
**Implementation and Coordination of Agricultural Research and Training in the SADC
Region (ICART)**

**Marketing of Indigenous leafy vegetables (ILVs),
and how small-scale farmer income can be
improved in SADC region
(Tanzania, Zambia and Botswana)**



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REGIONAL WORKSHOP REPORT

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ABBREVIATIONS AND ACRONYMS

ACT	Agricultural Council of Tanzania
AIDS	Acquired Immune Deficiency Syndromes
AVRDC	Asian Vegetable Research and Development Center
FANR	Food, Agriculture and Natural Resources
FFS	Farmer Field School
FSU	Farmer Support Unit
HIV	Human immunodeficiency virus
ICART	Implementation and Coordination of Agricultural Research and Training Programme of SADC
ILVs	Indigenous Leafy Vegetables
MAFCs	Ministry of Agriculture, Food Security and Cooperatives
M&E	Monitoring and Evaluation
NPGRC	National Plant Genetic Resource Centre
SADC	South African Development Community

1 BACKGROUND

1.1 INTRODUCTION

Indigenous leafy vegetable (cowpea, amaranth, sweet potatoes leaves, nightshade and spider plants) have been used for long time in Africa by natives. Different areas consumed different species just by gathering from the wild or growing in the small area for family consumption. Recently, many researchers have been addressing poverty and malnutrition alleviation among farmers without considering Potentiality of these vegetables. Agricultural Council of Tanzania and partners looked at these leafy vegetable to see how they can be commercialized (used by family and surplus for sale). Increase in demand for these vegetables has been increasing with increase in consumption in wider areas than before. However, marketing of these products have been done in nutshell or neglected in research. This project aims to create networking whereby information sharing about consumption and marketing of indigenous vegetables to improve income of the small scale farmers is done through participation of farmers themselves.

The minutes of the meeting were;

1.2 WORKSHOP OBJECTIVES

The objective of the stakeholder workshop was to share information on marketing of indigenous leafy vegetables gathered from Botswana, Zambia and Tanzania.

1.3 Approach

In line with a proposal submitted to the SADC-FANR ICART programme entitled Marketing of indigenous leafy vegetables and how small-scale farmer income can be improved in SADC Region; the workshop was organised and held in the Arusha Hotel 24-28th August, 2009. The meeting brought together researchers, farmers, extensionists, government officials work on ministry of Agriculture from the three countries involved in this initiative. The countries were Tanzania, Zambia and Botswana. The meeting programme involved presentations and discussions, as well as group work to come up with workshop outputs. The meeting was opened by the Project Coordinator, Eliamoni Lyatuu, Agricultural Economist and M&E officer for

Agricultural Council of Tanzania. Subsequent to self introduction, country synthesis presentations on Marketing and Value chain of ILVs from Tanzania, Zambia and Botswana. Discussions were also held to identify gaps and practical use involvement of Farmers in Marketing of ILVs as well as see opportunities farmers in SADC countries having in marketing Indigenous leafy vegetables.

Participants also had opportunity to go for excursion at The World vegetable Center-AVRDC that deals with research and training on Indigenous Leafy Vegetables in Africa. The center has all ILVs grown in the field and also produces seeds which packed and distributed to the small scale farmers. They also train farmer how to produce ILVs seeds.

At AVRDC, participants had opportunity to see production ILVs and ILV's seeds. They also saw seed processing after harvest, starting from seed preparation, drying using local made drier, and packing of seed as well as visited gene bank to see germ plasma storage. Participants were also given free healthy diet kit that includes 17 different kinds of ILVs seeds so that they can grow in their home garden.

Participant also visited different markets that sales ILVs in Arusha. They visited formal and informal markets to appreciate what is sold in the market. Some participants visited farmers to see how ILVs is grown in Tanzania and some participants visited Restaurants that specialize in selling ILVs dishes in Arusha.



Fig 1: Participant looking at sorting ILVs seeds



Fig 2: Participant at AVRDC main gate



Fig 3: Participant getting information on how ILVs are grown



Fig 4: Participant were sniffing ILVs used for spice



Fig 5: Participant at the gene bank for ILVs



Fig 6: ILVs local Seed drier at AVRDC

2 OPENING SESSIONS

2.1 Welcome remarks by the Project Coordinator Eliamoni Lyatuu, Agricultural Economist and M&E officer for Agricultural Council of Tanzania.

Eliamoni Lyatuu project leader –Welcomed all the participants and gave some few remarks on how the project started. He briefed participants how that project was presented in April at Gaborone and was approved by the donors SADC-ICART. He also brief of how the consultative meeting consolidate the information of Marketing of ILVS for sharing in the workshop. The project was concentrating on three countries namely Botswana, Tanzania and Zambia.

Self introduction was done by all the participants coming from the three countries; Botswana, Zambia and Tanzania.

2.2 Address by the Agricultural Council of Tanzania board of directors member, Mr Elius Mshiu

Mr E. Mshiu the board of directors for Agricultural Council of Tanzania (ACT) introduced ACT as the apex of public private institution link which started in 1999. ACT is involved in the policy making, agricultural research and training farmers on good agricultural practice. He said it is an organisation of wide variety of membership; farmers, fisheries, researchers to mention a few. He mentioned a few ILVs like pumpkin leaves, cassava leaves, nightshade, jute mallow, Cowpeas leaves, amaranthus and others as the important vegetables to improve farmer income. He mentioned that the ILVs are grown in small plots .ILVs help in income generation to the rural poor hence poverty reduction and malnutrition. He said that the market of ILVs not sufficient and the production is very low.9 tonnes/Ha in Africa and 17 tonnes/Ha in Asia, meanwhile in Africa per capita 52% and Asia 98%.

ILVs help in the eradication of vitamin deficiency like vitamins A, B and C, Iron, Calcium he noted that indigenous leafy vegetables have valuable potential to improve nutrition of the people in the SADC region, yet governments have not provided enabling environment for the development of this subsector. Further, the organized marketing of ILVs which the SADC/ICART supported workshop seek to address could improve the household income and

livelihoods of the rural people. This workshop, therefore aims at information sharing on the production, processing and marketing of ILVs in Botswana, Tanzania and Zambia by increasing production of ILVS and full information will impact knowledge, income when they are commercialized.

2.3 Address by SADC Representative

Ms Tshegofatso Gower said that she had attended the workshop to support as the representative of the project funders. She said that she was accompanied by his colleague Dr. Tzikara who will address the participant of the workshop on behalf of SADC-ICART.

In his remarks Dr. Tzikara said that he coordinates projects on agricultural research and training. ICART project support initiative on agriculture research on three components:

- i. Reseach projects
- ii. Training support
- iii. Supporting research networks

The aim of SADC-ICART is to organize research networks and support the SADC region .He advised project members to categorize the information documentation for sharing with farmers, NGOs, Researchers and Policy makers and to distribute as many information to as many people within the SADC region.

2.4 Official Opening Address by Mr. Mohamed S. Muya, The Permanent Secretary, Ministry of Agriculture, Food Security and Cooperatives of Tanzania

The Permanent Secretary welcomed the participants to Arusha, Tanzania and reminded all to make their contribution to the realization of workshop objectives. He said that the participants from different countries are gathered to make contribution to the workshop to alleviate poverty with the theme of Markerting of Indigenous Leafy Vegetables for small scale farmers. The value of ILVs in the provision of nutrition and household incomes to the rural livelihoods could not be overemphasized. It was therefore for this reason that information on marketing becomes necessary for the promotion of the production of ILVs in the region. It was emphasized that networking as a strategy for the knowledge creation and information sharing was necessary

especially if the promotion of the production and marketing of ILVs has to be realized. In this regard, collaboration between researchers, farmers and extension agents becomes crucial for the development of ILVs in the region.

3 WORKSHOP OUTCOMES

Presentations from Tanzania, Zambia and Botswana were done and during the Discussion following issues were discussed:

3.1 General Marketing and financial management information of Indigenous Leafy vegetables in SADC region by Eliamoni Lyatuu

Summary

The main focus for the presentation was to brief on the power of information sharing and unit on ILVs Marketing. The presenter mentioned that, supply of ILVs in the market has not been exploited due to lack of Marketing Information. It was reported that ILVs are in danger of being lost in Tanzania, Botswana and Zambia, as farmers are replacing them with improved varieties; reason is lack of seed and information about their performance, input requirements and marketing. This is worse in Botswana where cultivation of ILVs have not been done, despite of the high demand of ILVs in Botswana markets. Poor marketing information system, lack of promotion to articulate need and lobby for interested of the ILVs industry, Lack of consistent supply of ILVs and poor standards made farmers fail to sign contract with specialized market, external market and restaurants. However, this can best be solved by forming farmer group, of which these farmers to broaden the information based and pool resources together. Good example is Tanzanian farmer whom they work under groups called farmer support unit.

Farmer support Unit is the way farmers work in group but having interest in the market of their produce. Role of Farmer Support Unit is to capture market information and disseminate to their members through the way they have agreed each other, e.g. mobile phone, internet, posters or board notes in their offices.

Discussion

There is an underlying assumption that there is market for ILVs, so it is imperative that market surveys were undertaken to gather information on consumers' wants and preferences for these ILVs.

Generally speaking vegetables could be classified as exotic and indigenous (traditional or local) leafy vegetables. It was observed that marketing challenges for ILVs were huge especially for the rural farmers who were the majority possibly in all the three countries. The main characteristic of ILVs is their high seasonality in prevalence in nature. These vegetables are high in supply during the rainy season and as the dry season sets in their availability tends to be lean, hence posing a serious marketing challenge. In most cases, the farmers of ILVs in rural areas market their vegetables through barter system.

The other problem presenting in the region was lack of improved seeds and seed standards for the ILVs. The national gene banks in the three countries have collected and conserved seeds of ILVs. However, there are no standard guidelines for the management of these genetic resources in storage. For instance, there are no threshold viability levels below which the seed samples could be regenerated. In the area of seed legislation, the Seed Act in Zambia, for instance, does not cover the ILVs in a number of ways including standards. This has tended to disadvantage ILVs seed growers from formally marketing the seeds.

It was also observed that Farmer Support Units (FSU) available in Zambia currently cover different crops and not specifically for ILVs. In Tanzania, FSU were working well where AVRDC provides improved seeds of ILVs to farmers. The World Vegetable Center-AVRDC was doing a commendable work in making seed available to farmers. However, the institution was asked to improve on the packaging of the seed.

It was observed that marketing efforts of the ILVs will be futile, unless consumers appreciate the nutritive value of these vegetables. The meeting recommended that consumption of ILVs in Botswana, Tanzania and Zambia should be stimulated if market for these vegetables has to be realized.

In Botswana, production and consumption of the indigenous leafy vegetables were more regional and ethnicity specific. There are some challenges on ILVs because they are seasonal vegetables, shortage of water for irrigation, expensive irrigation equipments and that these vegetables are not consumed as main vegetables. In this regard it was felt that first there was need to stimulate demand for ILVs.

The demand and consumption of ILVs were highly regional specific in the rural areas of Zambia. However, in cities the situation may not be the same because of high ethnicity diversity. This means that as far as marketing of ILVs in Zambia, cities and towns are becoming important markets. There were some recommendations that there is need to create demand for ILVs before they are marketed.

Other challenges were that the ILVs are not in constant supply throughout the year especially in Botswana and Zambia. They are available mainly during rainy season and in short supply during dry season, although in some parts in Tanzania production and supply of ILVs is throughout the year. Improved seed to farmers is a gap that needs to be filled to be able to promote and market ILVs.

3.2 How small scale farmers can make money from the sale of ILVs by Mercy Marope

3.2.1 SUMMARY

The presentation aimed at making farmers producing ILVs aware by sharing information on marketing channels by which they can sell their produce and make money.

The presenter posed a question as to why indigenous leafy vegetables were found to be very important. The following issues were explained as answers to the question:

- ❖ Marketable hence generating income.
- ❖ They have comparative advantage to small scale farmers as they require few input and low labour.
- ❖ Empowers women who otherwise could not get employment in the formal sector.
- ❖ They are marketable hence generating income.
- ❖ They have comparative advantage to small scale farmers as they require few input and low labour.
- ❖ Empowers women who otherwise could not get employment in the formal sector.

With regard to the marketing channels it was clearly stated that it is the major key components in marketing of these vegetables and that the ILVs can be marketed through the following channels:

- ❖ Farmer can sell directly to the consumers at farmers' gate at market
- ❖ Farmers can sell to the retailer.
- ❖ Farmer can sell to a wholesaler through a broker
- ❖ Farmer can sell directly to a Resturant/Hotel/Supermarket
- ❖ Farmer can sell to an exporting company.

Farmers to be able to meet the standards that are required in the formal markets their produce should of high quality. It was emphasized that farmers can add value to the ILVs by Chopping and selling ready for cooking, packaging and labeling in plastics, and mixing different ILVs in one bundle.

It was learnt that there is high demand of ILVs in the European countries; therefore farmers are to increase their yields so that they can meet this demand, Increase efficiency in business and thereby raise the total generated income. Improving the competence thereby increase the market share.

3.2.2 DISCUSSION

The ILVs such as Cleome, pumpkin leaves and amaranths were identified as having high potential for commercialization. A lot of progress has been made by the National Plant Genetic Resource Centre (NPGRC) in the area of germplasm collection and conservation. These genetic resources could be accessed by users such as farmers to promote their growth. Indigenous leafy vegetables such as cowpea, spider plant, amaranths were singled out as the most consumed ILVs in parts of East Africa including Tanzania.

In order to promote marketing of ILVs, farmers involved in the production and marketing of these vegetables require some form of education in production and marketing aspects such as packaging and labeling.

The marketing of ILVs has its own problems such as lack of standard measures of the fresh leaves in all the three countries (Botswana, Zambia and Tanzania), which in most cases are sold in as bundles. The meeting suggested that some kind of measurement for use in SADC needed to be recommended as a standard.

3.3 Preservation and Processing of ILVs by Silvester Sakala

3.3.1 SUMMARY

From the presentation, the following issues were captured:

- ❖ It is evident that ILVs are highly perishable. The high perishability poses major challenges with their marketing and distribution. Practices aimed at minimizing yield and quality losses should be promoted amongst the ILVs producers.
- ❖ The preserved ILVs are meant for home consumption, but some of it is finding its way on the markets. The preserved ILVs do not normally last the entire season. The use of solar driers should be promoted to hasten the drying process and increase the amounts of ILVs preserved.
- ❖ There is need to improve the drying methods that are currently being used taking in to account hygienic considerations as well as nutrient degradation and loss. The nutritive status of the preserved ILVs should be investigated with a view to improving the drying processes and minimizing nutrient loss or degradation.
- ❖ There is need to promote the consumption of ILVs amongst the young persons by introducing them in to their daily food habits. This can be done by developing recipes which show modernized ways of preparing the ILVs.
- ❖ The private sector should be encouraged to enter the business of vegetable processing so as to encourage rural farmers to produce more ILVs.

3.3.2 DISCUSSION

Emphasis was being made on preservation and processing of ILVs for two reasons. Preservation enables availability of these vegetables during the lean period (dry season) when they are in short supply. Preservation also provides the rural farmer the opportunity to conveniently transport their preserved vegetables to town and city markets.

The meeting advised that this report needed inclusion of aspects of quantification of nutritive value losses associated with preservation and processing. The nutritive value of fresh ILVs was given and will be available in the books that will be distributed to the stakeholders.

The Charcoal cooler as a unit for maintenance of fresh leafy vegetables at local level served an important function. The charcoal is kept wet, which also minimizes charcoal particles contamination of the vegetables. However, there were concerns of health implications of this system to consumers. The use of soaked jute bags preserves the freshness of leafy vegetables and therefore minimize their deterioration was discussed and agreed to be good way of preserving ILVs.

The meeting also recommended that there should be standards of handling the vegetables in order to minimize the loss of value of the harvested leaves.

3.4 Support Indigenous Leafy vegetable Marketing in Tanzania, Botswana and Zambia: Policy issues by Gilbert Msuta

3.4.1 SUMMARY

The objective of the policy note was to understand the key roles played by Governments, Private sectors and the key stakeholders on marketing of ILVs. It aimed at making sure that the poor rural people who are to be supported are equipped to interact more equitably with market forces. It was clearly stated that countries in the region have not managed to refocus research institutions to better serve the majority of the smallholder farmers. Most technologies produced by the research institutions are suited to high cash input users to the detriment of the resource poor small holders' farmers who have been compounded by financial constraints facing the smallholder farmers.

The presenter came with a way forward for the Government and other private partners to do the following if the marketing of ILVs is to be effective and sustainable in increasing the income of the small holders' farmers in the region:

- ❖ More focus to be placed on commercial ILVs production with great emphasis on marketing through use of technologies developed by researchers.
- ❖ Governments in collaboration with private sector (PPP) to establish agricultural developments banks aimed at helping producers to obtain long term credits at affordable rates.
- ❖ Value addition of ILVs to be promoted through increased processing and storage infrastructures
- ❖ Promote a massive “Buy ILVs campaign”
- ❖ Incentives in ILVs to be introduced to encourage sustained investment, e.g abolishment of taxes with negative impact on ILVs production (production cess)
- ❖ Producers to be connected with both internal and external markets through various system such as contract farming, access to marketing information and price negotiation powers

3.4.2 DISCUSSION

The meeting observed that policy issues were critical to the development of ILVs. Appropriate policies such as water resources have an implication in the promotion of ILVs.

On financial institutional support in case of Botswana, financial institutions stand ready to advance the farmer with credit so long as the proposal is viable and clear to both the farmer and the financier.

With regard to policy issues, the meeting noted that there were variations across the three countries. It was recommended that there is need to prioritize proposed policy issues. In most countries as in Tanzania agriculture is categorized as a key sector to national economy.

3.4.2.1 MACRO POLICY ISSUES: COUNTRY DEVELOPMENT STRATEGIES

Macro policies are the core- they should provide provision that will allow or guide sectoral level policies to the cognizant of the importance of minor crops including ILVs in the sectoral policies, in particular agricultural, health, education, environmental and rural development.

3.4.2.1.1 STRATEGIES AND PROGRAMS

Formalization of markets should be made friendly and customized to the needs of small scale producers especially those producing ILVs.

Crop diversification: to take care of ILVs and other minor crops.

Amaranthus, cowpea leaves, cleome, pumpkin leaves, cassava leaves, sweet-potato leaves, jute mallow, ladies finger,

3.4.2.1.2 MEDICINAL & NUTRITIONAL PROPERTIES:

Issue is to sensitize health workers on the value of ILVs

Amaranthus known to increase blood

3.4.2.2 FINANCIAL INSTITUTIONS

3.4.2.2.1 TANZANIA

Agricultural Sector Development Program (ASDP), which is a sector wide program in which the government and development partners provide financing to producers through ASDP basket fund operationalised via the district development plans for agriculture namely; district agriculture development plans (DADPs).

SME financing initiatives including cluster competitiveness facilities

The government is in the process of establishing an agricultural bank. This is expected to provide for production of horticultural crops, ILVs inclusive.

Micro-finance institutions including community owned savings and credit cooperative societies (SACCOS).

Village Community Banks (VICOBA): mode of operation similar to that of SACCOS

3.4.2.2.2 ZAMBIA

Economic Empowerment Fund: small scale farmers can apply individually or as groups.

SME financing initiatives including cluster competitiveness facilities

Savings and Credit Cooperatives

3.4.2.2.3 BOTSWANA

Citizen Entrepreneurs Development Agency- Young Farmer's Fund

National Development Bank

First National Bank: have started financing agricultural projects.

Savings and Credit Cooperatives

3.4.2.3 RULES AND REGULATIONS (LEGISLATION)

Legislation governing production of crop seeds, crops, processing, marketing and consumption (enforcement of the food standards often targets the informal ILV vendors) should support the growth of the horticultural sector including ILVs.

3.4.2.4 INSTITUTIONAL SUPPORT

3.4.2.4.1 TRAINING

- Mainstream issues of ILVs in the curricula

3.4.2.4.2 RESEARCH

- Fast track available information/material to the end user
- Material improvement (breeding) of the promising lines and for drought, pests, disease (tolerance/resistance) and nutritional qualities.
- Support researchers to mainstream the generated knowledge and technology to the end users.
- Researcher to continue collecting and recognizing indigenous knowledge and improving on that knowledge
- Protection of our genetic material- build capacity of researchers to deal with GMOs

3.4.2.4.3 EXTENSION

- Participatory Extension Approaches: Farmer Field Schools (FFS) encourage exploratory learning at every stage of production
 - Challenge: shortage of extension staff. Recommendation= Training of Trainers
 - Demonstrations
- Empower extension to receive and disseminate knowledge and technologies to the end users.

3.4.2.5 VALUE ADDITION AND MARKETING

3.4.2.5.1 VALUE ADDITION

- Given the infancy of the industry, public support (access to finance, technologies, advisory services and protection) will still be needed
- Elimination of tax on ILV producers
- Measures should be put in place for sustainable harvesting

3.4.2.5.2 MARKET PLAYERS

Producers, processors and sellers should consider value addition through packaging and branding as important undertakings in the value chain with potential to substantially increase the margins

at all levels. However, certification of ILV seeds lacking in the policies (should feature in the seed acts or regulations).

The government should allow recognition of minor crops at macro policy level and allocation of resources at sectoral level.

3.5 Presentation: market players in the marketing of ILVs – Safi Ketsemang

3.5.1 SUMMARY

Smallholder supply chains are confronted with limited economies of scale no matter what sort of value chain they are engaged in. The constraints range from small production quantities and heterogeneous quality of produce to limited access to input supplies, capital, market information and the necessary farm management skills. To overcome at least some of these constraints collective action through collective organization of some kind is an essential first step. However, the literature does not provide more details on successful modes of operation of such collective organizations within high-value agricultural supply-chains in SADC region. The information sharing will give market players opportunity to know what to bring to the market. The presenter talk about structured and non structured market, channels of markets exists in Tanzania, Zambia and Botswana and how these channels operate.

3.5.2 DISCUSSION

It was observed that the non-structured market such as the supermarkets tend to dominate and disadvantage the small scale farmers, who in most cases sell their vegetables at the dictated low prices. In this regard the assertion that the informal markets provide income for the majority of the people may not necessarily be true. In most cases, the formal grading of the ILVs particularly the fresh vegetables for the domestic market is lacking. The informal markets tend to have their own advantages of buying local and consume local.

The involvement of farmers in the vending of leafy vegetables tends reduce his time for the production of the ILVs.

Farmers' associations have a tendency of empowering the farmers through a number of ways. These groupings enable stronger bargains and organized supplies for the represented farmers.

3.6 PLENARY SESSION

3.6.1 POLICY AND MARKET ISSUES

Crop diversification- this undertaking takes into account of minor crops such as ILVs which are important components for addressing food security, improved livelihoods and nutritional value needs of the people.

3.6.2 FINANCIAL SUPPORT TO FARMERS

These institutional supports are available to small scale farmers in the three countries of Botswana, Tanzania and Zambia. However, in most cases these initiatives are specifically tailored for the promotion of production and marketing of ILVs.

3.6.3 RESEARCH

Currently, technology transfer is limited to only a few farmer groups. It was felt that dissemination of these technologies requires to be expanded and broaden the coverage.

Policy must allow for use of standards that will enable availability of Indigenous leafy vegetable seeds of high quality.

3.6.4 EXTENSION

The three countries faced a shortage of extension staff. It was observed that elite farmers graduating from Farmers' Field Schools could be used as trainers of other farmers. The use of demonstration plots as teaching aids or technology dissemination tools should be encouraged just as other participatory extension tools.



Fig 7: Three Groups in their respective discussions



4 RECOMMENDATIONS AND WAY FORWARD

The meeting agreed on the following recommendations to strengthen marketing of ILVs

4.1.1 POLICY

The policy makers should support the promotion effort to create awareness in terms of education, training, nutrition information, curriculum, certification of seed particular for ILVs.

The policy makers should support infrastructures in terms of irrigation system, rain water harvest, roads

- ❖ Harmonization of the projects doing the same activities so that resources could be utilized efficiently
- ❖ Programs should be put in place to show the usefulness of ILVs in the mitigation of HIV- AIDS
- ❖ Policy should direct the financial institutions in such away that apart from the business they should focus also on helping farmers.

4.1.2 MARKET PLAYERS

- ❖ There is a need of marker research on internal weaknesses and strength and look for opportunities
- ❖ To look on possibilities of producing seeds for ILVs

4.1.3 SUPPORT SERVICES

- ❖ More support in terms of promotion of ILV
- ❖ Support services in terms of seeds supply, training, input supply, area of preservation, improved recipes and market information

- ❖ Support services should look in marketing component in terms of producer, product, customer, competition at different levels

4.1.4 RESEARCH AND EXTENSION

- ❖ Researchers should continue with research in terms of collection and documentation of the ILVs and seed improvement
- ❖ Strengthening Extension – Research linkages
- ❖ Sharing of information – Example, demonstration plots, agriculture shows, networking between institution, radio, magazine etc

5 ANNEXES

5.1 Annex 1: List of Participants

5.1.1 TANZANIA

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5.2 ANNEX 2: PROGRAMME FOR THE REGIONAL WORKSHOP ON MARKETING OF INDIGENOUS LEAFY VEGETABLES.

24TH – 28TH August, 2009

ARUSHA TANZANIA.

DAY ONE	
24th August, 2009	
CHAIRPERSON: Gilbert Msuta	
Time	Activity
8:30 – 9:00	Registration
9:00-9:20	Welcome address and Introductions Meeting Objectives ❖ Eliamoni Lyatuu
9:20-9:45	Address by ACT ❖ ACT Official
9:45-10:00	Address by SADC Representative Ms. Gower/Dr. Tizikara/
10:00 – 10:30	Official Opening ❖ Permanent Secretary- MAFC-Tanzania
10:30 – 11:00	Health Break
11.00-13.00	Share Information with stakeholder on: ❖ "Marketing information in general (book) – Eliamoni Lyatuu ❖ Discussion (10min) ❖ Marketing by farmers (Poster 1) – Mercy Marope ❖ Discussion (10min)
13:00 - 14:00	Health Break
14.00 – 15.10	❖ Market players and marking of ILVs (Flyer) – Ketseemang Safi ❖ Discussion (10min) ❖ Preservation and processing (Poster 2) – Silvester Sakala ❖ Discussion (10min) ❖

15:10 - 15:30	Health Break
	CHAIRPERSON: Lebo Lebotse
15.30 – 16:30	<ul style="list-style-type: none"> ❖ policy issues – Gilbert Msuta ❖ Discussion
DAY TWO 25th August 2009 Presentations Cont..... CHAIRPERSON: Keetsemang Safi	
8.00 – 10.30	Plenary Session <ul style="list-style-type: none"> ❖ Economics of marketing ILVs and Marketing-Mrk status, channels, types (formal and informal), Constrains in Mrkt ❖ Nutrition, medicinal and ILVs ❖ Preservation, Storage, processing, packing and Transportation ❖ Farmer support Unit –Farmer groups and Credit loan and Microfinance institution ❖ Policy issues
10:30 – 11:00	Health Break
11:00 – 13:00	Group Presentation <ul style="list-style-type: none"> ❖ Policy Issues (20min) ❖ Discussion on Policy Issues (40min) ❖ Economics of marketing ILVs and Marketing-Mrk status, channels, types (formal and informal), Constrains in Mrkt (20min) ❖ Discussion (40min)
13:00 - 14:00	Health Break
14:00-15:00	<ul style="list-style-type: none"> ❖ Nutrition and ILVs (20min) Discussion (40min)
15.00 –15:15	Health Break
15:15 – 17:00	<ul style="list-style-type: none"> ❖ Preservation and processing(20min) ❖ Discussion (40min) ❖ Closing session for stakeholders
DAY Three 26th August 2009 CHAIRPERSON: Eliamoni Lyatuu	

8.00 – 8.30	Plenary Recap: Question and Answer Session
8:30 – 9:30	Group Presentation ❖ Farmer support Unit –Farmer groups and Credit loan and Microfinance institution (20min) ❖ Discussion (40min)
9:30-11.00	Plenary Session ❖ ILVs and agricultural policies –Infrastructures development, price change ❖ Role of Private sector, NGOs and International Organisation ❖ Financial accessibilities to ILVs farmers ❖ Capacity building and awareness creation of ILVs
10.30 – 11.00	<i>Health Break</i>
11.00 – 13:00	Presentation from the groups ❖ ILVs and agricultural policies –Infrastructures development, price change (20min) ❖ Discussion (40min) ❖ Role of Private sector, NGOs and International Organisation (20min) ❖ Discussion (40min)
13:00 - 14:00	<i>Health Break</i>
14:00 – 15:00	Presentation from the groups ❖ Financial accessibilities to ILVs farmers (20min) ❖ Discussion (40min)
15:00-15:15	<i>Health Break</i>
15:15 – 16:20	- Capacity building and awareness creation of ILVs (20min) - Discussion (40min)
DAY Four 27th August 2009 Excursion to AVRDC and Compilation of information CHAIRPERSON: Eliamoni Lyatuu	
9:00-15:00	Excursion to AVRDC
15:00 - 14:00	<i>Health Break</i>
14:00 – 16:30	Compilation of information Project team

DAY Five 28th August 2009 Excursion to the ILVs Markets and Finalization of the documents and report CHAIRPERSON: Lebogang Lebotse	
8:30-14:00	Excursion to the ILVs market
13:00 - 14:00	<i>Health Break</i>
14:00 -1600	Final review and correction of the final document for the Organising committee Closing ❖ SADC-Representative

5.3 WELCOME REMARKS ON THE WORKSHOP ON MARKETING OF INDIGENOUS LEAFY VEGETABLES IN SADC REGION BY ELIAMONI LYATUU, PROJECT LEADER (24-28 August 2009 at The Arusha Hotel in Arusha, Tanzania)

Honourable guest of honour,

Agricultural Council Board member,

Representatives and Directors from Civil Society Organizations;

Representatives from public and private research institutions;

Representatives from public and private extension and market advisory services

Representatives of farmers from represented countries;

Distinguished participants;

Ladies and gentlemen,

Let me take this precious moment to welcome you all in this regional workshop on marketing of indigenous leafy vegetable here in Arusha, Tanzania. I know some of you travelled as far as from Botswana and Zambia to Tanzania, I say karibuni sana.

Ladies and gentlemen,

Allow me to give you objectives of this theme Marketing of Indigenous leafy vegetable. But before that let me brief you where we have started until now. The theme is under the ICART project of which its activities are supported by SADC and European Union. So we had consultative meeting in Lusaka Zambia to prepare this workshop by consolidating Regional market information about Indigenous leafy vegetables. The product of that meeting is the information that we are going to share in this workshop.

The main aim of the workshop is to share regional information that was consolidated and this workshop will discuss and adding more information that is researched, practically applied, documented and non

documented information, to help small farmers to do right decision in investing on Indigenous leafy vegetable.

At the end this workshop will come out with refined information that will be well shared in the region, through documented book, newsletter, flyers and posters, which will be distributed to the stakeholders within the region.

For this few welcome remarks, I once again welcome you to Arusha and in this workshop and feel free to share any information you have with us.

Ladies and gentlemen, allow me to welcome ACT address from the board member Mr. Mshiu.

Thank you very much

5.4 ADDRESS BY MR E. MSHIU OF THE AGRICULTURAL COUNCIL OF TANZANIA AT THE REGIONAL WORKSHOP ON MARKETING OF INDIGENOUS LEAFY VEGETABLES. 24TH – 28TH AUGUST, 2009, ARUSHA TANZANIA.

Mr. Muya, Permanent Secretary, Ministry of Agriculture, Food Security and Cooperatives of Tanzania

Honorable Representatives from the Ministries of Agriculture in Zambia and Botswana,

Directors and Representatives of Civil Society Organizations, Extension Officers, Private sector companies, Market Information Advisory Services, Officers from different countries

Farmers from different countries

Distinguished workshop participants,

Ladies and Gentlemen,

First and foremost, I would like to welcome you all to Arusha and in particular to this auspicious event. For foreigners, please accept my heartfelt *Karibu* to Tanzania and hope that you will enjoy a pleasant stay while visiting our country. You should feel greatly privileged to be in the “Geneva of Africa” which is renowned for its beautiful scenery and adjacent tourist attractions. After this workshop I strongly advise you to visit some of them and witness nature at its best. You will also enjoy our hospitality along the way.

As you are aware, we are gathered here to deliberate and contribute on the issues pertaining to marketing of indigenous leafy vegetables, and their contributions to improve incomes of smallholder farmers.

Guest of Honour, this workshop is a response to the Expression of Interest (EOI) under SADC-ICART project in SADC Region. The ICART project was established in line with global Research and Development initiatives directed at poverty alleviation, food security, sustainable development, and strengthening the Food, Agriculture and Natural Resources (FANR) Directorate’s capacity to coordinate agricultural research and training within SADC region.

ICART project is supported by the European Commission under 9th European Development Fund (EDF). Three SADC countries, namely; Botswana, Tanzania, and Zambia are included in this EOI. This project became operational immediately after the Inception Workshop which was held in Gaborone Botswana in April, 2009. A Letter of Award was given to the Agricultural Council of Tanzania (as a leading institution) and its networking partner institution in Lusaka, Zambia in July 2009. The aim of the Consultative Meeting was to consolidate information in these three countries regarding marketing of indigenous leafy vegetables, and to do all the necessary preparation for this workshop.

At this juncture allow me to briefly introduce ACT to you. ACT is an apex organization established in 1999 for the purpose of creating one laudable voice in lobbying and advocacy for the private agricultural stakeholders' interests. The fundamental objective of ACT is to unite all members of the agricultural community in Tanzania, and to champion meaningful dialogue with the government and other bodies on the policies and programmes pertaining to the development of agriculture and agribusiness in the country. ACT draws members from farmers, livestock keepers and fisheries associations, cooperatives, input suppliers, agro processors, transporters, researchers and academia. It is indeed an organization which boasts of a wide variety of membership.

Under the current ACT's Strategic Plan (200-2012), one of the main strategic objectives is to improve networking and collaboration between ACT and other like-minded local and international organizations. ACT is actively involved in many of these initiatives including the ICART project. I wish to reiterate here that ACT is committed to work together with other partners in this venture to ensure its successful completion.

The SADC/ICART project is aimed at information sharing in the SADC network region. The Expression of Interest regarding Marketing of Indigenous Leafy Vegetables aims to create effective networking whereby information sharing about marketing of indigenous vegetables to improve the income of small scale farmers is done through participation of all stakeholders, including farmers who are the main producers of these vegetables.

Guest of Honour, indigenous leafy vegetables (cowpea, amaranth, sweet potato leaves, nightshade pumpkin leaves, okra leaves and spider plants) to mention but a few, have been used for time immemorial by African natives. People in different areas consumed different species by gathering them from the wild or growing them on small plots around their homesteads. Despite the importance of these vegetables many African Governments have overlooked their potentiality in contributing to the reduction of poverty and malnutrition.

While the number of hungry people has been decreasing around the world, in Africa, this number is on the rise due to various reasons which include conflicts, poor agricultural policies, lack of suitable markets, lack of and poor adaptation of processing technologies, limited marketing infrastructure and dwindling labour supply due to HIV/AIDS epidemics. Furthermore, micronutrient and protein-calorie malnutrition is high especially iron and vitamin A. Malnutrition in terms of body weight among children under 5 years in Tanzania, Zambia and Botswana ranges from 25 to 30%, while the percentage of children suffering from stunting ranges from 30 to 50%.

On the average, Africa produces about 9 tons indigenous leafy vegetables per hectare which is one of the lowest when compared to the rest of the world. For example, productivity in Asia is 17 tons per hectare and 18 tons per hectare in North America. Similarly, per capita consumption of indigenous leafy

vegetables is also low. While Africa consumes 52kg per capita, consumption in Asia and North America is 132 and 98.5 kg per capita respectively. This situation will improve if adequate measures are undertaken.

Ladies and Gentlemen, despite the commitment to eliminate or drastically reduce micronutrient malnutrition generated by the International Conference on Nutrition (ICN) in 1992 and the World Food Summit in 1996, today, unacceptably high rates of micronutrient malnutrition still exist. In developing countries, about 1.5 billion people, mostly women and children, suffer anemia caused by iron deficiency. Prevalence of anemia due to iron deficiency is 86% in children and 85% in pregnant women (FAO 1990). These deficiencies mostly affect resource-poor, rural communities who mainly derive their income from subsistence farming.

Guest of Honour, a strategy to increase the consumption and marketing of under-exploited indigenous vegetables will play an important food-based role in eradication of vitamin A, iron and other micronutrient and protein-calorie deficiencies so widely prevalent in African countries. Full information will impact knowledge (nutritional and marketing skills) on farmers about these crops in Botswana, Tanzania, and Zambia, will thus be beneficial in meeting food needs especially during dry seasons and crucial in smoothening the seasonal effects of malnutrition, as well as improve income when commercialized. There is also economic justification: in many cases, these vegetables may be the only cash resource at the disposal of the women for the welfare of their families.

The Agricultural Council of Tanzania and partners from the Ministries of Agriculture in Zambia and Botswana decided to popularize these leafy vegetables in our daily family dishes as well as commercialize them. Although the consumption of these foods in our continent is on the increase, research and market strategies for indigenous leafy vegetables are negligible. We cannot afford to continue neglecting these foods that are a vital component in our diets. In this regard, I strongly urge this workshop to come up with suggestions and recommendations to our respective governments to put in place agricultural policies that will accelerate production and consumption of indigenous leafy vegetables and market the surplus.

Thank you very much for your attention.

5.5 OPENING SPEECH ON THE WORKSHOP ON MARKETING OF INDIGENOUS LEAFY VEGETABLES AND HOW IT IMPROVE INCOME OF SMALL HOLDER FARMERS IN TANZANIA, ZAMBIA AND BOTSWANA BY MOHAMED SAID MUJA, PERMANENT SECRETARY, MINISTRY OF AGRICULTURE FOOD SECURITY AND COOPERATIVE – TANZANIA

Honourable Representatives from Ministries responsible for Agriculture in: Zambia, Botswana and Tanzania,

Representatives and Directors from Civil Society Organizations;

Representatives from public and private research institutions;

Representatives from public and private extension and market advisory services

Representatives of farmers from represented countries;

Distinguished participants;

Ladies and gentlemen,

Foremost, let me take this opportunity to express my sincere appreciations to the organizers of the workshop for inviting me to officiate the opening ceremonies.

Equally important I wish to take this opportunity to welcome all of you to this workshop venue here in Arusha (The Geneva of Africa) and those who travel from as far as Zambia and Botswana to Tanzania. I am confident that you will enjoy the Tanzanian hospitality so natural in our peaceful and beautiful Tanzania the Land of Kilimanjaro and Serengeti and many other beautiful natural attractions.

Ladies and gentlemen, We are gathered here in this Workshop to make our needed contribution to the regional economic growth and poverty alleviation efforts in the SADC region under the theme information sharing about Marketing of Indigenous leafy Vegetables which aim at improving smallholders' livelihoods through enhanced earnings.

Ladies and Gentlemen, for some of you who may not be very aware what are the *indigenous leafy vegetable*, allow me to attempt introducing them to you based on my experience and the information provided to me by the experts. For many of us who were born and raised in the rural Africa we have vivid

and fond memories of the times when our mothers and grandmothers used to collect, dry and store vegetables during the rainy seasons and use them during the rest of the year. I for one I still remember fondly the aroma and special tests that have lasted in my memories of what those ladies use to prepare for our family. Forever associated with those memories are not only expert fingers of my mother plucking and processing the vegetables, but also the expertise and love that were poured in their preparation. The result were aroma and tastes that I am still struggling to sample but in vain in many of the colorful vegetables with many exotic words or names I often encounter in my many travels. How I still wish to words like – *Mchicha, Mnavu, Mlenda, Kisamvu, Matembere and Mgagani*. For you from Zambia I was informed that you have words like *Lubanga, Suntha, and Sihungwa* for cleome; and names like *Impwa and Zilo* for Solanum species. I am also informed that in Botswana Amaranth is known as *Thepe*, cowpea leaves are called *morogo wa dinawa* and pumpkin leaves are called *morogo wa leputse*.

In mentioning these names my mouth is already watering and I believe, this is not happening to me alone in this room. It must be true to many of you who have enjoyed that love and spiced with the aroma of those vegetables. These continental wide variety of names is a testimony of the importance of these indigenous vegetables to our lives.

Ladies and Gentlemen, I am informed that domestication started by home gardening in rural and peri urban areas. However, the demonstrated high demand of ILVs provides sound ground for farmers to expand their farming areas so that they can have enough for their home consumption as well as surplus for sale. From door to door and roadside sales of ILVs are readily available in some supermarkets.

Ladies and gentlemen, I believe it is this modest background and the subsequent proven nutritive value of Indigenous Leafy Vegetables that has provided the rationale for the SADC-ICART project and its activities-with support from 9th EDF. This proven potential for ILVs notwithstanding the marketing of ILVs has been facing a lot of challenges including the lack of marketing information, lack of and poor adaptation of processing technologies, limited marketing infrastructure and dwindling labour supply due to the HIV/AIDS epidemic. All these challenges have effect on lowering production and thus denying millions in Africa of nutritive values in Indigenous Leafy Vegetables.

Ladies and Gentlemen,

Despite the commitment to eliminate or drastically reduce micronutrient malnutrition generated by the International Conference on Nutrition (ICN) in 1992 and the World Food Summit in 1996, available data today inform us that, unacceptably high rates of micronutrient malnutrition still exist. In developing countries, about 1.5 billion people, mostly women and children, suffer from iron deficiency anaemia; Prevalence of anaemia due to iron deficiency is 86% in children and 85% in pregnant women as it is reported by FAO and UNICEF in 1990; 1.8 million children under five years of age are affected by vitamin A deficiency blindness; while more than 200 million people are considered vitamin A deficient; calcium

deficiency in pregnant and lactating women affect the development of their children and causes osteoporosis later in life. These deficiencies mostly affect resource-poor, rural communities who mainly derive their income from subsistence farming.

The SADC Agricultural Sector perspective with the 2003-2008 Policy and Strategy for HIV/AIDS emphasizes the importance of good nutrition as one measure to slowing down the progression of HIV infection to AIDS. The policy further underlines the imperative to promote marketing, processing and use of high nutritional-value crops. For vegetables the most recommended include Indigenous leafy Vegetables. Recognizing the importance of dietary diversification in nutrition and the contribution of ILVs to good nutrition, the food and nutrition security policy of 2005 recommend for expanded irrigation farming of ILVs under special credit facilitation arrangements to ensure continued supply of the same and thus enhance income of the farmers.

Ladies and Gentlemen,

A strategy to increase the production, Marketing and consumption of the under-exploited indigenous leafy vegetables will play an important food-based role in eradication of vitamin A, iron and other micronutrient and protein-calorie deficiencies so prevalent in our countries. For this to be true, however, as we all know information on Marketing is not only important but critical for it provide a basis for the smallholder farmers to invest in ILVs, which will thus be beneficial in meeting food needs especially during dry seasons and crucial in smoothening the seasonal effects of malnutrition as well as improve income when commercialized.

This Workshop at a regional level, ladies and gentlemen is intended to provide a forum for information sharing on marketing of ILVs. On the basis of the agenda of your workshop as outlined in the workshop programme, it is my hope that, issues that will arise in the course of your deliberations will provide a basis for charting the way forward for the marketing of ILVs.

Ladies and Gentlemen,

Allow me to stress the fact that Networking has proved to be an efficient mechanism for knowledge creation, dissemination and application especially among professionally-linked peers.

I am given to understand, in the context of agricultural research; three broad categories of knowledge networking are recognized: information sharing network, scientific consultation network and collaborative research network. This workshop focuses on Regional Information sharing networking with the ultimate objective being enhanced marketing of ILVs thus improving the incomes of small holder farmers in our region particularly in Botswana, Zambia and Tanzania.

I do recognize that setting up information sharing networks and keeping them running can be difficult. It requires commitment, willingness and sometimes to make compromises. This workshop in that context is an important step towards achievement of Marketing of Indigenous Leafy Vegetables and at the end the information required to invest, and market must be at the farmers' hands.

Ladies and Gentlemen,

I wish to urge you therefore to focus on moving this information sharing network which you have just started to higher heights and in so doing forging close collaboration between farmers, scientists, governments and other strategic private sector players.

Once again, on behalf of the Ministry of Agriculture Food Security and Cooperatives of the United Republic of Tanzania, let me take this opportunity to express our gratitude to the SADC-ICART secretariat in collaboration with European Union for support and funding activities in this project.

While noting that you have a busy schedule ahead, time allowing and in particular for our colleagues from Botswana and Zambia, please do visit our tourist attraction points in this northern circuit.

Ladies and Gentlemen,

It is now my singular honour to pronounce this workshop open and I wish you all fruitful deliberations, and remember, ***“Together we can, let's join our hands towards a common future”***

Thanking you for your attention and bless you.