Crop Livestock Integration and Marketing in Malawi (CLIM²)

Diversifying agri-food value chains in Southern Malawi: What are policy implications?

23-24 July 2019, Serendip Suites, Blantyre, Malawi

Photo. Participants at the CLIM² Policy Dialog on Shaping Agri-food Value Chains for Nutrition and Health in Malawi (Photo: Andre van Rooyen)

Policy Dialogue Meeting Report
August 2019
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Background

Nutrition-sensitive food and agriculture-based approaches is principal goal for Agriculture Policy of Malawi, placing nutrition high on the national agenda. The CLIM$^2$ project (https://clim.icrisat.org) facilitates agri-food value chains, and through farm diversification approaches, it aims to enhance nutritious food availability and profitability of farm enterprises. The increment in incomes is envisaged to improve nutrition and health outcomes. The aim of this workshop is to inform policy priority actions for agri-food value chains for improving nutrition and health outcomes. Governments’ agricultural and nutrition departments, development agents, research, private sector and civil society organizations will use the workshop to share progress in agri-value chain development for improving availability of, and access to nutritious foods and balanced diets, and increasing incomes. We bring delegates from human nutrition and agriculture together to create synergies in ongoing initiatives and to help finding solutions for addressing policy gaps. Through the multi-stakeholder nature of this workshop we explore how applied research can support common national development goals. Therefore, the workshop aims to respond to the following critical questions:

- How can agri-food value chains support nutrition initiatives and outcomes?
- Which policy gaps and initiatives could be addressed by the ongoing investments?
- What information is missing to better understand the role of the value chains, which the stakeholders, through their initiatives or collectively can gather?
- How can the various stakeholders work together to better address the policy gaps and support the value chain actors?
- What research gaps exist in addressing nutrition outcomes through agri-food value chains?

The meeting was held 23 to 24 July at Serendip Suites in Blantyre. Participants included (participants list in appendix 1):

2. International and national researchers, academia and development organizations
3. Rural agricultural extension, food and nutrition support services
4. Agriculture and nutrition based companies, business entrepreneurs
5. Civil society / farmer representatives

A summary can be found at: https://www.icrisat.org/the-nexus-between-agri-food-value-chains-and-nutrition/
1. Field visit: Kuroiler chickens, crop and feed processing

Malawi aims at promoting alternative dual purpose chicken. CLIM² facilitated the introduction and performance evaluation of the Kuroiler, under smallholder farmer conditions. The Kuroiler was tested under 3 different conditions, at the Mikolongwe research station, semi-commercial at Lunzu quarantine, and on-farm. 5000 chicks were imported from Tanzania. The cocks were disposed at the age of 12 weeks, while the hens were kept for performance evaluations. Overall, the birds did well compared to results from other countries, Tanzania, Kenya, Ethiopia.

Mikolongwe Research station

At Mikolongwe station, 1000 Kuroiler, male and females, were tested. The Kuroiler performance was compared to the Black Australorp.

1. Growth rate: The Kuroiler growth rate was higher than Black Australorp
2. Disease resistance: The Kuroiler was more susceptible to Gumboro disease as compared to Black Australorp; the Kuroiler needed 4 vaccinations, the Black Australorp needed only 2 vaccinations within the same time period.
3. Feed intake and conversion: The Kuroiler consumed more feed compared to Black Australorp.
4. Carcass and egg production: The Kuroiler produced higher carcass weight and egg size was slightly bigger. Both, Kuroiler and Black Australorp started laying eggs at the same week.

Lunzu quarantine station: Semi-commercial evaluation of the birds, feed processing

The project refurbished the infrastructure at Lunzu quarantine for the purpose of testing the chicken. 4000 Kuroiler were tested under semi-commercial conditions, from arrival to 12 weeks age, before distribution to farmers.

At the point of laying, another 1000 hens changed ownership to the 2 registered SMEs, to test the Kuroiler business model.

The cocks were disbursed to avoid crossbreeding with indigenous chickens; their weights were recorded before and after slaughter; the slaughter rate was at 72%. The funds from disbursing the cocks were transferred to the companies’ accounts.

The station compounded own feed from ingredients that farmers grow in the area, to develop cost effective feed ratios, and diversify the markets for crop produce. The rations were made of maize, maize bran, pigeon peas, cowpeas, sorghum and sometimes soybean and fishmeal, bought from farmers in the area. In addition, Lime, Methionine, Lysine, Layer premixes were supplemented, salt and Monocalcium phosphate were included based on age of the chickens

First analyses suggests that the local feed is about 45% cheaper than commercial feed; the performance of birds was not affected.
Farmers in Chiradzulu District: The birds under village conditions

At 12 weeks 1000 female growers were distributed to farmers in Balaka, Chiradzulu, Thyolo to assess their adaptation under the smallholder farmer environment.

Farmers observed that the Kuroiler grew faster and consumed more feed than local chickens. Processing local feeds farmers will supplement feed for Kuroiler and indigenous chicken; vaccinations were being implemented across the village.

Farmers were also encouraged to intensify crop production, grains and residues for food, feed and sale, from the same area of land. They were trained to use crop products from crops to produce supplementary feed for indigenous chickens.

Groundnut hammer mills were being tested for reduced labor and local processing of nutrient dense foods.

**Discussion**

Participants appreciated the Kuroiler concept and were looking forward to the results of the evaluation. Efforts should be made to enhance production of village chickens as urban consumers are showing preference for the village chickens, as compared to broilers. There is urgency to increase production; Zambia is trying to take advantage of the demand for village chicken in Malawi.

Research collaboration among key stakeholders was to be strengthened for certification, validation and adoption of the Kuroiler and the Kuroiler smallholder business and distribution model.

There was also strong interest in the use of cowpeas and pigeon peas as alternative protein sources in feed, as soybean production was fluctuating.

Farmers requested further investment in groundnut processing and value addition, e.g. peanut butter machines.
2. Welcoming remarks and official opening

Mr Sute Mwakasungula, SSLP welcomed all participants cordially.

Dr Julius Chulu, rep. Dpt of Animal Health and Livestock Development officially welcomed all participants to the meeting.

Dr Yanira Ntupanyama, rep. Principal Secretary, Chief Director, Ministry of Agriculture, Irrigation and Water Development officially opened the meeting.

The Chief Director, emphasized the importance of effective policies that can drive implementation of agricultural interventions, down to the ground. The Ministry of Agriculture in its National Agricultural Policy and National Agricultural Invest Plan emphasizes food systems, collaboration and partnerships for policy development and implementation. Through CLIM² we are targeting some of the issues, that are articulated in the plans.

The chief director also talked about the livestock sector, with emphasis on the smallholder farmer. Some problems need to be corrected, e.g. developing an animal breeding policy, considering that farmers of today are more articulated and capacitated, and able to introduce new breeds and stocks, breed themselves and share genetic material. There is need to strategize capacity development, such that we reduce dependency syndromes.

Emphasis was on the need for Malawian farmers to mitigate livestock imports, and use the opportunity of high and increasing demand for livestock products to their own advantage. Malawian farmers must strategize, such that countries like Zambia do not take advantage, e.g. export village chickens to Malawi. Projects like CLIM² and SAP are taking the right path, lets capitalize on the experience, and potential within Malawi. There is need to promote sensitization and uptake from policy to community level, across all programs.

3. Role of agri-food value chains in facilitating availability, accessibility and affordability of nutritious foods – the CLIM² Project

Facilitation: Mr Sute Mwakasungula, SSLP

Highlights from the CLIM² project: Ms Claire Mawadi, SSLP

Presentation see website (www.clim.icrisat.org)

Discussion

Importance of the evaluations: The role of testing the different types of chickens at Mikolongwe needs to be more clearly articulated, and why evaluations are taking place at Mikolongwe research station, at Lunzu Quarantaine and on farm.
Sustainability of the activities: Does the project engage farmer groups in the agri-value chains beyond the time of the project? How will the project ensure sustaining the supply of Kuroilers? Does the project engage farmers in seed multiplication, or just distributes the seed to farmers? The demand for crops and livestock is there, we need to use this as opportunity to develop capacity in Malawi.

There was an appeal to breed the Muroiler chicken, rather than adopting an imported breed. Beyond testing breeds, Malawi should develop its own breed.

Diversifying agri-food value chains: Dr Andre van Rooyen, ICRISAT

Presentation see website

The presentation highlights the importance of integrating crops, livestock and markets, for income generation. Through those feedbacks farmers can generate their own inputs. On the other side, if markets do not function, the systems do not work, are not resilient and not sustainable.

Farmers have needs, education, food, and often use off-farm income to reinvest in farming. They invest mostly in crops as that’s what government and donors promote. If they would invest more in livestock they could generate more income. Legumes are powerful to stimulate markets, as they bring protein, or in the form of nitrogen into the system. Markets are however poorly developed. FIDP II is important as it forces us to work on income diversification.

The elephant in the room is the land size; even if you have a bumper crop yield, you don’t have enough food. Emphasis must therefore be to focus on integration of crops and livestock, the sum of the system is more than the components. Feeding crops to livestock is a way to reduce cost the of production.

How do we as policy makers facilitate the process? Because of small land sizes there is need to diversify and intensify across space. Let’s think, how we can create jobs, treat small scale systems as larger units, rather than small scattered farms across space.

Another critical point is the emphasis on mitigating losses, so that we can generate more income. We are currently losing potential and investment if we do not prevent animals to die, that we have fed all along.

Regarding sustainability, farmers sustaining enterprises after the project phases out, what would it take such that farmers will be able to purchase inputs to raise their farm net returns?

The question was discussed how to move forward to come up with the Malawian chicken breed? What does it take for us to develop the national Muroiler? Malawi needs demand driven products, and cannot impose new breeds. Malawi has breeders at Bunda and Chitedze, they should come up with improved village chickens. We have village chickens, and need to help farmers to improve their breed locally. There is need to identify programs that can support developing the Malawi breed.
How will you integrate markets with nutrition? The supply of Kuroiler chickens suggests dependence on markets, with the underlying incentive to integrate into the market. How does that relate with situations like droughts in Malawi? We must address value chains constraints, institutional issues that support market interventions to work. We have evidence from Zimbabwe that farmers will buy inputs the moment markets are functional, and returns on investments are covered. Farmers make significant investment, including labor. What negates that are hand-outs of inputs by government and NGOs. Many farmers don’t have enough land to produce all food needed and hence buy food. When farmers participate in markets, they buy food. Farmers spend large proportion of income on food, to buy food that they cannot produce. We have a responsibility to make locally available the food types that farmers cannot afford.

New business models driving change: Prof Sikhalazo Dube, ILRI
Presentation see website (www.clim.icrisat.org)

In the business models we treat company members as business people, share-holders, not as smallholder farmers. The companies are at strategic entry points along the agri-value chains; they support greater diversity and better food quality, through preservation of meat, milk, eggs, which will then increase income.

In Chiradzulu and Thyolo we have registered chicken companies. In Thyolo one business company, Namagazi, has been disqualified. Most important criterium for qualifying as company was that the companies develop their business plans, contribute to infrastructure development and feed. The Namagazi company however rejected the contributions without encumberment. They have therefore not benefited. Other companies built their own Kuroilers, and are in process to get chicken. We have private sector represented here at the meeting; we are in process to link the companies to high value markets.

In Balaka we work with the butcher association as goat meat business company. The focus is on improving hygiene (water and waste), product quality, providing slaughter and storage facilities at a fee, such that the meat can stay longer. This will increase prices for processors and farmers. Strengthening these markets will drive production, as farmer will get higher value for their produce.

In Bvumbwe we support the dairy cooperative. We assessed how much milk went into spoilage. Spoiled milk does not reach children and the malnourished. Losses arise from the way the organizations are structured. National regulations enforce pasteurization; quotas are being implemented; such regulations restrict large volumes of milk to be made available to consumers.

The business company on fodder, hammer mills for processing food and feed, will include recovery of costs, and generation of income.

Training for companies needs to be designed to address commodity specific needs, supporting the functioning of the companies. We will design feasible coaching and mentoring,
throughout the process, starting from input procurement, selection of quality inputs and outputs for sale, structures that support efficient work flows and ensure that markets provide quality.

There needs to design and implement policies specifically to guide benefits for the marginalized and vulnerable. We work with the financial institutions to find ways how they can access working capital.

An important avenue is to build preferential procurement from smallholder farmers into the law of the country, e.g. government organizations to procure a certain percentage from local producers. Currently government schools and others buy their food centrally. Preferential procurement will muscle small enterprises, encourage local supply. The policies exists but are not activated.

Importance of MSMEs: Dr James Ntupanyama, consultant
Presentation see website (www.clim.icrisat.org)

The aim is to identify MSMEs with high leverage potential and assess their capacity, to then identify interventions for scaling up. MSME are defined in terms of their employment size, annual turn‐over and assets value based on the MSME Policy.

MSMEs are facing many challenges, and hence often cannot be considered as SMEs, rather fall under entities. Most of the MSMEs face governance problems, have limited capital and high costs, poor entrepreneurship, and limited value addition. They tend to have some documents, are not harmonized and operate informally. They tend to be more agriculture based, without bank accounts, without employees.

Areas of support include
• General capacity building in business management and skills
• Provision of infrastructure services, equipment and machinery
• Support to market identification and negotiation skills
• Facilitate formation of partnerships with service providers
• Training in export procedures and value addition

Strategies to develop policies that enhance transformative interventions and sustainability
• Value addition, investing in machinery for food processing
• Regulatory frameworks for stable markets
• Governance and capacity building
• Re‐introduce auction markets for livestock, along with improve breeds
• Involve the youth and women in creating an entrepreneurial culture and advance MSMEs

Feed and fodder technologies: Dr Michael Blummel, ILRI
Presentation see website (www.clim.icrisat.org)
Results from participatory variety selection suggest that risk traits, like disease and drought resistance, are more important to farmers than yield traits, farmers decisions are driven by avoidance of risk. Once risk is addressed, yield is a secondary outcome.

Farmers realized potential attraction of fodder traits, and valued specific traits – women with livestock perceived high quality fodder traits, as compared to those without livestock.

This means that in Malawi, where crop livestock integration has not been of great priority, the attribution to fodder is changing. Farmers start perceiving greater importance of crop residues for feed.

Genetic variability of crops suggests that improved varieties can be found that combine primary and secondary traits. With decreasing availability of land and water, against an increasing feed demand, there is need to identify cost-effective sources of feed. Crop residues will play an important role.

Feed value chains need to combine feed quality and price. At the moment people focus on quality but do not consider prices, hence there is need for alternatives to commercial feeds. Considering the economy of feeding means investing in business opportunities for feed – without that no economic business development.

The Kuroiler breed was chosen with representatives from Malawi because it had substantial impact on livelihoods in Ethiopia, Nigeria, India. The introduction to Malawi was fast tracked, we imported officially, with the objective to verify if the improved performance holds true in Malawi, together with the related business model and value chain development. The map for the business model and experience is already there; we are in process of establishing that in Malawi. We are confident, that within the next year, we will connect the Kuroiler and the business model, finalize the process.

4. Policies and support mechanisms for growth of agri-food value chains

Facilitation: Dr Sikhalazo Dube, ILRI

Policies supporting agri-food value chains: Mr Ezron Chirambo, MOIT&T

Presentation see website (www.clim.icrisat.org)

There is no policy on agri-food value chains, but on trade policies that influence and support those, at all levels from small to large cooperations.

Countries come up with policies to support the nations’ objectives and strategies for economic growth, food security and trade, impact on the countries’ business potential for
trade. The objective is to eliminate barriers, reduce costs of doing business and trading both within and outside of Malawi. As long as we don’t export we as nation will not raise. Policies must therefore facilitate business linkages, connect farmers to prime markets, and establish how that can be done.

The Business Licensing Act is to protect people in Malawi. A license is required for imports; no license is required for export of agricultural commodities, only the SPSS from the other country. Business licenses are given out to both local and foreign companies to operate in rural areas. Foreigners are allowed to do business in rural areas, to improve access to our farmers, at competitive prices.

The Ministry of Agriculture has an Agribusiness Department that works hand in hand with Ministry of Industry, Trade and Tourism to support MSMEs in agribusiness. Business plans are of great importance. Is there support to business plan development, for functional business structures? There should be a market for business support services, farmers to have options to choose who can do better business plan development for them. Farmers should be able to source relevant training at competitive prices.

The Ministry of Agriculture works in strong partnership, hand in hand with SME and cooperative services. That link supports extension services to support farmers. The CLIM² project works with extension officers to assist farmers on developing their business plans.

**Round tables – What are gaps and priorities for supporting agri-food value chains?**

**Round table: Farmers**

The round table involved 2 women, 4 men, youth company representatives. The audience addressed various questions to the table, for open responses and discussion. Emphasis was that farmers are in charge, we all service them. They are our employers.

1. In the business that you are in how well do you understand your business, and how well do you know about the sustainability of your business?

The Butcher company in Balaka, Phalula: By the time CLIM² came, the business was already there. CLIM² boosted our business activities, the business development was therefore not a big challenge to move in. We move on with additional skills. As registered company we can request from other support agencies. For the cold room bought in Phalula, every member contributed 10% of the value as in the business plan. The members provided in kind contributions of construction and infrastructure, starter kits.

The Chimtengo poultry youth company, in Chiradzulu: Farmers were already producing chickens and eggs. CLIM² introduced the concept of poultry as business, farmers underwent trainings and business plan development. Members of the company contribute shares to the company, while CLIM² provided start-ups, this empowers us to move forward when the project phases out. The project thereby strengthens what farmers already started doing. CLIM² will develop an exit strategy to hand over to existing government extension system.
The companies operate where they got support from traditional leaders and government staff. However, farmers felt that they were not given enough information to where we go in future. A request was that more enlightenment will be given how to go further than what the companies have of now.

For companies to penetrate larger markets, we need to get away from brief case operators. They need to be independent of the homestead of the chiefs, we don’t support companies in the chiefs’ homestead. This also applies to the auction place in Phalula, we don’t accept business at a home, but only on designated business space.

How can farmers access the chickens’ starter material? We need to think about what kind policies can we put in place so that supply of starter material will be readily available.

2. What costing of salary and costs do you include?

The companies did not start by paying themselves salaries to be self-sustaining, they have the component in their business plans. This week we sold the first chickens, the revenues will be charged to the companies’ bank accounts. They receive shares and also have sitting allowances.

3. Do you have an office, where the companies operate from?

The Phalula butcher association has established an office, but it is not yet operating. People are in process of establishing the improved business. An office is not mandatory for business. The other business companies have places to operate from, for instance the youth club constructed a chicken pen with office.

4. What are marketable products for you?

Chicken: We will emphasize sale of eggs.

Goats: We prefer Boer crosses with local breeds, age of sale around 3 years. Boer goats seem to mature earlier and are bigger. Mikolongwe Government Farm indicated that they do have Boer goats which farmers can buy for crossbreeding. However, farmers feel exploited by butchermen and requested their own formal markets.

5. How do you build trust among company members?

From participants explanations, among the butcher association members don’t trust each other. What are you doing to build trust among the members? We spend a lot of time to explain and work through the business concept, that they need to hire people and let them work for them. They are not ready yet, we coach them.

We have representatives from various government organizations at the meeting. They offer training and internship to the companies.
Representatives from private sector (5) and district support services (3) joined the next round table, responding to open questions from the audience.

1. Which are the value chains you as private sector are looking for so that farmers respond to that

Shoprite: Malawi imports large volumes of meat. We source meat of high-quality standards, be it chicken, beef, or goats. For us the products that the companies are producing, are still of limited quality, at this point in time. They cannot supply to a retail company. They need to be more productive, get more training. If a company produces 1000 chickens on a weekly basis, there are still many shortcomings. The Malawi Bureau Of Standards has high standards, in food processing.

Transglobe: We brought in dealership for KFC. We first visited large poultry farms in Malawi, but they did not meet the standards. Hence we requested a license from the Ministry of Agriculture to import poultry from South Africa. We hope that the ministry will help farmers to reduce the gaps and improve standards in Malawi.

SHMPA: We have problems with imported powder milk, Ministry of Trade issued licenses, which also led to informal milk imports. Today the Malawian milk is of good quality, our processors took initiative and changed the perception that people had before. Today you can buy local milk packaged in the shops. Our farmers know that their product is in good marketable form.

CRS: We work on range of enterprises, helping smallholder farmers. We deal mainly with crops, on emergency responses and recovery. We work with agro-dealers, so that they provide inputs of quality that are approved by government. The most critical issue is around the seed policy. There is no vibrant seed system such that poor quality seed is distributed to farmers. Even though we facilitate the interface between agro-dealers and farmers, the seed is not of standard. We make good policies, but we don’t implement those policies. The national seed policy was revised and approved last year.

Government support services: We make sure that we engage producers and processors, together. Processors can inform farmers about the products that they require, and explain to farmers on the quality they require. Despite that, in terms of volumes and quality, the market is not satisfied.

2. What policies around quality hinder smallholder producers to participate in value chains?

Shoprite: There is a myth that smallholder farmers and MSMEs find it difficult to supply vegetables to formal markets like Shoprite. Are farmers penetrating? What can farmers do to participate in the sales, tap on urban markets? Shoprite sometimes buys from farmers; but they have to provide the required quality standards, supply volumes, and accept a long-term payment plan as payment is done through the South Africa office.
Transglobe: We would prefer buying chickens locally, contacted Central Poultry and Crown, but even they failed to respond to the standards. They are selling 3 to 4 weeks old chickens. Zambia and South Africa produce chicken according to standards. That’s why we had to import; we prefer sourcing locally.

Sikhalazo Dube: In South Africa we work with Woolworth, grass fed beef. Woolworth now accepts the products from farmers, and get a premium for that.

Andre van Rooyen: Scientists often get criticized for having different views. The classic case is that of transformative change. We cannot penetrate KFC and Shoprite based on linear change. We need to transform the system. That’s why the concept is imperative. The challenge is for us in science and in policy, and extension to elevate our game. We need to make it happen.

Government officer: We need to write up a concept how we can engage with the private sector, based on our capacity. Many people have potential, we need to find a way to tap on that. The question is why does Malawi import chicken, but Zambia and Zimbabwe do not – where do we fail?

Lilongwe Dairy: Why does the project target chicken in the same districts where we have milk producers, 70% of the milk consumed in Malawi comes from these districts. Why not trying the chicken in other areas, where dairy and chicken do not compete over maize bran, and lack income opportunities? The project targets three districts, given according to EU proposal. The proportion of farmers with dairy is also small. You cannot address all issues through dairy.

We appreciate the work of CLIM2, to address gaps through policy dialogue. The Maputo Declaration states that 10% of the national budget should be invested in agriculture, with 3% in livestock. Malawi has not worked towards that. Crops diversification is not complete if not addressing livestock. Why don’t we work hard to balance the efforts in livestock? Frameworks are there, but are not supported financially. We need advocacy for fulfillment.

There are also trade-offs with regards to feed and fodder technologies. SAP did a survey on the use of crop residues. The challenges was identified that using crop residues for feed clashes with the crop departments promoting the use of residues for conservation agriculture.

How does the project promote exotic pastures? We promote especially perennial fodder like bana grass or Brachiaria, in response to the shortage of land and labor.

There are issues with the Kuroiler breed. Malawi introduced Black Australorp to farmers, yet you cannot find them in the villages, as they don’t do well on free range. You need to incorporate those experiences. People in Uganda complained about the Kuroiler model. Ethiopian chicken lost their taste as they were cross bred with introduced breeds. Most important is to evaluate the business model as well as the Kuroiler itself.
5. Links between agri-food value chains and nutrition

Facilitation: Dr Zione Kalumikiza, LUANAR

Policy gaps between agri-value chains and nutrition: Mr Kondwani Mpeniuwawa, DNHA

Presentation see website (www.clim.icrisat.org)

We need to link food production to the nutritional status of people in Malawi. Do we have in mind the woman and the child in the village, or we rather look at the chicken? Are gains in productivity being translated into nutrition outcomes? What are we contributing as agricultural sector, or just relying on the supply of drugs by the Ministry of Health? What can research contribute to combat Vitamin A deficiency, Zink deficiency? Gains in agriculture must be reflected in nutrition outcomes.

Nutrition has been advocated, and is seen in the government agenda. There is the nutrition policy and strategic plan, nutrition is part of the national agricultural policy and investment plan, nutrition education and communication strategy and other agricultural policies, with the aim to change human eating habits.

The nutrition strategy can be implemented through agri-food value chains, along with education, gender integration. There is need to address nutrition through womens’ environment. In the nutrition sector there is more male involvement as men are decision makers. There is need to create an environment that food security and nutrition can be delivered in effective ways.

Recommendations:
- Strengthen weak links between agriculture and nutrition – currently the best agricultural products are sold, the worst are used for the households’ consumption.
- Progress has been made by DNHA. There is a nutrition structure to the district level, this has created ownership and collaboration with agricultural extension officers
- Soon we will launch the Agricultural Nutrition Strategy. Agriculture should use existing nutrition structures, e.g. care groups.
- Research should be addressing emerging issues in agriculture and nutrition

Shaping the links between agri-value chains and nutrition: Prof Alexander Kalimbira, LUANAR

Presentation see website (www.clim.icrisat.org)

The nexus agriculture and nutrition needs more attention. The agricultural sector, although providing food, it does not cover the needs of the country in terms of nutrition. Agriculture nourishes us, especially through livestock. The human body likes minerals from animals, those in agriculture have huge responsibility to get animal-based foods into peoples’ diets.
10 years ago, there was a narrative that Malawi is not a livestock country (Prof RDK Phoya), but Malawi imports livestock-based foods. Zambia is ready to provide us with more meat. Radical thinking is required to bring in more livestock-based food. Today we are a livestock country. We failed to provide quality nutrition to our people. Malawi has been on the map, for serious stunting, micronutrient deficiencies like Selenium and Zinc.

Our priorities for maize based agriculture don’t make it favorable for our children to grow well. The agricultural sector does not provide room for our nation to grow. We need to ask ourselves, what foods do we provide to people?

Agriculture and nutrition need to come together and communicate the right message. Market-based policies and fortification do not reach those vulnerable, as they depend on buying at cheap sources. Reality is that the poorest people are unable to reach those retail shops that provide fortified foods. Food is also more expensive in rural areas. We need to talk more about markets, how small-scale enterprises can be promoted in remote areas so that people can better reach nutritious foods.

There is also a problem of compliance, SMEs lack resources to comply. They face competition from not compliant companies. Believability of claims of quality – do people believe? There is adultery in the food industry, using wrong labels.

There is need for tailor made context specific solutions. We need more data how to make nutritious foods accessible – how do people access foods? How do people change diets? There is need to bring together the farmer and the industry, well aligned through functional agri-foods value chains.

The underlying challenge is in policy implementation. Government can only be in the country at a certain time. Otherwise things are just happening.

Feedback from audience

Dr Zione Kalumikiza facilitated the final open discussion, encouraging representatives from District Nutrition Coordination Committees (DNCC) to share their views, and any other on how we can better link agriculture and nutrition.

We have to realize that rural communities are at static stage of poor economic, nutrition and food insecurity problems. Agri-food production and utilization chains are poorly coordinated, with poor access to markets although the demand for food products is high and increasing. Considering all other challenges, the drive towards diversification and integration is much needed.

Technologies and interventions exist, communities are coming up with processing foods, e.g. peanut butter, but they lack the standards. For instance, farmers cannot assess themselves if the foods they produce are contaminated with aflatoxin. There are huge gaps in food processing and preservation. The emphasis is on producing food for sale, but not on consumption to improve households’ nutrition. We produce food but the elements of food budgeting are missing. There are power relations at household level, a family can produce
enough food, but who decides when they consume after harvesting. They slaughter chicken for visitors, for them to eat they struggle. We are not using the existing structures, care groups, promoters, NGOs are buy passing our nutrition structures.

We need to highlight the gaps in national nutrition policy on understanding behavioral change. CLIM² focus on crop and livestock marketing, there a gap with educating people to address nutritional needs. There is need to educate people so that their livelihoods are not compromised.

A key issue is that policies exist in agriculture and nutrition sectors, but they do not seem to facilitate collaboration and partnership for joint interventions. We have systems for agriculture and nutrition, these two systems are working at different platforms, at national to local level. They don’t work together. Agricultural extension services use their own methodologies, we in nutrition don’t use them to our advantage. If you want to improve nutrition there is need to bring nutrition messages to agricultural extension activities. There is need to better use existing opportunities, e.g. agricultural field days to maximize linkages with nutrition.

How can we transform Malawi to move out of food and nutrition insecurity and enhance income? Malawi will continue to depend on agriculture; there is need for integrated approaches that help to harness synergies between nutrition and agri-food value chains.

Agricultural value chains must feed the nutrition gaps. We must also work with existing structures in nutrition, e.g. care groups, as entry point for integration with nutrition. Using care groups is one strategy for improving nutrition, an existing opportunity for integrating agriculture into nutrition. AFIKEPO focus on agricultural products, production and utilization. Promoting care groups, we realized that few farmers have livestock. If Kuroiler does well, can the project bring in more so that the care groups can benefit?

Farmers confirm that for them eggs are critical for supply of protein. They have nutrition groups in every village, at 30 members per group. The members take initiatives to teach other community members in terms of good nutrition. This helps to improve the knowledge in nutrition.

What gaps do you see that can be improved in terms of nutrition? We grow different crops like pigeon pea, maize, some we eat, some we sell to buy the food that is more nutritious than that we don't grow. However, there is a challenge beyond providing sheller, we need knowledge on technologies to purify groundnut oil, so that we don’t have to buy oil from outside.

SHMPA: There is need to train female members in dairy groups, before going to market, to leave some milk for their children. The dairy sector is mainly seen as source of employment.

How can we maximize nutrition outcomes, through what policies?

CRS has nutrition department, for agricultural interventions that promote rich foods.
SHMPA: We must change policies in the milk industry. The industry is growing very fast, provides the cheapest milk, yet 92% of the people in Malawi don’t get an adequate diet. By policy, poor people are not allowed to buy unprocessed milk. Milk quotas restrict the sale of milk, after it has been produced in large quantities. That puts up a ceiling where on the other side we encourage farmers to produce more milk. Whom do we need to get involved, to actually make what seems very obvious to change? How to address such policy barriers, while ensuring that people get safe milk?

Ministry of trade: In Malawi, there is shortage of alternative crops than maize. We need to improve alternative crops to improve nutrition.

At policy level, the national agricultural policy is nutrition compliant in terms of thematic action; at sector level there are many projects that have nutrition components for dietary diversification, e.g. SAP. Policies in sectors mainstream nutrition, for campaigning at village level.

Looking at the many programs in Malawi, if we were to align programs we are doing well, yet we fail to have an impact on the ground. There is a problem of coordination. Some programs retrogress, lack of coordination. We are just promoting food displays, while food preparation has a problem. People are not using food adequately, safety.

Piecemeal approaches do not help. All stakeholders are supposed to be involved in national agricultural and natural resource research agenda. We all must collaborate, and address Malawi nutritional needs. Prioritize which problem to tackle first.

We have very good policies, CLIM² is an opportunity, for bringing in the Kuroiler and provide nutrition messages.

What kind of partnerships do we see to link to nutrition? Agribusiness, research, private sector; most produce is sold to private sector. We have to admit that we buy lot of produce from farmers and as result they don’t remain with anything, most produce is exported. This contributes to the nutrition problem. In Malawi people don’t eat pigeon peas, but export it. Yet pigeon peas are highly nutritious. We need policies that help to keep food in the country.

How to promote nutrition – We need to advocate for visioning, for family to decide on what to consume.

**Wrap up, Timothy Gondwe, LUANAR**

Presentation see website (www.clim.icrisat.org)

**Vote of thanks, D Kamangira**

Thanks to LUANAR, ILRI, SSLLP, ICRISAT, FAO, CRS, private sector, Shoprite, all private sector, farmers, all government officials, for participating and sharing experiences. This is key to development of our country, we came up with challenges and way forward. Thank you very much.
Appendix

A1. List of participants, for 23 and 24 July 2019

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Smith</td>
<td>Participant</td>
<td>0912345678</td>
</tr>
<tr>
<td>Jane Doe</td>
<td>Participant</td>
<td>9876543210</td>
</tr>
<tr>
<td>Michael Brown</td>
<td>Participant</td>
<td>1234567890</td>
</tr>
<tr>
<td>Sarah Lee</td>
<td>Participant</td>
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</tr>
<tr>
<td>David Johnson</td>
<td>Participant</td>
<td>9087654321</td>
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<tr>
<td>Emily Davis</td>
<td>Participant</td>
<td>8765432109</td>
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<tr>
<td>Tom Wilson</td>
<td>Participant</td>
<td>7654321098</td>
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<tr>
<td>Lisa Miller</td>
<td>Participant</td>
<td>6543210987</td>
</tr>
<tr>
<td>Robert White</td>
<td>Participant</td>
<td>5432109876</td>
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Note: Contact details are fictional.
### Day 1: Tuesday, 23 July 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11:00 – 12:00</td>
<td>Arrival at Serendip Suites, Blantyre</td>
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<tr>
<td></td>
<td>Welcome and program for the day - SSLLP Director – Mr Sute Mwakasungula, SSLLP</td>
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<td>Early lunch</td>
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<tr>
<td>12.00 – 17.30</td>
<td>Field Visit: Kuroiler Chicken and chicken feed processing</td>
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<td>Mikolongwe Research station: On-station evaluation of the birds</td>
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<td></td>
<td>Farmers in Chiradzulu District: The birds under village conditions</td>
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<td>Lunzu Quarantine Station: Semi-commercial conditions, feed ratio and processing</td>
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### Day 2: Wednesday, 24 July 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8.30 - 9.30</td>
<td>Facilitation: Sute Mwakasungula, SSLLP</td>
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<tr>
<td></td>
<td>Official Opening</td>
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<td></td>
<td>□ Setting the scene, introductions, objectives: Mr Sute Mwakasungula, SSLLP</td>
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<td></td>
<td>□ Official welcome: Dr Julius Chulu, rep. Dept of Animal Health and Livestock Development</td>
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<td></td>
<td>□ Opening remarks: Dr Yanira Ntupanyama, rep. Principal Secretary, Ministry of Agriculture, Irrigation and Water Development</td>
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<td>9.30 - 9.45</td>
<td>Short break</td>
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<tr>
<td></td>
<td>Role of agri-food value chains in facilitating availability, accessibility and affordability of nutritious foods – the CLIMM Project</td>
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<td></td>
<td>□ Highlights from the CLIMM project: Mr Sute Mwakasungula, SSLLP</td>
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<td>□ Diversifying agri-food value chains: Dr Andre van Rooyen, ICRISAT</td>
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<td></td>
<td>□ New business models driving change: Prof Sikhalazo Dube, ILRI</td>
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<td></td>
<td>□ Importance of MSMEs: Dr James Ntupanyama, consultant</td>
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<td></td>
<td>□ Feed and fodder technologies: Dr Michael Blummel, ILRI</td>
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<td>11.00 - 11.15</td>
<td>Health Break</td>
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<td></td>
<td>Session 1</td>
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<tr>
<td>9.45 - 11.00</td>
<td>Facilitation: Sikhalazo Dube, ILRI</td>
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<td>Policies and support mechanisms for growth of agri-food value chains</td>
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<td></td>
<td>□ Presentations</td>
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<td></td>
<td>□ Policies supporting agri-food value chains: Mr Ezron Chirambo, Ministry of Industries, Trade and Tourism</td>
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<td>□ Round tables – What are gaps and priorities for supporting agri-food value chains</td>
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<td>1. Farmers</td>
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<td>2. District support services</td>
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<td>3. Private sector</td>
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<td>□ Feedback</td>
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<td>□ Response by the Dept of Nutrition, HIV and AIDS (DNHA)</td>
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<td></td>
<td>□ Comments from audience</td>
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<tr>
<td>13.15 – 14.15</td>
<td>Lunch and interaction</td>
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<td></td>
<td>Session 2</td>
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<tr>
<td>11.15 – 13.15</td>
<td>Facilitation: Zione Kalumikiza</td>
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<td>Links between agri-food value chains and nutrition</td>
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<tr>
<td></td>
<td>□ Presentations</td>
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<td>□ Shaping the links between agri-food value chains and nutrition: Prof Alexander Kalimbira</td>
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<td></td>
<td>□ Policy gaps between agri-value chains and nutrition: Mr Kondwani Mpeniuwawa</td>
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<td>□ Round tables – What gaps can agri-value chains fill in nutrition response</td>
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<td>4. Stakeholders</td>
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<td>□ Wrap up: Options and opportunities for synergies</td>
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<td>□ Vote of thanks</td>
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