/demand fluctuations	<ul style="list-style-type: none"> • Source markets with more stable prices • Availability of market information systems 	<ul style="list-style-type: none"> • Protection through government policies
Poor farmer organization - Unfair market actors taking advantage - Group social dynamics	<ul style="list-style-type: none"> • Training on group management, self-organization 	<ul style="list-style-type: none"> • Bring in training organizations
Quality, quantity and timing of sales	<ul style="list-style-type: none"> • Storage, post-harvest training 	<ul style="list-style-type: none"> • Bring in training organizations
Mismatch between farmers practice and markets grades and standards	<ul style="list-style-type: none"> • Engage private sector in using prices based on contractual agreements 	<ul style="list-style-type: none"> • Facilitate negotiations by farmers club representatives

Table 5 Extension and support services support for farmers in marketing livestock.

Challenges	How extension can help address	How, who, when?
Poor farmer organization	<ul style="list-style-type: none"> • Facilitate farmer cooperatives 	<ul style="list-style-type: none"> • Engage NGO and government field staff
Quality, quantity and timing	<ul style="list-style-type: none"> • Select and breed for high meat production • Provide high quality forage all year round • Develop and implement workable animal health management programs. • Enable famers partnership and aggregate selling • Plan and implement better reproductive management systems 	<ul style="list-style-type: none"> • Employ high quality breeding stock • Trainings on improved fodder harvesting, preservation and grazing systems • Provide housing compatible with climatic condition • Provide improved sanitation and cold storage or applying legally approved preservative
Lack of reliable markets for goats	<ul style="list-style-type: none"> • Assisting contract selling with superstores and other big meat processors 	<ul style="list-style-type: none"> • Facilitation through innovation platform and extension service providers
Inadequate market infrastructures	<ul style="list-style-type: none"> • Construction of improved livestock and meat market facilities 	<ul style="list-style-type: none"> • Resource mobilization by project team

Informal market arrangements	<ul style="list-style-type: none"> • Sensitize on meat handling and hygiene practices 	<ul style="list-style-type: none"> • Government policy regulations
Market information	<ul style="list-style-type: none"> • Facilitate mechanisms that provide accurate and timely market information 	<ul style="list-style-type: none"> • Facilitation through NGO and government field staff
Unscrupulous buyers	<ul style="list-style-type: none"> • Facilitate organized markets 	<ul style="list-style-type: none"> • Facilitation through NGO and government field staff

Table 6: Extension and support services support for farmers accessing inputs.

Challenges	How extension can help address
Lack of small stock inputs	<ul style="list-style-type: none"> • To work with project and facilitate SME in this area
Lack of feed	<ul style="list-style-type: none"> • Training on homemade feed formulas
Veterinary services are very expensive	<ul style="list-style-type: none"> • Facilitate buying drugs in groups
Limited access to drugs	<ul style="list-style-type: none"> • Facilitate loans from VLS to buy inputs
Long distances to access fertilizer	<ul style="list-style-type: none"> • Training on organic soil fertility improvement, manure use
Lack of drought resistant varieties	<ul style="list-style-type: none"> • Engaging resistant hybrid seed stock and drought tolerant

Private sector requirements

The project will start with addressing problems, provide training, how to use SMEs to support products to markets. We will work with SMEs to get investments into rural areas that are helpful for farmers. Government extension and support services will help to create a triangle between knowledge sharing, private sector and farmers. This will help to close the gaps between production, the use of the right inputs, so that market delivers what consumers want. Functional value chains with quality products will be rewarding the investments in inputs. At a higher level, there is need to reach policy makers, for them to influence more conducive conditions for farming.

Southern Malawi has many producers but very little land per farm, hence there is need to work together at scale in order to supply sufficiently large volumes. We need a new thinking on how to commercialize on these small farms, engage many producers to supply to markets, and to commercialize the agricultural sector, not the individual farmer. Other value chain actors also need to change their mindsets, not only the farmers. For instance, Shoprite procures from producer groups, and can advise on how farmers can better connect with them and supply consistently. If we commercialize the sector, price variation will reduce, as farmers will improve the quality and consistency, and sell at times when prices are higher. Thyolo has 167,000 farm households. If 25% of these each sell one goat, 42,000 goats will be on the market per year, implying 3,500 goats per month. At a price of 20,000 Malawi Kwacha per goat, this would be 70,000,000 Kwacha or 100,000 USD monthly. Similarly, if every farmer produces 100kg pigeon pea each, this will be 16.7 million kg pigeon pea per year. Making use of the economies of scale is therefore critical in turning around the local economies.

The various private sector representatives then explained options for collaboration and requirements through focus group discussions, with small groups of farmers and extension.

Financial service providers, group 1: COMSIP is an organization which promotes savings and credit as groups, e.g. livestock clubs, irrigation clubs, business groups. COMSIP provides training on financial literacy, business management, leadership, environment and nutrition among others. FINCA provides micro loans to groups ranging from MK20, 000 to MK1, 000,000 per person.

The collateral for a FINCA micro-loan is the group, if a member of a respective group fails to pay back a loan the group repays the loan and individual pays back to the group. Insurance is also covered, up to MK100, 000 in case of deaths. The current interest rate is at 6.5% per month on a reducing balance basis.

Input supply, group 2: Agricultural Trading Company is a company which provides inputs of all kinds, i.e. seeds, fertilizers, pesticides and veterinary supplies. ATC is a subsidiary of AHL group who also provides commodity exchange, with markets for all legumes. ATC presented the opportunity for SME development, to ensure that input supply is closer to farmers. ATC can supply veterinary drugs to areas where there are veterinary personnel. They also offer free delivery, but this depends on the profitability of the purchase. Farmers are advised to buy their inputs as groups in bulk. Otherwise farmers should buy inputs from reputable shops.

Supermarkets, group 3: Shoprite has several departments relevant for this project; the meat market department, fruits and vegetables department, including beans. Prices are uniform across the country. Farmers who aim at supplying products to Shoprite must provide a sample of produce, produce a business certificate and the certification from the Malawi Bureau of Standards. Upon satisfaction of the stated requirements a contract between suppliers and Shoprite is developed. Delivery/sales are based on ordering (stock control orders), orders may be done through phone or emails for contact individuals from groups. As a responsible corporate Shoprite will make certain tax deductions i.e. withholding tax 3%. In the livestock department, quality requirements/standards include baby chickens should be at least 1 kg of weight. There are quality requirements also for goat meat and pork. Shoprite is also interested in other commodities such as orange fleshed sweet potato, garlic, butternut, yellow and green pepper.

Hospitality, group 4: Annie's Lodge demands good quality livestock i.e. goats should be young, well rounded and heavy (20kg and above), have a good amount of fat, and disease free. If a farmer's goat meets these requirements, then they are likely to fetch around MWK 2,000 per kilogram live-weight. Other suggestions are that slaughter places should be hygienic and certified by livestock personnel. Farmers should ensure quality production by having raised kraals, feed their goats a diverse diet and treat and vaccinate their goats on time following information given by the livestock extension personnel. For supply of legumes and vegetables farmers should be organized into groups, to be able to supply large volumes graded by quality standards. For supply of vegetables, farmers need to bring a sample of their vegetables which should be free from pest and fresh.

Farmers stated that they would follow recommended practices to ensure that they meet the stringent quality requirements in both crops and livestock. Despite this, farmers recognized that their main challenges included the high cost of fertilizers, high cost of pesticides, high costs of veterinary drugs and climate change.

2.8 Value chain selection

Participants selected as main value chains for Thyolo district:

- Legumes: pigeon pea, groundnuts, red beans, sugar beans, soya, Mucuna, green grams
- Livestock: pigs, goats, chicken, dairy
- Fruits and vegetables: Banana, sugar cane
- Roots and tubers

While cereals, maize and sorghum are important for household food security they do not provide significant income generating opportunities, apart from where the residues are used for livestock feeding.

The project will first focus on pigeon pea, goats, pigs and chickens in Thyolo district, and then extend to others during the project life cycle.

Process lessons and conclusions

- The visioning process was an eye opener to most participants, linking farming and livelihood development objectives. Through this process the various stakeholders had the opportunity to present their challenges, requirements and possible modes of collaboration. This provided for the first time a platform to plan ahead together and devise the strategies to be undertaken for various visions to be accomplished. This also helped producers to demand services that would assist them in their different farming enterprises.
- More effective ways for multi-stakeholder collaboration are required to overcome the multiple challenges that limit the agribusiness sector. Smallholders need support to increase production, improve quality, develop their business skills and form co-operatives so they can enter into collective agreements with large companies. Adequate business models must form the foundation for developing and delivering a larger scale vision which also attract banks.
- The project will address problems by providing trainings on how to use SMEs to support products to markets. The project, through government extension and support services, will work with SMEs to get inputs into rural areas that are helpful for farmers. This will help to close the gap between what farmers produce, and what consumers want. Functional value chains with quality products will be rewarding the investment in inputs.
- Farmers agreed that visioning helped them to visualize their own future and the required steps to be taken. Most farmers realized that they can produce more pigeon pea but they don't have reliable markets. They recognized that prices are distorted by Indian business people, who set low prices. There is need to assess if pigeon peas can be utilized for feed instead of exports.
- The meeting was an opportunity for farmers to hear important requirements from private sector, which translated immediately into next planning steps:
 - Supermarkets confirmed that there is a ready market for goat meat, fruits and vegetables if farmers would be more organized and sell in groups and as suites of agricultural commodities to supermarket chains. Fruits, pigeon pea and goats have ready markets at Shoprite, but there is a need to pass Malawi cold storage quality standards.
 - AHL commodity exchange group representative disclosed services that can link farmers to external markets for legumes, farmers however need to aggregate and supply a minimum of one metric ton. He explained requirements, quality, and quantities.
 - Hotel representatives emphasized the importance of facilitating the links for farmers to markets. They suggested promoting fruits and vegetables through local processing factories, e.g. juices. Small feed processing factories could be introduced to farmer clubs in Thyolo.

It was acknowledged that farmers must work together, create associations which can access credit, and deal with larger buyers, develop sound business plans and access credit to increase production and profitability through appropriate market arrangements.

2.9 Immediate critical issues

- Low and inconsistent supply of produce from farmers.
- Unscrupulous traders/middlemen that buy produce at very low prices
- Lack of farmers' capacity to bargain for better prices for their produce
- Lack of information/ knowledge on how to use pesticides/ drugs by farmers
- Poor enterprise selection attracting low prices
- Poor management of goats and chickens (housing, feeding, breeding and disease control) leading to high mortality, low productivity and poor quality meat.
- Lack of organized goat markets
- Lack / Poor slaughtering facilities (infrastructure) leading to poor goat meat quality
- Government's blind eye on livestock production & markets
- Double standard messages from extension staff going to farmers
- Extension workers lack updated knowledge to advise farmers on new technologies
- Inadequate extension staff versus numbers of farmers
- Small land holding size amongst farming households, particularly in Chiradzulu and Thyolo.
- Lack of business skills amongst the youths and women, as well as butcher-men

2.10 Immediate training needs

a) Farmers

- Proper management of their stock- housing, feeding, breeding and disease control, in order to come up with good quality animals that can fetch high prices.
- Integrate relevant crops and livestock in order to improve the synergies on the same limited pieces of land.
- Provision of good quality, high yielding and draught resistant varieties for pigeon peas and cow peas for farmers to satisfy the markets.
- Form groups such as clubs, associations and/ or cooperatives not only to make sure there is consistent supply of their produce on the market but also for them to have strong bargaining power.
- Post-harvest loss management and value addition on their produce e.g. drying, grading, storage, packaging etc.

b) SMEs

- Train the youths, women and butcher-men in Business Management (Gross Margins and Financial Management)
- Engage the youths and women in various SMEs e.g. feed formulation and poultry production
- Assist butcher-men have good slaughtering infrastructure to improve meat quality.

c) Extension and government support services

- Standardize training materials and train extension staff in the same.
- Train lead farmers through these extension staff who would in turn assist fellow farmers in both crops and livestock management. Possible entry points for these trainings are the Farmer Field Schools.
- Direct more resources to disease control through deploying of veterinary assistants at village level, training paravets and lead farmers, and enactment of a deliberate policy to encourage farmers to vaccinate their animals. This could be done through livestock vaccination campaigns for diseases of national importance.
- Livestock extension should focus on improved animal husbandry, promotion and commercialization of supplementary feeding for livestock especially during lean periods
- Direct more resources into effective breeding programs and rehabilitate existing breeding centers.
- Market information systems should provide timely information on demand, supply, price. The existence of accurate and timely information helps market participants to make informed decisions regarding production and sale.
- Demarcate livestock trading sites and encourage traders to establish necessary facilities required for feeding, watering and sales.
- Transactions based on modern weight measuring methods must be developed, increasing marketing efficiency and protecting the interests of sellers and buyers. The visual weight measuring based transactions may entail loss for farmers. Traders frequently visit different markets and are more acquainted with the transaction than farmers.

d) Other actors to be involved

- Community Development department to train farmers in group dynamics and association/ cooperative development
- ATC and other input markets to help train extension staff on their new products so that they can assist farmers accordingly.

2.11 Next steps

The IP meeting in Thyolo raised important questions and started to find answers for the various actors in the value chains and knowledge brokers. Participants confirmed that they acquired important and relevant information during this initial platform meeting. For example, a woman producer stated that she is now aware on how to improve her farm. A man producer stated that he had learned how to intensify and maximize the yield on his farm, taking manure to the fields and how to manage his animals. All participants agreed on the major challenges and that the visioning helped them to visualize their own future and the strategies that they would employ to realize that future. The project will facilitate links to a range of buyers, it is an opportunity to take farmers from improving production up to improving marketing. Participants and the project team developed a way forward in terms of activities, Table 7 summarizes the immediate activities.

Table 7: Planned way forward for the Thyolo IP.

Theme	Activities	Responsible	Time
Research	Baseline, stakeholder analyses, GMA Value chain analyses Innovation -funds Policy and institutional development	Project team	July – August, 2017
Innovation platform	Feedback New links Plans for IP going forward Entry points	IP members	September – December, 2017
Capacity development and training	Define capacity needs Farmers Private Sector Extension NGOs	Project team	On-Going Process

6. 5.2 Chiradzulu innovation platform meeting

Date: 22 June 2017

Venue: Kanthiti Lodge, Chiradzulu

2.12 Introduction

The meeting was attended by different groups of value chain actors including;

- 15 farmer representatives of goat, chicken and pigeon pea farmer groups and cooperatives,
- 2 goat buyers,
- 6 government extension staff (3 district agriculture office, 3 from Thumbwe EPA), 1 representative from ministry of youth, 1 representative from ministry of trade,
- 5 private sector actors (1 representative from the Agriculture Trading Company (ATC), 1 input supplier, 2 representatives from lodges as output market actors)
- 8 CLIM² project team members.

The meeting hosted a total of 11 women and 23 men. The women included 5 women farmer representatives, 2 women extension staff from the government, 2 from the project team and 2 women from the private sector.

2.13 Challenges in agriculture

“This methodology brings problems to the surface. Everyone contributes individual problems, we now read the story of your problems.” Andre Van Rooyen (Project Leader)

The problem analysis exercise was done by the project team, farmer participants, government extension workers and other value chain actors in the project district. The goal of the exercise was to identify problems, and then to organize problems and their logical linkages that could help stakeholders better address their problems. Each participant in the IP meeting listed 3 or 4 priority problems in specific value chains independently. Extension officials listed what they believed are farmers’ most critical problems, their cards were individually marked. All cards were then collated into groups, same procedures as explained for Thyolo.

Table 8: Frequency of challenges in Chiradzulu district

Challenge	Frequency (n=)	Narrative on challenges
Output markets	20	<ul style="list-style-type: none"> Lack of markets for livestock (chickens, goats, pigs) and crops (maize, pigeon peas, red beans) Farmers are offered low prices for their produce Large variation between input costs and prices of products (e.g. fertilizer and maize) Limited access to lucrative international markets Goat markets are not strategically organized Price fluctuations in output markets
Input markets	14	<ul style="list-style-type: none"> Inability to access fertilizers, lack of capital High cost of hybrid seeds and also pesticides Lack of pesticides (pigeon peas and bananas) Inadequate input suppliers Lack of veterinary drugs (and scarcity of some vaccines for example NCD vaccine) Lack of livestock feed (capital to buy the feed)
Pests and diseases	10	<ul style="list-style-type: none"> High mortality rates High incidences of livestock diseases
Management and husbandry practices	5	<ul style="list-style-type: none"> Poor livestock housing Lack of access to livestock training Limited knowledge on feeding
Climate change	5	<ul style="list-style-type: none"> Unreliable rainfall Dry weather conditions Droughts Climatic stress affecting goats
Attitude of farmers	5	<ul style="list-style-type: none"> Farmers not adopting good agricultural practices Farmers don't consider livestock production as a business High dependency syndrome among farmers Farmers prioritize maize more above other crops like pigeon peas
Land	4	<ul style="list-style-type: none"> Limited land for grazing Small landholding sizes for farming
Extension and support services	4	<ul style="list-style-type: none"> Lack of access to extension and support services Inadequate extension staff Limited knowledge on livestock management, feeding, diseases
Low yields and productivity	4	<ul style="list-style-type: none"> Farmers are realizing minimal yields from their crop and livestock production.
Poor livestock breeds	3	<ul style="list-style-type: none"> Lack of good genetic material Conception rates are poor due to free range system of production High abortion rates in goats Prolonged kidding intervals in goats Low fertility rates in goats
Capital	3	<ul style="list-style-type: none"> Lack of capital to run farming enterprises
Theft	2	<ul style="list-style-type: none"> High theft cases in both livestock and crops
Transport	2	<ul style="list-style-type: none"> High cost of transportation of produce (crops) to markets Livestock buyers also face transportation challenges

The project team developed the following story line from challenges in agriculture in Chiradzulu:

- **Attitude:** This is where many problems start, the way how farmers look at their farm. We don't take livestock as a business, don't follow good farming practices, regard maize as superior to everything else. This is a problem where for long we have worked on subsistence farming and now start working on market oriented farming. If we can't overcome this attitude, we can't go anywhere. In the beginning we said we want to make money, if so we have to change our attitude. We must all decide if we are prepared to change for a better future, or we stay where we are. If we want to move up, we must stop thinking that we are poor, to think that we can reach better markets. We burry this attitude and move forward.
- **Markets:** Issues around markets are always the biggest ones. We are not surprised, as most projects in the past looked only at production. This project will address at markets challenges as a priority.
- **Inputs:** Inputs are always close to markets, access to inputs is a market issue. If you don't have a place where you can buy your inputs or sell your outputs, you will have a problem. Many issues are around high costs. People complain about high costs, if it's expensive this means there is a value attributed. If farmers say it's expensive, they want to buy it, but can't afford it. They can't afford those because of low productivity. If we can't sell we can't afford the inputs, and then get low production.
- **Pests and diseases:** This is also an input problem. If we can't treat our crops we will have low yields and can't supply to markets. If I can afford to buy inputs and reduce pests, diseases and mortalities, I can increase production and sell to markets. We can choose to what we want to see, problems or options to change. The good in this is that farmers know what the problems are. If we know what the problems are we can fix them. In many places farmers don't even know the problems. Improving management, feeding is important to reduce those diseases.
- **Transport:** High cost of transport is always a problem. Often costs are high, because we carry small amounts of products, result of low yields. The problem is how much we transport at a time. We can reduce costs for transport.
- **Working together:** Some government people know answers, e.g. that we are not well working together. We will work on how communities can work better together.
- **Limited land:** There is very little we can do about it, other than becoming more efficient. High level policy makers need to get involved to work in this issue.
- **Droughts:** There is little we can do about it. If we work with the right materials, we can manage droughts better. Most important fix however is proper markets. If your markets function, in years with high rainfall you can put money aside for the time when drought will come. The project will bring experts who know drought tolerant varieties.

Process lessons and conclusions:

We need to close the circle; make markets work so that farmers can afford the inputs and raise their productivity. Many cards are similar to what we saw in Thyolo. The problems are at many places, some places farmers can fix, other places we need the government to fix. Our commitment in this project is to spend a lot of time by fixing the markets, for you to access inputs and sell outputs. The farmers' responsibility is to produce quality products, so that the markets will be accept and pay for the products. The problems reflect people's issues, it's you who defined these problems. We need to think, how we integrate our systems, analyze our problems, how they relate to another, so that we can fix them in the process, and not one at a time. In the center of all we have farmers, extension services and FIDP II. In most past projects farmers were passengers, this bus has 3 drivers, 1. Project team, 2. Government support services, 3. Farmers. It puts a big

responsibility on all to make this project work. If we make farmers to drivers, they can continue driving after the project stops. However, farmers need to work much smarter than before. We understand that farmers understand the problems, hence together can fix them.

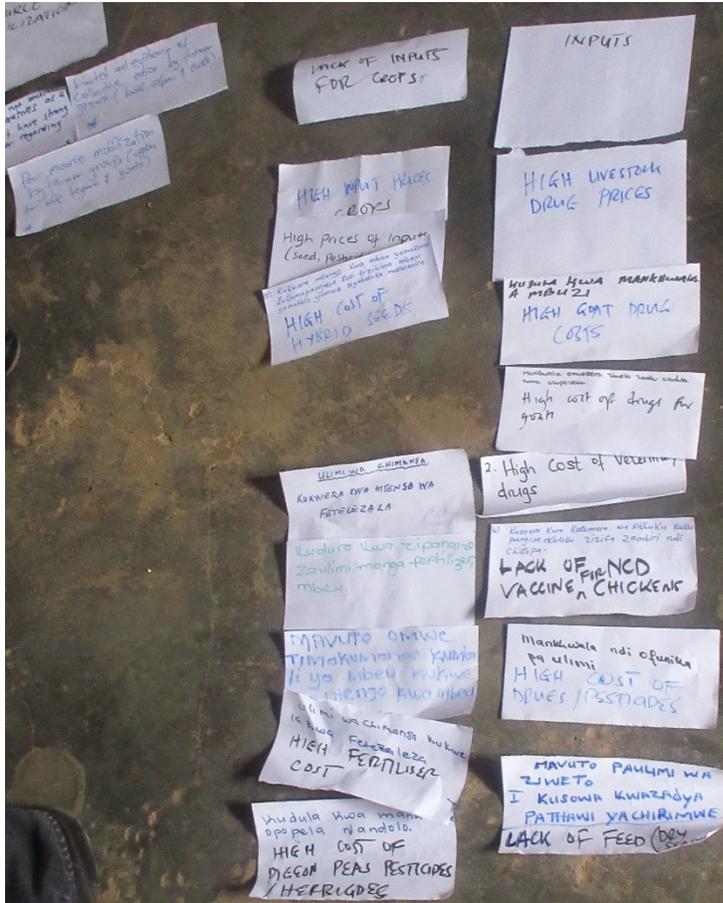


Figure 10 Challenges in agriculture.

2.14

2.15 Visioning and goals

The visioning and goal setting exercise was used for participants to illustrate their aspirations, goals and objectives for the future. This would help participants to formulate their own strategies how they could move forward. Farmer participants were split in groups by EPA. First, each group developed a graphic representation of their current situation as well as their desired future state. Then the groups defined strategies how they could get to the future state. A separate group was created for support services formulating their vision for supporting smallholder farmers. Presenting the results to the group was an opportunity for comments.

Farmers, Thumbwe EPA, group 1

Current situation 2017: Farmers live in a grass thatched house. They grow maize, soya and pigeon peas on the same plot where they harvest at least four bags of maize, four bags of soya. They are raising at least a goat and a chicken and they share their house with the livestock. They have a bicycle and for many their children fail to go to school.

The vision 2022: Their vision is having a house with iron sheet roof, grow different types of crops on different plots, crop yields will have increased, chickens and goats will be housed separately in good kraals that have iron sheet roofing. Their children will go to school, carry school bags, they have a motor bike and the yields.

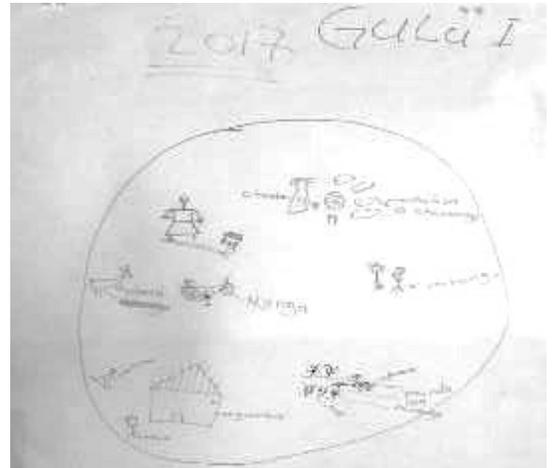


Figure 11 Current farm situation for pigeon pea farmers in Thumbwe EPA in Chiradzulu

Strategies to Achieve goals and vision:

- Practicing modern farming technologies (conservation agriculture, one seed per station)
- Practicing mono-cropping
- Making manure and applying in their fields
- Constructing modern livestock kraals
- Applying fertilizers and pesticides in their fields in a recommended way
- Planting agroforestry trees.

Farmers, Thumbwe EPA, group 2

Current situation 2017: Farmers are growing groundnuts and pigeon peas on one plot, maize, sorghum and cow peas on another plot. They are living in a grass thatched house, with exterior bathroom and toilet. They have a bicycle, children are going to school but lack some necessities.



Figure 12 Current situation, farmers in Thumbwe EPA, group 2

The vision 2022: Their vision is to live in a big house with iron sheet roofing, having at least five heads of cattle, 20 goats, all livestock in properly constructed kraals and also owning a motorcycle. Members of a household will be living healthy lives and children going to school with necessary materials like school bags.

Strategies to achieve goals and vision:

- Hardworking
- Being organized into groups
- Receiving training to improve their farming
- Access to organizations that may help them
- Improving their farming so that it becomes modern
- Having access to beneficial markets
- Being trained on feed formulation.

Farmers, Thumbwe EPA group 3

Current Scenario 2017: Farmers have a small house with a small external kitchen, bathroom, small toilet, an exterior sanitation place there they wash hands after visiting the toilet and there also have a garbage pit. What they are realizing from their crop farming is little, for example only fifteen bags of maize, six bags of pigeon peas, and five bags of sorghum and two bags of beans. They keep a few chickens, one goat in poorly constructed kraals.

Vision 2022: Their vision is to have a bigger house with a satellite dish, furnished (chairs, beds), with a modern kitchen, toilet, bathroom having dairy cattle, more goats, have a motor cycle, realizing up to 100 bags of maize, 70 bags of sorghum.

Strategies to achieve goals and vision:

- Change in attitude and working hard
- Taking their farming as a business enterprise
- Adopting modern farming technologies
- Following farming practices taught by extension officers
- Being organized into cooperatives
- Signing agreements with produce buyers

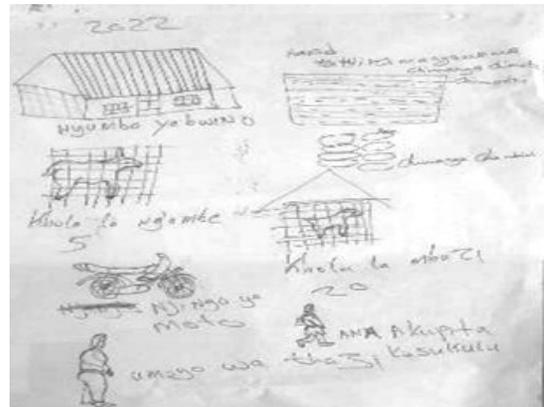


Figure 13 Future vision, farmers in Thumbwe EPA, group 2



Figure 14 Current situation, farmers in Thumbwe EPA, group 3



Figure 15 Future vision, farmers in Thumbwe EPA, group 3

- Having access to credit and using the proceeds to buy inputs to use in their farming enterprise.

Goat traders, Thumbwe EPA

Current Scenario 2017: People are living in grass thatched houses, with exterior kitchens and toilets. They have motor bicycles. They are slaughtering goats in unhygienic places and mostly under tree shelters. They also hold goats for slaughter or markets under trees. They buy and sell less number of goats.

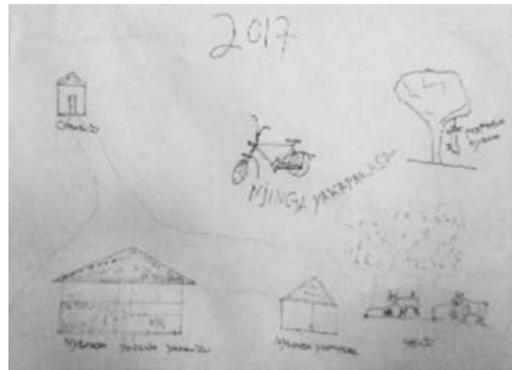


Figure 16 The current situation, goat traders in Thumbwe EPA

The Vision 2022: The vision is to live in a self-contained house with a well-maintained lawn, owning a motorcycle and a car that will be used to transport their livestock to and from markets. They envisage having an abattoir where they will be processing their livestock, the livestock going for slaughter being kept in good shelters.



Figure 17 Future vision, goat traders in Thumbwe EPA

Strategies to achieve goals and vision:

- Hardworking
- Access to credit/loans
- Working in collaboration with farmers so that they sell quality meat (sometimes farmers do not know they are selling pregnant does and some butcher men take advantage of that)
- Buying fatty goats (quality) to ease the marketing of the meat.
- Looking for training from CLIM² in areas of gross margin analysis.

Extension and support services' vision

Current Scenario 2017: Extension and support service providers characterized the current situation in agriculture as with limited ownership of project activities, lack of organization, low adoption of modern farming technologies, dependency syndrome among producers. Lack of organization in production and marketing, lack of adequate extension services and limited capacity of extension staff on; feed formulation, reporting, artificial insemination in goats and sheep and pests and disease management. Externally, the main scenario where characterized by land degradation, poor climate and soil infertility.

The Vision 2022: Extension and support services vision well organized farmer groups i.e. functional cooperatives

- Market platforms, auctions, reliable contract farming arrangements.

- Changed mind set of farmers on adoption of modern technologies
- Empowered farmers who mobilize resources by themselves.
- Have increased number and empowered livestock lead farmers.
- Improved information systems on crops and livestock
- Improved soils
- Improved knowledge among extension workers
- High quality and quantity of agricultural produce

Strategies to achieve the goals and vision:

- General capacity building support to farmer groups
- Intensification of supervision and coaching of farmer groups
- Facilitate establishment of market structures, forums
- Facilitate creation of stakeholder networks
- Staff needs to be trained on development of information systems
- Encourage crop residue incorporation, growing of legumes, manure application and conservation agriculture.

Process lessons and conclusions

- Experience the start of the vision process
- Revisit the major problem areas defined in the morning
- What is the role of extension and support services in addressing those major issues?
- Capacity development needed

2.16 Value chain selection

Building on the information gained in Thyolo, participants advanced on characterizing the selected value chains in the district. Participants grouped into the major crop and livestock value chains. They mapped out the key actors and interactions in the respective value chains. The maps show the flow products from producers to consumers along each value chain. The key challenges were then identified for each value chain segment.

Pigeon pea value chain



Figure 18 Pigeon pea value chain, Chiradzulu district.

Table 9 provides summarizes information on the pigeon pea value chain map in Chiradzulu district.

Table 9. Pigeon pea value chain actors and challenges in Chiradzulu district

Value chain segments	Major actors	Major challenges
Input supply	<ul style="list-style-type: none"> Local farmers (seed) FAJO investments at PIM and Limbe (seed, pesticides) Rex's agrodealers (pesticides) Chuma chili nthaka agrodealers at Litchenza (pesticides) ATC in Limbe (seed and pesticides) Government and NGOs (seed and pesticides) 	<ul style="list-style-type: none"> High cost of inputs Poor performance (yield) of recycled seed Distances to access inputs Limited range in packaging Expired pesticides sold by dealers
Production	<ul style="list-style-type: none"> Individual farmers Farmer clubs (e.g. Nankuyu, Masalani and Mtendere) Cooperatives (e.g. Chiradzulu boma, Mwaiwathu, Nalanda, Mpake) 	<ul style="list-style-type: none"> Limited landholding sizes Poor quality produce Pests and diseases Poor management practices Poor storage facilities Lack of capacity for value addition Limited knowledge on good agricultural practices
Transportation	<ul style="list-style-type: none"> Bicycles Motorcycles Truck transporters (Chiwoko, Mazinga, Mtambalika) 	<ul style="list-style-type: none"> Dishonest tendencies Poor produce handling High cost of transportation

	<ul style="list-style-type: none"> • Lorries (Mulli brothers, Chikolera). 	
Processors	<ul style="list-style-type: none"> • Transglobe • Proto feeds • Rab processors • AHCX Limbe 	<ul style="list-style-type: none"> • Low prices offered by processors • Poor terms of trade offered (no premium price for supply of large volumes, mode of payment)
Markets	<ul style="list-style-type: none"> • Vendors • Transglobe Limbe • Cooperatives • Eneka at Litchenza • NGOs buy for relief • Mulli brothers • Agora Limbe • Rab processors (Limbe) • TIL (Limbe) • Export trading (Limbe) 	<ul style="list-style-type: none"> • Price fluctuations • Price manipulation by vendors (e.g. tampering with weighing scales) • No price reward for superior varieties
Consumers	<ul style="list-style-type: none"> • Individual farmers (grain) • Livestock farmers (feed) • General population in town (Limbe/Blantyre) • Organizations (schools, prisons, hospitals) • Export markets 	<ul style="list-style-type: none"> • Limited preference on pigeon peas versus other legumes by consumers, hence less willingness to pay more • Limited knowledge on utilization (to develop different recipes)

Chicken value chain

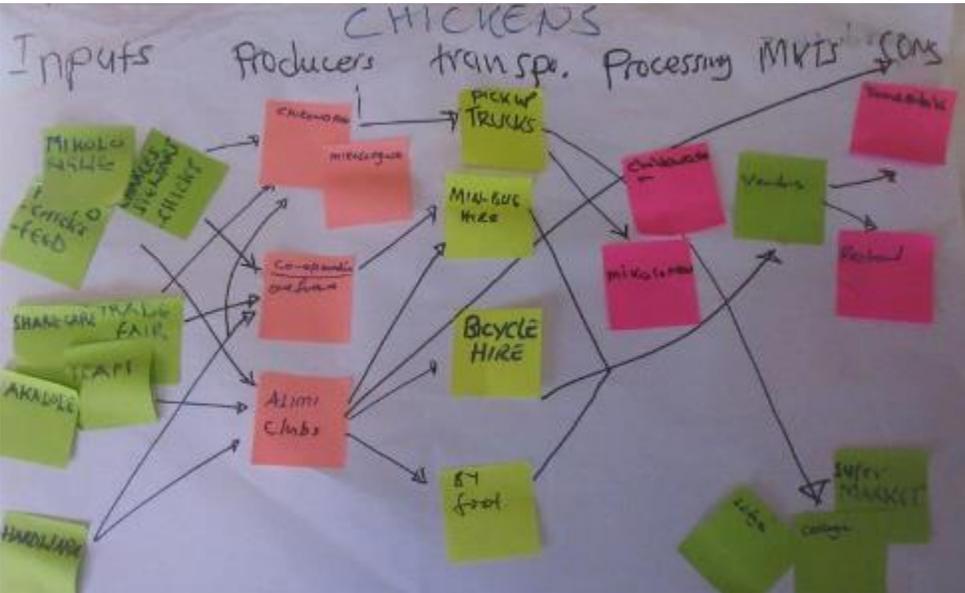


Figure 19 Chicken value chain map, Chiradzulu district

Table 10 provides summarizes information on the chicken value chain map in Chiradzulu district.

Table 10 Chicken value chain actors and challenges in Chiradzulu district

Value chain segment	Major actors	Major challenges
Input supply	<ul style="list-style-type: none"> • Mikolongwe (chicks) • Charles Stewart (chicks) • Proto (chicks, feed) • Trade fair, ICAM, Akalore, share care (vet drugs) • Hardware shops (building materials) 	<ul style="list-style-type: none"> • High cost of feed • Feed formula of purchased feed questionable • Feed packaged in large quantities • Vaccine quantity are large
Production	<ul style="list-style-type: none"> • Farmers • Farmer clubs (e.g. our future youth club) • Chikowa farm • Cooperatives 	<ul style="list-style-type: none"> • Inadequate capital • Competition from large and foreign producers • Inadequate information on markets, technical skills and diseases
Transportation	<ul style="list-style-type: none"> • Bicycle hire • Pick-up trucks • Minibus • By foot 	<ul style="list-style-type: none"> • Unreliable • High cost of transport
Processors	<ul style="list-style-type: none"> • Chikowa farm • Mikolongwe farm 	<ul style="list-style-type: none"> • Absence of cold chain facilities (cold rooms) • Electricity blackouts
Markets	<ul style="list-style-type: none"> • Vendors 	<ul style="list-style-type: none"> • Price competition (large producers offering cheap prices)
Consumers	<ul style="list-style-type: none"> • Domestic (households) • Restaurants • Supermarkets • Colleges 	<ul style="list-style-type: none"> • Competition from large producers • Customers want to buy at low prices • Customers prefer to buy at supermarkets

Goat value chain

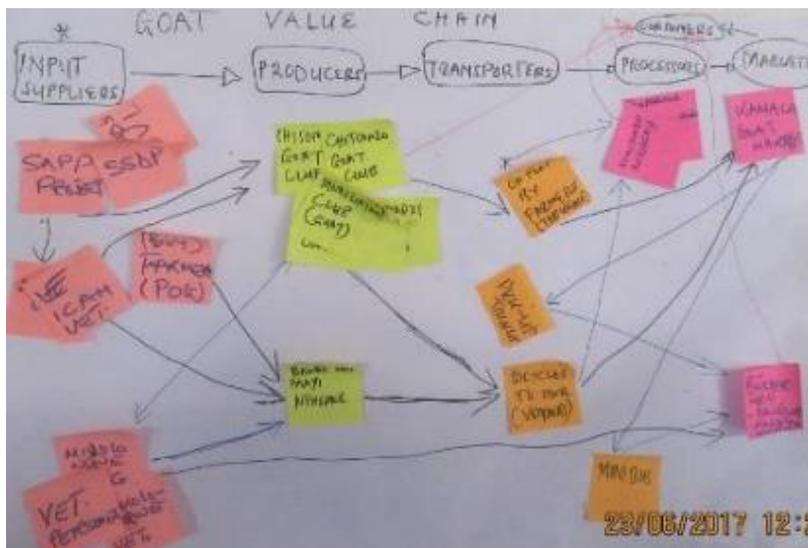


Figure 20 Goat value chain map, Chiradzulu district

Table 11 provides summarizes information on the goat value chain map in Chiradzulu district.

Table 11 The goat value chain actors and the challenges they face in Chiradzulu district

Value chain segment	Major actors	Major challenges
Input supply	<ul style="list-style-type: none"> • Mikolongwe MBG • Mikolongwe veterinary station • Veterinary personnel • Akalore vet • ICAM vet • Farmers • Sapp project • SSDP • NGOs (World Vision) • Pass on program 	<ul style="list-style-type: none"> • Farmers do not buy drugs in large numbers
Production	<ul style="list-style-type: none"> • Farmers • Goat farmer clubs (Chisomo, Chitsanzo, Mikundi, Tiyamike, umodzi, Mwayiwathu, Domasi) • Mr. and Mrs. Nthemwe 	<ul style="list-style-type: none"> • Inadequate feed • Low selling price • Disease outbreaks
Transportation	<ul style="list-style-type: none"> • Bicycles • Pickup trucks • Minibus • By foot (trekking by farmers) 	<ul style="list-style-type: none"> • Not reliable (bicycles) • Do not find more animals to transport at once
Processors	<ul style="list-style-type: none"> • Butcheries (Namitambo, Thaphama, Thili Muhola butcheries) 	<ul style="list-style-type: none"> • No hygienic processing facilities • Not enough capital • Goats are expensive
Markets	<ul style="list-style-type: none"> • Kamala goat market 	<ul style="list-style-type: none"> • Poor quality meat
Consumers	<ul style="list-style-type: none"> • Butcher men (at Bangwe, Makheta, Machinjiri) 	<ul style="list-style-type: none"> • Poor quality meat

Process lessons and conclusions

The value chain mapping helped participants to identify important actors in the various value chains, and how they are currently connected. The process also helped in analyzing the challenges facing, for each value chain and in all segments of the value chains. This helped to identify the entry points for each value chain, opportunities that exist for SME development (e.g. input supply) and identification of linkages to be strengthened.

Table 12 summarizes the challenges that were identified during the meeting and their possible immediate lines of action.

Table 12: Summary of lines of action for value chain development in Chiradzulu district.

Challenges	Line of action	Responsibility
Low and inconsistent supply of products	<ul style="list-style-type: none"> • Assist on inputs (improved crop varieties and improved livestock breeds) 	<ul style="list-style-type: none"> • Government • NGOs • CLIM²
Poorly developed product markets	<ul style="list-style-type: none"> • Strengthen farmer organizations (associations, clubs, cooperatives) • Policy interventions • Conduct market research 	<ul style="list-style-type: none"> • Community development department to train on group dynamics. • Government to assist on policy development • CLIM² to research on markets
Poor management practices	<ul style="list-style-type: none"> • Train farmers on proper management practices 	<ul style="list-style-type: none"> • Extension • CLIM²

Unorganized livestock markets	<ul style="list-style-type: none"> • Setting up market infrastructure 	<ul style="list-style-type: none"> • Government • CLIM²
Lack of slaughter facilities	<ul style="list-style-type: none"> • Provide slaughter infrastructure 	<ul style="list-style-type: none"> • Government • CLIM²
Inadequate extension	<ul style="list-style-type: none"> • Train lead farmers (through farmer field school approach). 	<ul style="list-style-type: none"> • Extension • CLIM²
Double standard messages reaching farmers	<ul style="list-style-type: none"> • Standardize training materials 	<ul style="list-style-type: none"> • Government • Extension
Small landholding sizes	<ul style="list-style-type: none"> • Training on crop livestock integration 	<ul style="list-style-type: none"> • Extension • CLIM²
Lack of business skills	<ul style="list-style-type: none"> • Train on business management, gross margin analysis, SME development. 	<ul style="list-style-type: none"> • CLIM² • Government • Extension

2.17 Immediate critical issues

- Low and inconsistent supply of produce from farmers
- Unscrupulous traders/middlemen that buy produce at very low prices
- Lack of farmers' capacity to bargain for better prices for their produce
- Lack of information/ knowledge on how to use pesticides/ drugs by farmers
- Poor enterprise selection attracting low prices
- Poor management of goats and chickens (housing, feeding, breeding and disease control) leading to high mortality, low productivity and poor quality meat.
- Lack of organized goat markets
- Lack / Poor slaughtering facilities (infrastructure) leading to poor goat meat quality
- Government's blind eye on livestock production & markets
- Double standard messages from extension staff going to farmers
- Extension workers lack updated knowledge to advise farmers on new technologies
- Inadequate extension staff versus numbers of farmers
- Small land holding size amongst farming households
- Lack of business skills amongst the youths and women, as well as butcher-men

2.18 Immediate training needs

a) *Farmers*

- Proper goat management, including housing, feeding, breeding and disease control, in order to come up with good quality animals, consistent supply, so that farmers can fetch higher prices
- Integrate relevant crops and livestock in order to improve the synergies on the same limited pieces of land
- Provision and multiplication of good quality, high yielding and draught resistant varieties for pigeon peas and cow peas for farmers to satisfy the markets
- Form groups such as clubs, associations and/ or cooperatives not only to make sure there is consistent supply of their produce on the market but also for them to have strong bargaining power
- Train farmers on post-harvest loss management and value addition on their produce, e.g. drying, grading, storage, packaging

b) *SMEs*

- Train the youths, women and butcher-men in business management (gross margins and financial management)
- Deliberately engage the youths and women in various SMEs, e.g. feed formulation and poultry production
- Assist butcher-men have good slaughtering infrastructure to improve meat quality

c) *Extension staff*

- The project should standardize training materials and train extension staff in the same.
- The project should train lead farmers through these extension staff who would in turn assist fellow farmers in both crops and livestock management.
- Possible entry points for these trainings are the Farmer Field Schools.

d) *Other actors to be involved*

- Community Development department to train farmers in group dynamics and association/ cooperative development
- ATC and other input markets to help train extension staff on their new products so that they can assist farmers accordingly

2.19 Next steps

The IP meeting in Chiradzulu raised similarly important questions and suggested answers to the Thyolo IP meeting. The meeting managed to inform the serious lack of dialogue and engagement between actors in various agricultural value chains. The IP confirmed that there were serious trust issues between value chain players but also observed that VCs operated based on the maximizing profit incentive by all actors although preliminary analysis showed that the distribution of profit was very skewed within the value chains of focus. The IP opted to await project activities while also reflecting on the general direction the IP would take going forward. The table below provides a list of activities planned following the meeting;

Table 8: Planned way forward for the Chiradzulu IP.

Theme	Activities	Responsible	Time
Research	Baseline, stakeholder analyses, GMA Value chain analyses Innovation -funds Policy and institutional development	Project team	July – August, 2017
Innovation platform	Feedback New links Plans for IP going forward Entry points	IP members	September – December, 2017
Capacity development and training	Define capacity needs Farmers Private Sector Extension NGOs	Project team	On-Going Process

7. 5.3 Balaka innovation platform meeting

Venue: Zuc Lodge, Balaka, Manjawira, Ntcheu

Date: 27 -28 June 2017

2.20 Introduction

Welcome remarks were done by the Balaka District Agribusiness Officer (Mr. Madalitso Mgombe) on behalf of the Balaka District Agriculture Development Officer. The officer welcomed all participants, explained the goals of the meeting and that it should be participatory. He also recommended engaging all value chain actors as core of project. The project leader, Andre van Rooyen introduced the project; he lined out the project goal, the theoretical underpinnings of the project and the need for evidence-based delivery of project interventions in the target areas.

The meeting was attended by 50 participants, including

- 15 farmer representatives for goat, cow pea and pigeon pea farmer groups/ cooperatives
- 1 representative from National Smallholder Farmers' Association of Malawi⁸ government extension staff (3 district agriculture officers, 3 from Phalula EPA, 2 from Utale EPA)
- 3 butcher men representatives
- 1 representative from Export Trading Group
- 3 other private sector actors
- 10 CLIM² project team members

The meeting had about one third women, and two thirds men.

2.21 Challenges in agriculture

"If markets do not work then farmers cannot produce enough quality products for the markets, as farmers cannot buy inputs to produce enough for themselves and the markets" Andre Van Rooyen (Project Team Leader)

A problem analysis exercise was done by the project team, farmer participants, government extension workers and other value chain actors in the project district. The goal of the exercise was to help participants identify their problems, those of other actors and organized the problems in logical linkages that could help all stakeholders better address the problems at hand. The exercise started out by allowing each participant in the IP meeting to list 3 or 4 priority problems in specific value chains independently. Extension officials listed what they believed are farmers' most critical problems, marked on different cards. Thereafter, all gathered in a circle, where the project leader and team collected each problem at a time from each individual, read them and grouped them according to similar themes. Story lines on challenges in agriculture were developed, and how addressing these could be turned around into solutions for agricultural development.

Table 13: Frequency of challenges in Balaka district

Challenge	Frequency (n)	Narrative on challenges
Output markets	43	<ul style="list-style-type: none"> • Price Fluctuations in output markets • High quantities produced but quality is not consistent. • Low prices of produce i.e. maize, pigeon pea and cow pea • Lack of reliable output markets • Informal sale points for agricultural produce • Long distances are being covered to sell goats
Input markets	16	<ul style="list-style-type: none"> • Accessibility of inputs is difficult due to long distances. • High input prices for crops • Lack of inputs for livestock i.e. drugs • Lack of resistant varieties of seeds • High cost of seeds and fertilizer • Lack of good livestock genetic material
Extension and support services	11	<ul style="list-style-type: none"> • Lack of transport for mobility of extension agents • Lack of in-service training • Shortage of extension workers • Lack of farmer comprehension of extension messages • Delays by government to release base commodity prices
Pests and diseases	7	<ul style="list-style-type: none"> • More frequent outbreaks of pests and diseases. • High prevalence rates of livestock diseases such as NCD • Newcastle disease a major problem in chickens • Farmers also affected the fall army worms
Farmer organization	6	<ul style="list-style-type: none"> • Limited farmer organization in clubs, cooperatives and associations to enable them buy inputs in bulk, control market price as well as afford proper storage facilities. • Limited skills in business planning and enterprise choice
Capital	5	<ul style="list-style-type: none"> • Limited access to loans • Low capital for investment into agriculture by farmers • High costs of credit
Lack of market infrastructure	5	<ul style="list-style-type: none"> • Limited functional value chains. • Butchers lack proper slaughtering and cooling facilities and means to transport large number of goats.
Unclear/unfair price determination	5	<ul style="list-style-type: none"> • No clear mechanism to determine price • Butchers did not use weight measures to purchase goats from farmers • Quality is not being used as a determinant of produce prices • Farmers feel short-changed while buyers are working with different qualities of produce which adds a sorting cost to their business
Attitude of farmers	3	<ul style="list-style-type: none"> • Farmers not approaching farming as a business • Low literacy levels of farmers • Low rates of adoption of technologies by farmers
Management and husbandry practices	2	<ul style="list-style-type: none"> • Mortality of goats is high. • Pigeon pea farmers lack proper storage facilities to store their produce when the market is unfavorable. The price on the market is now at K90-100/Kg. • Cow pea being produced is of low quality, need for value addition.

Climate change	2	<ul style="list-style-type: none"> • Frequent droughts being experienced in Balaka
Theft	1	<ul style="list-style-type: none"> • Theft of livestock was a major issue • Farmers also perceived theft in terms of prices offered by markets for both crops and livestock

The project team and the IP participants developed a story-line from the challenges identified;

Markets: The project team and participants all agreed that markets presented the most significant challenge for farmers. The problems were clear in both input and output markets. Farmers bemoaned a lack of market infrastructure for both inputs and outputs at local level. According to them this increased the costs of access to inputs and the transportation costs to distant markets. The farmers also observed a very unclear mechanism for price discovery/ determination for their produce.

Extension and support services: Farmers expressed a difficulty to access extension and support services within their areas. Extension and support services were concerned with the failure of producers to adhere to advice provided. Farmers also felt that the focus of extension agents was misplaced. It was agreed that there are few extension agents against projected demand for their services. In addition, support services from non-state actors such as NGOs were seen not to be sustainable. This pointed out to a poor hand-over system to government actors when projects phase out.

Capital: Producers and other value chain players complained of a lack of access to capital. The capital for loans is available although most feel that it is highly unaffordable.

Farmer Organization: Farmers are poorly organized. This reduces their ability to better bargain in formal markets. Farmers are cannot access inputs at much cheaper prices. Extension agents feel farmers lack capacity to work in functional groups.

Attitudes of farmers: Farmers do not follow recommended husbandry practices. Farmers do not view farming as a business but rather a subsistence venture.

Climate change: Balaka's climate is changing. A lot of dry spells, droughts and floods occurring. Actors are not adapting to the changing climate. There is need to develop responsive technologies and practices if production is not to suffer.

Land: Land is a major challenge in Balaka. Population is causing a lot of pressure. There is a lot of degradation of land resources and declining soil fertility.

Process lessons and conclusions

- Andre Van Rooyen expressed his happiness with the immense number of opportunities that exist in the district
- This should be no surprise as our problems are interrelated so is our interactions in the value chains, the chains will only work when all players work together
- Easiest way to comprehend the value chains is to assess how they operate i.e. how actions of single actors are linked to other actors in the value chains. For example, Semtoni cheese producers in Balaka obtain their milk from Toleza Farm within Balaka, produce cheese and then transport the Cheese to consumer markets in Lilongwe and Blantyre.
- Similarly, goat producers need to have inputs, medicine, extension advice so as to produce good quality goats

Goat and cattle butcher representatives' vision

Current situation 2017: Butchers saw their current situation in terms of poor housing (Grass-thatched) for their families and their livestock. In some cases, housing was being shared by humans and livestock. The current scenario also involved very low production of crops, unhealthy livestock, hand-carrying livestock to the markets and children not attending school.

Vision 2022: Butchers will be having a modern butchery. They will have bought a car, bicycle and motorcycle to help them with transport. They will have access to healthy animals and keep them near the butchery. They will have built a self-contained house with iron sheet roofing.

Strategies to achieve vision:

- Hard work in business
- Open accounts for managing business finances
- Have livestock holding grounds
- Look for more lucrative markets
- Search for organizations or companies that can support our business growth and development
- Source and provide good quality goats and goat meat
- Being honest businesspeople during sourcing of goats from farmers as well as in selling to consumers, with appropriate weights and scales
- Build capacity and skills in business management for profit



Figure 25 Current scenario for goat farmers in Balaka

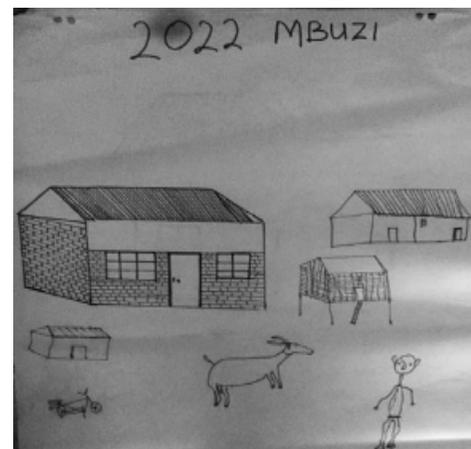


Figure 26 Future situation, farmers in Balaka, goat group



Figure 28 Current situation, butcher men in Balaka

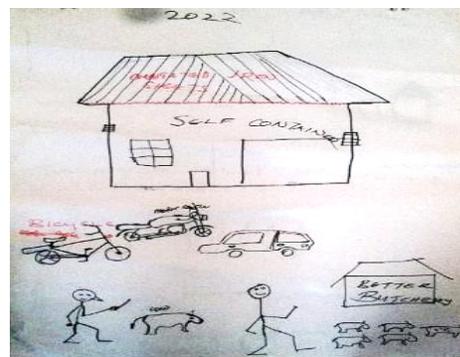


Figure 27 Future vision butcher man in Balaka

Extension and support services' vision

Challenges	5 year strategies
Poorly organized markets	<ul style="list-style-type: none"> • Farmers should organize in groups/ cooperatives to gain bargaining power in the market place • Contract farming between farmers and buyers • Regulate traders in the markets for crop and livestock produce (Shorten the chain for obtain trading licenses) • Plan together market sourcing before selection
High input costs	<ul style="list-style-type: none"> • Use VSL groups to easily access better prices for bulk purchases • Train farmers on modern farming practices such as manure use • Train farmers on farm business planning • Teach farmers on the use of drug boxes in livestock production
Climate change	<ul style="list-style-type: none"> • Use of drought and stress resistant varieties • Conservation agriculture • Crop diversification • Small stock production • Soil protection practices • Providing soil cover i.e. using vetiver grass • Irrigation farming
Inadequate extension services	<ul style="list-style-type: none"> • Train more lead farmers • Group approaches to extension provision • Use modern extension techniques such as mobile, radio, magazine, video
Dependency syndrome	<ul style="list-style-type: none"> • Train farmers to acquire inputs in a timely manner • Enhance participation and ownership of farmers in project activities to ensure continuity • Sustainable involvement of farmers in the project
Pests and diseases	<ul style="list-style-type: none"> • Plant and animal clinics • Use pest and disease resistant crop varieties • Participatory video of integrated pest management • Applying pest control methods
Lack of finance	<ul style="list-style-type: none"> • Farmers should be in groups that can access credit through VSLs • Business diversity
Low literacy levels	<ul style="list-style-type: none"> • Adult education for farmers in reading and writing • Farmer field tours and exchange visits
Small herd sizes	<ul style="list-style-type: none"> • Promote vaccination • Trainings on good animal husbandry • Improved breeding of livestock
Livestock theft	<ul style="list-style-type: none"> • License butchers to show origin of livestock • Livestock movement monitoring committees
Extension	<ul style="list-style-type: none"> • New knowledge for extension workers • Ensure resources to conduct extension work

Table 14 Extension and support services challenges and proposed ways to address them

Process lessons and conclusions

The process unveiled a lot of key lessons and conclusions summarized below;

- Extension workers are aware of the challenges they face in assisting producers in crops and livestock
- Extension service providers are able to categorize challenges from within their services and within producers
- Key lesson is that resources remain inadequate to address the numerous challenges faced by producers
- The project should also consider how to assist extension service providers to ensure adequate (quantity and quality) service provision to producers.
- Approaches being used should aim to overcome dependency on the part of producers and the serious resource constraints being faced by farmers.

2.23 Value chain selection

Similar process was followed as in Chiradzulu. Participants grouped into the major crop and livestock value chains. They mapped out the key actors, their roles and interactions in the respective value chains. The maps show the flow products from producers to consumers along each value chain. The key challenges were then identified for each value chain segment.

The project team leader (Andre Van Rooyen) reiterated that challenges in value chains are interrelated as are the actions of single actors with others, in the respective value chains, hence the chains will only function when all actors work together. For example, Semtoni cheese producers in Balaka obtain their milk from Toleza Farm within Balaka, produce cheese and then transport the cheese to consumer markets in Lilongwe and Blantyre. Similarly, goat producers need to have inputs, medicine, extension advice so as to produce good quality goats. It is important to understand the feedback loops that exist based on quality, quantity and timing within the value chains. Many projects have failed because they have focused only one aspect of the value chains involved. For example, the cheese factory focuses on processing, packing, classifying and not on the production, they would not have sufficient milk.

It is important to understand the key functions of the value chains, which are production and transport of goods to final consumers (product flow), as well as information flow and income flows. As an example, on information flows, goat farmers complained of the low prices for the goats, while butchery operators stated that quality influences prices significantly. This simple statement of information from the butchery operators can easily change the production system as well as the income generated by farmers. Similarly, on income flows, consumers are the most important people who put money or liquidity into the value chains, farmers operated at the opposite end of the value chain, price transmission along the value chain means that farmers would achieve higher income if they would produce what consumers require and are willing to pay.

Value chain mapping is important for two main reasons: (i) to understand where farmers get information and inputs for production, and (ii) to improve relationships between value chain actors and identify efficient channels within the value chains.

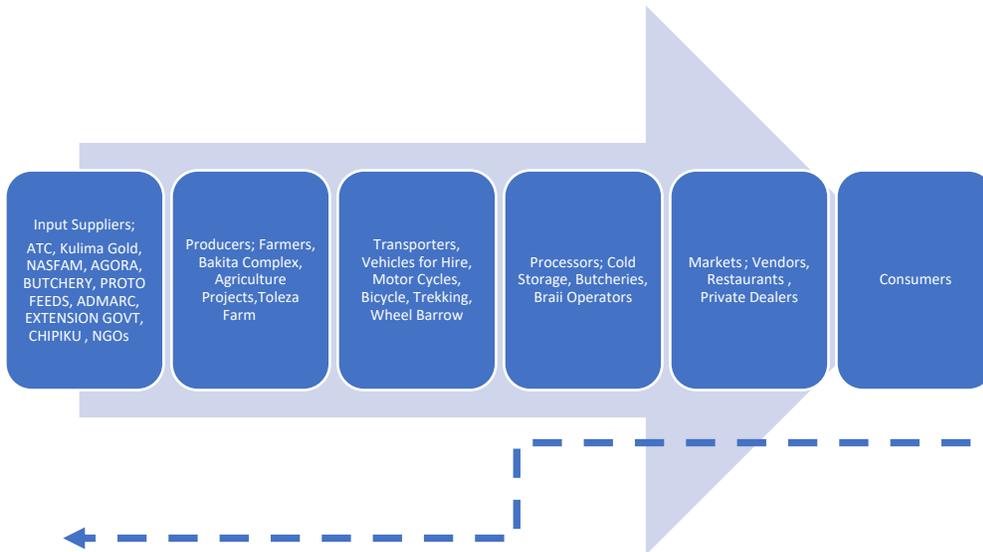


Figure 29 Schematic description of value chains for Balaka district, with two way flows of products, information and cash

Cowpea value chain

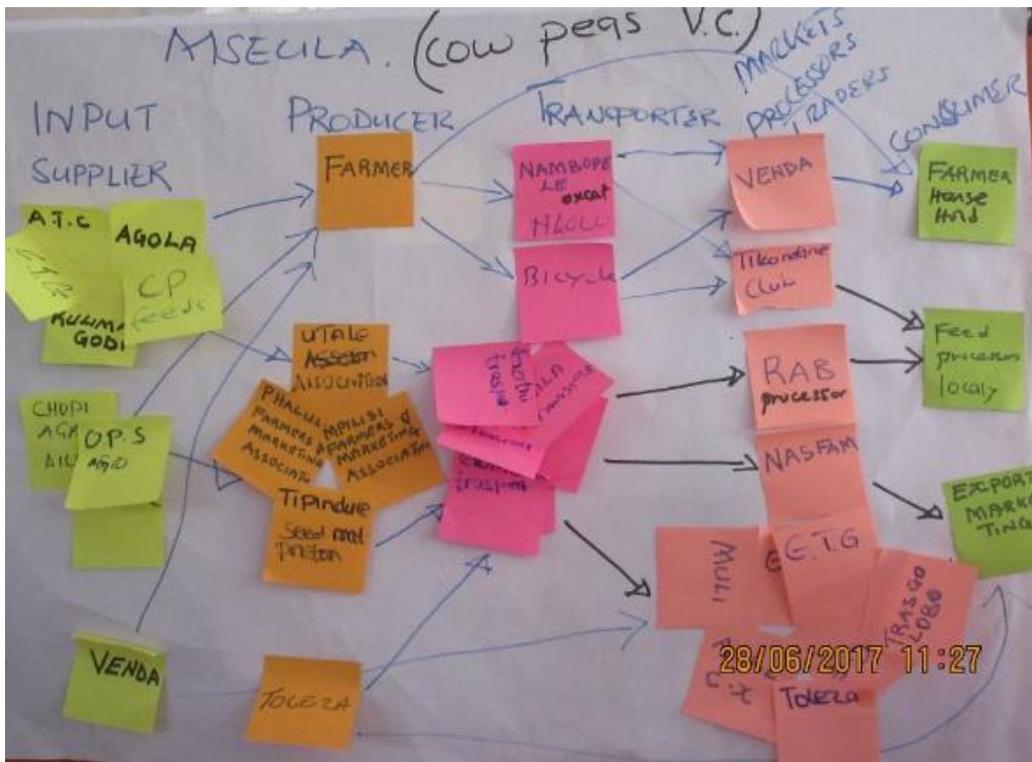


Figure 30 Cow pea value chain map, Balaka district

Table 15 summarizes information on the cow pea value chain map in Balaka district.

Table 15 Cowpea value chain actors and challenges in Balaka district

Value chain segments	Challenges
Input suppliers	<ul style="list-style-type: none"> • Accessibility • Poor quality of seed chemicals • Affordability
Producers	<ul style="list-style-type: none"> • Climate change • Scrupulous markets • Low yield or productivity • Unreliable markets • Lack of enforcement by local government actors in trading of agriculture produce i.e. licencing of trade in pigeon pea
Transporters	<ul style="list-style-type: none"> • High transport costs • Lack of insurance in the transport sector • Poor road network • Unreliable service providers in the sector
Processors	<ul style="list-style-type: none"> • None
Traders	<ul style="list-style-type: none"> • Low prices • Unscrupulous handling of produce by farmers • Untimely payments for produce collected from farmers • Lack of proper storage facilities
Consumers	<ul style="list-style-type: none"> • Poor quality of produce i.e. high aflatoxins in pigeon peas • Lack of value addition • Affordability

To identify solutions for the challenges along the cow pea value chain the challenges were grouped in 6 clusters. Participants were asked to list solutions for each cluster. Table 16 presents the results of this exercise.

Table 16 Potential solutions for addressing cow pea value chain challenges in Balaka district.

Clusters of challenges	Attempted solutions
Low product prices	<ul style="list-style-type: none"> • Delayed selling until prices increase • Follow good extension advice • Grade produce • Produce /what buyers are looking for
High input prices	<ul style="list-style-type: none"> • Use improved varieties • VSL to purchase inputs • Use manure • Sell livestock • Purchase inputs as a group
Transport	<ul style="list-style-type: none"> • Bulk transportation • Invite buyers to purchase on site • Sell to vendors • Use bicycles
Poor product quality	<ul style="list-style-type: none"> • Proper drying of produce • Grading • Harvest on time • Apply proper pesticides

Infrastructure storage facilities	<ul style="list-style-type: none"> • Using our own houses • Use of sacs
Business skills	<ul style="list-style-type: none"> • Attend farmer trainings • Mobile phone access through 321 platforms • Organized groups to access business skills training

Pigeon Pea Value Chain

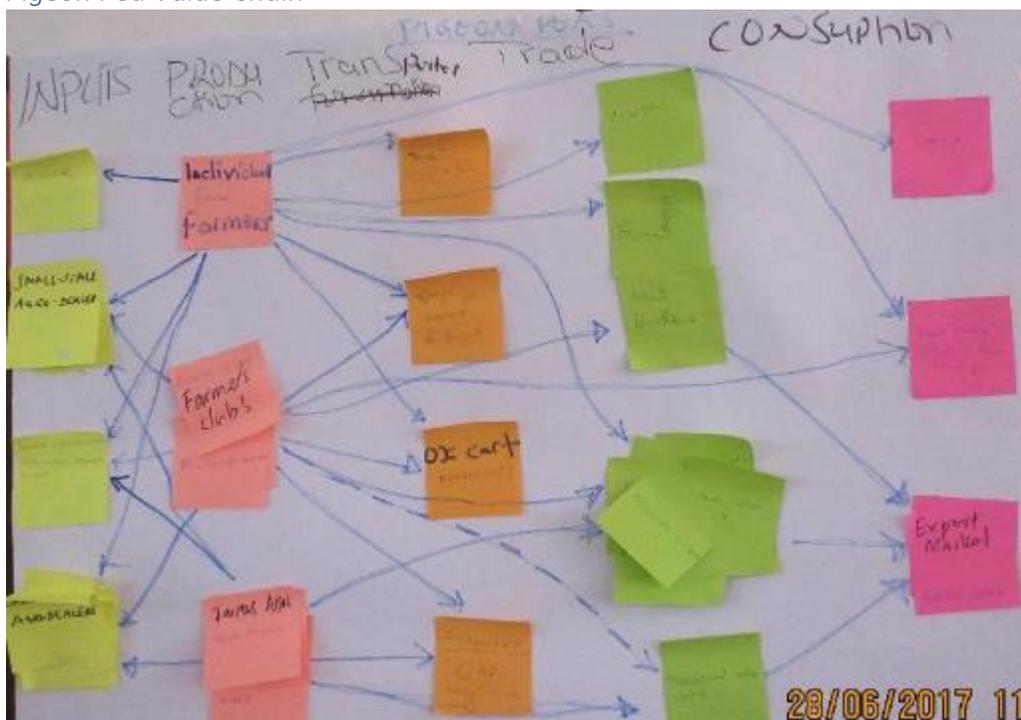


Figure 29 Pigeon pea value chain map, Balaka district.

Table 17 summarizes information on the pigeon pea value chain map in Balaka district.

Table 17 Pigeon value chain actors and challenges in Balaka district

Value chain actor	Challenges
Input suppliers	<ul style="list-style-type: none"> • Accessibility • Poor quality of seed chemicals • Affordability
Producers	<ul style="list-style-type: none"> • Climate change • Scrupulous markets • Low yield or productivity • Unreliable markets • Lack of enforcement by local government actors in trading of agriculture produce i.e. licensing of trade in pigeon pea
Transporters	<ul style="list-style-type: none"> • High transport costs • Lack of insurance in the transport sector • Poor road network • Unreliable service providers in the sector
Processors	<ul style="list-style-type: none"> • None
Traders	<ul style="list-style-type: none"> • Low prices • Unscrupulous handling of produce by farmers • Untimely payments for produce collected from farmers • Lack of proper storage facilities
Consumers	<ul style="list-style-type: none"> • Poor quality of produce i.e. high aflatoxins in pigeon peas • Lack of value addition • Affordability

Table 18 summarizes the solutions for addressing challenges along the pigeon pea value chains, Balaka district.

Table 18 Potential solutions for addressing pigeon pea value chain challenges, Balaka district.

Clusters of challenges	Attempted solutions
Low product prices	<ul style="list-style-type: none"> • Delayed selling till prices improve • Contract marketing • Grading of produce
High input prices	<ul style="list-style-type: none"> • Farmer groups to access inputs • Timely purchase of inputs
Transport	<ul style="list-style-type: none"> • Bulk transportation • Inviting buyers to purchase on site
Poor product quality	<ul style="list-style-type: none"> • Proper grading of produce • Proper handling of the produce
Infrastructure storage facilities	<ul style="list-style-type: none"> • Renting houses • Building storage facilities
Business skills	<ul style="list-style-type: none"> • Groups to access business skills training

Goat value chain



Figure 31 Goat value chain for Balaka.

Table 19 summarizes information on the pigeon pea value chain map in Balaka district.

Table 19 Goat value chain actors and challenges in Balaka district

Value chain segments	Challenges
Input suppliers	<ul style="list-style-type: none"> • Delays in providing inputs • Price fluctuations in input markets (inflation related) • Delays in providing inputs
Producers	<ul style="list-style-type: none"> • Lack of knowledge on livestock diseases and parasites • Low prices due to poor quality of goats • Lack of knowledge on quality requirements in the goat market • Lack of drug boxes for veterinary drugs and supplies • Lack of dip tanks
Transporters	<ul style="list-style-type: none"> • Lack of vehicles for hire
Processors	<ul style="list-style-type: none"> • Poor quality of goats supplied for processing • Few numbers of supply to processors • Few goat processors
Traders	<ul style="list-style-type: none"> • Lack of good and functional markets • Poor market infrastructure • Lack of proper livestock holding facilities • Lack of proper storage facilities • Numerous traders without proper regulation
Consumers	<ul style="list-style-type: none"> • Poor quality of goat meat • Unscrupulous scales and weights used by butchers • High cost of goat meat

Table 20 summarizes the solutions for addressing challenges along the goat value chains, Balaka district.

Table 20 Potential solutions for addressing goat value chain challenges, Balaka district

Clusters of challenges	Attempted solutions
Low product prices	Proper feeding Proper housing of livestock Proper disease controlling Group selling and marketing Cross-breeding of goats with more productive breeds
High input prices	Buying drugs in farmer clubs and groups Better management of livestock to prevent disease Use of improved breeds Village savings and loans Manure use
Transport	Use of wheelbarrows Hired bicycles and motorcycles
Poor product quality	Good feeding Control diseases Proper housing
Infrastructure storage facilities	Renting refrigerators Curing and roasting meat
Business skills	None so far

8.

Process lessons and conclusions

The value chain map exercise and explanations on business and entrepreneurship led by Dr Sikhalazo Dube raised an important discussion.

Strategic questions included

- What efforts have already been made by the farmers and other value chain actors to address the identified challenges?
- What linkages and interrelationships exist between the identified challenges and those identified from the problem analysis exercise?
- What feedback loops will the IP process create with national level government decision-makers and policy makers?
- How will the project follow its three direct routes to key policy makers, through Ministry of Agriculture, Ministry of Finance and European Union?
- How can top-level national government decision-makers and policy-makers participate on the ground?
- How can we disseminate information across all value chain actors so that we can increase the coverage of project scope and involve multiple stakeholders?
- The project reports have its own reporting mechanisms, government reports on their own, but the story they are both dealing with is the same. It is important to address context-specific challenges.
- What is the way forward from the first IP meeting in Balaka district?

More technical questions were

- How important are goats and other farm produce to the government of Malawi? Farming makes direct contributions to health, nutrition, education, finance and income for the country. What happens to skins and hides in the goat value chains?
- It is important to understand the process involved in production of livestock and crops for the market, and how to realize a good price for a product. Already farmers and other value chain actors are aware of the challenges around the entrepreneurial side of agriculture.
- Business is a two-way process between product and customer. Transparency is important in business, so is capital. The lack of transparency and honesty in the production process i.e. brimming chickens, over-watering goats or selling grains and legumes with moisture destroys good market relations. The project will capacitate how to determine prices at all levels in the value chain. This will help to explain appropriate prices for crop and livestock produce.
- About small and medium enterprises, the question was about determinants, number of employees and turnover. The project will emphasize that despite having few employees or low turnover we can provide quality products or services
- What are the needs/ problems of the customers or the market? Why did we venture in pigeon pea production? Lack of graded production? The decision to venture into a business is based on the customer needs and the availability of the resources to provide such a product? Similarly, the goat market needs good quality goat meat cut into the right proportions and sizes.
- In any chain, the weakest part of value chain requires the action of all the actors within that value chain as they all have a vested interest in improving the weakest points of the chain. An important example is that of dairy bulking groups, where the poorest quality milk will determine the grade that bulked milk will get

2.24 Immediate critical issues

Cowpeas

- Market price is the immediate critical issue: The produce is there in large quantities.
- Farmers have produced large quantities of cow peas. Cow pea prices are however very low, vendors offer K50/ kg.
- Limited farmer organization in clubs and associations hinders farmers to buy inputs in bulk, control market price as well as afford proper storage facilities.
- Concern Universal had a project supporting cow pea farmers in terms of production, still farmers were left without strong linkages to markets once it phased out.
- Accessibility of inputs is difficult due to long distances.
- Cow pea being produced is of low quality, need for value addition.
- Limited access to loans.
- Limited skills in business planning and enterprise choice.

Pigeon pea

- Farmers lack proper storage facilities to store their produce when the market is unfavorable. The price on the market is now at K90-100/Kg.
- Limited functional value chains.

Goats

- Mortality of goats is high.
- Farmers desire to have alternative markets opening up other than selling to butcher men who determine the prices.
- Butcher men lack proper slaughtering and cooling facilities and means to transport large number of goats.

-

Other actors to be involved:

- United Purpose is implementing the DIVERSIFY (Developing Integrated Value Chains in order to enhance Smallholder farmers' income and Food security), where there is a component of pigeon pea production. UP is using the lead farmer approach. They will also work with agro-dealers.
- FEED THE FUTURE is using the farmer field school approach, we will gather more info on this.
- Project Concern International has agribusiness, nutrition and food security projects in Balaka.
- Chinansi Foundation- Women Economic empowerment.
- NASFAM- Agriculture.
- YONECO- Youth development, Women.

2.25 Immediate training needs

a) Farmers

- Business planning and enterprise selection (gross margin analysis).
- Post-harvest management and value addition.
- Training in livestock management (housing, feeding, and disease control).
- Knowledge on value chain mapping and analysis in order to utilize the profitable path.
- Training farmers to intensify crop-livestock integration.
- Cow pea farmers want training to migrate from associations to cooperatives.

b) Extension

- Train extension workers in Farmer Field School approach as it has not fully been employed in the southern region.
- Training in new development and techniques.

c) SME

- Engage and train the youth and women in SME that will strengthen the value chains, e.g. input supply.
- Involve women and youth in post-harvest management and value addition enterprises.
- Train and empower youth and women in feed and fodder production and processing.

2.26 Next steps

- Strengthening linkages among all VC actors by constant flow of information.
- Organizing farmers in groups and strengthen existing clubs and associations.
- Involve more women and youth representatives in the next IP.

Table 21 The next steps for IP activities in Balaka

ACTIVITY	TASKS	RESPONSIBILITY	TIME
Research	Baseline surveys Stakeholder analysis Gross margin analysis Directions of innovation funds Policies		July – October July-December On-going On-going
Innovation Platform	Feedback Plans for IP members Entry-points Follow-up on new links On-going communication		
Capacity Development and Training	What capacity needs? Farmers Private Sector Extension		

7 Annexes

9.

10.Roles in the team for documentation and follow up

Team	District reports	Documentation, value chains
Helpless Mbale	Chiradzulu	Cereals
Ken Gunsalu	Thyolo	Challenges, livestock
Temwa Mvula	Balaka	Legumes
Claire Mwamadi	Chiradzulu/Thyolo	Visioning, blog
Kalima Sunday	Balaka	Livestock, blog

11.Innovation platform meeting methodology

Participants

- Participants and their organizations - How can this help moving the process further?
- Number of farmers, men and women
- EPAs and villages presented
- Apologies

Introduction

- Welcome
- Self-introductions - who is who?
- Purpose of the meeting – why are we here?
- Introduction of the project
- Define a common vision and goals
- Understand the concept of innovation platforms and how they work
- Select high potential value chains
- Identify entry points for Innovation Funds
- Set our own agenda
- Expectations – what do we bring, what do we want to take home?

Agriculture problem/ challenge identification exercise

- Participants individually note challenges they face on their farms, one problem per page, maximum 3 to 4, possibly on crop and livestock
- Extension officials bring in their perspectives and list what they believe are most critical challenges for farming
- Project team clusters the challenges by subject, as many farmers have similar problems, e.g. markets, inputs, farm management, financial services.
- For general statements, verify and differentiate within the subjects, by crops and livestock, and within those by species, precisely if it's about accessibility, availability, costs.

- Confirm about links between problems, e.g. how low productivity relates to farming inputs and how those relate to output markets.
- Assort the cards to tell a story on how the challenges relate to each other and how the project aims at engaging to address those

Visioning and goal setting exercise

- Farmers and extension services split in separate groups to develop the stories for moving from now to then
- First, every group draws today's perception on today's farms. To support clear description of the current situation, facilitator asks participants to close their eyes, "think about your farm, crops, inputs, post-harvest losses, livestock, children at school – clear thinking on where we are"
- Then, to visualize their future states, participants are asked to create our own vision, on "where you want to be – draw our farm in 5 years. Close your eyes, think about your farm by 2022, what to grow for sustainable intensification, how to engage with markets, where the children will be – clear thinking on where you want to be, realistically set targets"
- Each group provides feedback to the audience on the steps to change, with precise information on crops and livestock, technologies and integration, priority value chains
- Extension and support services can then discuss role of extension and support services in addressing those major issues, and capacity development needed

High potential value chain identification exercise:

- Use the feedback from farmers and extension and support services to reflect challenges and opportunities for smallholder farmers with private sector representatives
- Verify the major value chains, cluster by commodity groups, cereals, legumes, livestock, fruits and vegetables, roots and tubers
- Discuss about the demand for these commodities with private sector, types of commodities and potential markets
- Identify issues per value chain segment that the project should work on, for the respective value chains, farmers and extension services group per private sector representatives

Way forward

- Agenda based on final discussion
- Process lessons: Are there issues that need follow up and investigation
- Mobilization, organization and procedure? How can we improve?
- Objectives and achievements? How can we improve?
- Other challenges and opportunities for our future activities?

Synthesis approach for discussions, achievements, processes

- Achievements - What was the story?
Highlights, key issues, insights on achievements and on processes?
Commonalities / differences between the sites?
- Where was it easy/ difficult to agree?
Which new ideas came up during the discussions?
What can we learn from this meeting?

12. Thyolo IP meeting participant list

Name	Post and station	Email Address	Phone Number
1. Temwa A Mvula	DFC/SSLLP	temwaland@yahoo.com	0999695693
2. Vincent Mulumba	Farmer(Secretary)		0884698547
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11. Ales Thebu	Secretary	T/A Thukuta	
12. Chimwemwe Chikodzera	Vice Chairperson	Thekerani E.P.A	0993695143
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4	Ester Manong’a	“	“	0884817862
5	Chifundo Mwahara	AEDO Thumbwe	“	0881654849
6	Reginald Nankhumwa	DIO –DAO- CZ	nankhumwareginald@yahoo.com	0991338714
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9	Paulo Kausiwa	“	Box 27, Namitambo	0993701005
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34	Sabine Homann Kee Tui	ICRISAT		
35	Andre van Rooyen	ICRISAT/ Project Leader		

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15. Way forward after this series of IP meetings

Activity description	Responsible person	Timeline
The project will need to have a logo that should illustrate land, crops, livestock and markets. Andre agreed to facilitate this	Andre Van Rooyen	
District and national level strategic linkages development through the “cup of tea” approach. Sute and Alfred to conduct national level District teams to conduct district level linkages development	SSLLP Team	
Need to develop a checklist to understand market information, gender dynamics, value chain flows	Sabine Homann Kee Tui	3-7 July, 2017
National workshop of national level policy makers and decision-makers	Project team	November, 2017
Provision of IP training certificates of attendance	SSLLP	
Collection of feed and fodder samples to be sent to ILRI before end of year	SSLLP	20 th July, 2017
Develop Mendeley structure for report sharing	Andre Van Rooyen, Kalima Sunday & Kai Mausch	
Training of staff on facilitation and photograph archiving by Andre Van Rooyen	Andre Van Rooyen	
Submit first draft of IP Meeting report	Kalima Sunday	7 th July, 2017
Apply for project support under the Ministry of Youth in the CARD-UP Program	SSLLP	
Train staff on FFS and develop curriculum for project CLIM schools and training for government extension workers	Project team	
SSLLP staff meeting at Blantyre field office on way forward	SSLLP field team	
Procurement of project vehicles	ICRISAT, SSLLP	
Recruitment of scientific officer and finance person for project	ICRISAT, ILRI	
District baseline reports	SSLLP field team	2 Weeks

