

**GENDER, BIODIVERSITY AND LOCAL KNOWLEDGE SYSTEMS
(LinKS) TO STRENGTHEN AGRICULTURE AND RURAL
DEVELOPMENT**

PROCEEDINGS OF TRAINING WORKSHOP

***GOOD PRACTICES FOR PARTICIPATORY AND GENDER
SENSITIVE RESEARCH APPROACHES TO LOCAL KNOWLEDGE
AND BIODIVERSITY***

KIBAHA TANZANIA

28TH FEBRUARY - 10TH MARCH, 2000



HOSTED BY TANZANIA FOOD AND NUTRITION CENTRE

Preamble

The Food and Agriculture Organization of the United Nations is supporting a regional project in Tanzania, Zimbabwe, Swaziland and Mozambique entitled "Gender, Biodiversity and Local Knowledge Systems to strengthen Agriculture and Rural Development in Southern Africa". The aim of this project is to strengthen the capacity of key partner organizations to understand and apply farmer's knowledge and experience for the sustainable use of biodiversity for food and agriculture. The project works with a diverse group of stakeholders in each of implementing countries. These include NGO's, Government Machineries, academics and media institutions among others.

The project supports partner organization by providing training in record keeping and documentation of Local Knowledge and how to use gender analysis and participatory methods for both research and action process. It also provides technical support for research and gender based differences in farmer's knowledge that is related to agro biodiversity conservation. Technical assistance is also provided for enhancing communication and exchange of information about the value of local knowledge in agro-production both within and between communities, with farmers' supports. **Institutions and policy makers**

In line with the aims of LinkS project appended herein above, was a need of training Tanzania researchers on good practices and gender sensitive research approaches to local knowledge and biodiversity.

Objectives of the workshop

The main objectives of this training workshop were to:

- Explain and discuss the link between biodiversity, gender and local knowledge and examine their impact on food security in Tanzania.

- Understand the meaning of Intellectual Property Rights (IPRS) and the larger policy issues that are surrounding biodiversity conservation.
- Gain skills in gender analyses; participatory research approaches and communication techniques.

Topic areas

The workshop covered a wide variety of issues that are related to LinkS.

These were: General issues on gender, biodiversity and local knowledge; conceptualization of gender, biodiversity and local knowledge in relation to food security in the LinkS project implementation of activities and agro biodiversity in Tanzania and its relation to food security situation. Other areas were Indigenous / Local Knowledge use in Tanzania for conservation of agro biodiversity and attainment of food security; environment policy and its impact on conservation of natural resources and food security; IPR and its implication in the implementation of the LinkS project in the Region and in Tanzania and Tools for Gender analyses, participatory Research Approaches, and communication techniques for documenting, recording and use of IK for agro biodiversity and food security and sharing of Good practices in the use of PRA towards better communication between researchers, their subjects and Vice-Versa.

Methodology of training

The participatory approaches to training were employed by facilitators throughout the course. This was coupled with practical use of tools and methods for undertaking socio economic and gender analysis.

The training was in most of the time being conducted in group work and plenary discussions. At the end of group work, the members of each group gave their resolutions. Each day created by the presentation of summary of items discussed in that day by a volunteer participant.

Workshop time table

Session/Time	Monday 28-2-00	Tuesday 29-2-00	Wednesday 1-3-00	Thursday 2-3-00	Friday 3-3-00
08:30	REGISTRATION	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE
1 08:30-10:30	<ul style="list-style-type: none"> o Discussion of workshop goals, tentative schedule and participant's needs and expectations. o Establishing norms for the workshop. o Official Opening by Managing Director of TFNC. <p>(Facilitators: Missano/Colbert)</p>	<ul style="list-style-type: none"> o Local Knowledge and Food security. <p>(Facilitators: Matowanyika)</p>	<ul style="list-style-type: none"> o Biodiversity o Agrobiodiversity <p>(Facilitators: Sibuga/Lambrou)</p>	<ul style="list-style-type: none"> o International Policies. o National Policies governing Genetic Resources and IKS. <p>(Facilitators: Lambrou/Matowanyika)</p>	<ul style="list-style-type: none"> o International Policies. o National Policies governing Genetic Resources and IKS. <p>(Facilitators: Lambrou/Matowanyika)</p>
10:30-11:00	TEA/COFFEE BREAK				
2 11:00-12:30	<ul style="list-style-type: none"> o Overview on LINKS concepts. <p>(Facilitators: Missano/Lambrou)</p>	<ul style="list-style-type: none"> o Threats to Local Knowledge and Agro-Biodiversity. <p>(Facilitators: Sibuga/Lambrou/Matowanyika)</p> <ul style="list-style-type: none"> o Presentation (Grass Roots observations on Seed Fair issues and Procedures) <p>(By Participants)</p>	<ul style="list-style-type: none"> o Agro-Biodiversity in Tanzania and Genetic Biodiversity. <p>(Facilitator: Sibuga)</p>	<ul style="list-style-type: none"> o International Policies. o National Policies governing Genetic Resources and IKS. <p>(Facilitators: Lambrou/Matowanyika)</p>	<ul style="list-style-type: none"> o Principals of Participatory Approaches and tools for participatory research. <p>(Facilitators: Lambrou/Colbert)</p>
12:30-14:00	LUNCH				
3 14:15:45	<ul style="list-style-type: none"> o Local Knowledge Systems <p>(Facilitator: Dr. Matowanyika)</p>	<ul style="list-style-type: none"> o Threats to Local Knowledge and Agro-Biodiversity continued. 	<ul style="list-style-type: none"> o How Agro-Biodiversity Influences Food Security. 	<ul style="list-style-type: none"> o Relevant Legislative measures, Ethics and Equity. 	<ul style="list-style-type: none"> o RIPS on PRA in Southern Tanzania.
15:45-16:00	TEA/COFFEE BREAK				
4 16:00-17:00	<ul style="list-style-type: none"> o Local Knowledge Systems continued. 	<ul style="list-style-type: none"> o Adding value to Local Knowledge <p>(Facilitators: Matowanyika)</p>	<ul style="list-style-type: none"> o Above Continued. <p>(Facilitators: Sibuga/Lambrou)</p>	<ul style="list-style-type: none"> o International Policies. o National Policies governing Genetic Resources and IKS. <p>(Facilitators: Lambrou/Matowanyika)</p>	<ul style="list-style-type: none"> o Participatory methods and communications approaches. <p>(Facilitators: Lambrou/Colbert)</p>

Session/Time	Monday 28-2-00	Tuesday 29-2-00	Wednesday 1-3-00	Thursday 2-3-00	Friday 3-3-00
08:30	REGISTRATION	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE
5 17:00-17:10	Summary of day's work and questions (Facilitator: Colbert)	Summary of day's work and questions. (Participant)	Summary of day's work and questions	Summary of day's work and questions	Summary of day's work and questions
Tentative Schedule: Week 2					
08:30	OVERVIEW AND PLANNING FOR WEEK 2 SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE	OVERVIEW OF DAY'S SCHEDULE
1 08:30-10:30	<ul style="list-style-type: none"> o Attitudes towards IKS and documenting IKS. o Observations from the Field (Facilitator: Matowanyika)	<ul style="list-style-type: none"> o Gender and Agro-Biodiversity: Documenting IKS (Facilitator: Semesi)	<ul style="list-style-type: none"> o Overview of Gender Analysis and Gender Concepts. (Facilitator: Colbert)	<ul style="list-style-type: none"> o Development of Future Plans. o Networking o Communication: Its role in conducting Gender and Participatory Sensitive Research (Facilitators: Missano/Colbert)	<ul style="list-style-type: none"> o Final Plans refined, concluded and Presented to the Plenary. (Facilitators: Missano/Colbert)
Tea/Coffee Break					
2 11:00-12:30	<ul style="list-style-type: none"> o Gender and Agro-Biodiversity Research methods (Facilitators: Semesi)	<ul style="list-style-type: none"> o Gender and Biodiversity Management (Facilitators: Sibuga/Lambrou/Matowanyika) o Presentation (Grass Roots observations on Seed Fair issues and Procedures) (Facilitator: Semesi)	<ul style="list-style-type: none"> o Gender Analysis tools and methods (Group work) (Facilitator: Colbert)	<ul style="list-style-type: none"> o Finalizing Future Plans o Group work on the above (towards establishing National and Regional Networks) (Facilitators: Missano/Colbert)	<ul style="list-style-type: none"> o Follow-up to the workshop o Workshop Summary o Workshop evaluation (Facilitators: Missano/Colbert)
12:30-14:00	LUNCH				
3 14:15:45	Above continued	<ul style="list-style-type: none"> o Gender and Food Security Facilitators: Missano/Colbert)	<ul style="list-style-type: none"> o Group report out Facilitator: Colbert)	<ul style="list-style-type: none"> o Above continued and Presented to the Plenary by each group/institution o Questions and clarifications Facilitators: Missano/Colbert)	<ul style="list-style-type: none"> o Closing ceremony presided over by the Managing Director of TFNC (Facilitators: Missano/Colbert)
15:45-16:00	TEA/COFFEE BREAK				

4 16:00-17:00	<ul style="list-style-type: none"> o Above continued 	<ul style="list-style-type: none"> o Above continued <p>Facilitators: Missano/Colbert)</p>	<ul style="list-style-type: none"> o Good practices shared 	<ul style="list-style-type: none"> o Sharing good practices and lessons learnt <p>(Facilitators: Missano/Colbert)</p>	
5 17:00-17:10	Summary of day's work and questions	Summary of Day's work and questions	Summary of day's work and questions	Summary of day's works and questions	

Summary of Sessions:

Day 1:

Participants concentrated on the introductory part of the workshop namely introductions, objectives, overview of LinkS activities and the description of terms applied in LinkS. Terms described were Local Knowledge, Gender, biodiversity, Agrobiodiversity and food security. Others were gender main streaming, participatory research, knowledge and indigenous knowledge. This was followed by official inauguration by Mr. B. Jeje, the Director of Nutrition Policy and Planning on behalf of Dr. W. Lorri, Managing Director of TFNC. His speech is appended under Opening Remarks.

The participants agreed on norms which would guide workshop. This includes a number of issues from time management, mutual respect, no-smoking rule in the workshop and environment among other.

Day 2:

Participants in groups worked to explore the influence of indigenous knowledge (cultural practices) on household food security and biodiversity in Tanzania.

Regarding food security and indigenous knowledge, participants, working in four groups worked to identify a geographical area and identify how local knowledge can help or hinder food security. They also discussed the local/social institutions with regards to bio-diversity and food security in the area and identifying specific threats to bio-diversity and suggesting the ways of addressing the threats. Group work was followed by plenary for group presentation and discussions.

A presentation on "Agro-biodiversity in Tanzania" by Professor Sibuga of Sokoine University of Agriculture was enrichment to group and plenary discussion. It focused on the dependency of humanity on biodiversity in the eco systems and that a threat to biodiversity is a threat to humanity.

Day 3:

Cultural practices contributing to threats in or loss of agro-biodiversity were discussed in two groups. One group based specifically on the disappearance of agricultural crop while the other dwelled in Livestock.

The group presentation with regard to agricultural crops in Tanzania covered three crops sown in traditional practices that are threatened. These were finger millet which is nearly extinct in Kagera, and Kilimanjaro regions. Another crops were plantain and coffee which are threatened in Kilimanjaro due to adoption of intensive maize production. The last crop under threat was cocoyam in Kilimanjaro due to river beds deforestation. It was stressed that the extinction of such crop goes hand in hand with loss of IK on their production, processing and storage. Other threatened crops named were sweet potatoes and sorghum.

Another group presented on 'cultural practices' that are a threat to Livestock Genetic Resources. The genetic resources in discussion were cattle, goats, sheep and donkeys herded by ecosystem pastoral ethnic groups. Through Traditional husbandry and long term experience, local pastoralists have acquired primary knowledge of desirable genetic traits they want to propagate as a strategy to sustain livelihoods in harsh semi-arid environments. Some practices that poses threat to animal genetic resource were identified as breeding (which reduces a considerable level of genetic pool); cross breeding (which introduces new genes at the expense of the local gene pool); Diseases control (that brings in environmental pollutants which affect other species diversity); Confinement of animals (which reduces adaptability traits and herders indigenous knowledge of ecosystems) and off take (slaughter of animals for meat that threatens genetic traits adaptable to the area).

These thematic group presentation of plenary were enriched by lecture on main headings namely genetic diversity, animal and microbial genetic resources, significance of genetic diversity, under exploited plant and animal genetic resources and threats to agro biodiversity. Other headings were Microbial diversity, its significance and conservation.

Finally, participants in groups discussed steps to be taken towards understanding the role of agro biodiversity in promoting food security at community level. The importance of agro biodiversity was seen in food security (diversification of food source, security of income, maximization of productivity and restoration of soil fertility); support rituals/health status (Dowry, traditional medicines and ceremonies); Coping with changing climatic conditions of (drought, floods, and other calamities) and source of raw materials for livelihood security (building materials, firewood and handcrafts).

Steps to be taken while considering intervention were conducting situation or analysis on existing agro bio-diversity, norms, taboos and values regarding IKS. This is followed by applying participatory research, establishment of community seed banks and fairs and by laws regarding land use and exploitation of forest and wildlife products.

Day 4:

The topic on International Agreements relating to genetic material rights dominated the day.

The topic was facilitated by Dr. Yianna Lambrou who suggested also some important references namely Beyond Intellectual Property by D. Pusey and Eraham Duffield IDRC and People Plants and Potents Concible Group IDRC.

She elaborated the key agreement such as Intellectual Property Rights (IPR), Trade Related Intellectual Property Rights (TRIPS), General Agreement on Trade and Tariff (GATT), Convention on Biological Diversity (CBD) and International Code of Conduct for Plant Germplasm Collecting and Transfer (ICCPGCT).

Participants in group discussed on national level instruments to support community interests with regard to these international agreements. They also spelled the effects of the agreements on their work and the community they work with.

In plenary session it was concluded that there is a need of strengthening public information through campaigns on these issues. A politically independent body is required so as to deal with legal issues among others.

A presentation by Mr. Ndedya on Rural Integrated Project Support: Experience of Participatory Approaches followed. By citing the experience of Mtwara and Lindi Regions it was concluded that participatory approaches influences changes in communities knowledge, attitudes and practice toward development activities, leading to increased awareness and demand for active participation and building the sense of ownership of the projects.

Day 5:

There was a presentation on the 'Experience of Rural Seed Fairs (Mtwara/Lindi) followed by development of 'Guidelines on International Agreements' concerning rights to diversity in groups and plenary discussions. This was followed by introduction on the tools for communication and participatory research. Finally an evaluation of the week one of the training was conducted.

Dr. Mponda, Ms. Ndedya and Mr. Kinyunyu presentation on Rural Seed Fairs indicated that in order to improve food security, a need is there to promote availability of seeds through the community effort.

Farmer folks participating in seed fairs are concerned with benefit they will accrue from revealing their Indigenous knowledge among other things.

Regarding the International Agreements participants in groups developed "Draft guidelines" which state that there is a need of involving all stakeholders at all levels. An addition, a system is required that will keep all the stakeholders well informed on these international conventions/agreements. Other issues include translation of the conventions into local language; increasing public awareness; capacity building and training.

Tools used for better communication were noted as PRA tools namely daily activity clocks, maps, seasonal calendars and transect walk among others. The day ended by conducting the evaluation.

Day 6:

Presentation on Gender Agro-biodiversity was given after conduction of feedback on evaluation exercise. In this presentation Professor Semesi of the University of Dar es Salaam stressed that there is lack of support from government since existing policies actively discourage local landraces and lack of farmer participation. She made a general comment that IK in Tanzania is taken as primitive issue/idea.

In conducting Gender and Agro-biodiversity research one should bare in mind to use interdisciplinary team of trainers, timely doing of research at the right phase of species development, gender sensitivity and building partnership with community. Key question to help in gender analysis were facilitated by the professor.

As a conclusion participants shared their experience with reference to seed fairs facilitated by Naliendele Agriculture Research Institute in Mtwara and International Agreements concerning IK and agro biodiversity research.

A machinery for releasing seed in Tanzania was named as TANSEED. But their Mechanism not only forgot the local seeds but also is very bureaucratic and has no consideration of ecological difference.

It appeared that very few people are informed of the International Agreements e.g. the Rio Convention in Biological Diversity.

Participants in groups discussed about SWOT - Strength, Weakness, Opportunities and Threats - a tool useful in assessing gender IK.

Among the strengths of SWOT there was its adoptability to local situation as well as resilience to diseases. The weaknesses noted were low yield and future of meeting external market standards among others. Opportunities named were easier of multiplication and existence of National Institution such as TBS, TOSCA and TANSEED. Threats are existence of improved cultivars and eating or selling of seeds in case of food insecurity.

As a conclusion participants agreed that SWOT is a strong participatory tool if used as it has wide range of use.

Day 7:

It was dominated by discussion on gender issues, and agro-biodiversity.

In introduction, Dr. Matowanyika explained the IDRC guidelines for integrating gender analyses unto agro-biodiversity research. His emphasis was on gender analysis tools, gender monitoring and evaluation and mapping gender spaces.

Professor Semesi discussed about division of labour, economic factors, resources and time management. She also facilitated on knowledge, expertise and technology, information and community network and government and regalia of property ownership.

To wind up the day, participants in group discussed about gender based distribution of work among some tribes/communities in Tanzania.

Regarding mapping gender space, the facilitator discussed about analysis of mapping in the context of research on social-cultural

categories of women and men and ethno differences in the communities among others.

Day 8:

Definition of four concepts in relation to gender analysis was facilitated by Mrs. Colbert in order to enable participants comprehend them. The concepts were productive roles, reproductive roles, practiced gender needs and strategic gender needs. She continued by presenting the definition of socio-economic and Gender Analysis (SEAGA), as an approach to development.

Four case studies were then distributed to four groups of participants. There in, the groups were assigned to work on a problem using a specified tool. Through case studies, participants were able to appreciate the use of selected tools for analysis of social-economic and gender issues. The tools appreciated were Daily Activities Clocks; Farming Systems Diagram; Village resource map and problem Analysis Chart.

Finally Mr. Mgumia presented on "Experience of UMADEP in Agro-biodiversity Conservation" with particular reference to the use of ethnobotanical crop protection. This was complemented by presentation on "local knowledge systems of animal health and production with gender perspectives in Tanzania" by professor A. Maeda Machang'u.

Day 9:

Participants continued to discuss the SEAGA TOOLS namely Transect, Benefit Analysis, Venn Diagram and Income-Expenditure Matrices.

This was followed by the topic of development of gender policy and IFTZ. In this topic, the presenter led participants to understand the rationale, process and history of gender. Various terms and concepts on gender

were also facilitated. The terms/concepts were gender sensitivity, and gender issues. IFTZ was named to be a catalyst to make gender unconscious men and women become conscious of the prevailing situation.

Various gaps in relation to gender were identified. There after the presenter explained some strategies for improving gender situation in a community. Participants made resolutions/recommendation of the workshop to wind up the day.

Day 10:

A video on Indigenous knowledge was shown before the facilitators discussed further with participants about tools for use in identification of gender IKS/Biodiversity. The tool is abbreviated as KARI which stands for Knowledge, Activities, Resources and Incentives.

In the future participants recommended that there is a need of:

1. formulating a network/forum for the stakeholders in IK system, agro-biodiversity and gender in Tanzania;
2. LinkS to coordinate joint planning and funding of common activities of partner institution in areas of training, research, production and dissemination of information;
3. Lobbying and advocacy for community awareness prior to the ratification of International Agreements and Conventions;
4. Resource mobilization;
5. Probing on existing information on International Agreements and Convention; and
6. Establishing information database and system.

This was concluded by closure of the workshop by Dr. W. Lorri, Managing Director of TFNC.

RECOMMENDATIONS

During the final sessions of the workshop the group discussed, formulated and finalized the resolutions listed hereunder.

- There is a need of formulating network/forum for the stakeholders in IK System, agro biodiversity and gender in Tanzania and explore existing networks for potential partnerships.
- LinkS should coordinate joint planning and funding of common activities of partner institution, such as training workshop, research, production and dissemination of information;
- Lobbying and advocacy for the creation of enabling environment for public debate and awareness prior to the ratification of international agreements and conventions;
- Mobilizing resources for extending similar training to the community players, that is, extension officers, researchers and farmers;
- The workshop participants to probe on existing information on international agreements and conventions in their respective institutions;
- Establishing an information database and development of mechanisms for sharing information between the stakeholders in IK, agro-biodiversity and food security.