Sensitisation workshop on agro-biodiversity, gender and local knowledge

Simunye, 4 to 8 October 2004
Report of a

Sensitisation workshop on agro-biodiversity, gender and local knowledge

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Acronyms

LinKS  FAO project on “Gender, biodiversity and local knowledge systems for food security”
NRI  Natural Resources Institute, Chatham, UK
PRA  Participatory Rural Appraisal
SL  Sustainable livelihoods
UNISWA  University of Swaziland
CP  Crop Production
AEM  Agricultural Economics and Management
APH  Animal Production and Health
AEE  Agricultural Extension and Education
LUM  Land Use and Mechanization
HE  Home Economics
MOAC  Ministry of Agriculture and Cooperatives

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1 Summary

1.1 Background, objectives and training outline

The LinKS project is an FAO funded initiative focusing on the linkages between gender, agricultural biodiversity and local knowledge systems. One of the project's objectives is to enhance the ability of researchers and development workers from key partner organizations to apply an understanding of gender, local knowledge, and biodiversity and food security in their work by providing them with diverse learning opportunities as well as skills enhancement in gender-sensitive and participatory approaches.

A workshop to sensitize researchers from the University of Swaziland (UNISWA) as well as those from the Ministry of Agriculture and Cooperatives (MOAC) was conducted to fulfill the project's mandate. The objectives of this sensitisation workshop were to:

- Expose participants to LinKS programme activities
- Expose participants to the LinKS concepts (agro-biodiversity, gender, local knowledge and food security), building on participants’ experiences
- Assist participants in incorporating LinKS concepts into their courses / teaching activities
- Assist participants in incorporating LinKS concepts into their research activities

The participants were lecturers from UNISWA in the Faculty of Agriculture, representing 6 departments, as well as researchers from the MOAC, working at the Malkerns research station. The participants were at varying level in terms of age, teaching experience as well as engagements in research activities. A total of 16 participants with a breakdown of 9 men and 7 women including the national LinKS facilitator, Dr Patricia Musi, attended the workshop. Details of the participants are given in Annex 1 and Annex 2.

This was a 5 days workshop as presented in the programme below:
Table 1 Overview programme of the week

<table>
<thead>
<tr>
<th>Day</th>
<th>Activities</th>
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<tbody>
<tr>
<td><strong>Day One (Monday, 4 October 2004)</strong></td>
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</tr>
</tbody>
</table>
| a.m. (10 – 13.00)    | • Participants arrive, registration, reading time for module 1 fact sheets  
                           • Welcoming remarks and housekeeping issues / announcements  
                           • Introductions of trainers and participants  
                           • Expectations of participants  
                           • Objectives of the workshop  
                           • Programme of the workshop  
                           • Components of the training manual                                                                                           |
| p.m. (14.00 – 17.00) | • Background to LinKS project  
                           • Show video “Sharing the knowledge”  
                           • Group work (4 groups) on LinKS concept  
                           • Wrap up discussion  
                           • Reading time for case study (module 5)                                                                 |
| **Day two (Tuesday, 5 October 2004)** |                                                                                                                                              |
| a.m. (8 – 13.00)     | • LinKS concept and Mali case study – group work  
                           • Sustainable livelihoods framework  
                           • Group work on SL Framework, using the Mali case study                                                                 |
| p.m. (14.00 – 17.00) | • Reporting back on group work on SL framework  
                           • Videos “Sharing the knowledge” “Farmers, their animals and the environment”  
                           • Reading time for modules 3 and 4                                                                                          |
| **Day three (Wednesday, 6 October 2004)** |                                                                                                                                              |
| a.m. (8.00 – 13.00)  | • Initial evaluation  
                           • Interactive presentation on modules 3&4  
                           • Presentation on PIP / conventions and discussion  
                           • Discussion and wrap up on LinKS concepts and livelihoods framework (end of theoretical part) |
| p.m. (14.00 – 17.00) | • Participants’ case studies: How to apply concepts and SL framework in their own research work? - group work                                |
| **Day four (Thursday, 7 October 2004)** |                                                                                                                                              |
| a.m. (8.00 – 13.00)  | • Interdisciplinary research project development – group work and presentation to plenary                                                |
| p.m. (14.00 – 17.00) | • Participants’ case studies: Group work on courses – group work and presentation to plenary                                              |
| **Day five (Friday, 8 October 2004)** |                                                                                                                                              |
| a.m.                 | • Participants’ case studies: Group work on courses and presentation to plenary  
                           • The way forward  
                           • Workshop summary and evaluation  
                           • Closing                                                                                                                        |
| p.m.                 | • Travel                                                                                                                                  |
1.2 Workshop outcomes

It was suggested that as an initiative to take the workshop forward, a one day seminar should be conducted for the Heads of Departments and Dean for the Faculty of Agriculture, UNISWA. The purpose of this workshop would be to sensitize them on the LinKS concepts, so that they would support initiatives of their staff (lecturers and teaching assistants) to incorporate LinKS concepts into the teaching and research activities of the Faculty. It was agreed during the workshop that this would require a sensitisation of the senior faculty staff with an emphasis on the “value added” of the concepts. The same request was forwarded by the MOAC participants for the Malkerns Research Station management personnel.

The participants expressed a need for a workshop on participatory methods since most of them had not had training in this area. Their ability to effectively integrate the LinKS concepts in their teaching, research and outreach activities would be enhanced if they were equipped with participatory tools.
2 Session objectives and outputs

This chapter presents in a chronological order, a summary of the various sessions of the workshop, including the materials used and outputs produced during group work. Presentations and handouts used are included either in the text, or in the annex, or in separate files (PowerPoint presentations). Outputs produced during group work are included unedited in order to preserve their authenticity and to reflect participants’ learning.

2.1 Day one – Introductions, programme and LinKS concepts

Overall learning objectives and plan for the day
- Trainers understand participants’ background and expectations
- Participants and trainer agree on objectives and programme for the workshop
- Participants understand the structure of the training manual and its components
- Explore the LinKS concepts and their different components

Table 2 Detailed programme for day one

<table>
<thead>
<tr>
<th>No</th>
<th>Session and time</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Registration and tea (10.00 – 11.00)</td>
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</table>
| 1  | Welcome (11.00 – 11.10) | • Welcoming remarks by Patricia Musi  
• Housekeeping issues |
|    | Introductions (11.10 – 12.10) | • Introduction of trainers (Sibusiso)  
• Introduction of participants (in pairs – see annex for outputs) |
|    | Expectations and ground rules (12.10 – 12.45) | Expectations (Sibusiso): each participant notes down:  
(1) what he / she would like to learn during the workshop  
(2) how he / she would like things to be done during the workshop (leading to norms / ground rules)  
(3) what he / she would not like to happen during the workshop leading to fears |
<p>|    | Objectives of the workshop (12.45 – 13.00) | • Review of workshop objectives by Barbara (see powerpoint slide ‘SW Day 1) |
|    | Lunch break |            |
| 1  | Programme of the workshop (14.00 – 14.10) | • Presentation and discussion of, and agreement on workshop programme (Barbara) |
|    | Familiarisation with training manual components (14.10 – 14.20) | • Structure and components of the training manual: modules, fact sheets, key points / learning outcomes, process sheets, key readings (Barbara) |
|    | Introduction to LinKS project and discussion (14.20 – 15.10) | • LinKS project objectives and activities (Patricia) |</p>
<table>
<thead>
<tr>
<th>No</th>
<th>Session and time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Video presentation (15.10 – 15.30)</td>
<td>• Showing the video “Sharing the knowledge” (Patricia)</td>
</tr>
</tbody>
</table>
|    | Group work on LinKS concepts (15.30 – 16.30) | Group work on guiding questions in four groups (Sibusiso)
1. Agro-biodiversity
2. Gender
3. Local knowledge
4. Food security |
|    | Reading time for module 5 | |

**Session 1: Climate setting, objectives, expectations and discussions of programme**

**Material used**
- Registration sheets
- Stationary
- Flip charts and stand, marker pens
- Workshop programme and evaluation sheets as handouts
- Powerpoint presentation (SW day 1 session 1 and 2 questions.ppt and SW day 1 session 2 concept definitions.ppt and What is LinKS.ppt)
- Video “Sharing the knowledge”
- TV and video

**Outputs**

**Results from brainstorming on expectations, norms and fears**
The facilitators asked participants to note their expectations, norms and fears on pieces of paper and hand them to the facilitators. After mixing them, they were given back to the participants to read out. Similar ideas were grouped into clusters.

**EXPECTATIONS - (What you want to learn)**

**Cluster 1: Agro biodiversity**
- Agro biodiversity
- Approaches in agro biodiversity management
- Success of biodiversity
- Failures of biodiversity (and reasons for the failures)
- Use of genetic resources to achieve food security
- Local attitude toward generic breeds (crop / animal)
- What is the extent of the usage and availability of indigenous fruits and vegetables in Swaziland?

**Cluster 2: Local knowledge**
- What is local knowledge?
- What local knowledge regarding food security has LinKS identified in our communities?
Cluster 3: Gender
- What is the role of gender in the country’s state of being food insecure?

Cluster 4: Food security
- The food types, particularly indigenous Swazi food that is good for people living with HIV
- Learn about some solutions to the problems of food security

Cluster 5: Application of LinKS concepts
- Learn about LinKS issues and how they can be incorporated in academic institutions
- I would like to learn how linkages would help us to improve rural community areas of agro-biodiversity, gender and food security, as we work to improve the lives of underprivileged
- To be trained and get ideas on how the country can achieve sustainable agricultural development for the purpose of improving lives of rural fold using local and indigenous material

Cluster 6: Cross-cutting
- Research activities: Completed any gaps in gender, biodiversity and local knowledge systems for food security
- Analysis of biodiversity, gender and local knowledge as it relates to livelihoods

Cluster 7: Sharing of experiences
- Learn from other participants and facilitators challenges faced in rural development

Cluster 8: LinKS project
- What has LinKS achieved so far in the communities?
- How to be part of this LinKS project?
- What is the LinKS project all about? Background

Cluster 9: Working with people
- How to interact with people and how to facilitate participation in a group of clientele
- I’d like to learn how to work closely with people and different bosses / all departments without causing much confusion.

FEARS (What should not happen)

Cluster 1: Boredom
- I wouldn’t want to feel bored
- I don’t want to be bored during the training process. I would like to have a lively and objective oriented workshop
- Boredom

Cluster 2: Disasters
- Illness
- Death
- Power failure
- No power failure because it can disturb. No illness. May God be with us all.

Cluster 3: Gender
- What is the role of gender in the country’s state of being food insecure?
Cluster 4: Learning environment
- To learn like in a classroom with a teacher and students
- Nature of workshop being one directional
- To be restricted or confined like high school kids

Cluster 5: Disrespect to people’s views
- No dialogue. Let’s all have a chance to talk
- Shooting down another person’s view/thought

Cluster 6: Time
- Finishing very late (beyond the stipulated time)
- Evenings should be for resting (no assignments)

Cluster 7: Various
- No quarrels, please
- End up with not achieving the objectives

NORMS (How things should be done)

Cluster 1: Participation
- Participation for all
- Participatory attitude
- Contribute participation and arguments
- I would like people to participate fully and share knowledge/experiences and ideas

Cluster 2: Sharing
- All have a chance to share views – and all views considered in discussion
- Interactive in sharing ideas
- Expecting people to share experiences and ideas openly for the benefit of all participants

Cluster 3: Respecting ideas of others
- Free expression but respectful to facilitators and participants
- People should be free to express themselves and voice out their opinions – more informally
- Respect other people’s ideas etc.

Cluster 4: Time keeping
- Just like in other workshops – punctual
- Facilitators should be time conscious
- Behaviour of people: Cooperate, punctual and serious
- Punctual

Cluster 5: Attitude
- Relaxed
- I would like people to be free and relaxed. They should participate and be involved in discussions

Cluster 6: Various
- To have order and peace while in workshop. In addition, participants to take care of themselves the best way possible, so that we all go back happy and full of knowledge
- Mobile phones off
Discussion following the presentation on the LinKS project by LinKS Coordinator – Dr Patricia Musi:

Dr Musi presented the scope, objectives, activities and achievements of the LinKS project (see file “What is LinKS. ppt”).

- Q: Sustainability of the concepts: Is it ensured, if the project ends?
- A: Idea is to influence people’s thinking.
- Q: Objective of LinKS: influence partners. How many NGO partners?
- A: 1st workshop: the participants were drawn form MOAC extension officers as well as field officers from the drought consortium. About 9 NGOs were present in the workshop. These individuals should pass on their knowledge to colleagues.
- Q: Experience so far is that UNISWA is not appreciating the roles of partners / projects. Nothing remains!
- A: Need to institutionalise the knowledge – e.g. have one staff member to be the expert on a particular concept and continue networking.

Summary of session

- The facilitation method to be used during the training was explained to the participants. It was emphasized that a participatory methodology shall be used to ensure that all participants were active and contributed towards session and/or share their experiences with the others. This method would ensure that the workshop remained lively and that everybody participates fully in the discussions.
- Emphasis was placed on participants providing feedback to the facilitators on any issue related to the workshop to ensure the smooth operations. The mood meter was explained to the participants as well as the importance of evaluation of the workshop in order to improve such training events in the future.
- Participants had a better understanding on the LinKS project and what it is aiming to achieve.

Session 2 – Exploring the LinKS concepts

Material used

- Guiding questions (see file “questions concepts.doc”)
- Flipcharts, stand, marker pens, tape

The group was divided into four teams, and each was asked to discuss the guiding questions and to provide feedback to the plenary.
Outputs and discussions

Group 1: Agro-biodiversity

Understanding of Agro-biodiversity

- Made up of three components
  - Agro for agricultural
  - Bio for life
  - Diversity – variety

It can therefore be defined as a variety of genetic resources to enhance the livelihood of end users.

Key components

- \( P = G \times E \)
  - Where: \( P \) is the phenotype with the desired genetic resources
  - \( G \) is the genotype
  - \( E \) is the environment

- The variety of agricultural breeds is a result of the interaction of the environment and the genetic component
- The management systems and culture have a role to play in maintaining these

How it has changed over time as a result of:

- Commercialization of agriculture
- Globalization of markets
- Changes in management systems
- Changes in the environment

Discussions

Q: Should man also be included in the definition?
A: Agro = only agricultural organism, but man is also part of the environment, man comes in at the management system. Culture also is part of man and influences the management system.

But the environment also influences Man. Example Germany: People of the WWII generation are shorter than those of the post-war generation because of malnutrition during and after the war.

Definition as per the manual:

- Agro-biodiversity is that part of biodiversity which, in the context of agricultural production, contributes (directly or indirectly) to food production (crops and livestock), livelihoods (raw materials, medicinal plants, animals for
transportation, etc.) and **habitat conservation** (agro-ecosystems) for the population.

*****************************************************

**Group 2: Gender**

1. Gender – refers to the relations between men and women men + men – women + women not necessarily biologically as a result of sexual characteristics of either women or men, but is constructed socially.

2. Influencing Factors

   The Bible: from a religious point of view the word actually prescribes how a family should be run e.g.

   - A man is the head of the family.
   - The woman should obey the husband
   - The man should love the wife

**Other Factors**

- Society
- Culture
- Financial Independence
- Society Integration
- Exposure to Knowledge, other nationalities

3. Changes

   Before, women were not regarded as important yet today women are recognized (in terms of gender roles)

   - They take up challenging jobs
   - Women in parliament
   - Women bread winners
   - Men look after children and do household chores
   - Women can now stand and speak in public
   - Women can preach and stand before congregations
   - Women have now realized that they are oppressed (they have been sensitized)
   - Women now realize the potential in them

**Discussions**

Q: Gender not determined biologically – is it true? Initially it was biology that determined the roles.
A: Initially gender roles were probably more biologically determined than they are now because of the environment (men were hunters; women were tied down by having children). But now we don’t need this division anymore, but we hang on to it.

C: There is still a difference between men and women. Sex is not the same as gender. Gender is influenced by society.

C: Don’t agree that there was a time when women were not important. They were always important – even in the bible they were given important roles.

A: It is a question of what value is given to what women do.

C: Whether women and their activities are valued depends on society. For example, when men migrate, women stay at home and raise the family. This is an important role and is valued – perhaps not specifically acknowledged, but even men recognise that these functions are important.

C: It is society that forms the norms and values. And it changes over time.

**Definition as per the manual:**

- FAO defines Gender as the relations between men and women, both perceptual and material. Gender is not determined biologically, but is constructed socially. It is a central organising principle of societies and often governs the processes of production and reproduction, consumption and distribution.

**Group 3: Local / indigenous knowledge**

1. **What do you understand by local knowledge?**
   “It is knowledge acquired from relatives, elders, fore-fathers which are passed on from generation to generation “Influenced by Location”

2. **Key components/aspects**
   - Oral – currently not documented
   - Based on passed livelihood experiences
   - It generates from the natural bio-sphere
   - Secretive

3. **How has it changed over time**
   - Increased research on indigenous knowledge systems e.g. gene bank and Mafutseni farm.
   - Attempts to domesticate
   - Attempts to document
   - Increased knowledge on indigenous treatment e.g. livestock on video
   - Integration of local/indigenous/traditional remedies with the Western remedies
   - Changes have been propelled by HIV/AIDS pandemic e.g. GMO food discouraged.
However: removal of plants/animals from their natural habitats may change its behaviour/nutrition/chemical comp

Discussions

Q: Should local knowledge be documented?
A: Yes, it should be. There are examples of it being documented.

Q: But is it really just from elders? In practice it comes from different sources. For example, use of Coke bottles as drenching guns for administering local goat de-worming concoctions to goats in Uganda.

Q: Is it still local once it is documented?
A: It is being transformed from oral to written – the source stays the same. But it is still local.

C: Need to add dynamic nature of local knowledge.
C: Need to add electronic means / multimedia for documentation – not just writing up. E.g. filming, recording on audio tape.
C: Documentation is one of the changes that are occurring to local knowledge over time.

Q: What is the difference between local and indigenous?
A: Local can include information from outside. Indigenous means that it comes from local sources alone.

C: Often we think something is indigenous, but it is not (e.g. maize – came from Latin America)
C: Documentation can help to clarify history (but only if it is done properly / honestly)
C: (1) Documentation is subjective. Depends on who documents etc. Power issue – e.g. colonial powers wrote about Africa, but is what they documented really reflecting reality? They might have been biased. (2) Indigenous is not absolute – e.g. indigenous people came from somewhere as well.
C: Risk: If you cannot pass information on because people die before they can pass it on, it is dangerous / information gets lost. Better to document.
C: Documentation of local knowledge should happen beyond being recorded on paper alone, but also through other media.
C: Location should also be considered when looking at issues of Local knowledge.
C: Debate on the understanding of local/indigenous knowledge

Definition as per the manual:
- **Local knowledge** is the knowledge that people in a given community have developed over time, and continue to develop. It is:
  - Based on experience
  - Often tested over centuries of use
  - Adapted to local culture and environment
  - Embedded in community practices, institutions, relationships and rituals
  - Held by individuals, groups or communities
  - Dynamic and changing, incorporating new ideas all the time

---

**Group 4: Food security**

**A. Accessibility:**
- eggs, meat available but controlled by the head of the family.

**B. Food Production**
- different levels of production
  - institutional level – Tibiyo
  - household level
  - national level
  - TDL – produce above the household level

**Food Distribution**
- infrastructure
- equipment
- timeliness (distribution efficiency) – Mshamndane does not distribute food on time as a result food rot

**Accessibility**
- buyers power (money)
- infrastructure (tebetebe – bridge – not possible to go through)

**Food Consumption Pattern**
- people’s preferences depends on their tastes
- religious beliefs – Islam religion – pork
- money availability – affordability

**C. Pattern of Production**
- has changed from subsistence to commercial
- lot of inputs required = increase in acreage and yields
- have changed - no longer rely on local seeds but buy hybrids which are expensive to increase yields.
- Because of money, people sell almost all food to pay for the important things like school fees.
- Rural – urban migration
- Old aged people have no energy to produce
- To have food when people must have money to buy
- They have no land for production

- Changing climatic conditions
  - Rainfall is ever decreasing globally
  - Unreliable rainfall which affects ploughing timorously. This in turn affects yields due to unfavourable climatic conditions

Discussions

C: Donor Food distribution that is currently on-going in Swaziland is a sign of being food insecure and is creating a dependency situation for the communities.

C: Changing climate might necessitate changes in consumption pattern (e.g. less rain in Swaziland: need to eat cassava and sweet potato)

C: Food distribution: Sometimes channels are unavailable, but food aid can also make things worse (will destroy incentives for local production – not sustainable). But even when food is available, one might not have access to it (e.g. culture, religion).

C: Culture influences who eats. E.g. Europe: People give to children first.

C: Difference between food security and nutrition? Example of children eating porridge and sugar – so are they food secure? – A: Food security is about quality AND quantity.

C: Depends on economic status. Swaziland: For many people having enough maize is already good enough. But elsewhere, in towns, people want to eat meat. Need to include nutritional aspects of food security.

Q: Is it food insecurity if certain individuals don’t have enough food?
A: Depends on level – at individual level, many people can be food insecure.

C: Food security is influenced by tradition and habit. E.g. Eating porridge only instead of meat and vegetables as well.

Definition as per the manual:

- **Food security** is the adequate supply of food and food availability. “Food security is achieved when all people at all times have physical and economic access to sufficient safe and nutritious food to meet dietary needs and food preferences for an active and healthy life.” (FAO, 1996b).

***********************

Summary of session

- The discussions after the presentation of each concept were such that most of the participants clearly understood and reached a common understanding of the concepts
• More time was spent on the gender concept as the men were in the defence and were bringing in issues of culture to support their sentiments related to gender issues
• The concepts of agro-biodiversity, local knowledge and food security were not that much of a task to define as the participants all had an agriculture background
2.2 Day two – LinKS concepts and the sustainable livelihoods framework

Overall learning objectives and plan for the day
- Understand the Sustainable Livelihoods Framework and how it can be applied to LinKS concepts
- Use the Mali case study to explore both the LinKS concepts and the SL framework

Table 3 Detailed programme for day two

<table>
<thead>
<tr>
<th>No.</th>
<th>Session and time</th>
<th>Activities</th>
</tr>
</thead>
</table>
| 2   | Group feedback (8.15 – 9.45) | Groups gave feedback – see outputs (Sibusiso)  
                 Discussion |
| 3   | Group work on applying the concepts to the Mali CS (9.45 – 10.45) with tea in between | Group work in 4 groups (same as session 2)  
                 1. Agro-biodiversity  
                 2. Gender  
                 3. Local knowledge  
                 4. Food security  
                 Feedback to plenary (10.45 – 11.45) | Feedback from all groups (see below for outputs) – (Sibusiso)  
                 Discussion |
| 4   | Presentation on the SL framework (11.45–13.00) | Interactive powerpoint presentation (Barbara and Sibusiso)  
                 Drawing up SL framework on flip charts  
                 Participants contributed examples (see Figure 1 for output)  
                 Lunch Break |
| 4   | SL presentation continued (13.00 – 14.10) | Continued with discussions and examples from participants |
|     | Group work on SL framework and case study (14.10 – 16.30) | Group work in 3 groups. Task: Apply the SL framework to three groups of households in the Mali case study:  
                 1. Women without market gardens  
                 2. Households where the man has a market garden (there are 19 of them)  
                 3. Households where the woman has a market garden (there are 3 of them) |
|     | Reading (16.30 – 17.00) | Reading time for modules 3 and 4 for preparation of day 3 |
Session 3 – Exploring the LinKS concepts in the Mali case study

Material used

- Mali case study (included in manual – module 5)
- Flipcharts, stand, marker pens, tape

Still maintaining the same groups as in the previous exercise, the participants were asked to explore in their four groups these concepts using the Mali case study: Food security, gender, local knowledge and agro-biodiversity.

Outputs and discussions

Group 1: Agro-biodiversity

1. A shift from traditional to exotic fruits and vegetables
2. Commercialization
3. Commercial inputs
4. Decrease in availability of local plants in diet (change in diet)
5. Exploitation of bush resources by women
6. Loss of arable land for women as farming becomes more commercial (women no longer able to grow their own crops except on uplands)

Discussions

C: Some resources were lost, because men regarded certain plants as weeds.
C: Other examples: Pumpkins and water melons can disturb mechanisation – they will be pulled out.
C: Again, shows that all is interrelated – gender is linked to it as well. African potato: herding boys knew about the medicinal value of African potato, but it was not recognised to be an important plant.
C: Women did not address the issue, but did overexploit the bush instead. It depends on whether the men want to cooperate and not.

********************

Group 2: Gender

Men

- Few domestic obligations
- Building and maintaining houses
- Work collectively to produce staple crops
- Gardening for commercial purposes
Roles

Women:
- Food processing
- Cultivation and collection of plants to make sauces
- Married women worked individually to produce sauce things
- Gather various wild or semi wild plants from fields or bush areas to use in sauces
- Gather and process leaves of the baobab trees for sauces and use shear nut tree to make cooking oil and lotion for skincare
- Maintain these productive trees
- Make use of species in the bush areas

Change

- Gardening that was once done by women is now done by men
- Both men and women are involved in identifying market – gardening as a strategy for income

Differences

- Market gardening is male dominated and a commercial activity – exotic plants
- Land distribution was done by men to households
- Men got all the money from commercial gardens, without giving the women

Discussions

C: Case study did not say how the money earned from the gardens was spent. This is a gap – perhaps it was used in a constructive way.

Q: Were women involved in the production of the commercial vegetables? Not clear whether they participated. In Swaziland, the women do the weeding and harvesting, and men do the ploughing.

A: Article says that the garden manager benefited mostly.

C: By being married to the man who runs the garden, the women should have a right to some of the benefits – even if they are not physically involved in the garden work.

C: The children should benefit from their father’s income. Nutrition status can be improved by “pouring into the pot” (= sharing the income).

C: Are we seeing changes? There are many men who share the income now. Traditions are breaking now. Now husband and wife are partners in raising children, in running a business etc.

C: Western society: After divorce, the main bread winner (whether woman or man) has to support the other.

C: There is a lot of diversity. Some people are responsible and others are not. Some are able to look after more wives, and other can’t.
Group 3: Local knowledge

I. Prior to Gardens

Components:
- married women plant sauce things individually (in upland)
- men work collectively: produce staple crops like sorghum, millet, etc
- women’s crops: direct consumption and some income
- women: gather wild plants from their fields to use in sauces
- use of indigenous trees: baobab tree sauces – hear nut; cooking oil; skin lotion

II. Post Gardens
- women plant sauces in upland fields
- collect wild food plants in nearby bushes
- started planting their local none exotic food plants
- only 3 of the 22 gardens had indigenous foods (these were for women)
- a range of commercial inputs was used (gain of local knowledge)
- vegetables seeds and seedlings purchased
- result: decline in indigenous materials/foods
- women’s ability to produce traditional foods reduced

Discussions

C: Women still had the local knowledge in their minds. But it might be lost in the future.

C: Knowledge does not occur in isolation – it needs to be practiced. If the genetic resource is lost, the knowledge alone is not useful.

C: It is not just knowledge, but also skills. Skills are passed on through demonstration – if this does not happen, the knowledge will be lost.

C: Some indigenous plants were destroyed by herbicides, because they were considered weeds. It reduced the stability of the environment.

C: Attitude is also important. The video showed yesterday that the old people try to install a pride in the young for local knowledge – a passion and intimacy. This is important.

Group 4: Food security

- Stability of food security due to the social structure and unity
- Roles demarcation contributed to nutritional balance
  - Intercropping by women
  - Wild plant and fruits collection
- Local food processing (sauce ingredients and cosmetics) – income
- Market – Bamako out competed- food security
Discussions

C: Demand for vegetables was higher than supply – so people had to sell everything. Because the women’s plants phased out, people now had to buy their sauce plants. Men were not concerned about the nutritional status of the food – only women were concerned. The food quality deteriorated. The shift from traditional to commercial had an effect on nutrition.

C: There wouldn’t be anything wrong with the market demand, if women were also benefiting.

C: Documentation: The case study makes it sound as though all is getting worse – but there might be some good aspects in commercialisation. It depends on who describes the process.

C: The linkages to gender and local knowledge are already creeping in. This shows that all are interlinked.

***************

Summary of session

- A similar situation as described in the case study is experienced in Swaziland.
- Participants found the case study very long with missing information in some areas – for example, how income from the market gardens was being used. A local case study would have been preferred, but participants acknowledged that it is difficult to develop a comprehensive case study.

Session 4 – The SL framework and its application

Material used

- Powerpoint presentation: “Module 2 SL Framework long version.ppt”
- Large paper sheets on the wall for drawing up the framework with participants’ examples
- Flipcharts, stand, marker pens, tape

Outputs and discussions

Using the guiding questions in the Powerpoint presentation, the facilitators drew the SL framework on charts, with participants contributing to the components. See the outcome in Figure 1 – the red and green parts emerged from the brainstorming.
Figure 1  The sustainable rural livelihoods and its relationship to agro-biodiversity, gender and local knowledge

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Participants were tasked to apply the SL framework to three different groups of households in the Mali case study: Men with market gardens, women with market gardens and those where the women have no market gardens.

Because of time constraints, the feedback for this session was done on day three.

**Summary of session**
- Participants found the SL Framework relatively easy to understand when it was presented to them.
- The questions posed during the presentation were useful as a way of involving the participants during the presentation as they were able to make contributions to indicate their level of understanding.
- It is important to stress that the SL framework builds on existing concepts and approaches – that way people feel less overwhelmed by it (e.g. linkages to farming systems research).
2.3 Day Three – Presentation and discussions on the linkages between gender, local knowledge and agro-biodiversity (Module 3-4)

**Overall learning objectives and plan for the day**
- Participants understand agro-biodiversity management from a gender perspective
- Participants understand the relationship between agro-biodiversity and local knowledge
- Participants apply the LinKS concepts and livelihood framework in their research work

**Table 4 Detailed programme for day three**

<table>
<thead>
<tr>
<th>No.</th>
<th>Session and time</th>
<th>Activities</th>
</tr>
</thead>
</table>
|     | Initial evaluation (8.00 – 8.15) | • Participants are asked to note down:  
  • What they liked about the course so far  
  • What they did not like  
  • Any suggestions on what to improve |
| 4   | Feedback to plenary from day two (8.15 – 9.25) | • Feedback from all groups (see below for outputs)  
  • Discussion |
| 5   | Video “FAO livestock” (9.25 – 9.45) | • Video show with a briefing on its components |
|     | Module 3&4 presentation | • Powerpoint presentation on modules 3 and 4  
  • Discussion |
|     | PIP presentation | • Powerpoint presentation on modules 3 and 4  
  • Discussion |
|     | Wrap-up session | • Wrapping up the theory so far: LinKS concepts, linkages, SL framework |
|     | Lunch Break | |
| 6   | Group work on research projects (14.00 – 15.45) | • See handouts for group tasks  
  • Four groups: 1. Agricultural economics and home economics (4 participants)  
  2. Crop sciences (4 people)  
  3. Land use and mechanisation, and animal production (4 people)  
  4. Agricultural extension and education (3) |
|     | Feedback (15.45 – 16.30) | • Group feedback to plenary |
Session 4 – Applying the SL framework to the Mali case study

Outputs and discussions

Group 1: Women without garden

(See Figure 2 on page 31)

Discussions

C: Livelihood outcome: We noted what people actually achieved, but not what they want to achieve. Suggestion: Include in the framework what people tried to achieve and what they actually achieved.
C: Sometimes people plan for the negative. For example, suicide.
C: In livelihood outcomes, we should also mention some positive things. For example, people learnt from competition. Also, some people benefited from the trend. And the women would eventually do something about this – it would not remain like this for ever. This is just a snapshot of the situation as it was at a given point in time.
C: Prostitution could be both a strategy and an outcome. It is a coping strategy.
C: What is considered acceptable depends on culture and moral standards – varies according to society.
C: The focus of the livelihood outcomes are presented on the negative aspects yet they are phrased as “what people want to achieve”, It was suggested that it could be presented on the positive side and that this is one of the shortfalls of the SL Framework
C: The women without gardens would not remain static but would change as people are constantly developing due to market demands, people paying more attention to scare sources etc

******************************

Group 2: Women with gardens

Capital Assets

<table>
<thead>
<tr>
<th>Natural Assets</th>
<th>Financial Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streams</td>
<td>none</td>
</tr>
<tr>
<td>Land</td>
<td>from sale of produce</td>
</tr>
<tr>
<td>Natural biodiversity</td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td></td>
</tr>
</tbody>
</table>
**Physical Assets**

- Streams
- Chicken manure
- Tools and implements

**Social Assets**

- Influence as senior wife

**Human Assets**

- Farming skills
- Local knowledge/indigenous

**Vulnerability Context**

**Shocks**

- Animals invading fields
- Theft

**Trends**

- Animals invading fields

**Seasonality**

- Labour turnover – children off the school
- Streams – seasonal fluctuations in water levels

**PIPS**

**Policies**

- Senior wives
- Retired
- Les social obligation (related to raising children)
- Government policy – supporting local products

**Institution**

- Du/dutigiw

**Process**

- Allocation of land and duties
- Directing labour force
Livelihood Strategies

- Commercial cultivation
- Subsistence cultivation
- Integrated exotic and indigenous crops
- Good cropping practices: crop rotation; chicken manure

Livelihood Outcomes

- Meagre outcomes (food; money) to sustain themselves –
  - food security
- Self satisfaction
- Environmental friendly practices
  - Sustainance of practice
  - Healthy diet

Discussions

Q: How come there are no financial assets? They must have had some income from selling the produce.
A: Initially they started off with nothing – maybe they got some income later on, after selling the produce.
C: Then it should be reflected under financial assets. They must have had resources to hire labour and buy chemical inputs.
A: But they did not use chemicals / hire labour. The men did that.
C: The senior wives have retired from the home duties, so they have time to do other things (not necessarily do the field work, but direct work)
C: The financial base for the women with gardens is expected to improve as they are producing some crops for sale to the Bamako market
C: The policies need to be viewed at a micro and macro level

*****************************************************************************
Figure 2  Women without gardens

Vulnerability context

Trends:
- Landlessness

Shocks:
- Loss of garden land
- Processing of wild products: cooking oil; cosmetics

Seasonality:
- Processing of wild products: cooking oil; cosmetics

Livelihood outcomes

Malnutrition
- Marginalization
- Bitterness
- Rural-urban migration
- Deterioration in food safety and health
- Loss of local knowledge as a result of loss of agro-biodiversity
- Change in culinary patterns
- No formal schooling kids

Livelihood strategies (examples)

- Over exploitation of nature
- Primary domestic groups
- Subsistence production sustained
- Prostitution

Transforming structures and processes / PIPs (policies, institutions, processes)

Policies
- Cultural practices (dictates by tradition)
- Fate of assets

Social:
- Definite role in Social Group

Financial:
- None

Physical:
- Land access

Human:
- Family unit

Natural:
- Wild crops

Influence how people use capital assets

PIPs can influence / mitigate the impact of shocks and trends (e.g. food relief)

Livelihood outcomes determine asset base in the future
Group 1: Men with gardens

**Capital Assets:**
- Land
- Finance
- Building
- Markets
- Farm inputs (fertilizer, seeds)
- Vegetable and fruits
- Grains

**PIPs**

Policies:
- None specified
- Men dominated (19/22)
- Women removed from low lands

Institutions:
- No clear existence
- Cultural practices (men dominant)
- Incentives for growing exotic plants

Processes:
- None
- Gender

**Livelihood Strategies:**
- Shift to income generating activities
- Cropping- women to seek alternative site

**Vulnerability Context:**

Shocks:
- Seasonality: rains
- Sudden market availability
- Degradation of biodiversity
- Sudden needs of input

Trends:
- Scale of productivity
- Disturbance of ecology
- Loss of local crops & knowledge
Livelihood Outcomes:

- Income generated
- Nutrition – compromised (reduced)
- Food security – threatened
- Genetic erosion

Discussions about men with gardens

C: Men are in control – they did not need to use coping strategies. They had resources – so for example they could use chemicals whenever there was a pest outbreak.

C: But using the women’s land was also a coping strategy. They used their power position.

C: We need to keep in mind that it is a snapshot. There might be problems in the future (increasing supply of vegetables leading to a collapse in market price, pest build-up, etc.)

C: Some of the shocks are for the better – e.g. market availability.

C: Men don’t care so much about nutrition. At university, the boys used to eat a lot of bread, all day long, without consideration about what food was good. Even if they have money, they spend it on other things.

C: Assets have not been classified. Men had helpers in the market (= human asset)

C: Vulnerability context aspects can be both positive or negative – e.g. trends can be positive.

C: Livelihood outcomes: Income generated is part of the story – but what happened to that income? That is what is important.

C: Growing vegetables does not mean that you get a lot of income. Often prices for outputs are low and prices of inputs are high.

C: Not all men are the same. Only one woman is quoted to say that she does not see the money her husband brings home – maybe not all are like that.

C: Income generation activities: Do not always add income. Some activities have social function – developing social networks and human relations.

C: Hope is also important. E.g. sugar cane: People have zero income and are very busy. Bank and sugar companies are making profit.

C: Policies: It should mention that sons are inheriting land from their fathers and can acquire land from the elders.

C: Need to develop the livelihood strategies by the group

C: Noted that there was a difference between the livelihood strategy and the coping strategy

C: The human assets in the capital assets is missing yet it can be identified from the case study

C: The assets would have been more meaningful if they were classified under each capital asset category
C: How were the men with gardens better off then the women without gardens as the livelihood outcomes does not reflect any differences in terms of the outcomes

Summary of session

- Participants had a better understanding on the SL framework after applying it on the case study
- Participants complained that the case study had a lot of gaps resulting in one to speculate on some of the issues in the case study. Some participants thought that it was not suitable for use as it was open to a lot of guesswork. Rather a more locally based and comprehensive one should be developed for the application of the SL framework

Module 3

Comments on Loss of agro biodiversity

Discussions

C: Most Africans were trained in Europe, thus on their return to local countries they tend to use those overseas experiences instead of using and building up on local knowledge or resources. The training approach used by universities often undermines that the learner has some knowledge and that you can build up on to enhance the learning process and make it more meaningful and applicable.

C: Marrying of non-locals by Swazis also result in loss of use of some of the indigenous meals due to the change in eating habits. This situation is not unique for Swaziland as the same applies in Europe whereby peoples’ eating habits are also changing.

C: HIV/AIDS is now making people to utilize the traditional crops which had a rural stigma e.g. local chickens, imbuya etc. However the cost of acquiring some of these resources is high.

C: Sustainable harvesting of some local insect (mopane worms) that is used as a sauce is an example of agro-biodiversity preservation. Local chiefs would prevent people from harvesting all worms and ensure that some develop into butterflies so as to ensure the supply of worms in the following season.
C: Young people are not appreciating indigenous foods and are frowning on them
Challenge: In local Agricultural shows, local foods/meals are displayed, but not
served during meals times in the same functions. Why aren’t these food items served
in the same function as a promotional strategy?
C: Balance between preservation and use of the indigenous food sources should be
maintained to ensure that they are not depleted.
C: How far do we recognize our efforts, locally in meeting vs trying to meet
international standards or even regional standards?
C: A participant commended a member of the schools’ Agriculture Project for re-
introducing indigenous crops in the school system. Through her own initiative, the
officer has distributed seeds /seedlings for indigenous crops to be cultivated in the
schools gardens by the children. For example, indigenous varieties of cucurbits which
have in the past been ignored in school garden initiatives are now found in some
schools. This way, school children are exposed to indigenous crops and the loss of
agro-biodiversity is being alleviated.

Gender specific role and responsibilities with regard to Agro-biodiversity
management:

Discussions
C: In Swaziland the men decide on issues related to livestock especially cattle e.g.
breeding. But there is change in this situation as the men are nowadays employed and
the women and children are the ones who tend the livestock. Women follow the
instruction given by the men and they may further instruct the children. Therefore all
the powers are with the men even when selling the cattle. This change has a bearing
on the agro-biodiversity as both men and women are now at work and have ‘deserted’
their homes in a bid to generate income.
C: If litala-backyard garden (a little area next to a homestead where minimal farming
is done by women) could be expanded, women would have more land to produce
various crops and be food secured and that would greatly enhance food availability.

Common, shared and specialized local knowledge

Discussions
C: Most women know about using dung for the floors for rural homesteads
C: Some are specifically trained e.g. as midwives at community level
C: Seed selection is classified as specialized knowledge; within some communities a
few members from the homestead would have the knowledge and skills for the seed
selection.

MODULE 4: Policies and Institutions

Discussions
C: Some conventions are signed in Swaziland without developing the appropriate base in terms of policies for their applicability in the country first. Others are signed yet they are not applicable for the Swazi population.

C: there is a debate currently on-going on the IPR

C: the traditional healers association is attempting to enforce sharing of knowledge and networking amongst the traditional healers in Swaziland

C: Problem of a weed called *Chromolina odorata* which is spreading rapidly in Swaziland. Its invasion is a serious threat to farmers, researchers and a committee to address its plight has been formed in the country.

C: Do the gender conventions take into account the access and control of resources? However Swazis become more critical on conventions that relate to human rights, childrens’ rights etc.

C: Some policies are formulated but are never implemented or even about their outcome as they are channelled within the relevant institutions.

C: Plan to influence policy makers form the institutions that we come from (UNISWA).

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**Summary of session**

- The linkages were much clear for the participants after the presentations
- The signing of treaties by Swaziland was regarded as being irresponsible as in most cases, the country is not yet ready to operationalize them

**Session 6 – Application of LinKS concepts in participants’ research activities**

**Material used**

- Handouts with group tasks (see file: ‘Research project group work.doc’)
- Flipcharts, stand, marker pens, tape

The purpose of this session was for participants to apply the LinKS concepts in their research activities. In groups, participants were asked to identify planned or ongoing research activities where value could be added by incorporating LinKS concepts. (See handout for the details of the tasks.)
Outputs and discussions

Four groups incorporated LinKS concepts in the following research activities.

Group 1 - CP: Effect of water management on yield and quality of taro (emathapha)

The methodology that will be used in this study will be adapted such that aspects of local knowledge and gender are included.

Questionnaire (Local Knowledge)

- Seed availability
  - Obtained
  - Who
  - How
  - In-situ crop requirement
  - Crop cycle – (planting to harvest
  - Crop Husbandry
    - Gender
    - Age

How to store seeds

- Post harvest practices
- Quality and grading (for market) and post harvest handling
- Market survey: transport, % to market
- Time from harvest to sale
- Crop husbandry
  - Who weeds, transplanting
  - Watering by who? Ridging?
  - Any fertilizer use – if so who purchases
**Materials and Methods**

- Community
- Equipment
- Land (site)
- Land preparation and planting
- Three treatments:
  - Water 12 hours twice a week (control)
  - Water 12 hours once a week
  - Water 12 hours once in two weeks
- Yield determination
  - Tuber count/plant & per 25kg container
  - Mass/25kg container
- Taste
- Nutritional quality
- Report

**Changes to Methodology**

- Data excluded
- Leaf growth }growth analysis
- LAI

**Discussions**

C: Communities: Give different plots to women and men? Men will not turn up for experience. Use school kids.

C: Why two groups? Depends on how tasks are shared traditionally in taro combination.


Q: Changes to methodology: Why are these two excluded?

A: Because the plants are destroyed / disturbed when this is done. It would affect the results.

Q: Has this been done before on-station? A: Not clear.

C: Use of focus group discussions again could be more useful than individual interviews.

C: The idea of the exercise is to apply the concepts.

C: Mother-baby trial design
Group 2 - AEE : Mdonjane Youth Income Generating Project

The department of AEE intends to use the SL Framework to do a situational analysis of the community of Mdonjane. The intention is to involve the youth of the area in development activities. Since Mdonjane is situated close to the university, various departments can contribute to this project based on the results of the situation analysis.

CAPITAL ASSETS

Financial
- None
- To be raised

Physical
- Community shed
- Canal
- Land can be accessible

Social
- Umphakatsi
- Churches
- Families
- UNISWA
- NGO
- MoAC – HE, Agriculture

Natural
- Usuthu River
- Natural Species – animal; plants
- Crops and animals

Human
- Youth
- Adults willing to help
- Health motivators
- Practicing farmers

VULNERABILITY CONTEXT

Shocks
- HIV/AIDS
- Lack of funds

Trends
- Idleness
- Drug abuse
- Thuggery
- Unemployment

**Seasonality**
- Food insecurity

**Discussions**

C: Needs assessment useful to start with.

C: Policy recommendations: Provide guidelines to policy makers / develop guidelines on how to set up similar projects.

C: Outreach is specifically a part of UNISWA’s mandate – especially for the Extension Department. It is the link between the university and the communities (student placements etc.)

C: Opportunity for interdisciplinary work (curriculum development, sociologist, extension)

C: Accessibility to land not a problem in this case as it shall be requested through a group structure from the Chief

C: Currently there is no project that is on-going in the community but there are plans to start something thus the need for a needs assessment

***********************

**Group 3- APH/LUM : Local knowledge about animal husbandry and agricultural implements to address food shortage in rural areas of Swaziland**

- Start with household inventory of livestock and their uses
- Family structure
- List of items related to agro-biodiversity / local knowledge / gender and age, responsibility

A: Types of animals

B: Animal husbandry practices
- Milking
- Heading
- Tracking to dip tank
- Attending meeting of livestock
- Direct diagnosis
- Disease treatment
- Injections and inoculations
- Types of grazelands
- Availability of water
- Body condition
- Selection for breeding
- Selling
- Eggs quality
- Calf rearing
- Dehorning
- Castration
- Branding/identification
- Training for ploughing / yokes

C: Local knowledge in animal husbandry and agricultural equipments utilization

**Equipments**

**Hand operated**
- Hoes
- Rakes
- Forks
- Shovels
- Spades

**Tractor /animal driven**
- Harrows
- Cultivators
- Ploughs
- Planters
- Sprayers
- Spanning

**Gender dimension**
Who does what/who is responsible for what?

**Local knowledge**
How to use equipment/management

**Agro-biodiversity**
- Impact on soil/crop e.g. ploughing depth
- Impact on animals

**Food security**
Using equipment that are suitable to our environment and cheap (design with the local community in mind)

**Discussions on presentation**

C: Matrix approach is useful – using tables is a good approach.

C: It is useful to be specific about local knowledge – what exactly are we talking about?

C: Use of focus group discussions again could be more useful than individual interviews.
**************

**Group 4 - HE: Indigenous Crops: Their usage and nutritional value**

**Agro-biodiversity**
- Indigenous crops: varieties
- Management of genetic resources to maintain the Agro-biodiversity

**Local Knowledge**
- Taste preferences, yield, growing patterns of indigenous varieties
- Management of genetic resources (selection, storage, distribution etc)
- Lo inputs, cost effective, adapted to local environment

**Gender**
- Decision making,
- Land allocation
- Seed selection, storage
- Subsistence versus commercial
- Access and control over resources:
  - land
  - utilization of income generated
  - Processing
  - Preferences

**Food Security**
- Increase in food base
- Nutritional value
- Adaptable to environment can survive extreme climatic conditions
- Linkage between LK, gender, agro-biodiversity management for food security

**Value added:**
- Sustained maintenance of genetic resources for food security
- Reference material for extension workers
- Responsive and relevant research: basis for appropriate extension messages
- Acknowledgement of local knowledge
- Farmers participating in generating knowledge

**Activities**
- Community field day or show
- Seed display
- Preferred seed varieties
- Display and tasting of indigenous dishes
- Nutritional analysis of indigenous dishes

**Methodology changes**
- More participatory tools to be used
Discussions

C: Activities: Look more an output of the exercise than a methodology. In order to hold a field day, you would first need to do other activities.

C: The seed display could be used during the research itself / tangible things instead of just words.

***********************

Mid-workshop evaluation results

What I like about the workshop so far:
- Sleep well
- Keep time
- Relaxed atmosphere
- Freedom to express one’s view
- Like the way workshop is being conducted
- Participatory approach appreciated
- Time conscious (especially knock off)
- Interaction good
- Group work very interesting
- Delicious meals
- Good presentations
- Facilitators lively
- Not enough time
- Freedom of expression
- Everything is okay
- So far facilitators have done a good job
- No right or wrong view
- Training: perfect
- Hotel: Wonderful

What I dislike about the workshop so far
- So much reading to do each day
- Case study too complicated
- Case study 5 was poorly written, therefore not good for reading, leaves too many gabs
- Cannot cope with the reading but realize its importance. Not suggesting any changes
- Do not favour evening assignments
- Reading at night/morning disruptive to my rest
- Ghost visit in my room on Monday
- Past two days’ proceedings have gone well but nothing practical has come out yet. All is still theory
Suggestions for improvements
- Information and the reading assignments must be made clearer so participants can easily understand the concepts in the cases
- Need more discussion time
- More impressive and easy to remember if visuals are used
- Should allow more discussion time

Summary of session
- It was not possible for the participants to present research projects that are ongoing and thus the research projects used are planned ones
- The exercise was however regarded as useful as some of the research projects shall be taken through by the relevant teams
- Results from the mid-evaluation reflected that the workshop participants were so far comfortable with the progress and processes used in the workshop. However the suggestions on improvements shall also be considered especially on allowing more time for discussions.

2.4 Day Four: Interdisciplinary research project and courses

Overall learning objectives and plan for the day
1. Identification, selection and development of an interdisciplinary research project
2. Participants relate the concepts to one of the courses they teach for each of the departments

Table 5 Detailed programme for day four

<table>
<thead>
<tr>
<th>No.</th>
<th>Session and time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Selection of research theme to work on (8.00 – 9.15)</td>
<td>▶ Participants selected two projects for group work (to develop a proposal for interdisciplinary research)</td>
</tr>
<tr>
<td></td>
<td>Group work on interdisciplinary research (9.15 – 11.30)</td>
<td>• Group work (see handouts for guidelines file ‘Session 7 &amp; 8 research projects.doc’)</td>
</tr>
<tr>
<td></td>
<td>Feedback from group work (11.30 – 13.00)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lunch Break</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Group work on curriculum (14.00 – 16.00)</td>
<td>▶ Participants work on specific courses (see handouts for guidelines, file ‘Session 7 &amp; 8 research projects.doc’)</td>
</tr>
<tr>
<td></td>
<td>Feedback on group work (first group – vegetable production) – (16.00-17.00)</td>
<td>▶ See flip charts and ppt files</td>
</tr>
</tbody>
</table>
Session 7 – Interdisciplinary research project

**Material used**
- Handouts with group tasks (see file: ‘Session 7 & 8 research projects. doc’)
- Flipcharts, stand, marker pens, tape

**Outputs and discussions**

Participants proposed a number of interdisciplinary research topics with the aim of further developing them into proposals, with integration of LinKS concepts through specific activities. Projects were meant to be of interest to participants to the extent that they would seek funding for them through the UNISWA research grants or other sources. Proposed projects were checked for the inputs that different departments could make, and it was found that all of them could involve all departments. Therefore a vote was cast to decide which two projects should be worked on in more detail.

**Selection process**

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</thead>
<tbody>
<tr>
<td>1. Irrigation / water management in Taro</td>
<td>X (market, labour)</td>
<td>x (nutrition)</td>
<td>X</td>
<td>x (use as feed)</td>
<td>X</td>
<td>X</td>
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<tr>
<td>2. Income generation and cultural activities for youth</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>X</td>
<td>x</td>
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<tr>
<td>3. Indigenous foods / crops</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>X</td>
<td>x</td>
</tr>
<tr>
<td>4. Local knowledge on animal husbandry and implements</td>
<td>X</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>X</td>
<td>X</td>
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<tr>
<td>5. Use of wetlands for food / livestock</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>X</td>
<td>x</td>
</tr>
<tr>
<td>6. Impact of drought relief / food aid on agricultural development and food security</td>
<td>X</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>X</td>
<td>x</td>
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<tr>
<td>7. Needs assessment and prioritisation in community with aim to develop long-term</td>
<td>X</td>
<td>x</td>
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</table>
Project 6 and 7 were selected for group work (voting)

GROUP OUTPUTS
GROUP 1:
Impact of Drought Relief/Food Aid on Agricultural Development and Food Security

Problem statement
What impact has food aid had on the livelihood of the people in drought-stricken areas in their farming system?

Objectives
- What is happening to their farming systems?
- What types of crops are they farming? How much do they produce? How long does the produce last?
- Nutritional status of their produce vs. donated food.
- How are their eating habits affected?
- How have their social assets been affected?
- Is it sustainable?
- Impact of donations on local knowledge?

Methodology
- Descriptive survey
- Instrument – focus group, questionnaire
- Focus population – recipients of donated
- Sampling – stratified random sampling

LinKS concepts
- Agro-biodiversity
  - Exploitation of natural resources
  - Farming patterns
  - Animal production
- Gender
  - Men and women participants
- Food security
  - Copping strategy
  - No supply
- Local knowledge
  - What is happening to local knowledge?
  - Do they still have local knowledge?

Funding sources
- FAO
Action Plan
- Duration – 1 year
- November to March – solicit funds
- March to December – data collection and analysis
- January 2006 - report

Departments/disciplines
- Sociologists
- Nutritionist
- Land use and mechanization
- Animal production and health
- Crop production extension

Discussions – Impact of Food AID
C: It was quite an experience for the participants when developing the methodology and linking it to the LinKS concepts
C: Challenge is that data collected is relevant to the research objectives
C: There has been knowledge gain through the group discussions especially when you are used to experimental research.
C: The selection criteria for beneficiaries can also be considered
C: The food aid program is now shifting from donations to a food for work program
C: The nutritional status highlighted is based on the type of food consumed by the community. Time lines can also be used to reflect the changes in the nutritional status

GROUP 2:
Community Profile: Needs Assessment for Sustainable Livelihood

Main objective
To document the needs of the community for sustainable development

Specific Objectives:
- To determine the demographic characteristics of the community
- To identify the community needs
- To assess the available resources
- To determine feasible interventions
- Stakeholder analysis

Methodology
Community participatory approach – community meetings
Survey (questionnaire)
Qualitative and quantitative methods will be used to analyse data feasible interventions
Literature review, clarification of concepts, experiences, methods etc

People/departments/disciplines to be involved
CP/HE/LUM/AEE/APH/Government (research unit)

LinKS Concepts
a) Gender participatory approach – divide groups into gender specific groups
   Surveys
b) Local knowledge use of local resources, historical maps, time lines
c) Agro-biodiversity
Resources and needs – participatory method – how community utilizes resources e.g. land for cropping

Sources of funding
1. LinKS
2. UNISWA Research Unit

Project duration
12 months – start date – 12 months from release of funds

Action Plan
Preparations – 1 month
Participatory – 2 months
Survey – 4 months
Data analysis and write up – 5 months
Report back meeting on findings

Funding for Actual project
Community Service within the University
EU-Microprojects

Discussions on Needs Assessment presentation
C: A prioritization exercise shall be conducted at the end of the assessment to highlight what project initiatives should come first. This exercise should be conducted by the community.
C: A stakeholders’ analysis can be conducted to identify other stakeholders that are in the community and to identify their different roles in the community

C: UNISWA has a new structure on community related outreach program which could be used as a source of funding for this project

C: There is a need to differentiate between genuine needs and non-genuine needs in the community as well as urgent and non urgent needs. Such concepts need to be clarified with the community during the exercise to ensure that there is no confusion.

C: Provision of refreshments is necessary when doing participatory research as it takes a long time and can be exhaustive to the community members.

*******************************

**Summary of session**

- Participants are planning to take the two research projects forward as they found them quite useful / relevant and that they involve most of the departments
Session 8 – Curriculum development

Material used

- Handouts with group tasks (see file: ‘Session 9 curriculum development. doc’)
- Flipcharts, stand, marker pens, tape

Participants were asked to identify courses of their respective departments that would benefit from an integration of LinKS concepts. Participants then worked in pairs or small groups to address the questions as per the handouts.

Outputs and discussions

Presentation from Crop Production - CP

Course: Introduction to Vegetable Crop Production
- Classification of vegetable crops
- History of vegetable gardening development of market garden
- Seed – properties of seeds
- Seed storage
- Germination & dormancy (factors)
- Storage environment
- Nursery management
- Seed preparation technology
- Seedbed preparation
- Transplanting
- Principles & practices
- Physiology of transplant responses
- Site selection
- Site preparation
- Climate
- Labour
- Crop establishment
- Cultivation & soil management
- Irrigation
- Mulching
- Shading
- Harvesting
- Post harvest, handling and marketing

Individual vegetable crops
eggplant; capsicum; lettuce; cauliflower; radish; cucumber; bidens pilosa (black jack)
amaranthus; funnel; aloe (emahala) cochorus (ligusha); momodica
Discussions
C: Some of the students already conducted their research projects on indigenous plants (e.g. cocorous – contains a lot of fibre and iron)
C: Use provocative figures (xx% of species are disappearing); use of indigenous knowledge: Students to interview relatives, own knowledge, interact with communities, tell them about it
C: Other suggestion: Ask students to compare traditional and modern methods along a range of criteria
Q: How have these courses be taught so far? Are they not including these issues?"
A: Indigenous vegetables were included at degree level, but not at diploma level. Might depend on the lecturer.
C: What would need to happen in order to realise these activities? This question
C: Participatory approach tends to need more time. Do we have the freedom to change this? Are there policies to incorporate new items?
C: Most courses taught at the university do not relate to what is happening in the community.
C: Conventions: Could be taught at this course.
2.5 Day five – Way forward

Overall learning objectives and plan for the day
1. Developing the way forward
2. Summarizing and clarifications on the workshop
3. Conducting the evaluation for the workshop

Table 6 Detailed programme for day five

<table>
<thead>
<tr>
<th>No.</th>
<th>Session and time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>8.00 – 8.30 Checkout and group photographs</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8.30 – 10.00</td>
<td>• Feedback from group work - continued</td>
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<tr>
<td></td>
<td></td>
<td>Tea break</td>
</tr>
<tr>
<td>9</td>
<td>The way forward (10.15 – 11.35)</td>
<td>• Discussions and clustering of individuals’ contributions (Barbara and Sibusiso)</td>
</tr>
<tr>
<td></td>
<td>Summary and evaluation (11.35 – 11.50)</td>
<td>• Filling in of evaluation forms by participants</td>
</tr>
<tr>
<td></td>
<td>Workshop closure</td>
<td>• By Patricia Musi</td>
</tr>
</tbody>
</table>

Session 8 – Feedback continues

Outputs and discussions

Presentation from Extension Department (AEE)

Community and Rural Development
Aspects related to LinKS
Gender
All topics applicable, e.g.
• Participation
• Analysis of community and RD studies
• Conception
• Approaches

Local Knowledge
• Participation and involvement of clientele
• Conflict and self help
• Approaches,
• Selected case studies
• Principles
• History
• Rationale
**Agro-biodiversity**
- Participation and involvement
- Approaches
- Analysis of community development, selected case studies
- Principles
- Rationale
- History

**Value Added**
- Improved relevance to needs of community
- Enhanced ownership of intervention strategies
- Hands on experience by students

**Activities**
- Field trips
- Case studies
- Lectures for concepts
- Guest speakers
- Participatory community activities

**Changes**
- Revision of course description
- Approval by Senate
- Curriculum Review to add time allocated for course
- Workshops
- Resources

**Discussions**
C: Important to have a mixture of practical and theoretical exercises

C: Use three ways of learning and teaching: Exposure to new ideas / lecturing, drawing on students’ own experiences, letting students learn from others (community interactions)

C: there is an issue with staff attitudes.

***********************

**Presentation from Home Economics (Community nutrition course: FN402)**
**Aspects of the course**

- Factors related to nutritional status (political, economic, social, and agricultural)
- adapt the sustainable rural livelihoods framework and relate it to agro biodiversity, gender, local knowledge and food security
- livelihood outcomes are nutritional levels and food security
- Assessing NS in communities
- employ participatory tools to validate the four methods of assessment. Use the gender approach that is with the ABCD, linking gender with nutritional status
- Growth monitoring and nutrition surveillance
- Epidemiology, nutrition surveillance, counseling
- Agencies and organizations that conduct nutrition programmes or provide related services
- Food practices, nutrition labeling, consumer behavior in the market and consequent effects on nutrition
- Current issues on nutritional science
- Analysis of factors that contribute to malnutrition, measures for improvement, implementation and evaluating nutrition and educational programmes

Activities
- Participatory approach
  - Mind mapping
  - Community mapping
  - Social mapping
  - Matrix

Requirements
Capacity building with regards to participatory approaches and the tools

Discussions
C: UNISWA activities more focused on lecture than the use of other training methods/approaches
C: IF training on participatory tools can not be offered, at least the materials on the tools could be provided.
C: Importance of practicals
C: Scope for cross-cutting practicals with the students to interact in the community
C: Need for soul searching” – both attitudes and resources. Academics often see their courses as their own domain and are not ready to collaborated

******************************

Presentation from Agricultural Economics -AEM

Course: Cooperative Studies Cooperatives in Agricultural development

Types of Cooperatives

Production and Marketing
Service

Agro-biodiversity

A variety of agricultural products
Poultry, piggery, dairy beef bees and crops.
Preservation of genetic material
Seeds and breeding stock.
Gender

Most vegetable gardens are run by women
Some products require processing and that is done by women in most cases.

Local / Indigenous knowledge

Cooperatives using local plant material for handicraft.
The principles of cooperatives evolve around sharing common goals and being user owned.

Value added by concepts to the course

They ensure understanding and application of course in real life situations

Specific Activities

Video showing the different gender roles within a cooperative with reference to agro-biodiversity and local knowledge.
Use of field trips to complement lectures.

Requirements

Strong collaboration between department of cooperatives and the AEM department.
Financial support to facilitate field trips and preparing videos.

Discussions

C: In the 1970s, students practiced farm accounts with chicken. They learnt to do business management. Why don’t students learn how to manage cooperatives? We could teach something like that, but with a practical element, in collaboration with Ministry of Agriculture.
C: Suggestion of students forming cooperatives.
C: Problem: Schedule is tight – there is not enough time. First year students are in class from 7 to 5, and still writing tests. There is no time for cooperatives.
C: Students’ participation: There might be ways of involving students more in curriculum development to make sure they don’t get overworked and can benefit from a more participatory way of teaching.
C: Positive note: Lots of things are going on already – we should build on it.

**********************************
Presentation from Animal Production and Health - APH
Course: Dairy Production and Technology – APH 408

Aspects related to LinKS

*Agro-biodiversity*
- dairy cattle breeds
- milk composition
- types of feeds
- farming systems

*Local knowledge*
- dairy cattle breeds
- milk processing
- types of feeds
- seasons
diseases and treatments
  - calf rearing
  - milking

*Gender*
- dairy breeds
- milk processing
- feeds
- seasons
- diseases and treatments
- calf rearing
- milking
- milk composition

Addressing linkages

*Agro-biodiversity*
- suitable breeds
- acceptable milk composition
- availability of suitable feeds
- appropriate farming systems

*Local knowledge*
- improve milk processing methods
- strategies to increase milk production
- compare effectiveness of disease control methods
- improvement of calf rearing methods

*Gender*
- highlight respective gender activities

*Food security*
- when all aspects are harmonised, the milk production will be increased and
- processing will be improved
Activities to address these linkages within the course
- lectures
- videos
- field trips
- research

Realisation of the activities
- training of trainers
- change of curriculum
- research

Discussions
C: Would be useful to include local names of diseases and plants.
C: A long time ago students were attached to extension, instead of companies. It might be useful to make sure one of the two attachments at diploma level are with extension.
C: Problem is that students are many and courses are large. Students don’t get a lot of hands on experience.
C: There are often opportunities for students to work with NGOs. They could gain experience and help the organisations (e.g. nutritional surveys).
Q: Does the university have access to reports from NGOs and videos? That would be useful.

Presentation form Land Use Planning – LUM
Course: Land Use Planning - LUM 305
Aspects of the course
1. Mapping of soils and other land features
2. social survey for land evaluation

LinKS Concepts
Agro biodiversity
- soils - micro-organisms, crops, livestock
- climate
- topography – vegetable cover, slope

Gender
Values associated with their use – egg. Clay which is more valued by woman for making clay pots

Local knowledge
- soil conservation methods e.g. grass strips
- soil classification and uses by locals e.g. wetlands for taro framing
- land administration especially on Swazi Nation Land where land reserved for farming purposes is being sold for residential purposes
Food Security
- sustained/improved food production

Addressing linkages
- curriculum will be build on local knowledge for the course to be appreciated
- impact on poor land use patterns on agro biodiversity and food security shall be noted

Specific activities
- field surveys
- key informants
- videos

Requirements
- training

Discussions
C: it was highlighted that the course is currently a theory oriented course and not a practical. The filed trips would give it more value and make it a practical course
C: The availability of time to make the course a practical one was once again discussed at length

Summary of session
- Participants found this session useful and relevant to their work and were able to relate the concepts well
Session 9 – The way forward

Material used
- Individual task on the way forward (see below)
- Flipcharts, stand, marker pens, tape

Task
What specific activities would you forward on the sustainability of concepts, research activities/ teaching / curriculum development?

Outputs and discussions - results of brainstorming

Practical / community development activities
- Community work: The mandate of the university includes community work. Nearby communities can be supported in projects to ensure sustainability. Funding can be accessed from organisations that have an interest in this, e.g. Kellogg foundation / FAO
- Promoting agro-forestry production practices in rural communities, incorporating indigenous crop and animal resources. Institutional support of concepts through interaction with community and students (participatory approach)
- Introduction of home gardens to rural / urban communities

Participatory research (general and specific)
- Research reports have to be available to everyone. The people at grassroots level (locals) should have access to and be part of the whole exercise
- Research activities: Write and refine proposal on community needs assessment in sustainable development
- Apply LinKS concepts in conducting research (individual or group)
- Organic farming: Its feasibilities and constraints in today’s agriculture world, i.e. reduction of dependence on chemical use in agriculture
- Research activities: We need to take some of the work that has been started here back with us. The UNISWA research board can fund some of the work.
- Try as much as possible to incorporate concepts in socio-economical research activities.
- Documentation of indigenous knowledge to provide a basis for research activities
- In research the effective involvement of community participation as part of research will help in the use of LinKS concepts.
- Always include LinKS concepts in our research work, so that this Gospel lives on
Teaching activities
- Always include LinKS concepts in our teaching work, so that this Gospel lives on
- Start incorporating the concepts in our teaching methods
- Teaching: Integrate concepts in appropriate courses
- There’s need to incorporate local knowledge in all subjects that touch on social issues to avoid conflicts and to accommodate all parties
- Use teaching methods that allow participation of learners.

Curriculum review / development
- Merging of related courses and team teaching. Merging of courses may be extended across different departments. Also bring out links between curriculum and Swazi livelihood patterns.
- The concepts learnt can be useful for the methods course. The food security focus needs to be incorporated. The time dimension is important.
- Review the teaching curriculum on departmental level and merge related courses, so that respective lecturers take part in the course to avoid repetitions, which put pressure on students. This will avail time for practical, which will involve the LinKS concepts.
- Curriculum Development: Sensitising through a crush workshop on LinKS concepts.
- Review curriculum and reduce intake to promote practical training and research on local knowledge, gender and agro-biodiversity.

Sharing outcomes with other UNISWA staff
- It would be wise for academics to get over themselves for a while and begin to appreciate knowledge from all possible sources, especially from community people.
- The LinKS should have been instilled in minds of our superiors – so that they’ll require us to use them
- Sustainability of concepts: Participants to write reports to present to Dean and HoDs, then request for a meeting to discuss report.
- Workshop heads and deans in the faculty
- Present workshop recommendations on teaching / curriculum development to the Departmental Board and get consensus on way forward
- Share concepts with colleagues in the various departments as soon as possible

Team building UNISWA
- Improve our interpersonal relationships at a social level to be able to work together towards one goal

Material development / resources
- Funds to assist in implementing the concepts, e.g. to get transport to the areas where to acquire the local / indigenous knowledge
- More accessories to help in illustrations and explaining the concept of gender. This should help reduce the business that exist when relating to gender issues
- Participation of case-studies, in which the LinKS concepts are involved. But this should require some funding
Sustainability

- Research activities: Need a coordinator on the proposed interdisciplinary research in order to move the process forward.
- Have a link person with donor agencies
- A committee should be formed with representatives from participating departments to ensure sustainability

Final decision: Carrying the initiatives forward
A Seminar be conducted for the Head of Departments and Dean for the Faculty of Agriculture, UNISWA to sensitize them on the LinKS concept for the ease of adoption and acceptability of the concepts in the Faculty. For the success of this seminar it would be wise to engage a facilitator that is not a participant from the current workshop. The same request was forwarded by the MOAC participants for the Malkerns Research Station participants for their management personnel.

Closing session

Participants’ closing remarks:

- Lots of new ideas were developed
- Changes in emphasis / more practical / curriculum review ongoing
- Though the weather was hot, there has been good participation
Annexes

Annex 1  Profiles of participants
Name: Phumza Maseko
Is a researcher in the Soils Section of Malkerns Research Station, Ministry of Agriculture and Cooperatives - MOAC. He likes playing with mud / clay, hence his specialization in soils. He is interested in soccer and research activities (biodiversity and indigenous knowledge).
M J Simelane is a lecturer in the Agricultural Extension and Education Department, UNISWA. His achievements are the many students he has taught.

Vusi Mkhonta, is a Weed Scientist at the Malkerns Research Station, Ministry of Agriculture and Cooperatives. His interest is in agricultural development. He is a member of the national steering committee for Alien and Invasive plants.
Micah Masuku. Is an agricultural economist at UNISWA in the Agricultural Economics and Management Department. His main interests are in rural development, contractual relationships and supply chain management.

Zodwa Ndlela is in the Land Use and Mechanization department at UNISWA. Her interests are in Natural Resources Management. Her achievements are mainly in human resources development (training), and has some of her former students in this workshop. She has just joined UNISWA and since this is a new position, she is still looking for a niche and wants to teach more effectively.
Musa Dube is working for UNISWA under the Agriculture Extension and Education department. He likes working with communities. Achievements: natural resources management. Wish: perform much better than he did so far.

Henry Mndawe is from Piggs Peak and is employed as a Research officer in agricultural economics section at the Malkerns Research Station. He worked for NamBoard under a baby vegetable project – trained farmers in producing export vegetables, recently started at Malkerns. Previous job involved a lot of Monitoring and Evaluation. He is still single and is keen on sustainable economic development.
**Letswe Mabuza.** Works as technologist in textile design at UNISWA in the Home Economics Department. She comes from near Manzini. Interests: Community development. Wants to further her studies and skills. She worked for World Vision as a nutritionist focusing on malnutrition in children under 5 in rural areas.

**Victor Shongwe** is from UNISWA and is a part-time warden at the institution. He is under the department of crop production (horticulture). Pioneered research on indigenous vegetables and supervises research projects for final year students. Currently working on propagation of pineapple using tissue culture. He has a keen interest on establishing a horticulture project on micro-propagation of fruits and herbs.
Thulile Sigwane
works for UNISWA as a teaching assistant in Animal Production and Health department. She has previously worked for SKPE on livestock where she was involved with the utilisation of indigenous plants for feeding livestock. She is also associated with a project by Swaziland Meat Wholesalers. Her interests are in exploiting indigenous plants as feed supplements for livestock.

Dr M.N. Shandomo
came to Swaziland in 1986 and is working under the Animal Production and Health department at UNISWA. He has a rich history in teaching. His interest is in livestock health, including communal animal health services.
Mduduzi Shongwe comes from Ngwenya and works for UNISWA under the Land Use and Mechanization department. He completed his undergraduate degree in 2001 at UNISWA and is currently a teaching assistant. His main interest is in the field of agricultural mechanisation where he plans to further his studies.

Thokozile Sibiya. She works at UNISWA in the Home Economics department as a lecturer in Food and Nutrition. She comes from a family of 11 where she is the last born. She likes training and dining out (good food and good music) and is a Christian (evangelical church). Her interests are in HIV Aids, Nutrition and Food Technology as well as Food Security. She has studied in many countries. She is part of a Southern African research network on technology and nutrition. She is also the Chairperson for the Impact Mitigation sub-committee of NERCHA and a Board member of SWAPOL (Swaziland positive living).
Nozipho Motsa was born in Bulunga. She is still single and comes from a family of 8 where she is the first born. She enjoys sports and goes to dance clubs occasionally. Nozipho is a Roman Catholic and is currently a teaching assistant in the Department of Crop Production at UNISWA. She aspires to further her studies in Agronomy (MSc / PhD). Her achievements are: Graduating with a BSc Agriculture (CP) Degree in 2002 and being appointed a teaching assistant at UNISWA in 2004. Before joining UNISWA she was working as a consultant with CRATE (rural development / resettlement program). Her research interests are in food crops and community development.

Patricia Musi is from Manzini. She did her first degree in Sierra Leone, and then furthered her studies in the United States of America. She is on leave of absence from UNISWA and is currently coordinating the LinKS project. She is interested in poverty and food security issues and has a passion for participatory methodologies and grass roots processes that bring about sustainable improvements in rural livelihoods.
**Ruth Dlamini** is a lecturer in the Agriculture Education and Extension department. She teaches courses in Rural Sociology and Extension methods and has a special interest in community development and gender issues.

**Barbara Adolph**, works for NRI. She is single and has no children. She is German and a Sociologist. Barbara travelled to Swaziland twenty years ago and did voluntary community service. In her work she is more involved with local knowledge, specifically on soil and water conservation and plant protection (farmer field schools)

She has done some work on gender and agro-biodiversity. She has been involved in a number of projects of an interdisciplinary nature as a researcher.

Achievements: Publication of a book on local soil fertility management practices in India that has managed to bring about changes in the curriculum of researchers. The book is also widely used as it has been translated to local language.

Challenges: Funding for research. The institute has to send proposals for funding to different donors – there is no core funding.
Sibusiso Mondlane is an agriculturist by training and graduated from UNISWA in 1996. Since he has been mostly involved in community development under a number of local NGOs. He is currently working for a local consultancy known as Sesuka Sahamba Community Development Consultancy where he provides specialized training on Participatory Community Development and also on Microfinance. These specialized services are offered to donor institutions, NGOs as well as NGOs involved in agricultural and non-agricultural oriented initiatives. He is mostly involved in training and not much into research.
## Annex 2 Outcome from evaluation sheet

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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Any other comments or suggestions</th>
</tr>
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<tbody>
<tr>
<td><strong>To what extent were your expectations of the course met? (1 – 5)</strong></td>
<td><strong>What did you like/find useful about the workshop?</strong></td>
<td><strong>What did you dislike/find not useful about the workshop?</strong></td>
<td><strong>What did you learn?</strong></td>
<td><strong>How could the workshop have been improved, in terms of (a) training content and (b) training approach/methods?</strong></td>
<td><strong>What are you going to do as a follow-up?</strong></td>
<td><strong>Trainer’s knowledge of the topic (1-5)</strong></td>
<td><strong>Training methods used and the trainer’s training skills (1-5)</strong></td>
<td><strong>Trainer’s interactions with participants? (1-5)</strong></td>
<td><strong>The facilitators should not take sides because it is unfair—sometimes the facilitators will take sides in presentations such that the group will be embarrassed. The other participants then get the platform to humiliate the group with the “go-ahead” from the facilitator. This is condemned</strong></td>
</tr>
<tr>
<td>4</td>
<td>-(4) the facilitators should not take sides because it is unfair—sometimes the facilitators will take sides in presentations such that the group will be embarrassed. The other participants then get the platform to humiliate the group with the “go-ahead” from the facilitator. This is condemned</td>
<td>It is useful because it involves more of the participatory skills. This has not been identified as part of my experience but I will be able to use it now.</td>
<td>The sessions were too long, I would be exhausted by the end of the day. The reading assignments were too much</td>
<td>I learnt that local knowledge and gender are inter-related. Agro biodiversity involves the two. Gender is important to view in all directions and not to be biased</td>
<td>Give documents to participants on time. The case studies should not leave us in suspense e.g. the Mali case. Otherwise the participatory and presentation type of training is very good as far as I am concerned</td>
<td>Include all the LinkS concepts into my teaching and research work. Search for more advices and information on the websites cited in the manual to assist</td>
<td></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td><strong>The application of local knowledge and gender in the achievement of food security. The workshop only recognized their existence</strong></td>
<td>- Members fully participated and shared knowledge</td>
<td>nothing</td>
<td>The existence of agro biodiversity, gender aspects of knowledge and application of agro-biodiversity</td>
<td>Needed to distribute the training manual some 30 days prior to the workshop</td>
<td>Infuse the knowledge acquired in the teaching of my courses at University and during extension</td>
<td></td>
<td></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td><strong>The sustainable livelihood approach</strong></td>
<td>-</td>
<td>-</td>
<td>How to incorporate the LinkS concept in research and courses</td>
<td>It would have been better if the consultants had a case study research which they incorporated the concepts as a training tool</td>
<td>Will attempt to consider the concepts in my research activities</td>
<td></td>
<td></td>
<td><strong>5</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td><strong>When using the LinkS concepts in our own research</strong></td>
<td>-</td>
<td>-</td>
<td>I learned LinkS concepts and how to apply</td>
<td>Improvement can be in using local case studies</td>
<td>I will participate in the research project that has</td>
<td></td>
<td></td>
<td><strong>4</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

*4 The application of local knowledge and gender in the achievement of food security. The workshop only recognized their existence*
<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To what extent were your expectations of the course met? (1 – 5)*</td>
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<tr>
<td>2</td>
<td>What did you like/find useful about the workshop?</td>
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<td>How could the workshop have been improved, in terms of (a) training</td>
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<td></td>
<td>content and (b) training approach/methods?</td>
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<td>6</td>
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<td>7</td>
<td>Trainer's knowledge of the topic (1-5)**</td>
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<td>9</td>
<td>Trainer's interactions with participants? (1-5)**</td>
<td></td>
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<tr>
<td></td>
<td>Any other comments or suggestions</td>
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</tr>
<tr>
<td>4</td>
<td>Free self expression, respect of other peoples' opinions, allowing</td>
<td>Need to be broad when defining concepts, various tools, approaches and strategies to deal with issues and analyze community problems,</td>
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<tr>
<td></td>
<td>questions and some discussions and the LinKS concepts and framework</td>
<td>that there is a need to look beyond a problems that is being resolved</td>
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<td></td>
<td>projects -</td>
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<td></td>
<td></td>
<td>Not much changes because the facilitators did their best. Perhaps facilitators could have written themselves case studies that are</td>
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<td></td>
<td></td>
<td>local based. For instance Sibusiso Mondlane has lots of practical local examples that would epitomize case studies. Good job though</td>
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<td></td>
<td></td>
<td>in this domain. Foreign based case studies leave one with some unanswered questions</td>
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<td></td>
<td></td>
<td>To incorporate part of the experiences in my courses and lectures and incorporate and use some of the concepts when conducting</td>
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<td>consultancy</td>
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<td></td>
<td></td>
<td>Use local based case studies Allow participants to take down own notes even though proceedings will be made available. Some group</td>
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<tr>
<td></td>
<td></td>
<td>work requires guiding notes, therefore it seems reasonable to me to take own notes for reference sake My overall comment is that</td>
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<td></td>
<td></td>
<td>this workshop was great, very instructive, educative and refreshing. However my question is: “What will LinKS project do to ensure</td>
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<td></td>
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<td>that we apply and incorporate these concepts</td>
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<td>5</td>
<td>The concepts learnt in this workshop will help make teaching some of the courses more effective and relevant to the community situations, it will not be abstract</td>
<td>In my department, the subjects I teach were not looked into i.e. textiles (though it is relevant) it would have been wonderful to deliberate on them too and see how they link</td>
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<tr>
<td>5</td>
<td>Embracing LinKS concepts in research and training is a good approach. I believe it helps enhancing responsibilities to local problems</td>
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<tr>
<td>3</td>
<td>in order for the concepts to sink to me, I would have loved to workshop was participatory and I think the concepts were explained</td>
<td>The case studies used were not very clear for someone introduced to the concepts</td>
</tr>
</tbody>
</table>

5 5 5 Participants did not only listen but shared their experiences. This has enhanced generation of ideas. We were able to identify shortcomings of our research methods and teaching approaches.
|   | To what extent were your expectations of the course met? (1 – 5)* | 2 | What did you like/find useful about the workshop? | 3 | What did you dislike/find not useful about the workshop? | 4 | What did you learn? | 5 | How could the workshop have been improved, in terms of (a) training content and (b) training approach/methods? | 6 | What are you going to do as a follow-up? | 7 | Trainer's knowledge of the topic (1-5)** | 8 | Training methods used and the trainer's training skills (1-5)** | 9 | Trainer's interactions with participants? (1-5)** | Any other comments or suggestions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | see a study conducted and the concepts applied so one can use as a prototype upon which you could develop your own | concept for the first time | conducting research in social science | b. Training approach was good | concepts in my research | | | | | | | | | | | |
| 2 | The sharing of ideas amongst members, a revisit to the concepts of food security and the SL Framework. Use of case studies | nothing | SL Framework. Exposure to this in the past was shallow. This was beneficial in the sense that it was based on activities by the participants | Visits to actual communities but this could have been more expensive financially and time wise | Research, curriculum changes (ones within my control), community work | 5 | 4 | 4 | The SEAGA workshop is needed for participants of this workshop | |
| 3 | Research agenda was not given sufficient treatment | Understanding the linkages | Workshop was too short, maybe another one will help so that we are given enough time to grasp the concepts | The linkages between gender, biodiversity and local knowledge | Notify and give participants enough time to look at the training manual before they come for the workshop e.g. 2 months | Incorporate some of the concepts into my subjects and research | 4 | 4 | 5 | none | |
| 4 | Group discussions | Readings: the manual is too thick | Integration of LinkS concepts into research agenda and teaching activities Sustainable livelihoods framework applications | More time to be allocated to the interdisciplinary research project development The Mali case study should be improved to include more details or include country specific case studies | I will apply the LinkS concepts and the Livelihoods framework in my teaching activities | 4 | 4 | 4 | It was a very useful workshop I have been sensitized on Agro biodiversity, gender and local knowledge systems for food security | |
| 5 | How the LinkS concepts relate to the rural communities which is required in my filed of specialization. The | Nothing, everything was useful | I have learnt that not all that is modern or all of the education is good when it | I will educate myself first | | | | | | | | | | | |

5 The sharing of ideas amongst members, a revisit to the concepts of food security and the SL Framework. Use of case studies
4 Understanding the linkages
3 Research agenda was not given sufficient treatment
5 How the LinkS concepts relate to the rural communities which is required in my field of specialization. The

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</table>

| 4   | Almost everything was met |  |  |  |  |  |  |
|     | I liked everything save for the reading assignments |  |  |  |  |  |  |
|     | Nothing was disliked |  |  |  |  |  |  |
|     | The importance of co-operation between members especially from different sectors |  |  |  |  |  |  |
|     | Allow more participation in form of discussions |  |  |  |  |  |  |
|     | Incorporate the knowledge in my research work especially with the community |  |  |  |  |  |  |
| 5   | I was desirous of understanding all issues pertaining to food security. My understanding of the various dimensions was fulfilled |  |  |  |  |  |  |
|     | I am exposed to a different and more meaningful dimension of understanding research and training. The LinkS experience was worthwhile indeed. I wish more of my colleagues would be exposed to such an experience |  |  |  |  |  |  |
|     | I liked the participatory approach of the workshop which is a first hand practise on how we should be conducting ourselves in the field of research and teaching |  |  |  |  |  |  |
|     | The LinkS concept from a very wide application in almost every sphere of human understanding. The value of local knowledge cannot be argued. I found the analysis of capital assets and their fate to be quite useful |  |  |  |  |  |  |
|     | The training approach/method in the sense of being participatory are quite okay |  |  |  |  |  |  |
|     | My course do lend themselves well to the application of the concepts and I intend incorporating the concepts in some and my research endeavours |  |  |  |  |  |  |

*The opinions of the trainer may vary based on the context and feedback received.
**Scores range from 1 to 5, with 5 being the highest.
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<tr>
<td></td>
<td>Any other comments or suggestions</td>
</tr>
</tbody>
</table>

* (1): Not at all
(2): 
(3): Partly
(4): 
(5): Fully

** (1): Very bad
(2): 
(3): Average
(4): 
(5): Very good

The sponsors, organizers, trainers/facilitators did a commendable job indeed. God Bless!
Annex 3  Mood-meter

<table>
<thead>
<tr>
<th>Day</th>
<th>😊 Training</th>
<th>😊 Training</th>
<th>😞 Hotel</th>
<th>😞 Hotel</th>
<th>😞 Training</th>
<th>😞 Hotel</th>
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</thead>
<tbody>
<tr>
<td>Monday</td>
<td>6</td>
<td>5</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
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<tr>
<td>Tuesday</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>3</td>
<td>3</td>
<td></td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Thursday</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td></td>
<td>5</td>
<td></td>
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<tr>
<td>Friday</td>
<td></td>
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<td>9</td>
</tr>
</tbody>
</table>

Note: Not all participants filled in the mood meter
Brief explanation: Some participants were not happy on Wednesday as the sessions ended later than the scheduled time. On Friday participants were not happy with the hotel arrangement of checking out at 1000hrs as they had to vacate their rooms at 0800hrs in order to be in line with the workshop schedule.

Annex 4  Further Resources

Videos:

“Sharing the knowledge”. 12 minutes video produced by the LinKS project (FAO 2001). Highlights some examples of the use of local knowledge, including the use of medicinal plants for human and animal health care, selection and breeding of livestock to suit the local environment, and the development and preservation of local seed varieties. Filmed in Zimbabwe and Tanzania.

“Farmers, their animals and the environment”. 16 minutes video produced by UNDP (FAO 2000). Shows the link between the area’s farmers, their animals and the environment. Filmed in Southern Africa (Zimbabwe, Namibia, Tanzania)

Relevant web sites:

LinKS  

NRI  
http://www.nri.org

DFID livelihoods:  
http://www.livelihoods.org

DDS India  
http://www.ddsindia.com/

GTZ  
http://www.gtz.de/agrobiodiv/pub/pub.htm#6
LinKS Project
Gender, biodiversity and local knowledge
systems for food security

Contact details:
Gender and Development Service
Sustainable Development Department
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00100 Rome, Italy

Fax: (+39) 06 570 52004
email: links-project@fao.org
website: www.fao.org/sd/links