# WOMEN & YOUTH IN AGRICULTURE KNOWLEDGE SHARING & EXCHANGE SYMPOSIUM


**28th – 30th May 2024**

**Kasane, Botswana**

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# 1. INTRODUCTION AND BACKGROUND

## 1.1. Background

The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) is a SADC subsidiary dedicated to coordinating regional cooperation in agricultural research and development. As part of its mandate, CCARDESA is implementing the CAADP-XP4 Programme on Gender, funded by the International Fund for Agricultural Development (IFAD) from 2019 to 2023. This program emphasizes the critical role of women and youth in achieving a science-led, climate-resilient agricultural transformation in Africa. It aims to empower women and youth-led organizations to actively participate in global climate issues, fostering stronger partnerships and enhancing the capacities of implementing countries to achieve gender equality and the program's intended outcomes.

The Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) project, funded by the World Bank, supports these efforts by promoting climate-smart agriculture and climate information services to benefit millions of smallholder farmers in Africa. By making knowledge, technologies, and decision-making tools more accessible, AICCRA enhances the ability of agriculture research and extension service providers to cope with climate change.

Organizing events that bring together women and youth with different stakeholders is crucial for CAADP-XP4 and AICCRA, as it provides a platform for key stakeholders to collaborate, share experiences, and drive innovative solutions for sustainable agricultural development in the face of climate challenges, hence this symposium.

## 1.2. Objectives of the Symposium

Ms. Botho Maapatsane made a presentation on the objectives of the symposium and highlighted the following as the main objectives

i. Share case studies and experiences on successfully preserving and utilizing indigenous seeds.
ii. Present models of successfully integrating traditional crops and livestock into modern value chains.
iii. Conduct interactive sessions on innovative rainwater harvesting and climate-smart agriculture techniques.
iv. Demonstrate the latest affordable digital and precision farming tools.
v. Share insights into agroforestry, apiculture, and aquaculture, market opportunities, value addition, and sustainable practices.
vi. Experienced mentors will discuss the advantages of having a mentor and share effective networking strategies

### 1.3. Official Opening Address - Dr. Baitsi Podisi - CCARDESA CAADP-XP4 Coordinator


Dr. Baitsi Podisi delivered the opening speech at the 'Women & Youth in Agriculture Knowledge Sharing & Exchange Symposium' in Kasane. He began by acknowledging the support of the CCARDESA CAADP-XP4 Programme, funded by the European Union and administered through IFAD, as well as the World Bank-funded AICCRA project. Dr.Podisi emphasized CCARDESA's commitment to inclusivity in agricultural development, highlighting its focus on women, youth, and people with disabilities.
The speech referenced a 2016 youth Symposium in agriculture, underscoring the ongoing efforts to address youth unemployment and enhance food security through agricultural opportunities. Dr. Podisi outlined CCARDESA's role in coordinating agricultural research and development across SADC member states, covering various sectors, including crops, livestock, forestry, and fisheries.

While acknowledging progress in youth engagement in agriculture, Dr. Podisi stressed the need for further efforts, especially in light of high unemployment rates exacerbated by recent global challenges. He presented the symposium as a platform to showcase successful initiatives in agricultural education, financial support, and market access for women and youth-led enterprises.

Dr. Podisi outlined key discussion topics for the event, including the preservation of indigenous knowledge and seeds, integration of traditional and modern farming practices, climate-smart agriculture, and emerging sectors like apiculture and aquaculture. He emphasized the collaborative nature of the symposium and the importance of sharing experiences and learning from one another.

In conclusion, Dr. Podisi encouraged participants to view the symposium as a catalyst for building a more sustainable, inclusive, and prosperous agricultural sector in Africa. He expressed gratitude for the attendees' participation and officially opened the symposium, setting the stage for fruitful exchanges and networking opportunities.

### 1.4. CCARDESA/CAADP-XP4 Overview - Mrs. Bridget Kakuwa-Kasongamulilo


Bridget Kakuwa-Kasongamulilo, the Information, Communication & Knowledge Management Officer at CCARDESA, began her presentation by providing an overview of CCARDESA. She explained that CCARDESA is a subsidiary of SADC, established by Member States through a Charter in 2010 and officially launched in 2011. Its primary purpose is to coordinate agricultural research and development in the region.
Kakuwa then outlined CCARDESA's vision, mission, thematic areas, goals, and objectives. She highlighted the organization's roles, which include coordinating the

implementation of regional agricultural R&D programs, facilitating collaboration among research and innovation institutions, promoting public-private partnerships, improving agricultural technology generation, dissemination, and adoption, empowering farmers and their organizations, facilitating the development of sustainable education and training systems, and promoting cooperation and exchange of scientific and technical information on best practices in agriculture.

Moving on, Mrs Kasongamulilo provided an overview of CCARDESA's strategic plan. She explained that the strategy took into account past lessons, current trends, and foresight, aligning with the SADC Regional Agricultural Policy (RAP). The plan emphasizes climate-relevant interventions to increase the resilience of production systems, considers knowledge brokerage essential for evidence-based policy decision-making in the agricultural sector, and acknowledges the need to create and strengthen partnerships at all levels.

Mrs. Kasongamulilo then discussed CCARDESA's engagement with partners and stakeholders, such as FARA, AFAAS, ASARECA, and CORAF. She presented the CAADP-XP4 program and its link to CAADP, highlighting inclusive regional and international partnerships, production and exchange of climate-relevant agricultural knowledge, effective communication, monitoring and evaluation, promotion of systemic and effective use of science and innovation, and representation of sub-regional and national organizations at the continental level. Mrs. Kasongamulilo concluded her presentation with updates about the CAADP-XP4 program's results and key achievements.

## 2. WORKSHOP PROCEEDINGS – DAY 1

### 2.1. Key Note Address - Ms. Maria Zaloumis (The Zed Farmer)

Ms. Maria Zileni Zaloumis, aka "The ZedFarmer," is a 34-year-old commercial farmer and CEO of Tuzini Farms. Tuzini Farms has a 500 Ha family-owned business specializing in potato growing and growing seed maize during the latter period of the year, as well as onion and groundnuts for the local market. Tuzini Farms has four farms and employs over 62 families.

Ms Zaloumis gave an inspirational and educational story about her incredible journey in farming, full of both significant challenges and remarkable achievements. From being jobless in 2016 to managing multiple farms with advanced techniques like smart farming and climate-smart practices, your story is inspiring and educational.

The key takeaways from her story were :

- Passion and Resilience: Farming requires immense dedication, sacrifice, and hard work. Despite the challenges, your commitment to your farm highlights the importance of passion and resilience in this field.
- Adopting Climate Smart Technologies: Implementing smart farming technologies and climate-smart practices, such as introducing bees for pollination and planting specific trees to retain water, shows how innovative approaches can improve productivity and sustainability.

- Leadership and Management: Managing a large team and multiple farms requires strong leadership skills. Even with the need for constant presence and attention, the ability to oversee operations underscores the importance of good management. Being physically present on your farm is crucial for effective management and to ensure workers maintain productivity and quality. Leadership in farming requires patience, hard work, consistency, and strict time management. These qualities help ensure timely planting, harvesting, and overall operations
- Sacrifice and Reward: The sacrifices made in terms of time, comfort, and financial stability are significant. However, the potential financial and personal rewards can be substantial.
- Dealing with Adversity: Experiencing significant losses, like the 88 hectares of maize, and having to rebuild from scratch demonstrates the unpredictable nature of farming and the need for adaptability and perseverance. Despite significant losses, like the 88 hectares of maize, persistence is vital. Continuing to push forward after setbacks is essential for long-term success. Believing in new opportunities and maintaining faith, as you do with your pastoral role, can provide the mental and emotional strength needed to persevere.
- Focus and Attention: A crucial lesson is the need to focus on one farm to ensure efficient management and productivity. Dividing attention can lead to a decline in work ethic and productivity among workers.
- Specialization and Value Addition: Focusing on a few key crops and doing them well is more effective than trying to manage too many crops. Specialization helps master the processes and improve quality. Adding value to your products, like producing high-quality potatoes for off-takers or red onions for export, ensures a stable market and better returns. Attention to detail, from land preparation to harvesting, is crucial.
- Market Focus and Diversification: Understanding market demands and fluctuations can help you make informed decisions about which crops to grow. For example, due to market volatility, I shifted away from tomatoes and focused on crops like onions, potatoes, seed maize, pigeon peas, and groundnuts. Diversifying into crop farming and livestock allows for risk management and additional income streams. Even though livestock requires less day-to-day attention, it still contributes to your overall farm's success.
- Efficiency and Quality: Maintaining high standards and being meticulous about farming practices ensures that your products stand out in the market. High-quality produce attracts buyers and can lead to long-term contracts and pre-orders.
- Community and Contribution: Being called the Zed Farmer highlights her role in adding value not just to the farms but to clients and even sharing innovative ideas with the broader community, including leaders. By sharing your experiences and strategies, you can inspire and educate other farmers, contributing to the growth and improvement of the agricultural sector.
- Teamwork and Delegation: Effective farming requires a strong team and clear division of responsibilities. You can't handle everything on your own, especially the administrative and financial aspects. Having an organized structure, like an organogram, helps in managing tasks efficiently. In her case, working with family members who have complementary skills enhances business operations.
- Financial Management: It is crucial to keep accurate and detailed financial records. Knowing your annual turnover, profit, and loss figures allows you to make informed decisions and secure funding if needed. Simple bookkeeping practices, such as

maintaining a cash book with receipts and expenditures, can help you track your financial health.

- Goal Setting and Intentionality: Setting clear, intentional goals is essential for growth. her example of preparing for future purchases, like the Hilux and the plane, by taking small but meaningful steps illustrates the power of purposeful planning. Visualizing and preparing for your goals can make them more attainable, as seen with her method of buying mats for the Hilux before she could afford the vehicle itself.
- Purpose and Empowerment: It is important to bring a sense of purpose to your farming activities. Helping and teaching your workers, encouraging them to improve their lives, and fostering a supportive environment can lead to a more motivated and productive workforce. Ensuring your workers have something to show for their time and effort reflects good leadership and contributes to their personal growth and satisfaction.

Ms. Zaloumis ended her presentation by sharing a 5-minute video about her farm and operations.

### 2.2. Panel Discussion - How to enhance market access "Farm to Fork."- and export capabilities in the perishable products sector.

Moderator – Joshua Zinzombe and Panel Discussants - Ms., Ms. Feliste Mpore- Grape Farmer/Exporter -Tanzania and Nkosephayo Manyatsi -Smiling through Farms Eswatini

In the first part of the panel discussion, the panelists introduced themselves and briefly discussed their farming businesses and operations.

When asked the question, "Productivity is a key component of agriculture's economic performance and its competitiveness. Time is critical to the industry, as products take time to grow and harvest, and products are perishable once harvested.

The panelists' responses highlighted the following;

- Explore Export opportunities (Eswatini)
- Focus on High-value crops
- Invest in quality and safety, e.g., Global Gap Certifications – helps penetrate markets as it is a prerequisite for niche markets
- Understand your market (Tanzania)
- Make appropriate investments that should bring you returns.
- Capacity building in crop husbandry and quality (value addition) to out growers.
- Investing and giving back to the community (E.g., Providing water or boreholes to the surrounding community in Tanzania).
- Know what you doing – farming is a science (e.g., disease control), an art (you have to follow the rules; each crop has rules, e.g., harvest time), and a business

When asked why maximizing crop yield and minimizing disease risk is crucial for individual companies' profitability, Why is the Global Gap Important? The panelists highlighted the following in their responses.

- In the context of the Global Gap, Appreciation of quality and safety by consumers and pesticide residues, retainer confidence from consumers/buyers to help build a reputable brand.
- Global Gap provides an opportunity for export markets, but certification takes time. Be patient as you take the certification journey.
- Never compromise on pesticide use – e.g., the presence of chemical residues may entail the loss of market.

When asked about post-harvest losses and why it's important to add value or participate along the value chain,

- Value addition can move farmers to another level in Africa
- Perishability is a big problem with over 50% PHL
- When you add value to your crop, you increase revenue, e.g., fresh grapes 1200TSH, after drying 10,000TSH. When you add value, you control the price
- Increase the shelf life of crops, e.g., fresh grapes for one week and dried grapes for six months.
- For export markets, you reduce load and, therefore, costs
- You create employment

A participant from the audience who made a turnover of 21,000 USD in the honey sector was put on the spot on how she achieved that. She highlighted the following

- Initially, it started to solve a climate problem. Start small with steady growth
- Worked with the community and provided hives
- Pay attention to the processing steps to ensure quality during value addition
- Consider "Organic" certification to emphasize that there are no additives.

## 2.3. Key Note address: (Marula value chain) - Ms. Wame Mashaba

In the first part of the presentation, Ms. Mashaba gave an overview of the Natural Products Association of Botswana (NPAB) and that NPAB is an Association formed in 2017 that represents the Indigenous Value Chain in Botswana. NPAB offers services that include;

- Lobby retailers on behalf of its members for market access
- Secure group pricing to bring down members' costs
- Coordinate sector–level strategies for industry development
- Work with partners to help members prepare for the local and export market provide access to training and technical support
- Assists with standards development and compliance from ingredients to packaging
- IPR support initiatives
- SME capacity building with strategic partners.
- NPAB has approximately 50 members involved in Indigenous ingredient processors (e.g., Mongongo oil, Morula fruit pulp, and oil), Cosmetic Product Manufacturers (multiple skincare products and hair care products), Agri-processing of Indigenous Food and Beverage Products (e.g., Mophane worm snacks, Morula Drinks, Morula Jam, Morula Hot Sauce, Baobab Jam), Manufacturing Medicinal and Health Supplement products (Hoodia, Donkey Milk, Devils Claw, etc.), Organic Fertilizers, Indigenous Crop Farmers (e.g., Ditloo, Morama Bean) and Basketry using Veld Resources sectors.

In the second part of her presentation, Ms. Mashaba deep-dived into the Marula Value chain, detailing the Marula Tree characteristics. She further detailed the Marula value chain economic potential that presents opportunities to boost the local economies and job creation. More specifically, the Marula value chain presents the following opportunities;

- Economic Diversification (Food, Beverages, Cosmetics, Animal Feed, Fertilizer, Biofuel, etc.)
- Climate Change Adaptation strategy.
- Developing the Rural economy.
- Improving livelihoods and living standards in Botswana.
- Improving soil quality through planting trees and Intercropping.
- Creating Green Industries in Botswana.
- Improving and developing Standards in Food and Cosmetics.
- Developing new Markets.
- Developing Intellectual Property (Geographical Indicators).

She also highlighted some of the challenges facing the Marula value chain that includes;

- Lack of Testing facilities
- Lack of Support Industries
- Lack of Financing schemes to develop industry, particularly Grant Funding Institutions
- Lack of Infrastructure, particularly incubation facilities

- Market Development/ Marketing
- Different Stakeholders working in silos
- Regulatory Challenges
- Short Term Supply Chain Issues (Seasonality of fruits)
- Lack of adequate cold storage units
- Lack of adequate fruit processing equipment

Ms. Mashaba's presentation also highlighted the Marula value chain needs for it to grow, and these include;

- An Audit By Government Partners to find Gaps and blockages to effectively carry out commercialization and address them.
- Incubation Centers to allow for more companies to be incubated.
- Funding to Establish a Secretariat for the NPAB to improve administrative efficiency.
- Funding partners to establish a Natural and Indigenous Grant Fund.
- An Intellectual Property Support Fund to develop IP around Natural and Indigenous Resources.
- Sector Specific trade finance from Private and Public Funders. Creating funding instruments that de-risk seasonal harvesting and other sector-specific needs.
- Marketing support/ Market Development for Natural and Indigenous products and the Industry in the local and international markets.
- Affordable Logistics from Logistics companies. Effective rates to enable economic growth.

### 2.4. Panel Discussion - Improving access to loans, value addition techniques, quality assurance, and export capabilities in the perishable products sector.

Moderator – Ms. Gaofenngwe Nkani and Panel Discussants Mr. Tomo Pedro - Executive Director Gustambo, Ms. Sarah Kachedwa -Malawi Ukwe Youth Agribusiness Group, Marula value chain) - Ms. Wame Mashaba.

Mr. Pedro shared his inspiring story on how he got involved in agro-processing. His journey started when he went on holiday with his family to Brazil. His host held a function, and what was served there was everything from their food. Against his background as an animal scientist/researcher, he learned about processing because, in animal science, there are processing components, e.g., cheese and yogurt from milk. When he came back, he did some research on what kind of agro-processing he could engage in and opted to start value addition by making smoothies out of our fruit pulps. Currently, his company has six varieties of smoothies and has received inquiries and sent samples to one of the hotels, City Lodge, in South Africa.

Ms. Kachedwa shares our farming journey and story and how, through dedication to farming, you can use it as your full-time occupation without any formal education. She has taken her farming passion and initiative to turn her passion into an office job, exemplifying the idea of making the most of available resources and opportunities. She expressed sentiments about the hands-on approach and commitment to hard work, which are the virtues that have inspired her. Indeed, Ms. Kachedwa's story reinforces the idea that there are no excuses for not pursuing one's dreams and goals with determination and effort. Her farming enterprise journey can serve as a motivation for others to follow their passions.

Ms. Mashaba gave a presentation on pertinent matters related to standards and certification of indigenous products. In her presentation, she highlighted that navigating the standards and regulations for indigenous products can indeed be challenging, especially when existing frameworks don't cover newer, non-traditional products. Wame went on to provide an overview of how to obtain certification, especially for Indigenous and natural products, and highlighted the following;

**Understanding Standards and Certification**
International standards and certification cover food safety management systems. It helps ensure that food products are safe for consumption. For indigenous products, adopting ISO 22000 can enhance credibility, especially in international markets.

**Local and National Bureau of Standards**
While the local National Bureau of Standards might not have standards for every indigenous product, they are crucial in setting local benchmarks and ensuring product quality. Engaging with the Local and National Bureau of Standards to develop new standards is essential for market acceptance.

**Knowledge and Certification**
This can be achieved through;

- Research and Training - Start by researching online resources, attending workshops, and connecting with local agricultural or food safety bodies. Organizations like the FAO (Food and Agriculture Organization) often provide guidelines and training materials.
- Engage with Local Authorities - Regularly communicate with Local and national Bureau of Standards or equivalent bodies to stay updated on new standards being developed. Participate in consultations and provide input based on your product experiences.
- Collaborate with Associations - Join industry associations that can advocate for standard development and provide resources for testing and certification. For example, your association with NPAB (National Plant Protection Organization) can help you navigate the process and find support.

**Addressing Testing and Certification Challenges:**

- Local Testing Facilities: While Botswana has some testing facilities, they may not meet international standards. Collaborate with local authorities to improve these facilities and advocate for their accreditation to international standards.
- Outsourcing Testing: In the interim, using facilities in South Africa or other countries with recognized standards is a practical solution. This can be facilitated by partnerships with organizations like USAID, which help in understanding export requirements.
- Pushing for Local Solutions: Engage with government stakeholders to emphasize the need for local testing facilities to meet international standards. Highlight the economic and logistical benefits of local certification to gain support.

**Practical Tips for Small Farmers and Entrepreneurs:**

- Education and Awareness: Make use of online platforms like YouTube and industry websites to learn about processing, standards, and best practices. Look for webinars and courses that can offer insights into food safety and certification.

- Networking and Support: Connect with other entrepreneurs and farmers to share knowledge and resources. Associations and cooperatives can provide collective bargaining power and support in meeting standards.
- Innovation and Adaptation: Stay adaptable and open to new methods and technologies. Regularly update your practices based on the latest research and market trends.

By staying informed, leveraging available resources, and advocating for better local facilities, you can navigate the complexities of standards and certification for indigenous products. This approach will help you build a robust and internationally competitive business.

During plenary, pertinent issues that were raised as questions and comments were centered on the following

**Decolonizing food systems**
Your points about decolonizing food systems and reducing the reliance on chemicals in agriculture are crucial for both health and sustainability. There is a need to have more interest on local foods, natural foods, limited use of chemicals in production systems and the link to non-communicable foods. Indeed, addressing the rise of noncommunicable diseases linked to diet is essential. Encouraging the consumption of local, nutritious foods over processed, high-salt, and high-fat options can make a significant difference. a call to reduce the use of herbicides and pesticides is also timely, considering the potential health risks associated with these chemicals. efforts to collaborate, innovate, and promote healthier food systems are inspiring.

**Role of Media in information and knowledge management on Indigenous foods.**
The detrimental effects of herbicides and pesticides on soil health are vital. Sustainable agricultural practices are crucial not only for current food production but also for ensuring the longevity and fertility of the soil for future generations. The role of the media in promoting indigenous food and sustainable practices cannot be overstated. It's encouraging to hear that media practitioners are willing to collaborate to raise awareness and provide credible information. Effective communication can empower farmers and consumers alike, helping to shift preferences towards healthier, more sustainable options. Promoting indigenous livestock, such as chickens, is another excellent point. These animals play a significant role in maintaining ecological balance and can help address issues like beef and measles by naturally cleaning the environment.

Efforts and insights are crucial for driving change. By continuing to work together, leveraging media platforms, and advocating for sustainable practices, we can make significant strides in preserving our natural resources and promoting healthier food systems.

**Partnerships on knowledge management and sharing of Indigenous foods.**
Steps to Integrate Indigenous Practices into Conventional Farming Education and Training through Workshops, Seminars, and field Visits, Research and Knowledge Sharing through collaboration with Experts and Documentation and Dissemination, Community Engagement with Local Partnerships and Cultural Programs, Sustainable Practices, Media and Advocacy through Awareness Campaigns and collaborations

with Media and Working with media practitioners to create informative content that educates the public on indigenous agriculture and its advantages.
By taking these steps, one can effectively integrate indigenous practices into large-scale farming operations and help spread this knowledge across South Africa and beyond. initiatives to partner and collaborate will be key to driving this positive change.

### 2.5. Poultry Rearing as a Lucrative Business - Mr. Micheal Malunga-Namibia


Mr. Michael Malunga operates a poultry breeding and hatchery outside Windhoek, Namibia. He studied Poultry Production and Health at the Egyptian International Centre for Agriculture and has over 10 years of experience in poultry farming.
Micheal gave a keynote presentation on poultry farming as a lucrative business, highlighting its advantages and disadvantages.
The advantages of poultry farming as a lucrative business are Low startup cost, Easier expansion, Accessibility of markets, Profitability, and requiring a small space. The disadvantages are diseases that threaten to wipe out your entire flock (e.g., Avian Influenza) and High feed costs.

He further provided some nuggets on what to consider when venturing into poultry farming as a business, and these include;

i. Broilers—Broilers are grown for their meat. These birds have the genetic ability to grow fast. Day-old broiler chicks are bought from the hatchery and fed until they are 36 – 42 days old. The broilers then go to the abattoir for slaughtering. Some broiler farmers sell live birds off their farms.
ii. Layers—Laying hens produce eggs, which are an excellent source of proteins for humans. An egg producer buys day-old chicks and rears them for 20 weeks (5 months) or point-of-lay pullets (young females that are about to start laying) from a supplier and keeps them for 1 year (52 weeks) from the date they start laying eggs. At the end of the year, the hens are sold as live culls.
iii. Indigenous Pure Breeds—Although most commercial poultry producers use modern crossbreeds or hybrids, traditional pure breeds still exist. Some small-scale farmers keep pure breeds as a hobby or to penetrate the lucrative niche market of providing pure breeds.
iv. Commercial traditional breed—So far, only the Boschveld chicken has been commercialized in Africa. The bushveld is derived from three indigenous breeds: the Venda, Matabele, and Ovambo. The birds can be purchased at day old and produce fertile eggs that can be hatched.
v. Sasso Dual Purpose Chicken - Sasso is a dual-purpose chicken that originates from France. They have a unique colour and taste and can be raised in different environmental conditions (They can thrive even in these harsh climate conditions). The birds are stronger, more robust, and a bit more resistant to diseases in comparison to other breeds. Highly efficient in comparison to village chickens and can be reared under different rearing systems – indoors and intensive, free range, and village family production.
vi. In his conclusion, Michael gave a One-Penny advice before one considers getting into poultry farming: Before starting, Invest in knowledge (Short courses in Poultry Production and Health), do market research, start small, and expand.

## 2.6. Goat production as a lucrative Business - Mr. Paul Bulaya-Red Gold Farm-Zambia

Mr. Bulaya gave a brief inspiring background about his “Red Gold Farm.” Using his story and experiences in goat farming, his presentation highlighted the following.

Why Goat farming? Why should one consider goat farming?

i. Low Initial Investment—Compared to other livestock, starting a goat farm requires minimal capital for basic infrastructure such as shelter, fencing, and feeding equipment.
ii. Rapid Reproduction Rate—Goats reproduce quickly, with a gestation period between 5 and 6 months. A single doe can give birth to 2-3 kids per year. All things are constant, starting with 20 goats, which can result in 80 goats within a year.
iii. Adaptability—Goats thrive in different climates and terrains, can graze on marginal lands, and consume a variety of vegetation.
iv. Disease tolerance—Common goat disease is Blackleg, caused by bacteria found in the housing and prevented by proper vaccination and hygiene practices. Bottle jaw, swelling under the jaw due to fluid accumulation, prevented by regular deworming and good pasture management.
v. Short average age to market – depends on what goal and will determine the purpose of feeding.

He further highlighted the products from the goat value chain, including;

- Artisanal cheeses
- Goat milk soap and skin care products
- Meat processing: value-added products like sausages, salami, or jerky. Proper packing can make these products more appealing and marketable
- Breeding and selling registered goats.
- Goat manure fertilizer.

On what one must consider before venturing into goat farming, Mr Bulaya gave the following advice;

- Choose breeds based on your farm’s purpose (meat, milk, or fiber).
- Provide well-ventilated, clean shelters to protect goats from extreme weather.
- Ensure proper drainage and bedding.
- Goats are browsers and prefer shrubs, leaves, and grass
- Supplement their diet with grains, minerals, and fresh water.
- Regular deworming, vaccination,

In conclusion, Mr Bulaya recommended the following for a successful goat farming as a business;

- Start with 20 does
- Do some research on the type of breed you want to start with
- Invest in artificial insemination technology
- Know your target market.
- Network with other goat farmers

## 3. WORKSHOP PROCEEDINGS – DAY 2

### 3.1. Key Note address - LUANAR - Indigenous Vegetables - Dr Abel Sefasi


Dr. Abel Sefasi, the Lead Researcher in Indigenous Vegetables at LUANAR, delivered a brilliant and eye-opening presentation that inspired all participants in attendance. His research work, conducted alongside his dedicated team, showcased the real value and contributions of the research community toward ensuring food security in Malawi and beyond.

Dr. Sefasi began by providing a comprehensive overview of the various projects implemented over the past decade, all centered around indigenous vegetables. These projects, funded by organizations such as the Norwegian Embassy, the McKnight Foundation, and the Malawi Government, aimed to improve nutrition security and enhance resilience to climate change among smallholder farmers. The primary objective was to facilitate the production and conservation of indigenous vegetables by improving access to quality seeds and promoting good agronomic practices.

Throughout his presentation, Dr. Sefasi highlighted the special attributes of indigenous vegetables that make them invaluable assets in addressing food security challenges. He emphasized their high nutritional value, medicinal properties, adaptability to local growing conditions, and their alignment with national and regional policies such as the National Agriculture Policy (NAP) 2016, the Malawi Investment Plan (MIP-1), and the Malawi 2063 vision, as well as the Comprehensive Africa Agriculture Development Programme (CAADP).

Dr. Sefasi shared key findings from the research projects, which demonstrated the potential of indigenous vegetables as climate adaptation crops and viable income sources for farmers. However, he also acknowledged the challenges faced, including poor access to quality seeds, inadequate extension services targeting indigenous vegetables, limited market linkages, and a lack of agribusiness skills among farmers. Moving forward, Dr. Sefasi discussed the current research focus on the participatory evaluation of amaranth (Amaranthus spp) collections for commercialization. This research aims to evaluate the nutritive value of amaranth accessions, assess farmers' preferences through sensory evaluation and field performance, and determine the distinctiveness, uniformity, and stability (DUS) of accessions for variety release across different agro-ecologies.

Notably, Dr. Sefasi emphasized the opportunities that women and youth can exploit in the indigenous vegetables value chain. These opportunities include nutrition campaigns, seed commercialization, capitalizing on the growing demand for indigenous vegetables in urban areas and hotels, potential for value addition through processing into various products, and the possibility of offering unique indigenous vegetable products on international markets.

Despite the time constraint, Dr. Sefasi's presentation was comprehensive and well-received by the audience. They appreciated his insights into the potential of Indigenous vegetables and the efforts being made to unlock the participation of women and youth in this sector. His work demonstrated the vital role of research in promoting sustainable and inclusive agricultural development.

### 3.2. Panel Discussion - Youth & Women -Preservation and utilization of indigenous seeds and knowledge.

The panel featured experts from several African countries, including (from left to right) Mrs. Lumka Digashu, a commercial farmer from South Africa interested in regenerative agriculture; Dr. Abel Sefasi, an Indigenous plant researcher from Malawi; Susan Kunene, a midwife who is now a farmer practicing agroforestry and polyculture in Zambia; and Mrs. Christian Muzawazi-Rutherdale from Zimbabwe, who is focused on community seedbanks.

Several key themes emerged during the discussion:

**Importance of Community Seedbanks**

The panelists emphasized the critical role of community seedbanks in preserving indigenous seed varieties and traditional knowledge. These seedbanks not only safeguard genetic diversity but also serve as repositories of cultural stories and wisdom passed down through generations. Involving local communities and respecting traditional leaders is crucial for the success of such initiatives.

**Food and Nutrition Security**

While food security is a common goal, the panelists highlighted the need to go beyond mere caloric intake and prioritize nutrition security. Indigenous vegetables and crops offer a rich source of micronutrients and have the potential to promote healthier diets. Efforts are needed to document and raise awareness about the nutritional benefits of traditional foods.

**Regenerative and Organic Farming Practices**

The panel advocated for regenerative and organic farming methods that build soil health and promote sustainable food systems. Techniques such as agroforestry,

polyculture, and the use of cover crops like sun hemp were discussed as ways to enrich and protect soil fertility.

**Women's Empowerment and Community Engagement**
Women play a pivotal role in agriculture and food systems across Africa. Empowering women and engaging local communities were highlighted as essential for promoting food sovereignty and preserving indigenous knowledge. The panel encouraged starting initiatives at the grassroots level, working closely with villagers and traditional leaders.

**Knowledge Preservation and Sharing**
Documenting and sharing traditional knowledge about indigenous seeds, cultivation practices, and food preparation methods was emphasized as a critical task. This knowledge needs to be preserved and passed on to future generations to maintain food sovereignty and cultural heritage.

**Synergy between Traditional and Modern Science**
While valuing traditional wisdom, the panelists also recognized the importance of integrating modern scientific approaches, such as characterizing the nutritional profiles of indigenous crops and addressing issues like crop naming and cross-pollination.

The discussion underscored the importance of preserving and promoting indigenous seeds and traditional knowledge as a means to achieve food sovereignty, nutrition security, and sustainable food systems in Africa. It highlighted the need for a holistic approach that empowers communities, respects local wisdom, and combines traditional practices with scientific advancements.

### 3.3. Seed Value Chain Presentation - Mr. Supply Chisi-Malawi


Mr. Supply Chisi from Malawi began his presentation on the "Seed Value Chain" by highlighting the crucial role that women and youth play in agriculture, contributing significantly to food production, rural development, and sustainable farming practices. However, he acknowledged that their participation is often hindered by limited financial support, access to resources like land, and technical skills and leadership for enhancing productivity.
Mr. Chisi emphasized the importance of supporting, recognizing, and celebrating the contributions of women and youth in the agriculture sector, especially in the face of challenges such as climate change. He stressed the need to assist them in becoming more resilient and productive by using improved, scientifically proven technologies and implementing sound agricultural policies.
Moving on to seed systems, Mr. Chisi explained the existence of two main sources of planting materials: formal and informal seed systems. The informal system involves farmers producing seed, selecting, and exchanging. In contrast, the formal system is an organized and regulated with activities such as breeding, seed production, and distribution undertaken by public institutions or commercial actors.

Mr. Chisi highlighted the importance of high-quality certified seed in improving agricultural productivity, as it ensures known performance, true-to-type varieties, special traits, climate-smart features, and nutrient density. He then discussed the seed system players and the opportunities available for women and youth in research and development, service provision, seed growing, and grain trading.
Mr. Chisi provided an overview of the seed value chain, covering various stages:

- Variety Development: Developing germplasm with particular traits by trained breeders.
- Variety Registration: The release process of the variety for seed multiplication through national or regional harmonized processes.
- Seed Multiplication and Testing: Foundation and certified seed production and seed testing for market.
- Seed Storage: Specialized warehousing facilities.
- Seed Distribution: Specialized transportation systems and licensed outlets.
- Seed Utilization: Farmer adoption and use of certified seed.

Towards the end of his presentation, Mr. Chisi shared eye-opening statistics about the position of the SADC region and leading African countries in seed production and imports.

Despite the time constraint, Mr. Chisi's presentation captured the interest of all participants, providing valuable insights into the seed value chain and the opportunities it presents for women and youth in agriculture.

### 3.4. Agroecology and climate-smart agriculture - Mr. Abel Hangoma-Organic Farm 7- Zambia


Mr. Abel Hangoma from Organic Farm 7 in Zambia was a captivating speaker who spoke with the enthusiasm of an evangelist about organic farming. His presentation aimed to convince the audience to embrace organic farming and demonstrate how it can be made easy.
Mr. Hangoma began by sharing his personal journey, emphasizing that one's history and circumstances should never limit one's ability to achieve one's goals and write a new story. He recounted how he transformed from a small farmer from a poor family into a successful organic farmer, inspiring the participants with numerous photos that documented his remarkable progress.

Through his vivid imagery, Mr. Hangoma showcased the transformation of the rocky land he had purchased. He highlighted the construction of a large pond using local materials, the organic process of building fertile soil and promoting biodiversity, and the incredible results he achieved, including a bountiful harvest of vegetables, fruits, maize, leaves, bananas, berries, raisins, papaya, onions, and tomatoes.

Hangoma's presentation extended beyond agriculture. He shared how his site had evolved into an aesthetic eco-tourism destination. He showcased the harmonious coexistence of birds, lizards, snakes, and insects in their new habitats, the implementation of a solar panel grid, and the visits he received from overseas visitors. Throughout his presentation, Mr. Hangoma emphasized the benefits of organic farming, including the production of tasty organic foods, the therapeutic aroma of his farm, and the overall positive impact on the environment and biodiversity.

With his compelling storytelling and visual aids, Mr. Hangoma effectively inspired the participants, demonstrating that organic farming is achievable and can lead to a transformative and fulfilling life. His passion for organic farming and his successful journey from humble beginnings to a thriving organic farm made him a captivating and motivational speaker. Mr. Abel creates jobs and feeds 50 households through his organic farming endeavors.

### 3.5. Vermicompost and Pesticides - Mr. Joshua Zizombe - Green Farm-Zimbabwe


Mr. Joshua Zinzombe from Green Farms Inc, an organic farm, delivered a very informative, extensive, and colorful presentation on vermicompost and organic pesticides, akin to the previous one by Abel Hangoma. His presentation was accompanied by numerous informative photos and recommendations, although time constraints prevented him from covering all the material.

Mr. Zinzombe began by presenting common pests and their management and control methods. He discussed pests such as cutworms, red spider mites, aphids, bugrada bugs, thrips, and fall armyworms, providing insights into organic approaches for combating these pests.

He then delved into organic sprays and their targets, detailing the methods of using various plants like rubber hedge, cactus/mukonde, syringa berry, khaki weed/mbanda, lantana camara, bitter apple/nhundurwa/inthume, datura stramonium/ljoyi, chili, garlic, tephrosia, marigold, lippia javanica, custard apple muroro, basil, blackjack, and castor bean as natural pesticides.

Mr. Zinzombe presented a comprehensive overview of vermicompost, its preparation, and its benefits for organic farming. He covered the steps involved in vermicomposting, including the collection of weeds and waste materials, separation of non-degradable materials, partial digestion of hard materials, selection of suitable earthworm species, and the different methods of preparing vermicompost, such as using soil pits, heaps, or wooden boxes.

Mr. Zinzombe's presentation also highlighted the advantages of vermicomposting, including recycling organic waste, producing energy-rich resources, reducing environmental pollution, providing job opportunities, improving soil pH and water-holding capacity, releasing nutrients, increasing soil carbon levels, reducing

pathogenic microorganisms and the various applications of vermicompost and vermiwash in agriculture.
Despite the time constraints, Mr. Zinzombe's presentation proved to be highly valuable for organic farmers. It provided detailed information on organic pest management strategies and the process of vermicomposting, which is essential for sustainable and eco-friendly farming practices.

### 3.6. Key Note Address - Mr. Julius Boniface Butindi -Tanzania


Mr. Julius Boniface Butindi's presentation was probably the most comprehensive and well-documented presentation during the workshop. It provided detailed information about cashew cultivation, from seed to nursery to processing, equipping participants with the knowledge required to venture into cashew farming activities.
Cashew was presented as an Economically Significant Crop. Butindi began by highlighting its economic importance. This crop generated $227 million in exports for Tanzania during the 2023/2024 season, up from $162 million the previous year. He traced the origin of cashews to South America, specifically Brazil.
He continued with the field Establishment and Management, delving into the various aspects of field establishment and management, including:

- Site Selection: Mr. Butindi emphasized the importance of selecting a site with deep, reasonably fertile soil, an annual rainfall of at least 500mm, and a suitable temperature range of 18-40°C. He advised against shallow or waterlogged areas.
- Land Preparation: Butindi guided bush clearing, uprooting trunks, arranging logs, composting, weed control, and creating fire breaks.
- Field Layout and Planting: He discussed demarcating planting sites based on spacing requirements, which depend on the type of planting material (common or dwarf), management practices, and soil nutrients. Butindi also covered preparing planting holes, planting techniques (direct sowing or transplanting), staking, and mulching.
- Grafting: Butindi explained the grafting process, including top-working, to improve poorly performing cashew trees by taking advantage of their well-developed root systems.

The presentation provided a detailed overview of nursery establishment and management, including site selection, protective structures, preparation of potting mixes, seed-sowing techniques (direct and indirect), grafting operations, and record-keeping. Then Butindi covered various field management practices crucial for successful cashew cultivation:

- Gap Filling: Scouting for and replanting failed seedlings or germinated seeds to maintain the desired plant population.
- Weeding: Controlling weeds reduces competition for nutrients, water, light, and space, reduces fire hazards, and facilitates field operations.
- Intercropping: Growing annual crops like groundnuts, cowpeas, legumes, alongside cashews for soil fertility improvement and food security.

- Irrigation and Manure Application: Providing guidance on watering requirements and the application of manures like cow dung, poultry droppings, and compost.
- Pruning: Discussing formative, maintenance, and phytosanitation pruning techniques to train the seedlings, maintain tree structure, and suppress diseases.

The presentation concluded with information on harvesting practices, sorting and grading, drying techniques, storage methods, and cashew nut and apple processing. Butindi highlighted the various value-added products that can be derived from cashews, such as roasted kernels, cashew flour, cashew butter, apple juices, jams, wines, snacks, and even ethanol from the apples.

### 3.7. Panel Discussion - Agroforestry Products as a business


The panel discussion focused on the diverse benefits of beekeeping and encouraged everyone to consider taking up this activity. The presenters were Mr. Mandla Langwenya from Mazde Investments, a beekeeper from Eswatini, and Ms. Mercy Esau from Tilime Honey Produce in Malawi.

One of the primary advantages highlighted was the diverse range of products obtained from beekeeping. These include honey, valued for its medicinal properties and sweetening purposes; beeswax, used in cosmetics, wood polishing, and candle-making; royal jelly, an expensive and highly nutritious bee product; propolis, a resinous substance with potential pharmaceutical and cosmetic uses; and pollen and nectar, which are important ingredients for various products.

Beyond the direct products, the panelists emphasized the crucial role of bees in pollinating crops, thereby enhancing agricultural productivity. They presented beekeeping as an activity that can be undertaken with minimal space requirements, making it accessible even in urban or small-scale settings. Additionally, they noted that beekeeping does not compete with other animals and humans for food resources, making it a sustainable and complementary activity.

The economic potential of beekeeping was also discussed, and the panelists encouraged investment in this sector. They highlighted the concept of zero waste in beekeeping, as even the wax can be repurposed for various applications.
Furthermore, the panel touched upon the therapeutic benefits of bee products. Apitherapy (bee sting therapy) was mentioned as a potential means to boost immunity, and the medicinal properties of honey were also highlighted.

The panel comprehensively described beekeeping as a versatile and beneficial activity that can contribute to agriculture, economy, health, and sustainability. They encouraged audiences to explore beekeeping opportunities, whether on a small or large scale and to utilize the diverse range of products and services these industrious insects offer.

## 3.8. Panel Discussion - Discussing strategies for integrating traditional livestock and crops into modern value chains

This panel discussion featured, from left to right, Ms. Tlotlo Neo Phuduhudu (from Native Feeds, Botswana), Mr. Sisa Mpongoma (a dairy farmer from South Africa), and Ms. Kushata Moesi (livestock farmer from Botswana). The discussion touched on various aspects of livestock farming, market dynamics, environmental concerns, and future strategies. Below is the summary:

**Beef Quality and Feed**
The panelists emphasized that the origin and type of feed significantly impact beef quality and taste. They noted that beef tastes different across countries due to variations in cattle diets. Some Western countries will prefer Botswanan beef, likely due to the indigenous food consumed by the cattle.

**Commercial Farming Challenges**
Commercial farmers face constraints such as maintaining consistent supply to satisfy market demands and adhering to international market norms. These pressures often lead to using non-indigenous feeding methods to meet market requirements.

**Business Strategies**
Diversification and integration of different activities were highlighted as crucial for business survival. The speakers advised against relying solely on one aspect of farming (e.g., dairy) and encouraged farmers to invest in multiple areas. Mr. Mpongoma shared his strategy of integrating dairy, tractor, and animal feed businesses, reducing the need for outsourcing.

**Research and Development**
The panel stressed the need for continued research, particularly in determining protein rates in indigenous plants for animal feed. They emphasized the importance of research-backed formulas and knowledge dissemination. The University of Botswana was mentioned as conducting relevant research in this field.

**Indigenous Preservation**
The importance of preserving African indigenous breeds and knowledge systems was underscored. Concern was expressed about some African breeds being stored in Western countries and sold at high prices.

**Market Research and Preparation**
The discussion highlighted the need for market research and farmer capacity building to access larger markets. Farming was presented as a serious business requiring thorough planning and market understanding, especially when targeting international markets like the EU.

**Environmental Concerns and Dietary Shifts**

The panel touched on environmental issues, such as methane emissions from dairy farming. While acknowledging Africa's greenhouse gas emissions are still low, they discussed the need for adaptation strategies. The potential for dietary shifts towards white meat and aquaculture was mentioned to diversify protein sources and address health concerns.

**Rural Eco-Tourism**

The potential linkage between agriculture and hospitality or agrotourism was identified as an area for further exploration.

## 4. WORKSHOP PROCEEDINGS – DAY 3

### 4.1. Key Note Address - Ms Elizabeth Maanda Sianga - Zambia

Ms. Elizabeth Maanda Sianga, a multi-award-winning agripreneur and agro queen from Zambia, presented with calm and mastery, showcasing her expertise in agriculture. Her numerous accolades (including the Economics Association Best Agropreneur 2021, Stanbic Anakazi Awards—Green Award 2022, Small Scale Zambian Farmers Awards—Young Farmer of the Year 2022, Zananco Zee Women in Banking—Woman in Agriculture 2023, and the Agricoop Awards—Best Agronomist 2024) highlighted her remarkable achievements.


Ms. Sianga began her presentation by introducing her mixed farming entity, which encompasses the production of high-value vegetables, fish farming, grains, poultry, and value addition. She then shared some inspiring photos from her farm activities, illustrating the diversity and success of her operations.

Ms. Sianga emphasized the "Farming Holy Grail" – quantity, quality, and consistency – as the fundamental pillars of successful agricultural production. Before starting any agricultural venture, she stressed the importance of understanding market dynamics and consumer demand.

Sianga highlighted farmers' challenges in finding markets for their produce and underscored the significance of conducting market research to understand supply and demand dynamics. She emphasized the crucial role of quality, which begins with planting quality seeds and implementing sound management practices, ensuring that the produce speaks for itself in the market.

Sianga provided valuable insights in addressing the question of how to supply chain stores. She advised farmers to establish connections with procurement officers for fresh foods, arrange meetings to propose their offerings, and seek guidance from quality control officers to understand the required standards. Sianga emphasized the importance of branding, packaging, and standing out in a competitive market.

Moreover, Sianga outlined the requirements for farmers to supply chain stores, including being a registered business, having a detailed company profile, setting up negotiable price lists, providing water samples to ensure produce is not contaminated, and being prepared for site inspections, including packaging facilities.

Throughout her presentation, Sianga's calm and knowledgeable demeanor, along with her wealth of experience and accolades, made her an inspiring and authoritative figure in agribusiness. Her insights into navigating market challenges, maintaining quality and consistency, and meeting the demands of chain stores provided valuable guidance for aspiring and established farmers alike.

## 4.2. Panel Discussion - Exploring opportunities in aquaculture and Horticulture


This panel discussion featured three successful entrepreneurs, from left to right: Mr. Bene Baibene Nhambe, a fish farmer from Mozambique; Ms. Rosa Muchaziwepi, a mushroom farmer from Zimbabwe; and Ms. Elizabeth Maanda Sianga, a fish farmer from Zambia. The discussion covered their personal journeys, business challenges, and industry insights.

**Personal Journeys and Business Growth**

Each panelist shared their unique path to entrepreneurship. Ms. Rosa began her mushroom farming business after overcoming setbacks with unreliable trainers. She learned independently and found success in the off-season production of oyster mushrooms. Mr. Bene, an agricultural engineer, transitioned from volunteering at a research center to establishing his own aquaculture company, benefiting from training in Egypt. Ms. Maanda detailed her gradual growth in fish farming, learning about oxygen requirements and market segmentation through hands-on experience.

**Aquaculture Challenges and Practices**

The fish farmers discussed the importance of precise fingerling counting, with Mr. Bene adding a 5% buffer for mortality risks. They emphasized the need for specialized transportation and timing deliveries during cool hours. Market segmentation in fish sales was highlighted, with different size preferences for various consumer groups.

**Mushroom Farming Insights**

Ms. Rosa pointed out challenges in mushroom production, including rising substrate costs and the critical need for hygiene to prevent issues like green mold contamination. Notably, she mentioned that demand for mushrooms typically exceeds supply in her market.

**Key Business Advice**
A crucial advice came from Mr. Bene, emphasized by the facilitator: "Do not produce to sell. Produce what you can sell." This underscores the importance of market-driven production in agriculture.

**Addressing Common Concerns**
The panel addressed audience questions about starting with minimal resources, profitability considerations, market competition, disease management, and information access. They stressed the potential need for external support (government or partners) when starting a business. They noted that environmental factors are crucial while diseases are minimal in fish and mushroom farming.

**Government Support and Opportunities**
A representative from the Botswana government acknowledged the valuable insights shared by the panelists, indicating how their experiences could inform and improve opportunity packages for youth, women, and people with disabilities in Botswana.
The discussion provided a comprehensive view of the challenges and opportunities in aquaculture and mushroom farming, emphasizing the importance of market understanding, continuous learning, and adaptability in achieving success in these agricultural sectors.

### 4.3. Key Note Address – Exposure and adoption of affordable digital and precision farming techniques. Mr. Dignitius Mokwhanazi , Precision Aerial Agritek -Botswana

Mr. Dignitus Mokwhanazi, a pilot from Botswana, delivered a comprehensive and very well-illustrated (with real photos) presentation on leveraging drone technology for smart agricultural practices in Botswana. He brought extensive expertise to the subject matter as a pilot and drone pilot.


The presentation began with an introduction to Precision Aerial Agritek (PAA), a company founded in 2021 to investigate, test, and introduce drone agricultural technology in Botswana. With roots in commercial aircraft operations, PAA brings over 20 years of aviation experience and operational standards to its commercial drone business. Mr. Mokwhanazi highlighted the various agricultural services offered by PAA, including a) Agricultural land mapping for farm planning and land use management, b) NDVI (Normalized Difference Vegetation Index) and thermal field surveys for crop health analysis, c) Drone crop spraying, d) Invasive species control and debushing, e) Large area pest control f) Aerial wildlife and livestock counts and g) Anti-poaching efforts
Mr. Mokwhanazi emphasized the growing importance of drones in the agricultural sector, citing projections from the United Nations Food and Agricultural Organization (FAO) that food and feed production will need to increase by 70% by 2050 to meet global food needs. He stressed the adoption of new technologies, such as drones, as crucial for making farming more efficient, cost-effective, and productive.

The presentation delved into the advantages and disadvantages of precision agriculture, which integrates technology to enhance crop yields and efficiency. The advantages discussed included increased efficiency, cost savings, environmental benefits, data-driven decision-making, and enhanced crop quality. The disadvantages highlighted were the high initial investment, technological complexity, data security concerns, dependence on technology, and unequal access to advanced technologies. Mr. Mokwhanazi acknowledged the challenges faced in promoting the adoption of drone technology in Botswana, such as cultural practices, language barriers, and the need to bridge the gap between expectations and reality through field demonstrations. He also discussed the importance of equipping small-scale farmers with good farm management skills and collaborating with crop production officers to understand the local farming community better.

In addition to agricultural services, Mr. Mokwhanazi mentioned other services provided by PAA, including topographical field surveys, NDVI and thermal crop assessments, crop protection, land surveying and digital mapping, and drone thermal inspections for solar panels, rooftops, buildings, pipelines, and electricity infrastructure.
Mr. Mokwhanazi 's comprehensive presentation showcased drone technology's vast potential to revolutionize Botswana's agricultural practices. By addressing the advantages, challenges, and opportunities, he provided valuable insights into adopting precision farming techniques and the role of companies like PAA in driving this transformation.

### 4.4. Facilitating mentorship and networking opportunities for growth and learning - Mrs. Diane Sibanda-BOFA-Botswana

The workshop was coming to an end. Mrs. Diane Sibanda, President of BOFA, delivered an insightful presentation on the importance of mentorship and networking for growth for farmers and actors in the agricultural sector in general.
Sibanda defined mentoring as a process or act of sharing information, skills, and experiences to help a colleague develop and grow. It involves transferring knowledge and sharing experiences between two individuals: a mentor with more experience and a mentee seeking professional or personal growth.

She explained the differences between Coaching and Mentoring. While mentoring involves guidance and support from a more experienced individual, coaching helps mentees identify their goals and solve their challenges. This approach creates a deeper understanding, motivation, and empowerment for the mentee, making mentoring a unique and valuable learning experience.

Mrs. Sibanda highlighted two main types of mentoring:

i. Traditional one-to-one mentoring
ii. Peer mentoring is where individuals with similar backgrounds share experiences and knowledge.

Her presentation emphasized the numerous advantages and opportunities offered by mentoring, including:

- Expanding professional networks by introducing mentees to new people and opportunities, which helps develop their farming businesses.
- Fostering leadership skills by enhancing an individual or group's ability to influence or guide others.
- Maintaining accountability and enhancing career/personal development.
- Improving effective communication skills.
- Increasing employee retention.
- To conclude, Mrs. Sibanda provided examples of mentoring initiatives within BOFA:
- Mentoring aspiring farmers on hydroponics for tomato production.
- Mentoring BOFA members on leadership skills, negotiation, lobbying, and advocacy.
- Assisting in workshop facilitation for other organizations like BOBS and other associations.

In addition to mentoring, Mrs. Sibanda emphasized the importance of networking opportunities for growth in the agricultural sector. Networking allows individuals to expand their professional circles, share knowledge and experiences, and explore potential collaborations or business opportunities.

## 5. CLOSING REMARKS

### 5.1. Mrs. Diane Sibanda - BOFA

During the closing session, Mrs. Diane Sibanda, Chairperson of the Botswana Farmers Association (BOFA), returned to share her experiences and insights as a mentoring specialist. She began by acknowledging the diverse participants, including men, youth, and women.
Reflecting on her past struggles in farming, Mrs. Sibanda transitioned to discussing the importance of mentorship in agriculture. She came back by defining mentorship as supporting, helping, developing, and empowering farmers, distinguishing it from coaching and emphasizing that true mentorship is incompatible with selfishness.

Mrs. Sibanda shared how her mentorship activities contributed to the growth of BOFA and led to networking opportunities, including access to the First Lady of Botswana. She viewed the CCARDESA Symposium as an opportunity and a challenge for herself and BOFA to improve their efforts. Expressing gratitude for the workshop experience, Mrs. Sibanda emphasized her openness to new possibilities. She concluded with an emotional and determined statement: "We will do anything to do better, we are not shy," reflecting her commitment to continuous improvement and adaptability in the agricultural sector.

### 5.2. Dr Baitsi Podisi - CCARDESA

Dr. Podisi delivered a comprehensive closing speech highlighting key points and expressing gratitude to various stakeholders. He began by praising the facilitators for their engaging work, noting that no participants fell asleep during the workshop. Dr. Podisi acknowledged the presence of representatives from Botswana's Ministry of Agriculture and Food Security and the Ministry of Youth and the inspiring farmers specifically targeted for their active involvement in agriculture.

Dr. Podisi mentioned creating an Apiculture strategy group and reflected on the previous summit in 2016, wondering about the progress of youth participants from that event. He expressed hope for the growth of the agricultural community. He shared his enthusiasm for the diverse agricultural practices, innovations, and technologies discussed during the summit, including Climate-Smart Agriculture, new industries, organic agriculture, beekeeping, and rural technologies.
Acknowledging the active presence of farmers on social media, Dr. Podisi mentioned that he follows their work and hopes these champions will continue to inspire others in their countries and across the region. He emphasized that governments are attentive to CCARDESA's activities.

Dr. Podisi highlighted the EU's commitment to supporting CCARDESA and other CAADP XP4 organizations, mentioning a new 4.5 million Euro initiative to establish a center of excellence and consortium of agroecological actors. He also acknowledged the World Bank-funded Food System program, with pilot projects in Madagascar and Malawi.

In closing, he expressed gratitude to his team members and the support staff, including those not present. Dr. Podisi concluded by expressing his expectation for establishing a thematic working group with an online presence through social media following the event.

### 5.3. Mrs. Chedza Malapela - MADFS / MYGSC

Mrs. Chedza Malapela, who recently joined the Ministry of Agriculture in January as the National Coordinator for Young Agriculture and Farming, shared her initial uncertainty about her role and the ministry's initiative to have Youth officers across government departments. She emphasized her mission to ensure young people's inclusion in the Ministry's programs, noting that they now also have women-focused portfolios.

Mrs. Malapela expressed appreciation for the event sponsors, particularly the EU and the organizers. She commended CCARDESA for bringing together participants from various SADC countries, highlighting the value of knowledge sharing, networking, and learning opportunities for young people and women.

She declared the workshop a success, noting that everyone, regardless of their expertise or background, had learned something valuable, including insights about indigenous crops and knowledge. Mrs. Malapela stressed the importance of mutual learning and support among participants.

Acknowledging the challenges mentioned during the workshop, such as market penetration difficulties and competition from established players, she encouraged young farmers to persevere. She also highlighted Botswana's government efforts to support farmers through special packages.

Mrs. Malapela recapped key themes and messages from the workshop, including "quality or nothing," "impossible is just a word," "women are the backbone of farming," "food is culture," "organic farming," and "from farm to fork."

In conclusion, she praised the CCARDESA for convening the meeting, the BOFA Farmers Association, and all participants for their contributions and expressed gratitude for the knowledge gained. Mrs. Malapela looked forward to continued interactions through the WhatsApp group and hoped participants would apply what they had learned in their respective projects and businesses across different countries.

## 6. SUMMARY AND RECOMMENDATIONS

This event was truly empowering and enriching for all participants. It showcased a remarkable diversity of profiles, topics, talents, and commitments in the agricultural sector. The Symposium brought together a wide range of stakeholders, from young farmers to experienced entrepreneurs, researchers, and government representatives.

Participants unanimously agreed that the event was highly beneficial, providing valuable insights, techniques, and inspiration to return to their businesses or projects. Some attendees were deeply inspired by shared stories and experiences, while others gained detailed knowledge about practices they hadn't previously considered.

The symposium was unequivocally described as "a success," offering a unique platform for learning, exchanging ideas, cross-pollinating concepts, and networking. The workshop stood out not only for its diversity but also for the quality, intensity, and depth of the discussions and presentations.

Key topics included indigenous crops and knowledge systems, dairy farming, cashew business, beekeeping, aquaculture, mushroom farming, organic agriculture, and the importance of mentorship in farming among others. The event also highlighted the crucial role of women in agriculture and the potential of youth in driving innovation in the sector.

These are some of the key recommendations from this symposium:

1. **Continue the meticulous selection of champion farmers:**
   CCARDESA's approach to identifying and involving a diverse pool of successful farmers should be maintained and potentially expanded.

2. **Sustain the multi-stakeholder approach:**
   The involvement of various stakeholder groups, with a focus on practical achievements, should be perpetuated in future events.

3. **Establish a long-term exchange platform:**
   Create a self-sustained platform for ongoing exchanges, collaboration, and co-learning among young farmers.

4. **Leverage digital communication:**
   The creation of a WhatsApp group is a good first step. This should include other social media platforms to enable continuous interactions and encouragement among participants.

5. **Develop a structured monitoring system:**
   Implement a follow-up system with data collection functionalities to track progress, share successes, and identify areas for further support.

6. **Emphasize peer learning:**
   Continue to facilitate and encourage peer-to-peer learning and support among participants, as this has proven to be a key factor in empowerment and knowledge sharing.

7. **Expand on successful themes:**

Further develop workshops and discussions around popular topics such as indigenous knowledge, sustainable farming practices, and market access strategies.

8. **Enhance government engagement:**
   Build on the positive engagement from government representatives to ensure continued support and alignment of policies with farmers' needs.

9. **Promote success stories:**
   Regularly showcase success stories from participants to inspire others and demonstrate the tangible impacts of the Symposium.

10. **Explore mentorship programs:**
    Consider establishing a formal mentorship program connecting experienced farmers with newcomers to the sector.

Implementing these recommendations will allow future events to build on this Symposium's success and foster a vibrant community of agricultural innovators and entrepreneurs across the SADC region.

## 7. ANNEX

### 7.1. Program

**WOMEN & YOUTH IN AGRICULTURE KNOWLEDGE SHARING & EXCHANGE SYMPOSIUM**

**Programme and Agenda**

**Date: 28th – 30th May 2024**

**Venue: Kasane-Botswana**

| TIME | ACTIVITY | RESPONSIBLE |
|---|---|---|
| 27 May 2024 | Arrival /Registration<br>Management of the Rooming list & Set-up of the Conference room | All<br>Organizers (CCARDESA Finance & Hotel Admin) |
| **DAY 1, 28 May, 2024** | | |
| **Moderator: Dr. Chitundu Kasase** | | |
| 08:30-09:00 | Registration of delegates & Administration Notices | Workshop Secretariat |
| 09:00-09:15 | Introductions | Moderator – Dr Chitundu Kasase, PhD |
| 09:15- 09:20 | Objectives of the Symposium | Botho Maapatsane |
| 09:20-09:45 | Welcooming Remarks | Ms Diana Sibanda - BOFA |
| 09:45-10:00 | Official Opening Address | Dr. Baitsi Podisi - CCARDESA CAADP-XP4 Coordinator |
| 10:00:10:30 | CCARDESA/CAADP-XP4 Overview | Mrs. Bridget Kakuwa-Kasongamulilo |
| 10:30 -10:45 | Group photo | Communication Team |
| **10:45 -11:15** | **HEALTH BREAK** | **All** |
| 11:15-11:30 | Key Note Address | Ms Maria Zaloumis (The Zed Farmer) |
| 11:30-12:30 | Panel Discussion<br>**Moderator – Joshua Zinzombe**<br>How to enhance market access “farm to fork.”- and export capabilities in the perishable products sector. | • Ms Maria Zaloumis -Tuzini Farms<br>• Ms Feliste Mpore- Grape Farmer/Exporter -Tanzania<br>• Nkosephayo Manyatsi -Smiling through Farms Eswatini |
| 12:30-13:00 | Discussions | All |
| **13:00-14:00** | **LUNCH BREAK** | **All** |
| 14:00-14:30 | Key Note address: (Marula value chain) | Ms Wame Mashaba |
| 14:30-15:30 | Panel Discussion<br>**Moderator – Gaofenngwe Nkani**<br>Improving access to loans, value addition techniques, quality assurance, and export | • Mr. Tomo Pedro -Executive Director Gustambo |

| | | |
|---|---|---|
| | capabilities in the perishable products sector. | • Ms. Sarah Kachedwa -Malawi Ukwe Youth Agribusiness Group |
| **15:30 -16:00** | **HEALTH BREAK** | |
| 16:00-16:30 | Poultry Rearing as a Lucrative Business | Mr. Micheal Malunga-Namibia |
| 16:30-17:00 | Goat production as a lucrative Business | Mr. Paul Bulaya-Red Gold Farm-Zambia |
| 17:00-17:05 | Wrap up | Moderator |
| **DAY 2, 29th May, 2024** | | |
| **Moderator: Joshua Zinzombe (Greeen Farms Inc)** | | |
| 08:00-08:30 | Registration | Admin |
| 08:30-09:00 | Key Note address | LUANAR - Indigenous Vegetables - Dr Abel Sefasi |
| 09:00-10:00 | Panel Discussion<br>**Moderator – Joshua Zinzombe**<br>Youth & Women -Preservation and utilization of indigenous seeds and knowledge. | ▪ Mrs Susan Kunene-Farmer Zambia<br>▪ Mrs. Christian Muzawazi-Rutherdale- Zimbabwe |
| 10:00 – 10:30 | Discussion and Q&A | Moderator |
| **10:30- 11:00** | **HEALTH BREAK/NETWORKING** | **ALL** |
| 11:00-11:45 | Seed Value Chain Presentation/Discussion | Mr. Supply Chisi-Malawi |
| 11:45-12:25 | Agroecology and climate-smart agriculture/Discussion | Mr Abel Hangoma-Organic Farm 7-Zambia |
| 12:15-13:00 | Vermicompost and Pesticides /Discussion | Mr. Joshua Zizombe - Green Farm-Zimbabwe |
| **13:00-14:00** | **LUNCH BREAK** | **ALL** |
| 14:00-14:30 | Key Note Address | Mr Julius Boniface Butindi -Tanzania |
| 14:30-15:30 | Panel Discussion<br>**Moderator – Joshua Zinzombe**<br>Agroforestry Products as a business | • Mr. Mandla Langwenya - Mazde Investements - Eswatini<br>• Ms. Mercy Esau - Tilime Honey Produce - Malawi<br>• Mr. Makoye Henry Shimo - Infinity Cashews - Tanzania |
| **15:30 -16:00** | **HEALTH BREAK/WORKING** | **ALL** |
| 16:00:16:50 | Panel Discussion<br>**Moderator – Gaofenngwe Nkani**<br>Discussing strategies for integrating traditional livestock and crops into modern value chains | • Ms.Kushata Moesi - Moruakgomo - Botswana<br>• Mr. Sisa Mpongoma - South Africa<br>• Tlotlo Neo Phuduhudu - Native Feeds-Botswana<br>• Ms. Lumka Sibalwa - Digashu |
| 16:50-17:00 | Wrap-Up | Moderator |
| **DAY 3 - 30 May, 2024** | | |

| Moderators: Gaofenngwe Nkani | | |
|---|---|---|
| 08:00-08:30 | Reflections/Take-home Messages | ALL |
| 08:30-09:00 | Key Note Address | Ms Elizabeth Maanda Sianga - Zambia |
| 09:00-10:00 | Exploring opportunities in apiculture and aquaculture | • Mr. Bene Baibene Nhambe - Mozambique<br>• Mr Haini Pondeca -Mozambique |
| 10:00-10:45 | Exposure and adoption of affordable digital and precision farming techniques. | Mr. Dwayne Elderkin<br>Precision Aerial Agritek -Botswana |
| **10:45-11:15** | **HEALTH BREAK** | **ALL** |
| 11:15-12:00 | Facilitating mentorship and networking opportunities for growth and learning | Mrs. Diane Sibanda-BOFA-Botswana |
| 12:00 – 12:10 | Closing Remarks | BOFA |
| 12:10 – 12:20 | Closing Remarks | Dr Baitsi Podisi |
| 12:20 – 12:30 | Closing Remarks | MADFS / MYGSC |
| 12:00-13:00 | Reflections/Take-home Messages | ALL |
| **13:00-14:00** | **LUNCH BREAK** | **ALL** |
| 14:00-15:30 | Field Visit | Chobe Breams Farm |
| 15:20-15:45 | **HEALTH BREAK & NETWORKING** | **ALL** |
| **END OF MEETING/ FAREWELLS/ NETWORKING** | | |

## 7.2. Participants List

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