Manual for participatory land use planning facilitators

Final version, September 2010

for
Ministry of Lands and Resettlement
and
German Technical Cooperation
in the context of the
Modelling Land Use Planning Project

compiled by
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Commissioned consulting companies:
Foreword
This manual was developed in the framework of the “Modelling Integrated Regional Land Use Planning” project of the Namibian Ministry of Lands and Resettlement (MLR) and the German Technical Cooperation (GTZ). Its contents do not reflect in all aspects the professional viewpoints of the two commissioned consultants under contract of GOPA mbH and AMBERO Consultants.
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<tr>
<td>AALS</td>
<td>Affirmative Action Loan Scheme</td>
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<tr>
<td>BMC</td>
<td>Basin management committee</td>
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<tr>
<td>CAECID</td>
<td>Agencia Espanola de Co-operacion Internacional = Spanish Agency for International Development Cooperation</td>
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<tr>
<td>CBO</td>
<td>Community-based organisation</td>
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<tr>
<td>CBNRM</td>
<td>Community-based natural resources management</td>
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<tr>
<td>CDC</td>
<td>Constituency Development Committee</td>
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<tr>
<td>CCLSI</td>
<td>Cabinet Committee on Land and Social Issues</td>
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<tr>
<td>CIM</td>
<td>Centre for International Migration</td>
</tr>
<tr>
<td>CRO</td>
<td>Chief Regional Officer</td>
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<tr>
<td>CPP</td>
<td>Country pilot partnership</td>
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<tr>
<td>DED</td>
<td>Deutscher Entwicklungsdienst = German Development Service</td>
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<td>DRFN</td>
<td>Desert Research Foundation of Namibia</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental impact assessment</td>
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<tr>
<td>ERB</td>
<td>Ephemeral River Basin Management project</td>
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<td>FAO</td>
<td>Food and Agriculture Organisation</td>
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<tr>
<td>GIS</td>
<td>Geographical information system</td>
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<tr>
<td>GPS</td>
<td>Global positioning system</td>
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<tr>
<td>GTZ</td>
<td>Deutsche Gesellschaft für Technische Zusammenarbeit = German Technical Cooperation</td>
</tr>
<tr>
<td>IRLUP</td>
<td>Integrated regional land use plan</td>
</tr>
<tr>
<td>IWRM</td>
<td>Integrated water resources management</td>
</tr>
<tr>
<td>KfW</td>
<td>Kreditanstalt für Wiederaufbau</td>
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<tr>
<td>KRA</td>
<td>Key result area</td>
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<tr>
<td>LUP</td>
<td>Land use planning</td>
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<td>LUPA</td>
<td>Land use planning and allocation</td>
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<tr>
<td>MAWF</td>
<td>Ministry of Agriculture, Water and Forestry</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring &amp; evaluation</td>
</tr>
<tr>
<td>MET</td>
<td>Ministry of Environment and Tourism</td>
</tr>
<tr>
<td>MFMR</td>
<td>Ministry of Fisheries and Marine Resources</td>
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<tr>
<td>MLR</td>
<td>Ministry of Land and Resettlement</td>
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<tr>
<td>MME</td>
<td>Ministry of Mines and Energy</td>
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<tr>
<td>MRLGHRD</td>
<td>Ministry of Regional and Local Government, Housing and Rural Development</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>---------</td>
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<tr>
<td>MWT</td>
<td>Ministry of Works and Transport</td>
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<tr>
<td>NAU</td>
<td>Namibian Agricultural Union</td>
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<tr>
<td>NDC</td>
<td>Namibian Development Cooperation</td>
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<tr>
<td>NDP</td>
<td>National Development Plan</td>
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<tr>
<td>NDT</td>
<td>Namibian Development Trust</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
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<tr>
<td>NNF</td>
<td>Namibian Nature Foundation</td>
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<tr>
<td>NPC</td>
<td>National Planning Commission</td>
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<tr>
<td>NWR</td>
<td>Namibia Wildlife Resorts</td>
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<tr>
<td>OFRB</td>
<td>Orange-Fish River Basin</td>
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<td>PIM</td>
<td>Participatory impact monitoring</td>
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<tr>
<td>PLUP</td>
<td>Participatory land use planning</td>
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<td>PRA</td>
<td>Participatory rural appraisal</td>
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<tr>
<td>RC</td>
<td>Regional Council</td>
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<td>RDCC</td>
<td>Regional Development Coordination Committee</td>
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<tr>
<td>RRA</td>
<td>Rapid rural appraisal</td>
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<tr>
<td>SEA</td>
<td>Strategic environmental assessment</td>
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<tr>
<td>SNAFU</td>
<td>Southern Namibian Farmer’s Union</td>
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<tr>
<td>SPC</td>
<td>Stubenrauch Planning Consultants</td>
</tr>
<tr>
<td>TA</td>
<td>Traditional authorities</td>
</tr>
<tr>
<td>TCLSI</td>
<td>Technical Committee on Land and Social Issues</td>
</tr>
<tr>
<td>VDC</td>
<td>Village Development Committee</td>
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<tr>
<td>WPC</td>
<td>Water point committee</td>
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1. Introduction

This manual provides guidance to future facilitators of participatory processes in the framework of integrated regional land use planning (IRLUP), steered by the Namibian Ministry of Lands and Resettlement (MLR). It was developed in the context of the Karas IRLUP-project. Since the development of comprehensive land use planning (LUP) guidelines for Namibia is still ongoing, the manual can only be considered as a preliminary version. It will be reviewed, accomplished and adjusted during future IRLUP activities.

The manual is structured into eight chapters, whereas chapters 2 to 4 provide background information on land use planning in general as well as land use planning in Namibia specifically. Chapter 5 contains hands-on guidelines for the implementation of the participatory land use planning approach on local level developed for Namibia. Chapter 6 reflects important aspects on mapping within LUP processes and chapter 7 consists of an introduction into conflict management and analysis for handling conflicts in LUP. Chapter 8 makes reference to important literature used.

Overview on the contents of the chapters:

Chapter (1) provides a short introduction to the institutional set-up and the objectives of integrated regional land use planning in Namibia.

Chapter (2) gives a general and simplified introduction to participatory land use planning (PLUP) and integrated regional land use planning (IRLUP).

Chapter (3) contains a summary of the legal framework of land and natural resources management of Namibia and describes the institutional context of development and land use planning.

Chapter (4) outlines the overall IRLUP approach as far as developed up to present, with focus on the involvement of stakeholder groups in the IRLUP process at different planning stages.

Chapter (5) refers to the facilitation of the planning processes and the methods which shall be used in the stepwise approach including PRA-tools, action planning, documentation, participatory impact monitoring and the preparation of data arising from participatory planning processes for integration into geographical information systems (GIS). It is therefore the core chapter for future PLUP facilitators.

Chapter (6) gives an overview on important aspects regarding mapping activities in LUP processes and provides practical examples for orientation.

Chapter (7) provides some guidelines and tools for conflict analysis and management, which can be useful when addressing land use conflicts.

Chapter (8) consists of a list of important literature.
1.1 Background to the development of integrated regional land use plans in Namibia

The importance for cross-sectoral and integrated land use planning in Namibia is increasingly recognized by all stakeholders - at grass-root, regional, ministerial and governmental level - as more and more conflicts regarding land use occur. This is partly due to the relatively uncoordinated expansion of different land uses (commercial irrigation, mining, conservancies, etc.) as well as to overlapping future sector plans. However, no legal framework and guidelines for integrated regional land use planning and for sector coordination exist so far.

The mandate of MLR is prescribed in the cabinet-approved strategic plan 2006-2010:

“As custodian of the national land policy, MLR should primarily facilitate the effective allocation of land and create conditions, through dialogue, policies and legislation, for optimal land use in agriculture, shelter, conservancies, reserves and for the creation of strategic linkages and infrastructures that will enhance Namibia’s industrial, commercial, and tourism potential and add meaningful options for the social and economic advancement and livelihood of Namibian citizens”…

In order to fulfil its statutory mandate, the MLR is currently increasing its efforts to initiate IRLUP processes in Namibia. It is supported in this by the German and Spanish Technical Cooperation (GTZ and CAECID). A first pilot project for participatory integrated regional land use planning was implemented in Karas Region in 2009-2010.

The main aim of IRLUP can be summarised as follows:

The process shall identify all (spatial) development potentials and issues of importance (land use potentials, conflicts, environmental problems and structural deficits) and address them in an integrative way, by incorporating all national, regional, local and sectoral plans. The outcome shall be an overarching harmonised regional land use plan with realistic action plans to improve land use and resource management in the region. The process is development-oriented and participatory and based on direct coordination and joint-decision-making with all stakeholders.

The new approach of IRLUP in Namibia has the main underlying principles:

- Involvement of all sectors
- Use of Geographical Information System (GIS)
- Participatory decision-making
- Immediate implementation
- IRLUP is subject to a Strategic Environmental Assessment (SEA)

The present manual focuses on the participatory decision-making process, which lays the basis for immediate implementation as well as the integration of data and other outputs derived from participatory methods into the geographical planning database. It is intended to guide participatory facilitators in their role to assure the participation of land user groups and other stakeholders in the process to the best possible extent. The participatory planning process also considers aspects of sector involvement.
Section A: General introduction to land use planning

Current and future land use activities map, developed by SPC and Geocarta, 2010
2. General introduction to land use planning

In this first section the terms participatory land use planning and integrated regional land use planning will be explained and discussed, also with a view to concepts of participation at different planning levels. Furthermore, a summary of the most important steps and results of any land use planning process will be given.

2.1 Participatory land use planning (PLUP)

What is participatory land use planning?

Land use planning is actually undertaken in an informal way all the time; for example when land owners decide how best to use which part of their land or local governments take decisions on the best location of development projects. However, in the present context the term refers to formal planning, which is a structured process and leads to the official approval of land use plans designating specific areas for specific functions (compare Haub, 2009).

Definitions of land, land use, land use planning (LUP) and participatory land use planning are provided below:

**Land** is a delineable area on the earth’s surface. Land accommodates amongst others resources such as soils, minerals, water, forests and other vegetation formations. People organise and re-organize land to suit their needs and desires and use the land for various specific urban and rural functions, for example agricultural production, exploitation, transport, protection and conservation, industry, services, housing and others (taken from a presentation by Haub, 2010).

**Land use** is characterised by the arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it. Land use defined in this way establishes a direct link between land cover and the actions of people in their environment (FAO/UNEP, 1999).

**Land use planning** is a cross-sectoral and integrative decision-making process that facilitates the allocation of land to the uses that give the greatest sustainable benefit (Haub, 2009).

The need for land use planning arises whenever there is a competition for land in any form or in regions or sub-regions where severe degradation of natural resources (for example soil erosion or forest destruction) takes place, conflicts over land and natural resources increase and/or the productivity remains limited although possibilities for intensification, diversification and development exist. **Implementation-oriented and sustainable land use planning processes need to be participatory** and to involve the rural population which manages the land and natural resources. In this regard, emphasis is put on dialogue. Since participation in terms of grass-root level decision-
making and ownership is often carried out at local level, the term participatory land use planning is commonly used for land use planning processes on a local scale ("village-level"). However, regional or national land use planning procedures can also involve direct grass-root level involvement or are ideally based on the local level plans (compare chapter 2.2).

**Participatory land use planning** is an iterative process based on the dialogue amongst all stakeholders aiming at the negotiation and decision for a sustainable form of land use in rural areas as well as initiating and monitoring its implementation. The objective of participatory land use planning is to achieve sustainable land use, that is, a type of land use which is socially just and desirable, economically viable, environmentally sound and culturally and technically compatible. It sets in motion social processes of decision-making and consensus-building concerning the use and protection of private, communal or public land (GTZ, 1999).

**Participatory land use planning aims at**

- optimising the actual land use,
- resolving conflicts which arise between competing uses and between the needs of different interest groups,
- choosing sustainable options that best meet identified needs,
- rehabilitating and conserving natural resources,
- supporting the general development process,
- raising awareness concerning environmental problems and processes among the population and authorities.

*Compare Gaesing et.al, 2003*
Principles of land use planning

LUP

...is oriented to local conditions,
...considers local environmental knowledge,
...takes into account traditional strategies for solving problems and conflicts,
...is a bottom-up process based on self-help and self-responsibility,
...is a dialogue,
...is a process leading to an improvement of the capacity of stakeholders,
...requires transparency,
...requires stakeholder differentiation and gender sensitivity,
...is based on inter-disciplinary cooperation,
...is an iterative process,
...is implementation-oriented.

Compare Amler et.al (GTZ LUP-guidelines, 1999) and Gaesing et.al, 2003

What is meant by participation in the context of PLUP?

Different concepts and levels of participation exist. The International Association for Public Participation distinguishes five levels of participation:

- to inform,
- to consult,
- to involve,
- to collaborate and
- to empower.

Each of these levels has a specific public participation goal and employs different techniques to reach that goal. The table below summarises them.
**Levels of participation**

<table>
<thead>
<tr>
<th>INFORM</th>
<th>CONSULT</th>
<th>INVOLVE</th>
<th>COLLABORATE</th>
<th>EMPOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public participation goal</td>
<td>Public participation goal</td>
<td>Public participation goal</td>
<td>Public participation goal</td>
<td>Public participation goal</td>
</tr>
<tr>
<td>To provide the public with balanced information to assist them in understanding the problem, opportunities, solutions and alternatives.</td>
<td>To obtain public feedback on analysis, alternatives and decisions.</td>
<td>To work directly with the public throughout the process to ensure that public concerns are consistently understood and considered.</td>
<td>To partner with the public in each aspect of the decision-making process including the development of alternatives and the identification of preferred solution.</td>
<td>To place final decision-making in the hands of the public.</td>
</tr>
</tbody>
</table>

**Promise to the public**

| We will keep you informed. | We will keep you informed, listen to you and acknowledge concerns and aspirations, provide feedback on how public input influenced decision. | We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how the public input influenced the decisions. | We will look to you for direct advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible. | We will implement what you decided. |

**Example techniques**

- Fact sheets
- Open forums
- Media (Radio, press releases, advertisements, websites)
- Public comment
- Focus group discussions
- Surveys, Rapid Rural Appraisal
- Public meetings
- Meetings
- Workshops
- Polling
- Participatory methods without direct power on final decision-making
- Citizen advisory committees
- Consensus building / participatory decision-making in workshops with public representatives
- Citizen juries
- Ballots
- Delegated decisions
- Participatory Rural Appraisal, bottom-up planning, decision-making and actions

*Adapted from: International Association for Public Participation, 2007 and du Toit and Pollard, 2008:709*

Participatory land use planning aims at achieving the highest level of participation in order to ensure that people have a greater voice in planning and decision-making, become empowered, develop ownership for planning and implementing activities and to sustainably manage their land and the natural resources they rely on.

In order to involve the local population to the highest extent in the analysis and planning process, participatory rural appraisal (PRA)-tools are commonly used in participatory land use planning processes. These tools have been proven to be very helpful in the context of participatory development and land use planning in many countries and contexts including Namibia. The boxes hereafter provide an idea of the approach.
Participatory Rural Appraisal (PRA):

PRA evolved from Rapid Rural Appraisal (RRA) methods; both approaches are explained hereafter:

**Rapid Rural Appraisal (RRA)**

RRA is a social science approach that emerged in the early 1980s for applications in development cooperation. In it, a multidisciplinary team makes use of simple, non-standard methods and the knowledge of local people to quickly elicit, analyse and evaluate information and hypotheses about rural life and rural resources that are of relevance for taking action. RRA techniques are an attractive alternative to conventional survey methods when the aim is not to systematically capture precise figures (a typically time-consuming and cost-intensive undertaking), but rather speedy and action-oriented assessment of local knowledge, needs and potentials with an aim to elaborating strategies to resolve conflicts or investigate specific problems. They are also suitable for shifting the focus of conventional surveys onto essential aspects.

**Participatory Appraisal (PRA)**

Internationally this is often referred to as Participatory/Rapid/Rural/Relaxed Appraisal, abbreviated PRA. It is a further evolutionary stage of the RRA approach. In it, emphasis is placed on empowering local people to assume an active role in analysing problems and drawing up plans, with outsiders mainly acting as “facilitators”. Here it is no longer the external experts but rather the local people themselves who “own” the results of the study. This enables them to assume responsibility for implementing the activities based on them. PRA methods are successful within the scope of programs that support participatory development cooperation, e.g. approaches as “participatory technology development”, “farmer back to farmer/farmer experimenter networks” “participatory action research”, “community development” and “peoples/popular participation”. Source (RRA and PRA): Schönhuth and Kievelitz, 1994

PRA is an approach which can be used in the analysis of local problems and the formulation of tentative solutions with “grass-root”-stakeholders. It makes use of a wide range of visualisation methods for group-based analysis to deal with spatial and temporal aspects of social and environmental problems. It mainly deals with a community-level scale of analysis but is increasingly being used to help deal with higher-level, systemic problems.

PRA provides a structure and many practical ideas to help stimulate local participation in the creation and sharing of new insights. The emphasis on ensuring community feedback broadens the group of people involved. It is used for planning and reflects in fact a planning process. There is no single way to ‘do’ PRA, although there are core principles and over 30 tools available to guide teamwork, do sampling, structure discussions and visualise analysis. The combination and sequence of tools are determined by the context. In the context of land use planning different tools can be combined to a set.

Some basic concepts of PRA are:

- **Triangulation**: this refers to a form of “cross-checking” by varying the team composition, the sources of information and the techniques applied to ensure that the qualitative insights are cross-checked by different sources using different methods.

- **Optimal ignorance**: recognition of the need to know enough without knowing it all.

- **Learning from the community and empowerment**: The problems and interests should be seen through the eyes of the local population. The latter should be strengthened in their capacities to organise themselves, to plan and to conduct projects and activities by using their own resources. This means that the PRA team needs to:
  - switch from doing to facilitating,
  - switch from telling/teaching to listening/learning,
  - switch from prescriptive to responsive planning.

- **Visual sharing**: Through the use of visual tools, participation is enhanced.

- **Consideration of gender/women’s concerns and concerns of other special interest groups**: The methods can be applied with different interest groups separately in order to obtain different viewpoints and to take into account as much as possible the needs and interests of disadvantaged groups.
Can a participatory approach and technical know-how be combined?

Yes. Traditional knowledge and the analysis of the needs and interests of different land use stakeholders can be combined with the technical know-how of land use planning and mapping professionals whenever this is appropriate in the PLUP process. Over the last decades approaches on how to join these two forms of knowledge have been successfully developed and tested in different contexts. Examples of such combinations include the following:

- Information derived from stakeholders can be complemented with information from statistics and technical field surveys (for example regarding soil qualities, carrying capacities or utilisation potentials of forests), which can confirm existing potentials or other aspects of planning.
- If participatory maps were developed or site visits undertaken, the spatial information derived can be transferred into geo-referenced digital maps prepared by GIS professionals. The data can be transferred into orthophotos or topographic maps or GPS surveys can be conducted in order to localise precisely areas of relevance or key structures that the local population points out. By entering this information into the GIS system, the information can also be considered for regional planning. You can refer to chapter 6 for more information on these methods.
- Maps elaborated on a technical basis like land potential maps or different development scenario maps can be discussed with local, public and private stakeholders during planning meetings.

Proposed land use zoning based on a participatory planning exercise in the North of Namibia which was transferred from a participatory map into a GIS (source: Dina Katataiza)
The use of remote sensing, Geographical Information Systems (GIS) and Global Positioning Systems (GPS) in combination with participatory land use planning

Remote sensing
Remote sensing comprise different techniques to obtain information on the Earth’s surface via satellites or airplanes. Common tools used for land use planning are:
- satellite images,
- aerial photographs and
- orthophotos.

Orthophotos are georeferenced and corrected satellite mages or aerial photographs, which means that they were fit into the coordinate system and geometrical errors (which occur when taking images from satellites or airplanes due to the earth’s curvature) were corrected. The orthophotos are used as base layer in geographic information systems (GIS) and other important elements like town land or farm boundaries can be shown in addition for better orientation.

Geographical information systems (GIS)
A GIS is a computer-based system which captures, manages, analyses and displays geographical information combined with statistical and other data. It is a very useful instrument to analyse suitability of land for different uses, model land use options or to produce different maps for planning purposes.

Global Positioning Systems (GPS)
A GPS is a satellite-based system that provides -amongst other data- reliable information on the exact location through receivers (actually the receivers themselves are often called GPS, whereas the term itself refers to the system). The coordinates taken (points or lines) can be downloaded into GIS systems and combined with other relevant information.

Use of these means in participatory land use planning:
Whenever local stakeholders have mapped their natural resources, land uses, infrastructures, settlement areas and other features of relevance in participatory mapping exercises (i.e. through development of resource maps, current land use maps, etc.), the information can be transferred into technical maps. It has been proven easier for local populations to work with satellite images or aerial photographs, which were – whenever possible – already corrected and developed into orthophotos.

The stakeholders transfer their own information on resources, land uses, infrastructures, etc. into those images by using their preferred symbology. Specialists then enter this spatial information into the GIS and develop technical maps with the same symbology, so that the stakeholders can recognize their own work.

In the process of planning of future development projects and in the development of future land use maps, the same procedure is repeated.

Whenever accuracy of data for the exact location of future boundaries or points is needed, technical surveys with the help of GPS will become necessary. These surveys will be conducted by specialists jointly with all concerned stakeholders in order to transfer the information into official maps.
Where are the linkages between PLUP and development planning?

Land use planning needs to consider frame conditions for future land uses. These include non-spatial aspects such as marketing regulations and conditions for specific agricultural outputs, climate change and others. As land use planning is an overarching and multi-sectoral exercise, it cannot be separated from development planning (compare Haub, 2009). Land use planning needs to be socially desirable and economically viable. The challenge is to combine economic incentives with conservation of the natural resource base and to manage and use natural resources sustainably. Furthermore a balance between short- and long-term objectives of land use plans in terms of necessary investments of resources must be found (financial and labour-wise). Often PLUP projects support development projects, agricultural development and the promotion of alternative income sources alongside land conservation measures.

Where are the linkages between land use planning and urban planning?

People organise and re-organise land to suit their needs and desires and to use land for different specific functions, like agricultural production, conservation, recreation, mineral exploitation, transport (roads, railways, etc.), industry and housing. Some functions of land require or depend on other functions; agricultural production for example requires access to transport and to markets in order to be feasible. Furthermore, urban areas need to fulfil important functions for the rural population and provide for specific services (health, education, supply, markets, etc.) whereas the rural areas need to provide specific functions like recreation areas for the urban population and they also need to supply urban areas with agricultural and other products (building materials, etc.). Moreover, increasing population sizes might require the need for expansion of urban areas. Land use planning has to consider and incorporate all these aspects.

Urban expansion and town land encroachment, Windhoek, Namibia (Photograph: Haub, Olaf)
Where are the linkages between land use planning and land ownership?

Land use planning needs to consider land tenure because:

- The process itself can become a source of conflict in case a defined future use of the land determines WHO will use the land at the same time and will thus have an impact on other people’s access to land. This needs to be avoided!
- Existing land ownership conflicts might hinder the process of smooth land use planning. They need to be addressed during the LUP process.

Land use planning therefore needs to be sensitive to land conflicts. It needs to prevent them and, where they do exist, contribute to their settlement (compare chapter 7). The latter might require a lot of effort and political will, possibly including a review of the legal framework. In this regard, it is very important to analyse formal and informal land tenure arrangements (including land rights resulting from and based on customary land allocation systems) when discussing and defining land uses. It is NOT in the interest of a sustainable land use plan to deprive anybody of their legitimate rights to access his or her land and/or to provide for somebody else (e.g. a public institution or a private investor) to use land on which other stakeholders (e.g. small farmers, ethnic minorities, livestock keepers, etc.) have existing rights. Transparent land use planning with proper participation in decision-making can be a key to achieve tenure security for all stakeholders, including marginalised groups.
2.2 Integrated regional land use planning (IRLUP)

What is integrated regional land use planning?

Regional land use planning defines how the different kinds of land in a region will be utilised in the future. It has to consider the regional circumstances which are relevant for land use (e.g. social, cultural and economic patterns, climatic conditions, actual needs, available resources, environmental conditions, etc), but also overall national strategies, sector strategies, rules and regulations defined by upper levels. Thus, regional plans link “bottom-up” aspects of planning, coming from local levels and “top-down” aspects of planning, defined by central / higher government structures. Regional land use planning integrates plans arising from local level planning processes - if the “bottom-up” aspects of local land use are considered in regional level planning - as well as different sector plans and strategies into harmonised and integrated regional land use plans. Land use planning at regional level has a kind of “linking function” between national strategic planning, sector planning and local level planning. It is crucial to consider and integrate all kinds of institutions and sectors with relevance for land use into the planning process and to respect the laws and regulations about land and resources use in place.

Integrated regional land use planning describes a process of putting together, discussing and negotiating different needs, interests and plans from the local level with view to existing relevant sector, regional and national development plans as well as existing policies and regulations. IRLUP requires a comprehensive and intense cooperation between all institutions and groups at national, regional and local level that deal with land resources and their management (compare Haub, 2010).

In all planning processes at regional and local level, planners need to consider:

- Development plans, for example:
  - National development plans
  - Regional development plans
  - Local development plans (like constituency or village development plans)

- Land use plans, for example:
  - National land use plan
  - Local land use plans

- Sector plans, for example:
  - Transport sector development plans
  - Tourism development sector plans
  - Agricultural development sector plans, etc.

- Sector strategies, for example:
  - Forestry strategy plans
  - Conservation strategy plans
  - Water resources strategy and management plans (basin management plans)

- Urban development plans

- Other existing relevant plans, for example trans-boundary development plans
What can participation look like at regional level?

Regional land use planning processes often make use of representative structures of the different stakeholder groups and focus on the most critical issues and sub-areas. A balance needs to be found between the direct involvement and integration of the local population in the process and the significant investments of time and resources participatory processes require. In this context, it is recommended that integrated regional land use planning processes undertake in-depth stakeholder analysis in order to consider all relevant groups before starting the process.

The regional level is the best level to negotiate between the local needs and interests and higher-level planning authorities and sector ministries. On the one hand, it is important to assure that the needs and interests of the local population are considered when formulating plans, policies and regulations on higher level. On the other hand, it needs to be cross-checked whether plans made at local level are in line with national, regional and sectoral development plans or whether there are contradictions or areas of conflict. In such cases, plans need to be modified. This process is also called “horizontal integration” of different sectors and “vertical integration” of different planning levels. More explanations on these concepts can be found in the document “Understanding of land use planning and its relevance for Namibia” (Haub, 2009).

In order to establish an integrated regional land use plan the responsible coordinating body needs to follow an inter-sectoral approach and have a good communication strategy from the onset of the land use planning initiative!

The following picture illustrates the inter-linkages between the different levels of planning (local level, regional or district level and national level).

![Source: FAO, 1993](image-url)
2.3 Common stages and steps in land use planning

Although land use planning processes can vary substantially in terms of objectives, planning levels and planning contexts, they usually all follow some typical stages and steps in the planning process. The four main stages are illustrated hereafter.

**1. Organisational stage**  
During the first stage, the need for land use planning is assessed and logistical, financial and institutional preparations are made in order to address the need for LUP. At the same time, the planning level is determined.

**2. Analysis stage**  
This second stage includes a detailed stakeholder and issue analysis and the setting up of platforms for dialogue. All relevant existing data is identified and analysed and new data is collected through the use of participatory as well as technical tools. The nature of data required is determined by the objectives and the focus of the LUP process.

**3. Planning and decision-making stage**  
The most important issues regarding the existing land uses are discussed with all concerned parties in order to identify means to improve the use of land and resources and to settle conflicts. A typical element of a LUP process is the development of a zoning concept which is agreed upon with all stakeholders, but also structural deficits are discussed. The process must be closely facilitated by moderators to steer discussions and to help to solve conflicting issues. Consent for future developments need to be found among the stakeholders. The formal approval of the plan, regulations and recommendations by decision-makers is an important part of this stage.

**4. Implementation and monitoring stage**  
The plan is implemented according to the timing and the responsibilities suggested in the plan and according to the availability of resources. It must be emphasised that LUP is an ongoing, iterative process (“rolling planning”) and will therefore be institutionalised for monitoring and continuous plan adaption purposes.

**Cross-cutting issues**  
As already mentioned in the section on “principles of PLUP” (chapter 2.1), land use planning processes shall strengthen capacities of stakeholders and enhance dialogue. They need to be gender- and conflict- sensitive and try to improve frame conditions (like tenure regulations) as much as possible.

**LUP-project or team**  
LUP processes are usually guided and facilitated by inter-disciplinary planning teams which can be part of different institutions or a project.

The typical steps in LUP processes are visualised in the following picture.
Common steps in land use planning
(oriented by the land use planning guidelines of GTZ, 1999)

| Evaluating the need for land use planning (natural resources degradation or destruction, land use conflicts, constraints in production and rural development, etc.) |
| Creating preconditions for LUP (persever available documentation and information, do time planning, assure financial resources, etc.) |
| Determining the unit of planning and -possibly- pilot villages or zones (village level / watershed / administrative unit... considering also mobile parts of the population) |
| Monitoring and evaluation |
| Plan implementation (stakeholder-group and gender-differentiated). The plan considers a mix of measures (profitable and non-profitable), the time frames are adapted to the capacities of the target groups and partner cooperation. Training is provided by the LUP-project team and partners. |
| Cross-cutting issues: Institutional strengthening, improvement of framework conditions (i.e. land tenure aspects), awareness raising, enhancement of dialogue, gender sensitiveness, conflict management, joint decision-taking |
| LUP-project team moderates the process and assures the involvement of all stakeholders |
| Stakeholder analysis / gender analysis (analyse interest groups for LUP, create a platform of stakeholders) |
| Entering into a dialogue with all participants (approach local communities and other stakeholders to analyse their needs and points of view, create confidence) |
| Data collection and analysis (Review statistics, plans and reports, conduct FRAs to identify current land resources, socio-economic conditions, the history of land use, visions, conflicting issues in land use and the needs of men and women with regard to land use and development aspects...) |
| Drawing up the actual LUP (Definition of future land use (incl. rules) and specific measures (incl. conservation and development measures), considering costs, sustainability, responsibilities, schedules, etc.) |
| Zoning and mapping (Agro-ecological zoning and mapping (join participatory maps and technical maps (GIS)) |
2.4 Participatory impact monitoring in land use planning

For a successful land use planning process the development of a suitable participatory monitoring system with focus on impacts is of utmost importance. The system should be adapted to the local conditions and be easy to implement. It should concentrate on the most important changes and effects caused by the activities which are undertaken as a result of the land use planning process. In order to develop a better understanding of what participatory impact monitoring is and how it can be introduced to local communities or local stakeholders, the following chapter will provide an overview on the most important points.

**What is monitoring and what is participatory impact monitoring?**

Monitoring means continuous observation, reflection and correction of activities. It is actually done in an informal way by farmers or institutions all the time, for instance when farmers do regular checks on the quality of their crops or on the well-being of their cattle herds and adapt their farming practices according to their observations.

In the context of participatory land use planning or participatory development planning, the term “participatory impact monitoring” refers to a participatory process of observation, reflection and decision-taking regarding the planned activities and/or projects. It will help to steer the PLUP process into the right direction and to correct activities whenever the results or effects do not optimally meet the expectations and needs of the people.

(Source: adapted from Germann and Gohl, 1996)

The focus of any monitoring system should not only be on the fulfilment of action plans, but should also reflect on:

… whether the planned activities still correspond to what people envisioned,

… the effects of the activities or projects (positive / negative, expected / unexpected),

… the experiences and “lessons learned” from the implementation of the plans,

… new developments which take place and have to be considered in the land use plan (“rolling planning”).

The process of participatory impact monitoring will further strengthen the organisational structures as well as the management and conflict-resolution capacities of the local institutions and people. They will become more and more empowered in managing successfully their own projects and activities. Some prerequisites for the successful implementation of a monitoring system are:

- Regular meetings with all involved stakeholders,
- Procedures for joint decision-taking in place,
- Continuous interest in the land use planning / development process,
- Trust amongst and between stakeholders.

Ideally, the system should be developed during the planning phase already!
Monitoring is often done with the help of indicators and so is participatory impact monitoring.

**What is an indicator and how is it developed?**

An indicator is like a roadside marker; it is a value, a number, a symptom or any other pointer which shows you a change. It provides you with information that summarises the characteristics of a system or highlights what is happening in the system.

According to the definition adopted by USAID, an indicator is “a variable, which purpose it is to measure change in a phenomena or process”.

There are four ways to create indicators:

- **Measuring or counting**: fixing values, for example quantities of a product or income rates
- **Scaling or rating**: something is described using a gradual description (like for example the quality of a product, by distinguishing between very good – good – average – bad – very bad)
- **Classifying**: informs about non-gradual categories (yes/no; women/men), etc.
- **Describing qualitatively**

Examples:

- A community decided during the land use planning process to develop gardening and eco-tourism potentials on their land. They identified some simple indicators to monitor the quality of the garden like the quantity of garden products sold and the benefits for different community groups. Regarding the eco-tourism project they monitor the employment rates, the number of tourists and other impacts of the tourism flows in their community.
- On a regional scale, stakeholders have planned for improved use of irrigation potentials and to fight against bush encroachment and they have drawn up an action plan. Suitable indicators to monitor the achievements and side effects are developed to guide the implementation process. These could include that land under irrigation increases by 50 ha per year and 50 ha are de-bushed every year.
Section B: Land use planning in Namibia

Sources of pictures: Olaf Haub (elephants, mining, crop farming) and Silke Schwedes (road, quiver tree forest, small livestock farming, meeting)
3. Legal and policy framework for development and land use planning in Namibia

3.1 Land ownership structures

In general, three different land ownership structures need to be distinguished in Namibia:
- State land (incl. urban and mining areas and national parks) = 15% of the total area,
- Communal land = 41% of the total area
- Commercial (private) land = 44% of the total area.

At present 50% of Namibia’s population live in communal areas where they do not have individual land titles. However their customary land rights (to residential land and farming land) are being registered in the ongoing process of Communal Land Registration according to the Communal Land Reform Act of 2002. The customary land rights are being approved by Traditional Authorities and verified and ratified by Communal Land Boards. The Communal Land Reform Act also foresees the possibility to lease land in designated areas of communal areas for commercial purposes.

79% of Namibia’s freehold farms are owned by previously advantaged Namibians or foreigners. The average farm size is 5.000 ha. Based on the Commercial Land Reform Act of 1995, land has been continuously re-distributed to previously disadvantaged Namibians through resettlement and affirmative action loan schemes during the past years.

Source: Powerpoint-presentation on land management in Namibia from Tanja Pickardt, GTZ, 2010)
3.2 Development planning

- **National Development Planning and National Planning Commission**

All planning in Namibia is guided by eight objectives set out in the government’s Vision 2030. These will contribute towards the achievement of making Namibia prosperous and industrialised, developed by her human resources, enjoying peace, harmony and political stability. Five year National Development Plans – better known as NDPs – are the main medium term planning tools to achieve these long term objectives. Namibia is currently implementing its third NDP (NDP 3) covering the period 2007/2008 to 2011/2012.

The National Planning Commission (NPC) is charged with the responsibility for the planning of national priorities and directing the course of national development. NPC coordinates development planning at national level, but leaves the spatial issues regarding the envisaged development interventions to line ministries. **Spatial planning and inter-ministerial coordination remains neglected by NPC.**

The NPC operates essentially at a strategic planning level and uses a planning approach which is called an integrated results-based management approach. At the basis of this approach is the definition of key result areas (KRA) for each long term objective identified in Vision 2030. For each KRA one or more NDP goals are identified. And for each goal a set of performance indicators, baselines and targets are identified for systematic performance monitoring. Line ministries and other support and implementing institutions are responsible for the development of subsector goals, targets and indicators. Through a process of local level participation attempts are made to integrate local level priorities and needs into KRA. This approach relies on line ministries to develop detailed sub-sector programmes and activities.

To some extent, the development of sub-sector programmes is based on the stepwise identification and prioritisation of development needs through Village and Constituency Development Committees (VDCs and CDCs). The Regional Development Coordination Committees (RDCCs) prioritise the proposed development projects and their regional planning staff fill in project identification formats which are forwarded to the Ministry of Regional and Local Government, Housing and Rural Development (MRLGHRD). MRLGHRD again prioritises the proposals received from all regions and submits the project formats for funding approval to NPC and the line ministries. In practice, these committees are hampered by various shortcomings in terms of resources and skills for drawing up integrated development programmes.

**Little co-ordination appears to take place among line ministries.** In addition, the policy and legal frameworks of line ministries in sectors that have a bearing on land use planning and management are not consistent with each other and frequently contradict each other, albeit inadvertently.
3.3 Land use planning

Up to now, clear and harmonised planning procedures for land use planning are still missing and no National Land Use Plan exists for Namibia. Only few IRLUPs were developed and show significant shortcomings. Development-oriented IRLUPs which do harmonise land uses and which were developed through a participatory and inter-sectoral approach do not exist yet. The different line ministries still undertake their own, sectoral plannings with little inter-sectoral co-ordination. In addition, mandates and responsibilities for spatial planning are still overlapping and sometimes even contradict each other as will be discussed below. In some cases the existing legislation provides for local communities to engage in the planning and management of the natural resources they use. This will also be discussed hereafter.

- **Ministry of Lands and Resettlement (MLR)**
  The Ministry of Lands and Resettlement has the mandate to facilitate the allocation of land, to steer the ongoing land reform according to the Commercial Land Reform Act and the Communal Land Reform Act as well as to develop “Integrated Regional Land Use Plans”, which shall define how land is utilised in the regions.

   Apart from MLR, the activities of at least six line ministries have a direct bearing on land and natural resources management. These are:
   - the Ministry of Regional and Local Government, Housing and Rural Development;
   - the Ministry of Agriculture, Water and Forestry;
   - the Ministry of Environment and Tourism;
   - the Ministry of Mines and Energy;
   - the Ministry of Fisheries and Marine Resources and
   - the Ministry of Works and Transport / Road Authority.

- **Ministry of Regional and Local Government, Housing and Rural Development (MRLGHRD) and Regional Councils (RC)**
  The MRLGHRD has the most comprehensive legal powers and institutional framework to carry out planning, hosting a dedicated division for urban and regional planning. It has the mandate to ensure appropriate town planning and infrastructural development. Urban planning issues are governed by the Town Planning Ordinance, 1954, the Townships and Division of Lands Ordinance, 1963, and the Local Authorities Act, No. 23 of 1992. The objectives of these Acts as well as planning procedures arising from their provisions are dealt with in more detail in the *Manual on Town and Regional Planning Practice in Namibia* published by the Association for Local Authorities in Namibia in 1995. However, emphasis shall be put on the fact that this manual only deals with town planning and do not provide any guidelines for regional planning. Furthermore the town planning processes are not linked with regional or land use planning processes.

   Being the line ministry responsible for Regional Councils, the MRLGHRD has also supported Regional Councils with development planning in their regions. In terms of
section 28 of the Regional Councils Act No 22 of 1992, Regional Councils have the legal power and mandate to undertake development planning in their regions with a view to:

- General land utilisation patterns,
- Physical, social and economic characteristics,
- Distribution, increase, movement and urbanisation of the population,
- Natural and other resources,
- Economic development potential,
- Existing and planned infrastructure,
- Sensitivity to the natural environment.

Regional governors may initiate and formulate planning and development policies and may initiate the making of regulations by the Regional Council (Stanton n.d.). In recent years the staff establishment of Regional Councils were reviewed and a Directorate of Planning and Development Services approved for all RCs. These consist of 3 divisions:

- a division of rural services;
- a division of technical services and
- a division of planning and development.

Although still new, this structure enables Regional Councils to engage in regional planning, including land use planning. However, regional development plans and town planning schemes are still subjected to approval by MRLGHRD and regional land use plans fall under the mandate of MLR.

- **Ministry of Agriculture, Water and Forestry (MAWF)**

The Ministry of Agriculture, Water and Forestry's mandate is to promote, develop, manage and utilise agriculture, water and forestry resources. Especially policies and legislation in the water and forestry sectors provide communities of natural resource users with varying degrees of participation in the management of their resources.

The Forestry Act of 2000 provides for the establishment of community forests. MAWF enters into an agreement with a community to transfer rights and obligations with regard to the forest resources management in a defined community forest area. In order to ensure sustainable management, a forest inventory has to be carried out, which forms the basis for the development of a management plan. Subject to this management plan, the management authority of a community forest has wide powers to control the utilisation of forest resources and other natural products in the area of the community forest, including grazing animals. The management authority is often an integrated CBNRM committee, which is also in charge of conservancies. “Resource use zonation planning” is hereby used as an instrument to define and control the use of forest resources in different zones and to avoid land use conflicts, but it is not a legal instrument.

The Water Resources Management Act of 2004 also provides for a structure that will be responsible at different levels for the development and implementation of water
management plans. Coordination with regional development plans is required by law, providing for contributions to land use planning. At the apex of this structure is a Basin Management Committee which should be broadly representative of all stakeholders in a basin. Amongst other things the Act requires that Basin Management Committees prepare water management plans for their water management areas and to promote community participation in all different aspects of water management. Although the Act is not in force yet and no regulations have been promulgated, several basin management activities were already started.

At the local level the Water Resources Management Act provides Water Point User Associations to plan and control the use of communal land in the immediate vicinity of a water point in co-operation with the Communal Land Board and the traditional authority concerned (Section 19). Although it is not clear how the immediate vicinity of a water point is defined, a more significant ambiguity exists in the fact that current land policy and legislation does not empower Land Boards to plan and control the use of communal land. Regional Councils are the only structures at sub-national level with legal powers to draw up development plans in regions. However, the Communal Land Reform Act does provide traditional authorities with powers to exercise control over the number of livestock in areas of their jurisdiction and to introduce rotational grazing by prohibiting livestock from grazing in parts of their areas.

Another important policy falling under the jurisdiction of MAWF is the Green Scheme Policy aiming at increasing food production capacities through irrigation on both commercial and communal land. The newly revised Green Scheme Policy paper of December 2008 foresees five different farming models for irrigation schemes: private development in communal areas, private development in commercial areas, state development in communal areas, state development in commercial areas and commercial irrigation development in communal areas. In communal areas, private investors or the State obtain land through the Land Board and the Traditional Authority in terms of a leasehold agreement as planned in the new Land Bill. The integration of small-scale irrigation farms is encouraged. Until present, few practical experiences exist in the planning and application of these farming models which require proper participatory and integrated planning (compare MAWF 2008).

- **Ministry of Environment and Tourism (MET)**
The Ministry of Environment and Tourism has the mandate to conserve the natural environment in Namibia, to protect its biological diversity, to expand, develop, manage and control the country’s conservation areas and to manage its natural resources. The implementation of conservancies were the first approach of community-based natural resources management in Namibia.

Conservancies provide local communities with specific rights to the consumptive and non-consumptive use of game. Registered conservancies have to conduct game counts and develop a management plan to be able to receive quotas for hunting of any kind. Zonation planning is done in order to avoid or at least mitigate human-wildlife
conflicts. Although the zonation plan of a conservancy is not a legal instrument for land use planning as such, the Communal Land Board has to consider the conservancy management plan when approving leaseholds within conservancies.

- **Ministry of Mines and Energy (MME)**
  The Ministry of Mines and Energy promotes, facilitates and regulates the responsible development and sustainable utilisation of Namibia’s mineral, geological and energy resources. Mineral resources below the surface are State property. The MME grants prospecting and exploitation rights in accordance to the Mineral Act of 1992. Regulations regarding permissions for prospecting and mining as well as the compensation of private land owners and/or traditional authorities with respect to the exploration or exploitation rights granted in their areas are in place; in addition, the Environmental Management Act of 2007 provides a comprehensive legal framework regarding required environmental assessment and impact studies as well as mitigation measures for mining operations.

- **The Ministry of Fisheries and Marine Resources (MFMR)**
  The Ministry of Fishery and Marine Resources is responsible for sustainably managing living aquatic resources and to promote the aquaculture sector. Aquaculture comprises the cultivation of aquatic organisms, such as fish, shellfish or plants (for example seaweed), in a controlled and sometimes enclosed body of water, which can be a marine or inland site. Several fish farm projects, partly community-based, exist in the country or are envisaged. Those activities need to be considered and integrated in land use planning processes.

- **The Ministry of Works and Transport (MWT) / Road Authority**
  The Ministry of Works and Transport does, amongst others, plan and steer the development of road and railway networks, both having a spatial dimension. They develop national and regional transport sector plans which may have significant impact on land use and thus need to be considered in land use planning.

The current existing legislation and policy in Namibia pertaining to land and natural resources management does not complement another and inter-sectoral coordination and planning is urgently needed for to achieve the development of harmonised land use and development plans. **For the MLR to be able to carry out participatory and integrated regional land use planning and enforce such plans, legislation is required that takes account of other policies and laws and harmonises them.** That this can be done appears to be demonstrated by the Environmental Management Act, No. 7 of 2007. Furthermore, MLR needs to take over its role in coordinating and facilitating integrated planning on national and regional levels.

The tables below provides a broad overview of the institutional mandates of different line ministries and other institutions over development and land use planning and the management of natural resources.
### Institutional mandates related to development and land use planning

<table>
<thead>
<tr>
<th>Institution</th>
<th>Development planning</th>
<th>Land use planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Planning Commission (NPC)</td>
<td>• Coordinates development planning at national level</td>
<td>-</td>
</tr>
<tr>
<td>Ministry of Lands and Resettlement (MLR)</td>
<td>-</td>
<td>• Mandate for Integrated Regional Land Use Planning, i.e. to “facilitate the effective allocation of land and create conditions, through dialogue, policies and legislation, for optimal land use in agriculture, shelter, conservancies, reserves and for the creation of strategic linkages and infrastructures that will enhance Namibia’s industrial, commercial, and tourism potential and add meaningful options for the social and economic advancement and livelihood of Namibian citizens”…</td>
</tr>
<tr>
<td>Ministry of Regional and Local Government, Housing and Rural Development (MRLGHRD)</td>
<td>• Support to Regional Councils (RCs) and Local Authorities (CDCs, VDCs) in development planning • Urban planning incl. surroundings of settlement areas (town lands, etc.)</td>
<td>-</td>
</tr>
<tr>
<td>Regional Councils (RCs)</td>
<td>• Responsible for development planning in their regions with a view to: - General land utilisation patterns, - Physical, social and economic characteristics, - Distribution, increase, movement and urbanisation of the population, - Natural and other resources, - Economic development potential, - Existing and planned infra-structure, - Sensitivity to the natural environment.</td>
<td>-</td>
</tr>
<tr>
<td>Ministry of Agriculture, Water and Forestry (MAWF)</td>
<td>• Sector development plans and strategies (agriculture, water, forestry)</td>
<td>• Set-up of basin management committees and development of basin management plans (Act not yet in force) • Promotion, development, approval of agricultural (irrigation) schemes • Proclamation and planning of State Forest areas • Establishment of community forests and development of forest management plans • Set up and support to Water User Associations and Committees to manage and maintain water points and “to plan and control the use of communal land in the immediate vicinity of a water point”</td>
</tr>
<tr>
<td>Institution</td>
<td>Development planning</td>
<td>Land use planning</td>
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<tr>
<td>Ministry of Environment and Tourism (MET)</td>
<td>Sector development plans and strategies (conservation, environment)</td>
<td>Proclamation, planning and management of protected areas&lt;br&gt;Regulation of wildlife and tourism outside protected areas&lt;br&gt;Establishment of and support to conservancies (communal areas) and to the related development of zoning and management plans (no legal power to enforce the zoning plans)</td>
</tr>
<tr>
<td>Ministry of Mines and Energy (MME)</td>
<td>Sector development plans and strategies (energy, mining)</td>
<td>(Granting of exploration and exploitation rights has a direct impact on land use)</td>
</tr>
<tr>
<td>Ministry of Fishery and Marine Resources (MFMR)</td>
<td>Sector development plans and strategies (fisheries, aquaculture)</td>
<td>(Planning and establishment of aquaculture projects has a direct impact on land use)</td>
</tr>
<tr>
<td>Ministry of Works and Transport (MWT) / Road Authority</td>
<td>Sector development plans and strategies (road and railway planning)</td>
<td>(Planning and development of road and railway infrastructure has a direct impact on land use)</td>
</tr>
<tr>
<td>Traditional Authorities</td>
<td>Are members of VDCs and CDCs</td>
<td>Land allocation by customary grants and endorsement of lease agreements&lt;br&gt;Need to be consulted by water user associations in drawing up plans for land use and control in the vicinity of water points</td>
</tr>
<tr>
<td>Communal Land board on regional level</td>
<td>-</td>
<td>Controls the allocation and cancellation of customary land rights by Traditional Authorities&lt;br&gt;Decides on the applications for the right of leaseholds in communal areas&lt;br&gt;Need to be consulted by water user associations in drawing up plans for land use and control in the vicinity of water points</td>
</tr>
<tr>
<td>Land Use and Environmental boards (provided for by National Land Policy, but not implemented)</td>
<td>-</td>
<td>Ensure that land use planning, land administration, land development and environmental protection are promoted and coordinated on a national and regional basis to guarantee environmental, social and economic stability</td>
</tr>
<tr>
<td>Sustainable Development Advisory Council (planned under Environmental Act)</td>
<td>-</td>
<td>Advice the Minister of Lands or any other organ of government on land use, land use planning, land administration, land development and environmental protection in order to promote and coordinate and ensure environmental, social and economic sustainability….</td>
</tr>
</tbody>
</table>

Source: adapted from NNF/USAID, 2010
### Institutional mandates related to different land use sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Central Government / line ministries</th>
<th>Regional and local governments</th>
<th>Traditional Authority / Land boards (communal areas)</th>
<th>Community associations incl. Water point committees, Community forests and Conservancies</th>
</tr>
</thead>
</table>
| Livestock farming | • MAWF facilitates livestock development and is responsible for the control of stock diseases.  
• Livestock management decisions are responsibility of owners as it is private property on state land, commercial and communal areas. | • Control livestock farming activities in urban areas (townlands) in coordination with MAWF. However, livestock is private property. | • Not exercising control although the CLRA, 2002 provides for Traditional Authorities to control the number of livestock in areas under their jurisdiction and introduce rotational grazing by prohibiting livestock from grazing in parts of their areas. | • Water point committees have legal powers to plan and control the use of land in the vicinity of water points.  
• Community forestry committees have the right to control access of livestock to forests under their control according to the forest management plan. |
| Game farming    | • Overall control of game management in conservancies by MET. On private land MET has no mandate except over protected species. | • Role unclear. In some cases (Aus townlands), regional or local authorities manage game in coordination with MET. | • Communal land boards have to consider if a new leasehold would contradict the management plan of a conservancy. | • Communities in communal areas can register conservancies and become responsible for wildlife management according to management plans. Control of hunting quotas by MET. |
| Water           | • Overall control by MAWF. Rights and responsibilities over water points devolved to local communities.  
• MAWF mandated to establish basin management committees which are responsible to develop basin management plans. | • Regional Water Management Agency responsible for coordination & planning (planned).  
• RC planning the development of regions with a view to existing and planned water infrastructure.  
• Local authorities construct water works; stop or limit the supply of water; limit the use of water during droughts or other emergencies. | • No specific powers except duty to ensure sustainable resource management as well as to keep water points on communal pastures accessible to all. | • Water point committees manage and maintain water points and have the right to exclude non-members. |
| Irrigated agriculture | • Overall control by MAWF and the Green Scheme Agency within MAWF  
• Promotion, development and approval of irrigation schemes | • No mandates except in the allocation of irrigation land in settlement areas (e.g. Noordoewer). | • No specific mandates. | • No specific mandates. |
<p>| Mining          | • Overall control by MME. | • No specific powers. | • No specific powers. | • No specific powers. |</p>
<table>
<thead>
<tr>
<th>Sector</th>
<th>Central Government / line ministries</th>
<th>Regional and local governments</th>
<th>Traditional Authority / Land boards (communal areas)</th>
<th>Community associations incl. Water point committees, Community forests and Conserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
<td>● Overall control by MAWF.</td>
<td>● No specific powers.</td>
<td>● TA has to give consent to a Community Forest.</td>
<td>● Community forest management committees manage forest resources on the basis of approved forest management plans.</td>
</tr>
<tr>
<td></td>
<td>● MAWF mandated to proclaim State and Community forests and establish appropriate management structures and management plans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisheries</td>
<td>● Mandate for sea and inland fisheries rests with the Ministry of Fisheries and Marine Resources.</td>
<td>● Members of Regional Councils and local authorities represented on Inland Fisheries Council.</td>
<td>● Members of Council of Traditional Leaders represented on Inland Fisheries Council.</td>
<td>● No mandates.</td>
</tr>
<tr>
<td></td>
<td>● MFMR has powers to issue licenses for fishing and enforce conservation measures by regulating means of fishing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>● Overall responsibility: MET.</td>
<td>● No mandates.</td>
<td>● TAs have a duty to provide assistance in ensuring that natural resources are used in a sustainable manner that conserves the environment and maintains the ecosystem.</td>
<td>● No mandate with regard to conservation.</td>
</tr>
<tr>
<td>Tourism</td>
<td>● Overall responsibility: MET.</td>
<td>● No mandates other than to promote tourism in regions.</td>
<td>● No mandate regarding tourism.</td>
<td>● Conservancies have a mandate to develop tourism in their area.</td>
</tr>
<tr>
<td>Urban development</td>
<td>● Overall responsibility: Ministry of Regional and Local Government and Housing.</td>
<td>● Directly responsible for the development and administration of settlement areas.</td>
<td>● No mandate.</td>
<td>● No mandate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Planning the development of regions with a view to the urbanisation of the population.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>● Overall responsibility: Ministry of Works and Transport.</td>
<td>● Planning the development of regions with a view to transport systems.</td>
<td>● No mandate.</td>
<td>● No mandate.</td>
</tr>
</tbody>
</table>
4. **Status-quo of the development of methodological approaches for Integrated regional land use planning in Namibia**

The MLR with support of GTZ and CAECID is developing and introducing a new approach for the formulation of Integrated Regional Land Use Plans in Namibia. The following chapter gives an overview on the current state of the development of this methodological approach. In the text box below, the main objective, concepts and characteristics of this approach, which were defined by MLR with support by GTZ/CAECID, are highlighted before describing the methodology.

**Objective of Integrated Regional Land Use Planning in Namibia:**

The process shall identify all (spatial) development potentials and issues of importance (land use potentials, conflicts, environmental problems and structural deficits) and address them in an integrative way, by incorporating all national, regional, local and sectoral plans. The outcome shall be an overarching harmonised regional land use plan with realistic action plans to improve land use and resource management in the region. The process is development-oriented and participatory and based on direct coordination and joint-decision-making with all stakeholders.

The new approach of IRLUP in Namibia has the **main underlying principles:**

- Involvement of all sectors
- Use of Geographical Information Systems (GIS)
- Participatory decision-making
- Immediate implementation
- IRLUP is subject to a Strategic Environmental Assessment (SEA)

Special **characteristics** of IRLUP in Namibia are:

- There is no legal framework for IRLUP yet and guidelines are still being developed through the present process on “Modelling IRLUP”.
- The IRLUP process is **steered at two levels** (regional and national level).
- IRLUP focuses on four main aspects:
  - (Spatial) development / land use potentials,
  - Land use conflicts,
  - Environmental problems (disasters) and
  - Structural deficits.

- “**Key issues**” and “**focus areas**” concerning the four main aspects are identified with all stakeholders and addressed on local, regional and/or national level according to each issue at stake:
  - “Key issues” with a regional dimension are identified on grass-root level, but addressed at regional level by using **representative structures of land use stakeholders and participatory planning methods**.
  - “Key issues” with a local dimension **are analysed in participatory planning workshops and future land use plans and action plans are drawn up whenever agreements were achieved by all stakeholders.**
4.1 Proposed main aspects of IRLUP and concentration on “key issues” and “focus areas”

IRLUP in Namibia looks into four different aspects:

- **(Spatial) development / land use potentials**
  The first aspect refers to spatial development potentials, such as underutilised land potential, opportunities to optimise land use through intensification, diversification or land use changes as well as capital investment projects such as agricultural developments, mining developments, infrastructure developments, etc. which are planned in the region.

- **Land use conflicts**
  The second aspect concerns existing and/or possible future conflicts regarding land use. These can be caused by uncoordinated sectoral planning, by uncontrolled expansion of urban areas into farmlands, by ethnic conflicts or by the fact that different land users of a particular area are having different interests in land use (see also chapter 7).

- **Environmental problems (disasters)**
  This aspect deals with severe environmental degradation and pollution (natural or environmental disasters), which may already be present in sub-regions or which could possibly occur in the near future.

- **Structural deficits**
  The fourth and last aspect refers to structural deficits. These include non-spatial factors that may impact negatively on optimal land use. Unfavourable marketing conditions (long distances to markets, unfavourable transport conditions, etc.), for example, may discourage farmers to grow crops on their land, although it may be very well suited for horticulture. Tenure insecurity may hold people back from making investments on their land and in their agricultural enterprises. In general, structural deficits have to be addressed on a higher strategic / political level.

During the analytical stage of the IRLUP process, “key issues” and “focus areas” are identified and prioritised with all stakeholders. The methodology of this process is described in chapter 4.3.2 and in more in detail in chapter 5. **The underlying idea is to concentrate the LUP process on the most important issues and areas in a region.**

**Definition of a key issue:**
A key issue describes an opportunity, concern or problem raised by the stakeholders of IRLUP regarding a (spatial) development project or land use activities, current or future land use conflicts, environmental problems or structural deficits. The present situation is thus unsatisfactory and there is need for proper and integrated planning.

**Note:** Although the key issue might be linked to a specific sector in which potentials or problems have been identified, the focus area where the key issue refers to will be
analysed and planned for through an integrated approach, taking into account all different current forms of land use, future land use and development options and their harmonisation!

During the IRLUP process in Namibia, different areas of particular interest will be identified and focussed on. These are called “focus areas”.

**Definition of a focus area:**
An area or small sub-region with development potentials, underutilised land potentials and/or where conflicts or environmental problems (disasters) occur and in which the issues will be addressed by participatory planning approaches with all relevant stakeholder groups.

---

### Region

**Focus area**

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### 4.2 Proposed steering structure of IRLUP

As described in chapter 3 of this manual, Regional Councils have the legal power to undertake development planning in their regions including the development of land utilisation and natural resources management. However, in practice, planning of capital projects and of land use changes is generally done by sector ministries and decision-making powers on prioritisation and resource allocation still rest with central government. The decentralisation process has not yet advanced to a stage where the mandates and powers as well as the institutional capacities allow for steering and coordination at regional level. This is why the proposed steering structure of IRLUP processes has two levels: a regional and a central level.

While the Cabinet Committee on Land and Social Issues (CCLSI) through its Technical Committee on Land and Social Issues (TCLSI) is going to steer the IRLUP processes
at national level\(^1\), the Regional Development Coordination Committees (RDCCs) will steer the processes at regional level. A professional inter-disciplinary IRLUP task force will be set up per region to facilitate the overall planning processes.

The following picture visualises the proposed steering and participation structure of IRLUP processes.

**Steering and participation structure in IRLUP:**

**Steering structure on national level:**
- Cabinet committee on land and social issues
- Technical committee on land and social issues
- Sub-committee on IRLUP

*Overall steering and endorsement of decisions*

**Secretariat:**
MLR-LUPA division

**Steering structure on regional level:**
- Regional Development Coordination Committee

*Joint decision-taking*
Steering at national level
The Technical Committee on Land and Social Issues (TCLSI) is formed by permanent secretaries of 13 line ministries\(^2\). Its sub-committee for IRLUP will closely follow the LUP projects in the regions and intervene in the processes if required. They will endorse relevant decisions through the Technical Committee itself and the Cabinet Committee on Land and Social Issues (CCLSI).

Secretariat
The Ministry of Land and Resettlement will act as a secretariat to the TCLSI through its Division of Land Use Planning and Allocation (LUPA).

Steering at regional level:
The Regional Development Coordination Committee (RDCC) is usually composed of the Regional Governor and the Chief Regional Officer, all Regional Councillors, regional representatives of line ministries and NGOs which are active in the region. It is possible for additional stakeholders to join the RDCC temporarily for the IRLUP process (for example traditional authorities or representatives of farmers associations).

IRLUP task force
The task force to facilitate the IRLUP process on all levels shall be composed of:
- the lead land use planning and GIS consultant (commissioned by MLR)
- at least one MLR-staff member from LUPA (central level)
- at least one staff member of the respective MLR Regional Office
- a planner from the regional development planning division
- a participatory facilitator
- a SEA consultant (temporarily)

Ideally, the task force should be an interdisciplinary team. The regional planner needs to be officially seconded to the IRLUP project by the respective RC. The land use planning / GIS consultant as well as the participatory facilitator will be contracted by MLR. A Strategic Environmental Assessment (SEA) consultant will join the task force temporarily since all IRLUPs will be subjected to a SEA. It is anticipated that the SEA process will be closely linked to the IRLUP process in the planning stage already.

Land use stakeholders
The land use stakeholders will be integrated into decision-making at regional level through the use of participatory decision-making approaches. This will be facilitated through bottom-up planning in focus areas and by using their representative structures with regard to issues which are addressed at regional level (compare chapter 4.3.3).

---
4.3 Proposed stages in IRLUP

The various stages of the land use planning process are briefly summarised in the following chapter (both technical and participatory aspects). A detailed description of the sequential steps of the participatory planning approach is then given in chapter 5.

4.3.1 Organisational stage

The organisational stage aims at setting-up the institutional structures for the process.

The IRLUP process starts with the setting-up of its steering structures, the approval of budgets and the recruitment of consultants. The committees at national and regional level (TCLSI / RDCC) exist permanently, so that the development or up-dating process of an IRLUP can be directly addressed, discussed and agreed upon with the national structures, motivated by MLR as custodian of the national land policy and integrated regional land use planning. The TCLSI will form a sub-committee for LUP. It has not yet been decided whether this sub-committee will be responsible for all the regions or be set up per region. During the organisational stage kick-off meetings are called upon with the TCLSI and the RDCC in order to inform its members about the process. The IRLUP task force for the respective region is formed officially during this stage.

4.3.2 Analytical stage

During the analytical stage an inventory of data on existing resources and land uses is developed. “Key issues” and “focus areas” of IRLUP are identified and prioritised through a participatory process (stakeholder analysis and meetings).

The following main activities are undertaken by the IRLUP task force during this stage:

- Assessment of natural and other resources (“inventory”) → as a result different thematic maps are developed
- Identification and categorisation of existing land uses → Development of maps with existing land uses

Map of existing land uses, developed for the Karas Regional Land Use Plan by SPC/Geocarta, 2010
• Identification of ongoing and planned activities through review of sector plans, projects and programmes relevant for LUP, including existing zoning proposals. Data and documents are collected and coordination takes place with all line ministries to develop maps and summary tables with plans, programmes, projects and zones.

• Land use stakeholder analysis & meetings for participatory identification of underutilised land potentials, current or possible future land use conflicts, environmental problems (disasters) and structural deficits regarding the land reform, land tenure, access to markets, etc. Familiarisation with the views, needs and interests of the different stakeholders and with the region itself.

As a result of this process a list of key issues and maps with the location of possible focus areas for the planning process is elaborated.

4.3.3 Planning and decision-making stage

The planning and decision-making stage aims at the development of a general zoning concept for the region and of viable solutions for the prioritised issues regarding

- (Spatial) development / land use potentials
- land use conflicts
- environmental problems (disasters) and
- structural deficits.

The following main activities are undertaken by the IRLUP task force during this stage:

• Based on the analysis a regional zoning map for future land use options and underlying user regulations is developed (the zoning is not rigid, but leaves options for change subject to defined conditions).

• Prioritisation of the identified “key issues” (and the attached “focus areas”) based on criteria with participatory involvement at regional level. The steering structure on national level will be informed about the prioritised “key issues” and “focus areas”.

The list of “key issues” is presented in a regional stakeholder meeting (RDCC + all other relevant stakeholders). At this meeting, key issues are discussed and prioritised along the following criteria:

o whether the issues have a spatial dimension or not and
o whether they can be addressed and possibly solved at a local, regional or national level.

The main aim of this selection process is to identify:

1. Issues with a spatial dimension, which can be addressed and possibly be solved at a local level in a “focus area”,

2. Issues with a spatial dimension or with a structural dimension, which can be addressed and possibly be solved at regional level,

3. Issues with a spatial or structural dimension which can only be addressed at national level. In these cases the role of regional governments is limited to
formulating recommendations and communicating them to national level where decision-making powers lie.

- Addressing “key issues” at regional level ➔ Discussion and set-up of action plans and/or recommendations
- Addressing “key issues” at local level in “focus areas” ➔ Development and discussion of viable planning options and action plans through a participatory planning approach including mapping of resources and current land uses, discussion on options for future developments and improved land use, joint-decision-making, development of a future land use map and action planning.

If required, technical and economic studies can be carried out to make recommendations on which of the proposed solutions is the most viable. The final decisions on future zoning and land use plans and the attached actions will be taken jointly by all concerned stakeholders.

All maps arising from the planning exercises will be transferred into the GIS system.

### 4.3.4 Implementation and monitoring stage

Participatory impact monitoring systems will be developed for the different key issues ad the plans which were developed in their respects as well as for the overall land use plan. The stakeholder’s capacities to implement and adapt action plans and to monitor effects of action taken will be strengthened through this procedure.

The task force members of the Ministry of Lands and Resettlement together with the regional planner will continuously meet with the RDCC and the stakeholder groups concerned by the different actions plans which were developed during the process in order to take part in the monitoring process. Emphasis should be placed again on the fact that a land use plan is a “rolling plan”, which will be renewed whenever the need arises.

All stages and steps of the Namibian IRLUP process are visualised in the picture hereafter.
Proposed steps in integrated regional land use planning in Namibia

/ Emphasis is laid on the fact that although presented as step-wise approach, IRLUP is not a straight step-by-step procedures, but iterative... !

Cross-cutting issues: Institutional strengthening, improvement of framework conditions (i.e. land tenure aspects), awareness raising, enhancement of dialogue, gender sensitivity, conflict management, joint decision-taking

IRLUP-task force moderates the process and assures the involvement of all stakeholders

Planning stage
- Regional level: Issues that can be addressed and solved on regional level are addressed in regional stakeholder meetings and action plans will be drawn up.
- Regional level: Issues that cannot be addressed on regional level only are discussed in regional stakeholder meetings. Recommendations are developed and communicated to the national level.

Planning stage
- Local level: Issues are addressed on "grass-root" level in "focus areas" by using PRA-planning methods: different options to solve the issues (improve land use, manage conflicts and natural resources...) are thought of and action plans are drawn up. Technical and economic studies can prove the viability of the proposed solutions.

Planning stage
- Selection of "key issues" and "focus areas" for in-depth planning on regional and local level.

Implementation and monitoring stage
- Step-wise implementation of the different measures and recommendations formulated in the IRLUP according to short, medium and long-term objectives set.

Monitoring and evaluation

Organisational stage
- Set-up or activation of steering committees on central governmental and regional level, set-up of an IRLUP taskforce, kick-off meetings, time planning, assure financial resources, etc.

Analytical stage
- Resources inventory and mapping of current land uses
- Review of available documentation and information on sector plans, programmes and projects in the region incl. planned future projects
- Stakeholder analysis and land use stakeholder meetings to identify key issues with regard to land potentials, conflicts, disasters and structural deficits and to familiarise with the region

Analytical stage
- Preparing a joint list of identified key issues and maps showing the potential focus areas
Section C: PLUP facilitation guidelines
5. Guidelines for the stepwise facilitation of participation in land use planning

The following guidelines are directed to the participatory facilitators in form of a detailed description of their tasks and of the tools they can use in the participatory planning process. The guidelines focus on land use planning at local level (see chapter 5.1). Since the involvement and tasks of the participatory facilitators in the facilitation of planning processes at regional level has not yet been defined, the envisaged planning approach at regional level and the potential use of facilitation techniques in participation processes on regional level is only outlined briefly in chapter 5.2.

5.1 Facilitation of land use planning at the local level

5.1.1 Distribution of tasks within the land use planning task force

Before entering the step-wise guideline, let’s summarise the most important points of chapter 4 regarding the facilitation of participation in IRLUP:

Each IRLUP processes will be facilitated by an interdisciplinary task force. The task force will be composed of

- the lead land use planning and GIS consultant (commissioned by MLR)
- at least one MLR-staff member from LUPA (central level)
- at least one staff member of the respective MLR Regional Office
- a planner from the regional development planning division
- a participatory facilitator
- a SEA consultant (temporarily)

Within the analytical stage of the IRLUP process, “key issues” and related “focus areas” will be identified, for which a more detailed, sector-overarching and participatory land use planning process is necessary. The identified “key issues” and related “focus areas” will be prioritised in a regional stakeholder meeting. Bottom-up planning processes are then facilitated on local level in the focus areas by the task force including the participatory facilitators and the plans arising from them are later on integrated into the regional land use plan.

The participatory approach is a step-wise one. The participatory facilitators will ensure in the process that the views and interests of all grass-root stakeholders are being heard and considered at all levels. They will:

- prepare and organise meeting with stakeholders,
- facilitate and co-facilitate discussions and
- take care of the documentation alongside the other task force members.

During the stakeholder analysis and the planning meetings at different levels the main tasks of participatory facilitators will be to:

- involve everybody (men, women, different interest groups in land use),
- gather different ideas by guiding open and friendly discussions,
• reveal the underlying interests, needs, views and problems of all land user groups,
• motivate the discussion and planning process,
• help to find consensus amongst all stakeholders,
• strengthen the self-help and conflict-solving capacities of regional and local stakeholders,
• create a feeling of ownership for the process.

The following table provides a more detailed overview on all steps undertaken in the analytical stage and the planning stage at local level. The responsibilities within the IRLUP task force are indicated for each step. The participatory process starts when the planning process is organised and the steering structures and the task force are in place.

In the following sections, all steps are explained in a detailed manner, including the different planning tools to be used.
Overview on participatory planning steps + responsibilities within the task force

<table>
<thead>
<tr>
<th>Stages and steps</th>
<th>Distribution of responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analytical stage</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Step 1: Stakeholder analysis and stakeholder meetings to identify key issues and focus areas for IRLUP</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-steps:</strong></td>
<td><strong>Tasks:</strong></td>
</tr>
<tr>
<td>1.1 Meet the RDCC to start-up the process, to identify and analyse stakeholders (“outside stakeholder analysis”)</td>
<td>Lead responsibility (organisation, facilitation, documentation)</td>
</tr>
<tr>
<td>1.2 Organise a tour through the region to meet with all stakeholders</td>
<td>-</td>
</tr>
<tr>
<td>1.3 Facilitate meetings to identify key issues and focus areas with all stakeholders</td>
<td>Supports</td>
</tr>
<tr>
<td>1.4 Document the stakeholder meetings and the “inside stakeholder analysis”</td>
<td>Supports</td>
</tr>
<tr>
<td>1.5 Collect important documents and additional information</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td>1.6 Add-up + refine the stakeholder identification and the stakeholder meetings (linked to 1.3)</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td>1.7 Establish a list of identified key issues and potential focus areas for IRLUP</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td>1.8 Document the overall process of step 1 incl. all key issues and focus areas identified for the region</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td><strong>Planning stage</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2: Regional stakeholder meeting to prioritise key issues and focus areas</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Prepare the regional stakeholder meeting</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td>2.2 Facilitate the regional stakeholder meeting and the prioritisation of identified key issues on different levels</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td>2.3 Document the meeting</td>
<td>Lead responsibility</td>
</tr>
</tbody>
</table>
# Manual for participatory land use planning facilitators

## Planning stage

### Step 3: Organisation, facilitation and documentation of planning meetings at local level including participatory mapping for integration into the GIS and action planning

<table>
<thead>
<tr>
<th>Sub-steps:</th>
<th>Distribution of responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tasks:</strong></td>
<td>LUP/GIS</td>
</tr>
<tr>
<td>3.1 Review the respective documentation; joint briefing</td>
<td>Lead responsibility, briefs task force members</td>
</tr>
<tr>
<td>3.2 Undertake a preparatory meeting</td>
<td>Lead responsibility</td>
</tr>
<tr>
<td>3.3 Prepare the “analysis workshop(s)”</td>
<td>Supports (technical inputs)</td>
</tr>
<tr>
<td>3.4 Facilitate the “analysis workshop(s)”</td>
<td>Supports (technical inputs)</td>
</tr>
<tr>
<td>3.5 Document the “analysis workshop(s)”</td>
<td>Supports (technical inputs)</td>
</tr>
<tr>
<td>3.6 Prepare the planning workshop(s)</td>
<td>Supports (technical inputs)</td>
</tr>
<tr>
<td>3.10 Facilitate the planning workshop(s)</td>
<td>Supports (technical inputs)</td>
</tr>
<tr>
<td>3.8 Facilitate the development of an action plan</td>
<td>Supports (technical inputs)</td>
</tr>
<tr>
<td>3.9 Document the planning workshop incl. future land use map and action plan*</td>
<td>Supervises</td>
</tr>
<tr>
<td>3.10 Accompany a possible GPS field survey</td>
<td>Lead responsibility</td>
</tr>
</tbody>
</table>

### Implementation and monitoring stage

#### Step 4: Development of participatory impact monitoring systems

<table>
<thead>
<tr>
<th></th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Develop participatory impact monitoring systems with the respective stakeholders</td>
<td>Actively involved</td>
<td>Lead responsibility</td>
<td>Lead responsibility</td>
<td>Actively involved</td>
<td>Actively involved</td>
</tr>
<tr>
<td>4.2 Document the PIM system</td>
<td>Supports</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
<tr>
<td>4.3 Plan implementation; implementation of PIM</td>
<td>-</td>
<td>Follow-up</td>
<td>-</td>
<td>Supports</td>
<td>Lead responsibility</td>
</tr>
</tbody>
</table>

*The final local land use plan will be developed by the LUP/GIS consultant by integrating all technical aspects.*
Step 1: Stakeholder analysis and stakeholder meetings to identify key issues and focus areas

<table>
<thead>
<tr>
<th>Stage / Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical stage</td>
<td>Stakeholder analysis and stakeholder meetings to identify key issues and focus areas for IRLUP</td>
</tr>
<tr>
<td>Planning and decision-making stage</td>
<td>Regional stakeholder meeting to prioritise key issues and focus areas</td>
</tr>
<tr>
<td>Step 3</td>
<td>Organisation, facilitation and documentation of planning meetings at local level including participatory mapping for integration into the GIS and action planning</td>
</tr>
</tbody>
</table>

Implementation and monitoring stage

| Step 4 | Establishment of participatory impact monitoring systems |

**Expected outputs of Step 1:**
- All relevant stakeholders have been identified and analysed.
- All relevant stakeholders have been spoken to in order to reveal their interests and concerns and to involve them into the planning process from the very beginning.
- All key issues and possible focus areas with regard to the aspects IRLUP addresses have been identified through a participatory process.

**Sub-steps:**
- 1.1 Meet the RDCC to start-up the process, to identify and analyse stakeholders (“outside stakeholder analysis”)
- 1.2 Organise a tour through the region to meet with all stakeholders
- 1.3 Facilitate meetings to identify key issues and focus areas with the stakeholders
- 1.4 Document the stakeholder meetings and the “inside stakeholder analysis”
- 1.5 Collect important documents and additional information
- 1.6 Add-up + refine the stakeholder identification and the stakeholder meetings
- 1.7 Establish a list of key issues and potential focus areas for IRLUP
- 1.8 Document the overall process of step 1 and all key issues and focus areas identified for the region

**Tools:**
- Stakeholder identification
- Stakeholder analysis I (“outside analysis”)
- Checklist for main outputs from the stakeholder meetings
- Checklists of guiding questions for stakeholder meetings
- Site visits
- Participatory review of aerial pictures or maps
- Cross-checking of information through other sources
- Documentation guidelines for key issue/focus area identification through stakeholder meetings
- Stakeholder analysis II (“inside stakeholder analysis”)

**Required time:** 4-6 months (approximately 50 stakeholder meetings; at least 1 day per meeting should be scheduled to be able to conduct site visits after the discussions).
Sub-step 1.1: Meet the RDCC to start-up the process, to identify and analyse stakeholders (“outside stakeholder analysis”)

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Meet the RDCC to start-up the process, to identify and analyse stakeholders</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
</tr>
<tr>
<td>(“outside stakeholder analysis”)</td>
<td>(organisation, facilitation, documentation)</td>
<td></td>
<td></td>
<td></td>
<td>(organisation, contributions)</td>
</tr>
</tbody>
</table>

The IRLUP process will start with a meeting with the RDCC, organised and facilitated by the lead land use planner. Assist the lead consultant in preparing the meeting and in explaining the steps and procedures of IRLUP at the beginning of the meeting.

The objective of the first meeting is to start the stakeholder identification and analysis in the respective region. For this purpose, assist the lead consultant to develop a stakeholder overview with the participants and to discuss the interests, powers, vulnerability and potential roles of each of the stakeholders. Use the opportunity of the meeting also to ask for and to collect relevant documents regarding land use and development planning in the region.

The following definition can be used for stakeholder identification:

**Definition of a stakeholder in IRLUP**

In general terms a stakeholder is a person, group or organisation which has a direct or indirect stake in a process, because he/she/it can affect or be affected by the process’ objectives, policies and/or actions.

For IRLUP, all land users and institutions which can affect or be affected by the land use planning process shall be considered as stakeholders. Whenever they have similar objectives and interests based on their (livelihood) activities or institutional mandates they can be considered as a stakeholder group. This definition implies that all persons or groups with different objectives or interests need to be considered separately, which can lead to the splitting-up of stakeholder groups into sub-groups during the process.

To **identify** all stakeholders ask:
- Who can affect or be affected by land use planning in the region?
- Are these stakeholders formally or informally organised?
- Are there sub-groups?
- Where are they located exactly?

To **analyse** the stakeholders ask:
- What are the interests of the stakeholders?
- What is their potential power / influence?
- Are they vulnerable?
- What can / should be their role in the process?
To find out the localities where to meet the stakeholders ask:
- Where can the stakeholders be met?
- Who can be contacted to get in touch with them?

The following tools help you in the stakeholder identification and analysis. Note that it is an iterative process which needs to be continuously reviewed and refined!

### Tool: Stakeholder identification (for orientation purposes, needs to be adapted in each region!)

<table>
<thead>
<tr>
<th>Land user groups*</th>
<th>Ownership structures (incl. traditional):</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Farmers groups</strong></td>
<td>- Regional Council</td>
</tr>
<tr>
<td>● Commercial farmers</td>
<td>- Rural Planning Division</td>
</tr>
<tr>
<td></td>
<td>- Affirmative action scheme farmers</td>
</tr>
<tr>
<td></td>
<td>- Resettlement farmers</td>
</tr>
<tr>
<td>● Communal farmers incl. Odendaal farms</td>
<td>- Traditional authorities</td>
</tr>
<tr>
<td>● Irrigation farming companies</td>
<td>- Communal land boards</td>
</tr>
<tr>
<td>● Small-scale irrigation/crop farmers</td>
<td>- Local authorities (town and village councils)</td>
</tr>
<tr>
<td><strong>Tourism establishments</strong></td>
<td>- Line ministries:</td>
</tr>
<tr>
<td>● Game and/or tourism establishments</td>
<td>- MET</td>
</tr>
<tr>
<td>● Mixed farming/tourism establishments</td>
<td>- MAWF</td>
</tr>
<tr>
<td></td>
<td>- Commercial farmers</td>
</tr>
<tr>
<td></td>
<td>- Conservancy committees</td>
</tr>
<tr>
<td></td>
<td>- Community-based tourism organisations</td>
</tr>
<tr>
<td><strong>Community forestry committees</strong></td>
<td>- MWTC</td>
</tr>
<tr>
<td><strong>Mining operators</strong></td>
<td>- MLR</td>
</tr>
<tr>
<td>● Multinational miners</td>
<td>- MRLGHRD</td>
</tr>
<tr>
<td>● Small-scale miners</td>
<td>- MFMR</td>
</tr>
<tr>
<td>● Affirmative action scheme farmers</td>
<td>- MME</td>
</tr>
<tr>
<td>● Resettlement farmers</td>
<td><strong>NGOs and cooperation projects with representative structure in the region</strong></td>
</tr>
<tr>
<td>● Commercial farmers</td>
<td>- Urban population incl. their institutions:</td>
</tr>
<tr>
<td></td>
<td>- Constituency Development Committees</td>
</tr>
<tr>
<td></td>
<td>- Village Development Committees</td>
</tr>
<tr>
<td></td>
<td>- Government officials and service providers</td>
</tr>
<tr>
<td></td>
<td>- Hotel and restaurant owners and staff</td>
</tr>
<tr>
<td></td>
<td>- Shop-keepers, traders</td>
</tr>
<tr>
<td></td>
<td>- Shack-dweller associations</td>
</tr>
<tr>
<td></td>
<td>- Youth groups</td>
</tr>
<tr>
<td></td>
<td>- Women groups</td>
</tr>
<tr>
<td></td>
<td>- Associations of unemployed people</td>
</tr>
<tr>
<td><strong>Others:</strong></td>
<td>- Parastatal institutions:</td>
</tr>
<tr>
<td>● Churches</td>
<td>- Nampower</td>
</tr>
<tr>
<td></td>
<td>- Namwater</td>
</tr>
<tr>
<td></td>
<td>- Namibia Development Cooperation (NDC)</td>
</tr>
<tr>
<td></td>
<td>- Transnamib</td>
</tr>
</tbody>
</table>

*with their sub-groups: women, youth groups, specific ethnic groups, etc.
Description of possible stakeholder groups in IRLUP (for orientation purposes!)

Land user groups:
- Commercial farmers associations (incl. AALS, resettlement farmers): chairpersons and members of different farmers associations can represent these important stakeholder groups. Their associations serve as entry point to establish contacts with farmers and to understand their concerns regarding land use, potentials, problems, constraints and conflicts. Sub-groups of the associations and representatives of women should be invited to meetings!
- Communal farmers are organised in associations as well whereas these are sometimes dormant locally or are replaced by more informal structures. Meetings with communal farmer's groups should be undertaken separately from the traditional authority and possibly existing conservancy committees in order to obtain all different viewpoints. All ethnic groups and women should be represented during the meetings or preferably be met separately!
- Irrigation farming companies and small-scale irrigators: Commercial irrigation companies as well as the attached small irrigation stakeholders should be spoken to separately in order to find out about issues for land use planning.
- Game and/or tourism establishments: Their owners are far less organised than the farmer's associations so that they might be selected randomly for meetings or according to information on possible key issues for the IRLUP process, like conflicts between game farming and neighbouring land uses.
- Mixed farming/tourism establishments: Commercial farms often integrate touristic offers into their livelihood system. Issues of importance can be revealed during meetings with farmers associations.
- Conservancies and community-based tourism organisations: it is recommended to meet all conservancy committees during the stakeholder analysis in order to discuss on issues related to the integration of wildlife and grazing and additional issues of interest. Community-based tourism organisations which do use land for their purposes can also exist outside communal areas - in villages, settlement areas or towns - and should be identified and considered in all regions.
- Community forestry committees: These committees are established by MAWF and MET in the framework of community-based natural resources management approaches and manage their community forests according to management plans. They need to be involved in the land use planning processes and consulted through stakeholder meetings.
- Multi-national mining companies are the most powerful group of land use stakeholders. They should be approached in order to win their interest in participating in the process and to collaborate for solving problems or conflicts arising in relation to mining operations.
- Small miners are often formally or informally organised and need to be identified and contacted in the process to integrate their viewpoints and concerns.

Ownership structures:
- The Regional Council with its rural planning division is one of the key players of the process and is contacted in the very early stage of the process (through RDCC).
- All traditional authorities need to be contacted and spoken to during the stakeholder meetings. They have wide-ranging functions in the regulation of land use (see chapter 3) and they can therefore play important roles during the process.
- Communal Land Boards should be consulted in case of conflicting issues regarding the allocation of land rights in communal areas.
- Local authorities need to be consulted and integrated in the process in order to integrate issues linking urban with rural areas (service provision, markets, infrastructure, etc.)

Line ministries: at least MET, MAWF, MWTC, MRLGHRD and MME need to be closely involved into the process from the onset onwards. Regarding their roles, refer to chapter 3

Urban population incl. their institutions:
- Not only the institutionalised development committees (VDCs and CDCs) need to be considered, but also all organised or unorganised interest groups in land use planning like government officials, hotel and restaurant owners and employees, women and youth groups, shack dwellers, etc. Their development needs and proposals need to be taken into account in the LUP process.

Parastatal institutions:
- Parastatal institutions like Nampower, Namwater, NDC and Transnamib are important service providers, also for rural areas, and need to be contacted through stakeholder meetings.

NGOs / development cooperation projects:
- They are part of the RDCC and need to be directly involved in the process.
### Tool: Stakeholder analysis I – “outside analysis” (to be applied in the start-up meeting with the RDCC)

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Association(s)</th>
<th>Sub-groups</th>
<th>Interests</th>
<th>Power / influence (o / + / ++)</th>
<th>Vulnerability (o / + / ++)</th>
<th>Potential role in the process</th>
</tr>
</thead>
</table>
Sub-step 1.2: Organise a tour through the region to meet with all stakeholders

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 Organise a tour through the region to meet with all stakeholders</td>
<td>-</td>
<td>Supervises</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

With this second sub-step the participatory takes over the responsibility for the participatory process. Make arrangements to meet with all identified stakeholder groups. Use the information arising from the stakeholder analysis regarding powers, vulnerability and possible roles of stakeholders to prepare for the meetings accordingly. Remember for example to invite all sub-groups including more vulnerable ethnic sub-groups, women, etc. to the meetings or to even better meet these sub-groups separately! Wherever possible, organisational structures and regular meetings of stakeholder groups should be used as entry point (i.e. meetings of their associations). Organise the meetings well in terms of invitations, appointments, venues and time frames to ensure a satisfactory participation of the stakeholder group members and to have time for site visits. Equip yourself with base maps of the region and possibly aerial pictures as well as a camera!

Sub-step 1.3: Facilitate meetings to identify key issues and focus areas with all stakeholders

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
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<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 Facilitate meetings to identify key issues and focus areas with all stakeholders</td>
<td>Supports</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

Before each stakeholder meeting, agree internally who will facilitate and who will take notes and think of other means of documentation as well (i.e. taking pictures). Start the discussion with key informants during stakeholder meetings with an appropriate introduction of the facilitator, the task force and the participants. The names of all informants need to be recorded as well as date, time and location of the meeting. Explain the exact purpose of your mission (the objectives of IRLUP and the roles of the task force) and allow participants to ask questions for clarification.

After the introduction, a few general questions concerning the background of the locality or organisation should be asked. This will allow breaking the ice and creating a more relaxed atmosphere. There is no standard set of questions that can be used across different situations. It is useful however, to compile a checklist of guiding questions to ensure that the broad topics are adequately covered. Each meeting will generate its own set of questions that are likely to be relevant to the identification and
description of key issues. You will have to pursue leads provided during the course of the discussion by probing further into particular subject matters.


**Tool: Checklist for main outputs from the stakeholder meetings**

The meetings should reveal:

- Whether there is spatial development potential such as underutilised land which can be used for development initiatives; if so where the area is, how big the area is, how many beneficiaries the development initiative could have and what was already done in order to start-up the initiative.
- Opportunities to optimise land use through intensification, diversification or land use change and if there is, why it is not made use of (obstacles).
- Whether there are any existing or possible future conflicts regarding land use.
- Whether there are any current or possible future environmental problems (pollution, degradation, bush encroachment), where and why.
- Which framework conditions have a negative impact on the optimal use of land (tenure aspects, transport, marketing aspects, etc.) and whether the rural population can satisfy all their major needs in the rural areas or in the adjacent towns (health, education, supply, markets) and vice versa, the urban population can satisfy their basic needs from the rural areas (provision of goods, recreation, etc.).

**Tool: Checklist of guiding questions for stakeholder meetings**

- Which kind of natural resources do exist in your area? On which resources can land utilisation base on (location, abundance, etc.)?
- How are you currently utilising your land? Do you think your land is used optimally (way of using the land, intensity of land use, diversity of land uses)?
- If not, what are the constraints you are facing?
- Are there potentials to bring more land into production, to change land use to more profitable uses or to diversify land use? If there is potential: can you describe it (where is the area, who could benefit, how could it be used, to do what, what has been done already to start the initiative)?
- Are new development projects of capital nature foreseen for the land you have access to? If it is, what exactly is planned? How should or could that issue be dealt with?
- Are there any conflicts about land that affect you? Where? Why? Who is involved? What is the exact issue?
- Is your area affected by environmental degradation or pollution or any other environmental problems? If so, where? Why? How? ….
- Where do you market your products to and which means of transport do you use? Do you encounter basic problems to commercialise your products? Why?
- Can you fulfil your basic needs for supply/education/health in your vicinity? Where? What would be needed if the situation is not satisfying?
During the meeting or at the end of the meeting ask the participants about **important studies and documents** existing for their area with regards to the land related issues of interest. Ask if you can obtain these documents and where.

Recall again the definition of a key issue and a focus area in IRLUP:

**Definition of a key issue:**
A key issue describes an opportunity, concern or problem raised by the stakeholders of IRLUP regarding a (spatial) development project or land use activities, current or future land use conflicts, environmental problems or structural deficits. The present situation is thus unsatisfactory and there is need for proper and integrated planning.

**Definition of a focus area:**
An area or small sub-region with development potentials, underutilised land potentials and/or where conflicts or environmental problems (disasters) occur and in which the issues will be addressed by participatory planning approaches with all relevant stakeholder groups.

In addition to the discussion sessions, site visits and a participatory review of maps are recommended in order to deepen the analysis.

**Tool: Site visits**
Site visits to places or projects indicated during the meetings add value to the information and are highly recommended. You will better understand the points raised by the stakeholders during the meeting when seeing the sites and places they referred to and more questions will come up…

**Tool: Participatory review of aerial pictures or maps**
When starting the stakeholder meetings the task force should be equipped with different maps (overview maps, topographical maps) and possibly aerial pictures of the region and its sub-regions. The maps can be studied during the meeting with the stakeholders so that the participants can orient the task force about the exact areas of concern for land use (for example the areas where conflicts or environmental problems occur).
Sub-step 1.4: Document the stakeholder meetings and the “inside stakeholder analysis”

<table>
<thead>
<tr>
<th>Responsibilities</th>
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<th>Participatory Facilitator</th>
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<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 Document the stakeholder meetings and the “inside stakeholder analysis”</td>
<td>Supports</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

After each stakeholder meeting, it is the responsibility of the participatory facilitator to take care of a proper documentation, with support by the task force members (i.e. the note-takers of the meeting). The following guidelines shall help to properly document the stakeholder meetings.

In addition to the documentation of each single meeting, the “inside stakeholder analysis”-format provided with the next tool should be filled in. It summarises the most important aspects which were revealed by each stakeholder group.

At the end of the tour through the region, the participatory facilitators should provide an overview on all stakeholder meetings as introductory part of the document.

**Tool: Documentation guidelines for key issue/focus area identification through stakeholder meetings**

### Stakeholder meeting documentation

*The overall document should contain the following information:*

1. Overview on all stakeholder meetings (number of meetings, stakeholder groups met, locations, names of task force members, etc.)

2. For each meeting the date and venue should be recorded and a description of the stakeholder group which was met (location and/or institution, number of people belonging to the stakeholder group and number of participants of the meeting, incl. age groups, positions of participants (committee members, etc.), ethnic background, etc.)

3. The following findings are then to be summarised for each stakeholder meeting:
   - Main natural resources in the area the stakeholder group relies on,
   - Main livelihood activities,
Options regarding (spatial) development initiatives: where the area is, how big the area is, how many beneficiaries the initiative could have and what was already done in order to start-up the initiative,

- Opportunities to optimise land use through intensification, diversification or land use change the stakeholders identified and why they do not yet make use of the possibility,

- The different interests and/or framework circumstances leading to a current or future conflict in the area, describing as detailed as possible the exact (sub-)area the conflict occurs in, the dimension of the conflict and the conflict parties involved,

- The current or possible future environmental problems the stakeholders indicated, where they occur and why,

- The framework conditions the stakeholders are confronted with having a negative impact on the optimal use of land like tenure aspects, transport or marketing aspects and the like

- The problems the rural population faces to access basic services (or vice versa) the problems for urban stakeholders to be supplied by basic products from the rural areas.

4. The main findings can possibly be accompanied by maps showing the areas of interest, photographs, etc.

5. Recommendations regarding missing information, important studies and documents or key informants should also be integrated in the documentation. The findings can later on be amended or commented on whenever this additional information is at hands (compare sub-step 1.5 hereafter).

6. The “inside stakeholder analysis” (see following tool) is to be filled in after each meeting and attached to the documentation.
### Tool: Stakeholder analysis II ("inside stakeholder analysis")

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Associations or location(s)</th>
<th>Present forms of land use</th>
<th>Current constraints in land utilisation regarding conflicts, environmental problems, structural deficits or other socio-economic issues of concern</th>
<th>Potentials for intensification, diversification or change of land use</th>
<th>Homogeneity (regarding concerns)</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tbody>
</table>
Sub-step 1.5: Collect important documents and additional information

<table>
<thead>
<tr>
<th>Responsibilities</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.5 Collect important documents and additional information</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

During the stakeholder meetings you may have received information on existing studies, data or documents which are important to further analyse the issues at stake. Collect the documents and cross-check information obtained during the stakeholder meetings through other sources (compare following tool). This step falls under the responsibility of both the lead LUP consultant and the participatory facilitator, taking into account that some of the documents / key informants are located in Windhoek, some in the region at stake.

Tool: Cross-checking of information through other sources

Whenever you obtain information on envisaged or possible spatial developments or land use potentials, conflicts, environmental problems and structural deficits by the different stakeholder groups, you should further investigate on the points raised, in order to understand their relevance and dimension (following the triangulation principle of PRA). You can contact for example the responsible line ministry, NGOs or other institutions or persons concerned, who can be helpful for your team to obtain a clearer picture on the issues which were raised and you can review respective documentation and studies at hands regarding the issues. The information obtained should be added to your documentation of the stakeholder meetings.

Sub-step 1.6: Add-up + refine the stakeholder identification and the stakeholder meetings

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
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<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6 Add-up + refine the stakeholder identification and the stakeholder meetings (linked to 1.3)</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Lead responsibility (facilitation and documentation)</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

During the course of the first trip to meet all stakeholder groups you may find out that you have not taken into account important additional stakeholders or that the group you met was very heterogeneous and is composed of sub-groups with their own points of view. You should complete and refine your stakeholder identification list accordingly and arrange for additional meetings as to consider all interest groups for land use planning. Remember that stakeholder identification and analysis is an iterative process!

Follow steps 1.2 to 1.5 again until you finished the stakeholder meetings including proper documentation.
Sub-step 1.7: Establish a list of key issues and potential focus areas for IRLUP

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
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<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7 Establish a list of identified key issues and potential focus areas for IRLUP</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

Support the lead LUP consultant to establish a list of key issues as a result of the stakeholder meetings (as well as other processes which fall under the responsibility of the LUP consultant like the review of all development and sector plans for the region). Indicate in appropriate overview maps, which can be prepared on the basis of topographical maps, where the location of potential focus areas for land use planning is (compare step 2.1). This step leads to the preparation of the regional stakeholder meeting to prioritise key issues.

The lead consultant has the overall responsibility of making sure that all key issues have been identified, analysed and documented.

Sub-step 1.8: Document the overall process of step 1 incl. all key issues and focus areas identified for the region

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
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<th>Participatory Facilitator</th>
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<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8 Document the overall process of step 1 incl. all key issues and focus areas identified for the region</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

As for step 1.7, the documentation of the overall process of stakeholder identification, analysis and key issue identification through different processes is the responsibility of the lead land use planning consultant, which might request support from the task force members for specific information. The documentation of the stakeholder meetings will be incorporated in step 1.7 and 1.8.
### Step 2: Regional stakeholder meeting to prioritise key issues and focus areas

<table>
<thead>
<tr>
<th>Stage / Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analytical stage</strong></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td>Stakeholder analysis and stakeholder meetings to identify key issues and focus areas for IRLUP</td>
</tr>
<tr>
<td><strong>Planning and decision-making stage</strong></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Regional stakeholder meeting to prioritise key issues and focus areas</td>
</tr>
<tr>
<td>Step 3</td>
<td>Organisation, facilitation and documentation of planning meetings at local level including participatory mapping for integration into the GIS and action planning</td>
</tr>
<tr>
<td><strong>Implementation and monitoring stage</strong></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td>Development of participatory impact monitoring systems</td>
</tr>
</tbody>
</table>

**Expected outputs of Step 2:**
- The stakeholders confirm and discuss the identified key issues for integrated regional land use planning and prioritise the most important ones through a ranking exercise.

**Sub-steps:**
- 2.1 Prepare the regional stakeholder meeting
- 2.2 Facilitate the regional stakeholder meeting and the prioritisation of key issues on different levels
- 2.3 Document the meeting

**Tools:**
- Key issue tables
- Maps showing potential focus areas
- Group work on key issues
- Preference ranking

**Required time:**
2 days, approx. 50 or more stakeholder representatives will be present!
Sub-step 2.1: Prepare the regional stakeholder meeting

The regional stakeholder meeting to prioritise the identified key issues for the land use plan is a major milestone of the whole process and therefore needs to be well organised and prepared. The facilitation and documentation of the meeting is the responsibility of the lead consultant of the LUP process, but the participatory facilitator will closely assist in its preparation and facilitate a group-work during the meeting.

Representatives from all stakeholder groups identified during the analysis phase will be invited to the event. Take care that the venue and time for the event will be properly chosen in order to assure the best possible participation, including arrangements for transportation and overnight stays. To prepare the facilitation, assist in the development of the following materials:

Tool: Key issue tables

Divide the list of key issues identified during the stakeholder meetings and through additional means into the four main aspects that the IRLUP process addresses and put them on four pin boards. Point out whether they are spatial issues or not.

Aspect: Spatial development / Land use potentials

<table>
<thead>
<tr>
<th>Key issue</th>
<th>What does it mean? (Description of the exact subject matter…)</th>
<th>Spatial issue</th>
<th>Non-spatial issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited profitability of commercial farming</td>
<td>……..</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Underutilised tourism potential in the xxxx communal area</td>
<td>…….</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Underutilised irrigation potential along river xx</td>
<td>…….</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Aspect: Land use conflicts

<table>
<thead>
<tr>
<th>Key issue</th>
<th>What does it mean? (Description of the exact subject matter…)</th>
<th>Spatial issue</th>
<th>Non-spatial issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict between game and livestock farming in area xxxx</td>
<td>……..</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Aspect: Environmental problems (disasters)

<table>
<thead>
<tr>
<th>Key issue</th>
<th>What does it mean? (Description of the exact subject matter…)</th>
<th>Spatial issue</th>
<th>Non-spatial issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe bush encroachment in sub-area xxxx</td>
<td>……..</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
### Aspect: Structural deficits

<table>
<thead>
<tr>
<th>Key issue</th>
<th>What does it mean?</th>
<th>Spatial issue</th>
<th>Non-spatial issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited profitability of resettlement and AALS farms due to lack of support schemes</td>
<td>(Description of the exact subject matter…)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Difficulties to access markets for xxxx in the area xxxx</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Note the following:

In reality issues will often overlap and cannot be attributed clearly to one aspect only. The following examples illustrate the point: Land which is currently not used or only extensively, but bears potential for use or more intensive use frequently gives rise to conflicts between different interest groups who want to have access to this land in order to utilise its potentials. Conflicts do also arise when severe environmental problems occur. In cases of ambiguity, the team needs to be pragmatic and assign the identified key issue to one of the categories, bearing in mind that it would also fall under a different category.

Issues raised under the aspect “structural deficits” most often do not have a spatial dimension!

#### Tool: Maps showing potential focus areas

For the purpose of the meeting the preparation of overview maps on the potential focus areas for land use planning are sufficient; several of them need to be printed in preparation of the meeting. They should show basic features like roads, rivers, settlements, national parks, communal areas, conservancies and the boundaries of the region. Indicate where the stakeholders identified potential focus areas. Pin these maps on the four pin boards together with the list of key issues.
Sub-step 2.2: Facilitate the regional stakeholder meeting and the prioritisation of key issues on different levels

The main objectives of the regional stakeholder meeting are to
- review the results of the stakeholder meetings conducted during the analysis phase of the IRLUP process,
- confirm the relevance of all identified issues and - if needed - to add additional ones,
- prioritise the key issues.

Follow this sequence and approximate timing in your facilitation:

1) Introduce the IRLUP process and task force, the participants and the objectives of the meeting as well as what you are going to do during the meeting (30 min.).
2) Present the results of the stakeholder meetings and key issue identification with the respective lists and maps of potential focus areas for the IRLUP process. Make sure that the participants understand the participatory process and the complementary processes of which the issues are arising from and the dimension of each of the key issue identified (2-3 hours, with clarification questions on each issue).
3) Facilitate a group work to finally review all the key issues and focus areas (confirm their relevance and/or potentially add additional issues and identify on which level the issues should be addressed – local, regional or regional + national) (see tool “group work on key issues”) (3-4 hours).
4) Let the participants present the results of the group work and prioritise the key issues and related focus areas through a ranking exercise (see tool “preference ranking”) (3 hours, on the second day of the meeting).
5) Present and discuss the results from the ranking exercise (1 hour, at the end of the meeting).

Split the participants into four groups on a random basis. The groups will work on the key issues identified under the main aspects of the IRLUP process- (spatial) development / land use potentials, land use conflicts, environmental problems (disasters) and structural deficits by using one pin board each. The participatory facilitator will facilitate one of these group works in his/her role as co-facilitator. The groups discuss:
- whether issues can be addressed at regional or local level within the region or whether a particular issue needs institutional and/or political support from national level and can therefore only be addressed at regional and national level,
- what the expected or unexpected effects of addressing the key issue could be.
The groups can use the following matrix for this purpose:

<table>
<thead>
<tr>
<th>Aspect:</th>
<th>Can be addressed at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key issue</td>
<td>What does it mean?</td>
</tr>
<tr>
<td></td>
<td>What will be the effect of addressing it?</td>
</tr>
</tbody>
</table>

After the group work all groups present their results to each other and the list of key issues is finally completed. All issues need to be well understood with their dimensions and possible effects of addressing them.

![Image of people during a meeting](image)

**Tool: Preference ranking**

The ranking exercise will give all stakeholder groups an opportunity to express their preference with regard to the key issues that should be addressed in the land use plan.

**Before the ranking:**
- Split the key issue tables into those issues which can be addressed at local level, those that can only be addressed at regional level and those that can only be addressed at regional and national level. Use three pinboards for this purpose. This makes it possible to rank local level issues separately from regional and national issues. Without this separation, the risk is high that local level issues are ‘crowded out’ by issues that can only be addressed at regional or national levels.
- Establish a list of all stakeholder groups present during the stakeholder meeting. This is done to ensure that all stakeholders regardless of the number of representatives present get the same number of stickers to do their ranking.

**Ranking:**
Stakeholders do their ranking by placing stickers next to the key issues listed on pin boards (one sticker is one point; each group can receive 3 to 5 stickers). They are free
to place all their stickers on one issue if they feel particularly strongly about it, or spread them over several issues. The process needs to be repeated three times for the different levels of attention. When all stakeholders have placed their stickers, count the number of points attributed and present the results.

The regional stakeholder meeting will be concluded with a summary of the discussions and a recap of the key issues prioritised for the IRLUP process. An overview on the time frames to address the selected issues will be provided. Needless to say, the availability of human and financial resources in each region will determine the number of key issues raised in the IRLUP that can be addressed.

**Sub-step 2.3: Document the meeting**

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 Document the meeting</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

Assist the lead consultant in properly documenting the meeting, which falls under his/her responsibility. Therefore no guidelines are outlined here.
Step 3: Organisation and facilitation of planning meetings at local level

<table>
<thead>
<tr>
<th>Stage / Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical stage</td>
<td>Stakeholder analysis and stakeholder meetings to identify key issues and focus areas for IRLUP</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning and decision-making stage</td>
<td>Regional stakeholder meeting to prioritise key issues and focus areas</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning and decision-making stage</td>
<td>Organisation, facilitation and documentation of planning meetings at local level including participatory mapping for integration into the GIS and action planning</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation and monitoring stage</td>
<td>Development of participatory impact monitoring systems</td>
</tr>
</tbody>
</table>

Expected outputs of Step 3:

✓ The prioritised key issues at local level have been addressed in participatory workshops with all concerned stakeholders. Different options and solutions with their respective impacts have been discussed and evaluated and final decisions were taken jointly.

✓ Participatory maps showing the agreed zoning concepts / locations for development initiatives have been developed and can be integrated into the GIS.

✓ Comprehensive and realistic action plans were developed with all stakeholders.

Sub-steps (to be undertaken for each location):

- 3.1 Review the respective documentation, joint briefing
- 3.2 Undertake a preparatory meeting
- 3.3 Prepare the “analysis workshop(s)”
- 3.4 Facilitate the “analysis workshop(s)”
- 3.5 Document the “analysis workshop(s)”
- 3.6 Prepare the planning workshop(s)
- 3.7 Facilitate the planning workshop(s)
- 3.8 Facilitate the development of an action plan
- 3.9 Document the planning workshop(s) incl. future land use map and action plan*
- 3.10 Accompany a possible GPS field survey

* The final local-level land use plan will be developed by the LUP/GIS consultant by integrating all technical aspects.

Tools:

- General checklists for preparing and facilitating meetings (see annex 3)
- PRA-tool kit
- Summary table of results from the use of PRA-tools
- Documentation guidelines for “analysis workshops”
- Guideline to facilitate the development of action plans
- Documentation guidelines for planning workshops

Required time: Several months. The exact number and duration of meetings will depend on the number of key issues addressed and on the complexity of the issues!
**Sub-step 3.1: Review the respective documentation, joint briefing**

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1  Review the respective documentation; joint briefing</td>
<td><strong>Lead responsibility, briefs task force members</strong></td>
<td>Active involvement</td>
<td>Active involvement</td>
<td>Active involvement</td>
<td>Active involvement</td>
</tr>
</tbody>
</table>

Before starting the planning process at local level in the prioritised focus areas, further familiarise with the local environment and deepen your analysis on the key issue at stake. Make sure that:

- you contacted all responsible line ministries, institutions and local stakeholders and have received all relevant documentation,
- you have collected and studied all the documents, reports, studies and maps related to the particular region. These include planning documents of relevant line ministries, surveys, feasibility studies, technical studies, etc.

The review of the documentation shall help you to further understand the dimension of the key issue: the potentials that the focus area bears, the underlying causes of a problem or of the conflict, or the structural deficits land use stakeholders are facing.

A joint briefing with the lead land use planning/GIS consultant shall be realised in order to ensure that all task force members have a sound understanding of the most important technical aspects revealed through the documents.

**Sub-step 3.2: Undertake a preparatory meeting**

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2  Undertake a preparatory meeting</td>
<td><strong>Lead responsibility</strong></td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

Organise a preparatory meeting with the stakeholders on the ground; for this step the lead LUP/GIS and the participatory facilitator will be responsible jointly. During the preparatory meeting explain the exact aim and the context of the planning workshop. This will include:

- the clarification of the objectives and contents of the workshop,
- who should be invited,
- the time frame and
- the logistics.

Make sure that all relevant stakeholders have been identified and will be invited to the meeting; however, consider carefully whether it is desirable to invite representatives of line ministries or other governmental institutions for the workshop or for the whole time.
of the workshop, because their presence might limit the possibility for the grass-root stakeholders to express their concerns, viewpoints and criticisms freely! Develop a list of workshop participants together with the local contact person(s), who assist you in the preparation. The presence of all groups of the community and all other stakeholder groups concerned should be assured (men, women, elders, young people, people living outside the village, but belonging to the community, neighbouring farmers, etc.) by inviting them early and by making sure that the objective of the meeting is clear to them. Think of inviting also NGOs, private investors or other relevant stakeholders to the meeting!

**Sub-step 3.3: Prepare the “analysis workshop(s)”**

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
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<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 Prepare the “analysis workshop(s)”</td>
<td>Supports (technical inputs)</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

The first workshop will emphasise on the **analysis** of the key issue with the local population on grass-root level; if more need to further analyse important aspects of the area’s environment or the issues at stake arise, further meetings can be called in afterwards before the planning process can start.

The first workshop shall last **3 to 4 days**. If the key issue involves a land use conflict, it is advisable to work with the different interest groups or conflicting parties separately and to plan for two or more separate meetings before organising the first joint meeting!

In order to prepare for the workshop, you need to build up a team of facilitators and prepare the different sessions of the first planning workshop intensively by developing **checklists with questions for each tool**. Agree on time frames and on the internal roles of each team member for each step during the workshop and for each tool to be applied. At least one team member will facilitate and one will take notes during the different sessions of the meeting.

Reflect and discuss beforehand whether it will make sense to temporarily split the group of participants into **sub-groups** in order to give different interest groups within the community the opportunity to discuss important topics internally or in order to better handle a high number of participants (usually to work several days with a large group of people can be exhausting and time consuming. The advantages and disadvantages to split the total group of participants need to be discussed beforehand regarding the different tools which the team wants to apply and the underlying discussion points you want to address!)

Reflect on the language in which the meeting will be held and if **translation** will be required. If so, the team might need to contract a translator or translators as part of the
team if nobody within the team can translate. Another option could be that somebody within the community translates; this needs to be organised well before the meeting!

Purchase and prepare all required materials (brown paper, cards, pens, note books and the like). Take a photo camera along to take pictures!

Request the GIS consultants to develop a set of materials for you (compare chapter 6):

- An overview map of the area based on the topographical map showing the focus areas with its surroundings as well as roads, rivers, settlements, national parks, communal areas, farm boundaries, conservancies and main vegetation patterns. The same or additional overview maps can also integrate information which might become relevant during discussions, like the agro-ecological zoning, carrying capacities or basic service infrastructures; the specific information of interest will depend on the key issue at stake. The overview map can be used for general orientation and discussion during the workshop.

- An orthophoto of the area (including the nearer surroundings). In case this is not available, satellite images or aerial photographs (preferably at least georeferenced) or topographic maps can be used as well for the purpose of transferring the results of participatory mapping to technical images/maps. The base image/map for transferring the data from participatory maps should preferably also show the main boundaries, i.e. farm boundaries, for better orientation.

Make sure that the venue of the meeting will be appropriate and that the logistics you will need are in place and/or arranged (for example electricity, catering, etc.).

Use the general checklists to prepare and facilitate meetings provided in annex 3 to further prepare for the event!

Sub-step 3.4: Facilitate the “analysis workshop(s)"

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4 Facilitate the “analysis workshop(s)”</td>
<td>Supports (technical inputs)</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

During the first workshop four important PRA-tools shall be applied in order to analyse

- the ecological and spatial situation in the planning area, its natural resources, tenure situation, current land uses, problems and conflicts (resource mapping),
- the underlying socio-economic aspects, i.e. sources and impacts of a key problem which is identified together with the stakeholders (flow-diagram),
- the institutional set-up the stakeholders are interacting in (Venn-diagram) and
- to deepen important specific aspects by visiting the sites and better understanding the dimensions of possibilities, problems or conflicts (site visits)
The following box provides an overview on the PRA tools which can be applied in the context of the analysis workshops.

**PRA tools for the analysis workshop(s):**

Use the following tools during the first meeting(s), bearing in mind that the nature of each key issue requires flexibility in the selection and use of specific tools:

**PRA-tool 1:** Resource map (including the transfer of the results to an orthophoto)  
**PRA-tool 2:** Flow-diagram (focus on causes-effects of the identified key problem)  
**PRA-tool 3:** Venn-diagram  
**PRA-tool 4:** Transect walk or drive / site visits

Other important tools which can be used according to the context are:  
PRA-tool 13: Semi-structured interviews or focus group discussions  
PRA-tool 10: Trend lines and historical transects  
PRA-tool 12: Seasonal calendars  
PRA-tool 9: Mobility maps  
PRA-tool 11: Proportional pilings  
PRA-tool 7: Pair wise rankings

In the event that conflicting interests play a role, conflict analysis tools can be used:  
Conflict analysis tool 1: conflict onion  
Conflict analysis tool 2: conflict map  
Conflict analysis tool 3: Conflict analysis table  
Conflict analysis tool 4: Actor analysis

It needs to be decided according to each context, whether the first meeting can already address possible solutions. If so, the following tools can be helpful to discuss and rank options and solutions:

- Flow-diagram (in a second step of the flow diagram development the focus is on possible solutions to the identified root-causes of the key problem)  
- Matrix scoring and ranking (to rank different options / solutions according to criteria)  
- Problem and solution ranking (to list and prioritise all identified problems and possible solutions)

For better orientation on all possible PRA-tools which can be applied refer to the following general description of the PRA tool-kit hereafter and to annex 1.
In the following you receive an overview on the five main tools for PLUP in Namibia as well as some additional tools that could be useful in different situations. All tools are described in more detail in annex 1.

Main tools:

- **Resource map (Tool 1)**
The development of a map of current resources by participants will help to construct a picture of the local environment and create a baseline reference for discussions on resources. It will help to identify the natural resources availability, problems related to land use and underutilised potentials. All different resources regardless the key issue at stake have to be mapped. In addition, other important aspects have to be highlighted in the map: land tenure, current land uses, conflicts, land use problems... in order to develop a sector-overarching and integrated land use plan on local level. The resource map helps to prepare the discussions on future land uses and the future land use map.

- **Flow-diagram (Tool 2)**
The participatory development of a flow diagram will show the root-causes of a specific key issue and the effects the issue has on land use and livelihoods. Once the underlying causes of this problem have been identified, these can be discussed with view to identify possible solutions. It is of utmost importance to probe into all causes and effects during the discussion and to also discuss possible impacts of proposed solutions.

- **Venn-diagram (Tool 3)**
Venn-Diagrams are useful tools to discuss the institutional set-up in the community context. Participants reflect on and discuss the importance of institutions within their community and of those institutions outside for the issue at stake. The tool will reveal whether people have access to these institutions or not and which institutions can support development processes. The tool can be adapted if used with other local stakeholders like farmers associations or at regional level.

- **Transect walk or drive / site visits (Tool 4)**
A transect walk or drive and/or site visits will further help the land use planning team to understand the community’s environment. The team will obtain a closer insight into current land utilisation patterns and the context of the related problems or potentials as well as structural deficits (land tenure, policy framework, etc.).

- **Future land use map (Tool 5) – to be applied in the planning phase!**
If the key issue has a spatial dimension and can be addressed and/or solved through the development of an integrated and harmonised land use map, this tool is a very important one. It will present the basis for future investments in optimising land use (intensification, diversification, land use change, capital development projects). Its development needs to be done with all relevant stakeholders. The future zoning concept developed and/or boundaries delimited and/or locations for new development projects identified need to be surveyed with the use of GPS or other cartographic/
surveying means in order to integrate the data into the GIS used for the plan. Respective regulations for land and resources uses need to be discussed and formally captured. In complex and especially in conflicting set-ups the development of the map might require several planning sessions! It will be directly linked to the action plan.

Other relevant tools:

- **Matrix scoring and ranking (Tool 6)**
  Scoring and ranking exercises help to place something in order to determine what is more and what is less important or appropriate. Whereas a simple preference ranking can be done by directly letting people indicate their choices, a matrix scoring and ranking exercise is more complex, because participants will determine criteria and evaluate options against those criteria. In this way, the community will develop their own criteria for decision-making. The tool can also help to reveal differences in priorities of different social groups (men / women; elderly people / young people; people in support or against a conservancy, etc.).

- **Pair wise ranking (Tool 7)**
  Pair wise ranking can be used to prioritise different issues or problems.

- **Problem and solution ranking (Tool 8)**
  Problem and solution ranking is used to identify the priorities of participants with regard to land use and more general development issues and to rank possible solutions to these issues.

- **Mobility maps (Tool 9)**
  Mobility maps help to understand the spatial mobility of community members and the relevance of specific geographical places like water points, forests, neighbouring towns or rural market places to them. They can also easily be adapted and used to analyse for instance different users of a water point or access to basic services for rural people.

- **Historical transects or trend lines (Tool 10)**
  The use of historical transects or trend lines is helpful to show changes over time. Causes for environmental degradation can be traced or perceived changes in rainfall patterns analysed and discussed for example.

- **Proportional pilings / pie charts (Tool 11)**
  Proportional pilings and subsequent pie charts can be developed when it is necessary to obtain a better understanding of approximate proportions, e.g. the importance of different sources of income or the proportion of different land uses.

- **Seasonal calendars (Tool 12)**
  This tool helps to identify the main activities, problems and opportunities related to land use through the annual cycle.

- **Semi-structures interviews / focus group discussions (Tool 13)**
  Dialogue-like interviews or group discussions can be undertaken to reveal more information and to discuss specific topics of interest.
Overview on the focus of PRA-PLUP tools (analysis or solution-oriented)

<table>
<thead>
<tr>
<th>Tool</th>
<th>Analysis-oriented</th>
<th>Solution-oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data on spatial distribution of resources</td>
<td>Time-related data</td>
</tr>
<tr>
<td><strong>Main tools to be always used</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Resource maps</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>2. Flow diagrams</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>3. Venn-diagrams</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>4. Transect walks or drives / Site visits</td>
<td>x</td>
<td>(x)</td>
</tr>
<tr>
<td>5. Future land use maps</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Additional tools to be used according to the context</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Matrix scorings and rankings</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>7. Pairwise rankings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Problem &amp; solution rankings</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>9. Mobility maps</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>10. Historical transects / trend lines</td>
<td>(x)</td>
<td>x</td>
</tr>
<tr>
<td>11. Seasonal calendars</td>
<td>(x)</td>
<td>x</td>
</tr>
<tr>
<td>12. Pilings</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>13. Semi-structured interviews / Focus group discussions</td>
<td>(x)</td>
<td>(x)</td>
</tr>
</tbody>
</table>
Programme of the analysis workshop(s)
Start the first workshop with a presentation of all participants and the clarification of the main objective of the meeting. Time frames and logistics also need to be announced and translation processes need to be clarified if necessary.

The facilitators' team will then introduce and apply the different tools and discussion sessions with the whole group of participants or in sub-groups. If you work in sub-groups, the results always need to be presented to the rest of the participants in a plenary session.

A typical programme for a first workshop with focus on the in-depth analysis of the key issue could look like this:

<table>
<thead>
<tr>
<th>1st day</th>
<th>Content</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the workshop, introduction of the participants</td>
<td>½ hour</td>
<td></td>
</tr>
<tr>
<td>Resource mapping</td>
<td>3 hours</td>
<td></td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in sub-groups: - The first sub-group transfers the results from the mapping tool to an orthophoto - The second group develops a Venn-Diagram</td>
<td>3-4 hours</td>
<td></td>
</tr>
<tr>
<td>Wrap up of the first day</td>
<td>½ hour</td>
<td></td>
</tr>
</tbody>
</table>

| 2nd day | |
| Summary of the results of the two tools applied on the first day | 1 hour |
| Transect walk or drive / site visits | 3 hours |
| **Break** | |
| Variable tool (focus group discussion, historical transect or mobility map for instance) | 2 hours |
| Summary of the results from the tools applied on the second day and wrap-up | 1 hour |

| 3rd day | |
| Flow-diagram | 3 hours |
| **Break** | |
| Matrix scoring and ranking | 2-3 hours |
| Summary of the results from the tools applied on the third day | 1 hour |
| Wrap-up of the first workshop | ½ hour |

It is useful to summarise the findings of the different sessions in the evenings or mornings. Have a look at the following tool for this.
Tool: Summary table of results from the use of PRA

Summarise the findings of the different discussion sessions held with the help of PRA-tools by developing a table together with the community members or among the task force members / facilitators of the workshop.

If you use this tool among the PLUP task force members (for instance as an internal tool to discuss the findings of each day) you should share your viewpoints with the community. If you use the tool together with the community it can be helpful as a summarising exercise in the evenings or in the mornings of the next day.

<table>
<thead>
<tr>
<th>Discussion or planning exercise (PRA-tool)</th>
<th>Participants / Who was part of it?</th>
<th>Main findings</th>
<th>Conclusions / follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub-step 3.5: Document the “analysis workshop(s)”

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 Document the “analysis workshop(s)”</td>
<td>Supports (technical inputs)</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

The team needs to evaluate and document the meeting properly whereas its documentation falls under the responsibility of the participatory facilitator to. You can orient yourself with the following documentation guidelines (see tool) to comply with the task.

The results of the first meeting should also be communicated to other relevant stakeholders which were not invited for all workshop days or who could not be present with the approval of the community / participants of the workshop.

Proper reporting and documentation of all workshops in the IRLUP process is of utmost importance to ensure that information is transparent and accessible at any moment and
that the process can be recalled at later stages. In the following, some basic principles for note-taking and reporting and documentation will be highlighted, with focus on the grass-root level planning workshops and the documentation of PRA-tools which will be applied in the planning process.

**Basic principles for note-taking during the PLUP workshops:**

- The task force / the team of facilitators should always delegate the responsibility for note-taking to one team member, and this for each discussion and planning session or each PRA-tool applied.
- The facilitators should request permission from the participants to take notes.
- The note taker will record the most important ideas as well as entire statements the people make, if found important. He/she will also capture different opinions raised during discussions and how agreements were achieved and plans were made.
- In addition, the note taker together with the team will always copy the written/visual results of planning exercises like maps, matrixes or the like.

**Note takers should try to:**

- Be accurate, factual and complete when taking notes.
- Be alert during the discussions and record the debates and agreements.
- Record key phrases and terminology if possible in the local language or give a proper translation.
- Ensure that everybody will understand all terms that you use in your report.
- Carefully copy all written/visual results to A4 paper and keep them in your records.
- Make notes on the symbols used in visual outputs like maps or to clearly explain the meaning of points attributed in a ranking exercise (1=very bad and 5=very good or the like).
- Keep record also on the number and composition of participants of each group.

**Tool: Documentation guidelines**

The following guidelines to document the “analysis workshops” will have to be adapted to specific planning situations and to the key issues and objectives of each planning meeting or workshop at stake.

**Chapter 1: Background and objective of the planning meeting/workshop**

Short description of the IRLUP process so far and clear description of the objective of the participatory planning meeting in the respective location (“focus area”).

**Chapter 2: General description of the planning location**

- Geographical location and main characteristics of its natural environment
- Demographic characteristics (population size, ethnical groups, etc.)
- Main infrastructures and services (“level of development”)
- Main socio-cultural characteristics and livelihood activities of the population

**Step 3: Planning meetings at local level**
Chapter 3: General description of the planning event

- Date and venue
- Participants (number, age, gender, ethnicity, membership in organisations, etc.)
- Task force members / facilitators present
- Organisational issues of importance (translation, materials used, etc.)

Chapter 4: Documentation of the different discussion and planning exercises (PRA-tools) used during the meeting/workshop

For each tool applied and session:

- Main objectives of the discussion / planning tool
- Participants (number and composition)
- Main contents of the discussion (for example problems or options related to land uses described and discussed)
- Key quotations from the participants
- Points of interpretation essential to understand the written/visual result of the planning exercise (map, matrix or the like)
- Copy of the written/visual result of the discussion and planning exercise (PRA-tool)

Note: after the analysis workshop you will summarise in this section:

- All information on existing resources and their spatial distribution, land tenure, current use of resources, conflicts regarding land use as well as current land use forms revealed through the resource map tool. Attach the developed maps (orthophotos) to the report!
- The information arising from the flow diagram discussion (underlying causes and effects of the key problem, and possible solutions).
- The results from the Venn-Diagram referring to the institutional set-up in and outside the community or active in the reach of the stakeholders involved.
- The results from the transect walks/drives / site visits, possibly with pictures.
- The information obtained through other tools applied.

Chapter 5: Summary of all the different discussion and planning exercises held during the meeting/workshop

This chapter should provide a summary matrix on the tools applied and the main findings. The matrix was ideally established by the facilitator’s team or with the community during the workshop (compare respective tool).

<table>
<thead>
<tr>
<th>Discussion or planning exercise (PRA-tool)</th>
<th>Participants / Who was part of it?</th>
<th>Main findings</th>
<th>Conclusions / follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chapter 6: Additional information and further remarks concerning the follow-up

Any other additional information which is important should be noted down here as well as remarks on the follow-up foreseen to further analyse and/or plan in the area.

Step 3: Planning meetings at local level
Sub-step 3.6: Prepare the planning workshop(s)

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6 Prepare the planning workshop(s)</td>
<td>Supports (technical inputs)</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

When the focus area and the issues at stake (available resources, land use options, problems related to land use, conflicts, etc.) were analysed in-depth and through the involvement of all stakeholder groups including the responsible governmental institutions and line ministries, the PLUP process can enter into the planning phase.

The planning workshop(s) will emphasise on the planning itself in the presence of all stakeholders concerned (including responsible regional and local governments, line ministries or other institutions of importance). All stakeholders need to be present so that the action plan can be developed with their support.

The first planning workshop will last around 3 to 4 days and if need arises, additional meetings need to be scheduled to finalise the future land use map and the drawing up of realistic action plans. The planning workshop(s) will need careful preparation.

Like for the analysis meeting, agree on time frames and on the internal roles of each team member for each step during the workshop and each tool to be applied. At least one team member will facilitate and one will take notes during the different sessions of the meeting. Reflect and discuss whether it will make sense to work on different solutions in sub-groups so that different interest groups within the community or the stakeholders can develop their proposed solutions, especially more disadvantaged sub-groups.

Reflect again on the language in which the meeting will be held and if translation will be required. If so, the team might need to contract a translator or translators as part of the team if nobody within the team can translate. Another option could be that somebody within the community translates; this needs to be organised well before the meeting!

Purchase and prepare all required materials (brown paper, cards, pens, note books and the like). Take a photo camera along to take pictures! Take the overview maps from the first planning workshop along as well!

Request from the GIS consultants (compare chapter 6):
- An orthophoto of the area (including the nearer surroundings) in order to transfer the results from the future land use map into it. In case none is available, satellite images or aerial photographs (preferably at least georeferenced) or topographic maps can be used as well for the purpose of transferring the results of participatory
mapping to technical images/maps. The base image/map for transferring the data from participatory maps should preferably also show the main boundaries, i.e. farm boundaries, for better orientation.

Make sure that the venue of the meeting will be appropriate and that the logistics you will need are in place and/or arranged (for example electricity, catering, etc.). Use the general checklists to prepare and facilitate the meeting (see step 3).

**Sub-step 3.7: Facilitate the planning workshop(s)**

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7 Facilitate the planning workshop(s)</td>
<td>Supports (technical inputs)</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

The main aim of the planning workshop(s) will be to develop a future land use map or - if the key issue does not have a spatial dimension or does not imply a change of land use- to develop a concept for improving the situation (change resource management strategies or tackle environmental problems, etc.). However, it is most likely that each key issue will have a spatial dimension and that its solutions can also be mapped. The future land use map will indicate:

- future land use patterns (zoning) and activities, incl. determination of land use changes, intensifications or diversifications, designation of areas for defined uses and setting of regulations for future land uses.

The future land use map goes in line with an action plan (see next step).

**Tips**

The following tools during the second planning meeting, bearing in mind that the nature of each key issue requires flexibility in the final selection and use of specific tools:

**PRA-tool 5:** Future land use map (including its transfer to an orthophoto)

Action plan

Other important tools which can be used according to the context are:

**PRA-tool 2:** Flow-diagram (with focus on the discussion of possible solutions to the identified root-causes of the key problem)

**PRA-tool 13:** Semi-structured interviews or focus group discussions

**PRA-tool 6:** Matrix scoring and ranking (to rank different options / solutions according to criteria)

**PRA-tool 8:** Problem and solution ranking (to list and prioritise all identified problems and possible solutions)
A typical programme of a planning workshop can look like this:

<table>
<thead>
<tr>
<th>1st day</th>
<th>Content</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to the workshop, introduction of the participants</td>
<td>½ hour</td>
</tr>
<tr>
<td></td>
<td>Presentation of the results of the first planning workshop</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td>Focus group discussion</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flow diagram review and discussion on different solutions and impacts</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>Wrap up of the first day</td>
<td>½ hour</td>
</tr>
<tr>
<td>2nd day</td>
<td>Summary of the results of the two tools applied on the first day</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td>Problem and solution ranking</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>3rd day</td>
<td>Development of a future land use map</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>End-up the future land use map</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>Start up of the action plan</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action planning</td>
<td>3 hours</td>
</tr>
<tr>
<td>4th day</td>
<td>Action planning</td>
<td>7 hours</td>
</tr>
<tr>
<td></td>
<td>Wrap-up of the second planning workshop, agree on a meeting to develop an impact monitoring system</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

Programme of the planning workshop

Start the second planning workshop with an introduction of the participants and with the presentation and discussion of the results of the analysis workshop(s). Clarify the main objective of the meeting and stress the fact that the aim will be to work out solutions as well as a future land use map (if applicable) and an action plan; however, if solutions cannot yet be agreed upon by all, further meetings will be needed and called upon later. Time frames and logistics also need to be announced in the beginning and the process of translation needs to be agreed upon.

The facilitators' team will then introduce and apply the different tools and discussion sessions with the whole group of participants or in sub-groups. If you work in sub-groups, the results always need to be presented to the rest of the participants in a plenary session.
Different discussion sessions and the application of PRA-tools (i.e. ranking tools) can guide the process of finding possible solutions.

The key tools to be applied in the planning workshops are the future land use map and the action plan. Although the development of the action plan is an integral part of the planning workshop it will be presented hereafter as a separate step. It involves the definition of a monitoring process for its activities and in the process follow-up meetings can be agreed upon with the stakeholders.

**Sub-step 3.8: Facilitate the development of an action plan**

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8 Facilitate the development of an action plan</td>
<td>Supports (technical inputs)</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

The main objective of the local-level planning workshops regarding the key issues in the framework of IRLUP is the development of action plans with the community or the concerned stakeholders involved.

The action plan is developed on the last day(s) of the planning workshop(s) when the process is at the appropriate stage (when agreements on the future use of land have been reached). At this stage, a thorough analysis of the key issue for PLUP in a focus area has been completed, different options to address the underlying problems, to solve the conflicts or to optimise the situation were discussed and ranked and the community or the stakeholders feel in a position to define concrete actions.

A major part of the process up to that point was to identify the main problems in the community or the focus area related to the key issue, for instance the underlying problems which hinder from making use of a land or resources potential. During the first workshop, the root causes and the effects these problems have on land use were discussed with the help of a flow-diagram. A resource map was drawn and discussed and a Venn-diagram developed to analyse the institutional set-up. A transect walk/drive or site visit was undertaken to places of interest and concern.

During planning workshop different solutions to overcome the problems were discussed and -whenever agreements were reached- a future land use map was developed by all stakeholders if the key issue at stake has a spatial dimension.

The action plan will now outline all activities planned, how they will be implemented (by whom, when, etc.) and by whom they will be financed. It assists at the same time to empower the community/stakeholders in terms of requesting services needed for interventions and identifying the role they can play in these interventions. It must be pointed out to the community or the stakeholders that they will be able to solve some of
the problems, while others require interventions from the government and other development agents. These should commit themselves during the planning process to support the stakeholders in their actions.

The action plan has to go in line with the future land use map!

Facilitation of the action plan

**Time frame:** 0.5 – 1 day or more, depending on the complexity of the land use related issue (you can probably estimate the time needed after the first workshop. The planning workshop needs to provide enough time for action planning!)

**Participants:** A cross section of the community or of all concerned stakeholders, incl. institutions which can provide support as far as possible. All persons and institutions, who are involved in the implementation of activities or who are considered in the action plan, should be part of the planning process and the preparation of the action plan.

**Resources:** Flipcharts and markers of different colours

**Steps:**
- Prepare a planning matrix beforehand (see picture below).
- Explain the purpose of the table for the action plan. The matrix or table will be used to record the discussions about what needs to be done to address the key issue and its underlying problems, by whom, by what time and with whose support.
- Agree with all participants on the key issue / problem and write it down in the upper first section of the plan (example: eco-tourism potential cannot be used optimally).
- Then go over to the extent of the key issue / problem. How serious is it, what are its effects? (for example lack of development in the community; the flow-diagram is helpful to summarise the facts)
- Discuss where the community wants to be in the foreseeable future with regard to the key issue, i.e. develop a vision. An example would be: “we want to fully benefit from eco-tourism in future”.
- Once the vision has been agreed to, proceed with the underlying problems which were discussed during the first planning meeting.
- Ask which problems or issues the community / local stakeholders can address and which are beyond their capacity. Look at the root causes of all problems. The main question is now: What activities can the community / the stakeholders undertake to solve its key issue / problem and hence achieve its vision of the future?
- Guide them in the discussions and the identification of suitable activities, it is necessary to be specific and break main activities down into sub-activities.
- Identify who will be responsible to carry out the activity? The names of specific people need to be entered into the matrix.
- What external support is needed? Once again be specific.
> Ask what progress the community wants to have made regarding the problem within a specified period of time. A specific date needs to be agreed upon for the completion of each (sub-activity).
> How will the community know that it is getting there? The community needs to identify specific milestones to measure progress and indicate that an activity has been completed. This will help to monitor proper and timely implementation of the action plan.
> Agree on a process for results-based monitoring (how often will the fulfilment of tasks be cross-checked and by whom?)

**Action plan matrix**

<table>
<thead>
<tr>
<th>Key issue / problem:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of the current situation (summary of main effects):</td>
</tr>
<tr>
<td>Vision:</td>
</tr>
</tbody>
</table>

**Activity 1:**

<table>
<thead>
<tr>
<th>Sub-Activities</th>
<th>Responsible person</th>
<th>Who can possibly support? (person/institution)</th>
<th>Timing (until)</th>
<th>Costs involved</th>
<th>Milestone (Result)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>1.3</td>
<td></td>
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<tr>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Activity 2:**

<table>
<thead>
<tr>
<th>Activity 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
</tr>
<tr>
<td>2.2</td>
</tr>
<tr>
<td>2.3</td>
</tr>
<tr>
<td>2.4</td>
</tr>
</tbody>
</table>

When the action plan is completed, the PLUP task force should introduce the concept of participatory impact monitoring to the community / stakeholders and develop a simple system to **monitor also the effects** of the activities planned. A detailed guideline on how to do this is provided in step 4.
Sub-step 3.9: Document the planning workshop(s) incl. future land use map and action plan

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.10 Document the planning workshop(s) incl. future land use map and action plan</td>
<td>Supervises</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

The documentation of the planning workshop(s) is a responsibility of the participatory facilitator whereas documentation will be directly supervised by the lead land use planner who is in charge of preparing the final land use plan on the basis of the agreements and plans drawn up. You can use the following guidelines, which base on the reporting of the first workshops and can be combined with these reports.

**Tool: Documentation guidelines for planning workshops**

**Chapter 1: Background and objective of the planning meeting/workshop**
Short description of the IRLUP process so far and clear description of the objective of the participatory planning meeting in the respective location ("focus area").

**Chapter 2: General description of the planning location**
- Geographical location and main characteristics of its natural environment
- Demographic characteristics (population size, ethnical groups, etc.)
- Main infrastructures and services ("level of development")
- Main socio-cultural characteristics and livelihood activities of the population

**Chapter 3: General description of the planning event**
- Date and venue
- Participants (number, age, gender, ethnicity, membership in organisations, etc.)
- Task force members / facilitators present
- Organisational issues of importance (translation, materials used, etc.)

**Chapter 4: Documentation of the different discussion and planning exercises (PRA-tools) used during the meeting/workshop**
For each tool applied and session:
- Main objectives of the discussion / planning tool
- Participants (number and composition)
Main contents of the discussion (for example problems or options related to land uses described and discussed)
- Key quotations from the participants
- Points of interpretation essential to understand the written/visual result of the planning exercise (map, matrix or the like)
- Copy of the written/visual result of the discussion and planning exercise (PRA-tool)

Note: after the planning workshop you will summarise here the basic processes / tools which led to the agreements and solutions achieved.

Chapter 5: Summary of all the different discussion and planning exercises held during the meeting/workshop
This chapter should provide a summary matrix on the tools applied and the main findings. The matrix was ideally established by the facilitator’s team or with the community during the workshop (compare respective tool).

<table>
<thead>
<tr>
<th>Discussion or planning exercise (PRA-tool)</th>
<th>Participants / Who was part of it?</th>
<th>Main findings</th>
<th>Conclusions / follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Chapter 6: Documentation of the final land use map
In this chapter you document the process of achieving consent on the future zonation and/or delimitation of areas. Attach the future land use map which was developed.

Chapter 7: Documentation of the community action plan
Copy the action into this chapter (compare tool: guideline to facilitate the action plan development) and add the information on how often the fulfilment of tasks will be monitored and by whom.

Chapter 8: Additional information and further remarks concerning the follow-up
Any other additional information which is important should be noted down here as well as closing remarks on the follow-up foreseen to monitor and evaluate the outcomes of the process. As soon as a participatory impact monitoring system has been developed it can be described in this section.
Sub-step 3.10: Accompany a possible GPS field survey

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.10 Accompany a possible GPS field survey</td>
<td>Lead responsibility</td>
<td>Takes part</td>
<td>Takes part (organises work on the ground)</td>
<td>Takes part</td>
<td>Takes part</td>
</tr>
</tbody>
</table>

Whenever accuracy of the spatial data arising from the planning process (i.e. the development of a future land use map) is needed, the PLUP team under the lead of the GIS expert will undertake a GPS survey.

The participatory facilitators will play an important role in preparing this activity, especially by making sure that
- The whole community/all stakeholders agreed on the exact boundaries or locations of for future land uses or development projects.
- The GPS survey can be accompanied by accepted representatives.

During the activity the representatives will guide the GIS experts along the lines or to the points which need to be georeferenced. The GIS experts will take points with the help of GPS instruments and later on transfer the results into the GIS system.
Step 4: Development of participatory impact monitoring systems

<table>
<thead>
<tr>
<th>Stage / Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical stage</td>
<td>Stakeholder analysis and stakeholder meetings to identify key issues and focus areas for IRLUP</td>
</tr>
<tr>
<td>Planning and decision-making stage</td>
<td>Regional stakeholder meeting to prioritise key issues and focus areas</td>
</tr>
<tr>
<td></td>
<td>Organisation, facilitation and documentation of planning meetings at local level including participatory mapping for integration into the GIS and action planning</td>
</tr>
<tr>
<td>Implementation and monitoring stage</td>
<td>Development of participatory impact monitoring systems</td>
</tr>
</tbody>
</table>

Expected outputs of Step 4:

- A participatory impact monitoring system is developed with the respective stakeholders for each focus area.
- The monitoring system will help to monitor expected and unexpected effects from the implementation of the action plan and help to make necessary adaptations if required.

Sub-steps:

- 4.1 Develop participatory impact monitoring systems with the respective stakeholders
- 4.2 Document the PIM system
- 4.3 Implement PIM

Tools:

- Guideline to develop and implement participatory impact monitoring (PIM)
- Guideline to document a PIM system

Required time:

1 day for the development of the system per key issue / focus area.
The monitoring process itself is an iterative one.
Sub-step 4.1: Develop participatory impact monitoring systems with the respective stakeholders

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Develop participatory impact monitoring systems with the respective stakeholders</td>
<td>Actively involved</td>
<td>Lead responsibility</td>
<td>Lead responsibility</td>
<td>Actively involved</td>
<td>Actively involved</td>
</tr>
</tbody>
</table>

Facilitate the development of a participatory impact monitoring system for each key issue addressed at local level. For this purpose, call in a 1-day meeting with all the stakeholders, which took part in the action planning process, for each focus area. This should be done preferably not long after the actual action plan development. You might also combine this step with the action planning if time allows! The step falls under the joint responsibility of the participatory facilitator and the MLR-LUPA division.

Follow the guidelines hereafter in your facilitation.

**Tool: Guideline to develop and implement PIM**

**Development of the system:**

**Step 1:** At the beginning, ask the stakeholders you are working with (and which were part of the whole planning process):
- What changes they expect from the measures / projects / activities they planned
- What changes they fear from the measures / projects / activities they planned

Then let them choose the most important expectations and fears. You can build upon the discussions on desired and undesired impacts that you had during the flow diagram/solution discussion and during plan development!!

**Step II:** Ask the people how they will see whether things are changing the way they intend them to change and how this change can be determined. The discussion will lead to the development of appropriate “indicators”. Furthermore, the people have to agree on the information they will need to gather in order to measure the indicators (compare chapter 2.4 for more information on PIM and indicators).

**Step III:** Decide with the participants who should gather the information needed to monitor and how this will be done (how often will the information be required, how shall data be collected). Let them also discuss who should have access to the information. They should also decide on the frequency of monitoring meetings (internal / with the presence of supporting institutions).
Sub-step 4.2: Document the PIM system

<table>
<thead>
<tr>
<th>Responsibilities:</th>
<th>LUP/GIS</th>
<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Document the PIM system</td>
<td>Supports</td>
<td>Supports</td>
<td>Lead responsibility</td>
<td>Supports</td>
<td>Supports</td>
</tr>
</tbody>
</table>

This step falls under the responsibility of the participatory facilitator. He/she will document the impact monitoring system agreed upon and hand over the documentation to the lead land use planner and the task force team, i.e. the Regional Planning staff who will be tasked with the follow up of the implementation of the plan and the monitoring systems (compare step 4.3).

![document icon]

**Tool: Guideline to document a PIM system**

*Describe in a short manner to which focus area / future land plan and action plan you refer to*

**Description of the PIM system:**

- What was agreed to be monitored? List the positive (desired) changes and negative (undesired) possible changes the stakeholders want to monitor.
- Note down for each desired and undesired change which indicators were chosen for the purpose of monitoring and how the data / information will be collected.
- Mention clearly who took over the responsibility for PIM, how often the community / stakeholders agreed to meet for monitoring purposes and how often meetings with the supporting institutions are foreseen.

Sub-step 4.3: Plan implementation; implementation of PIM

<table>
<thead>
<tr>
<th>Responsibilities:</th>
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<th>LUPA</th>
<th>Participatory Facilitator</th>
<th>MLR (region)</th>
<th>RC (Planner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3 Plan implementation; implementation of PIM</td>
<td>-</td>
<td>Follow-up</td>
<td>-</td>
<td>Supports</td>
<td>Lead responsibility</td>
</tr>
</tbody>
</table>

This task does fall under the responsibility of the regional planner. He/she will weigh the implementation of the land use plan and the monitoring systems in place (result-based systems to implement the actions plans as well as PIM). The following section gives some general guidance for the implementation of PIM.
**Implementation of the participatory impact monitoring system:**

**Step IV:** Regular collection of data / observation by the responsible person(s).

**Step V:** Discussion of results of the impact monitoring process in regular meetings. The discussions should not only focus on the selected expectations, fears and respective indicators, but should also reflect on the question which other intended or unintended changes the people observed.

**Step VI:** Analysis of changes: Are we on the right track? If the results of the monitoring deviate from what was expected how can we adapt the plans to achieve what we wanted?

**Step VII:** Adaptation of plans: What action should be taken to further adapt or improve the implementation of activities in the framework of the land use planning project? How can negative development be avoided? The adapted plans need to clearly define responsibilities and timing.

**Step VIII:** Adaptation of the monitoring system: if needed, the monitoring system itself can be improved during the process (review of its focus, of the indicators or the way information is collected…).
5.2 Facilitation of land use planning at the regional level

At the current stage of development of the participatory approach it has not yet been defined in which way the participatory facilitators will support the facilitation of workshops and meetings at regional level. For this reason, only a general description of the envisaged processes will be given hereafter.

The key issues with a regional dimension, which were prioritised at the regional stakeholder meeting, are addressed in workshops with the concerned stakeholders during the IRLUP process. Those key issues will mainly have political character, but they might also be linked to general development or natural resources management aspects in the respective region, for which it seems necessary to formulate sector-overarching regional strategies (profitability of farming, land reform aspects, marketing schemes, regional development approaches or water management strategies are just some examples for possible key issues). Whenever suitable, action plans will be drawn up as a result of the inter-institutional stakeholder meetings and integrated into the land use plan. Recommendations arising from the discussions are formulated and communicated to higher political levels and will be followed up in accordance to monitoring systems which needs to be set up.

Another important planning aspect the lead land use planner/GIS consultant will address at regional level is the development of a future zonation concept for the region. This process will be based on the technical studies undertaken in the analysis phase (i.e. resources inventories and assessments, current land use mapping, assessment of the different future sector and development plans) and it will undergo a strategic environmental assessment (SEA) before different portions of land can be allocated for future land uses within this future zonation concept. The SEA process will also assess all development initiatives and plans with spatial dimension the land use plan intends to incorporate before the plan can finally be approved (through the SEA process changes in the dimensions or locations of different development initiatives might be necessary before the final plan can be agreed upon by all stakeholders).

![Zonation concept for Karas region, developed by SPC/Geocarta](attachment://Zonation_concept_for_Karas_region.png)
The participatory facilitators can possibly become involved in the discussion and planning processes at regional level by assisting in the preparation and facilitation of meetings, especially by weighing over the consideration of all concerned stakeholder groups and over the timely and appropriate organisation of the meetings. He/she could also take over different “communication tasks” to local level stakeholders concerned by the recommendations or plans discussed at regional level, since local-level stakeholders might only be represented by local authorities or chairmen of associations at those meetings. The facilitators can thus make sure that the grass-root stakeholder’s viewpoints will be incorporated in the plans to the best possible extent. Furthermore the integration of local level plans into the regional plan can be accompanied and supervised by the participatory facilitators.

During the planning meetings at regional level different facilitation techniques as well as PRA tools can be made use of, i.e. the metaplan technique (use of coloured cards to visualise and structure discussions, compare annex 3) and possibly the following tools:
- Mapping (depending on the context, different thematic maps can help as tools for discussions or the regional stakeholders can point out the dimension of underlying problems and aspects on maps)
- Flow diagrams (to analyse causes, effects and possible solutions for the issues and problems at stake)
- Venn-diagrams (to analyse the institutional set-ups)
- Matrix rankings (to score and rank different solutions regarding the issues at stake)
- Trend lines (to visualise discussions and show trends)

To optimally prepare the meetings, the lead land use planner/GIS expert and the task force can use of the general checklists to prepare and facilitate meetings provided in annex 3. In addition, the PRA-tool box can be made use of whereas some tools might need to be slightly adapted to be applied at regional level. Furthermore the action plan matrix can be used also for the regional level planning processes.
6. Combining participatory and technical mapping

In the following chapter, the steps involved in participatory mapping and analysis of natural resources and current land uses are explained in detail together with the process of facilitating joint-decision-taking on future land uses, zonings and rules and regulations for land and natural resources management with local stakeholders. Furthermore the process of integrating the spatial information obtained through participatory mapping tools into a Geographical Information System will be summarised and three examples of land use planning processes in Namibia will be given in order to further illustrate such approaches.

Mapping in the analytical phase

According to the methodology outlined in chapter 5, each planning process on the local level will undergo an analytical phase and a planning phase. During the analysis phase or the first stakeholder workshop(s), a resources map is going to be drawn with the local community and other stakeholders involved in the planning process. The aim is:

- to identify all present resources of the planning area and their spatial distribution (i.e. water resources, soils, different vegetation types, minerals or other materials which can be made use of for activities like small-mining, biodiversity-rich areas or areas with scenic beauty with tourism potential, etc.),
- to identify and interpret the present forms of land use,
- to identify and discuss problems and conflicts in land use (for example areas with high erosion levels, areas in which conflicts arise between user groups, areas where human-wildlife or livestock-wildlife conflicts occur, etc.),
- to discuss issues pertaining to land tenure, access and control over land and resources, and
- to identify areas with potential for alternative uses, intensification or diversification.

The resources mapping is done in three important steps (compare PRA tool N°1):

1) Modelling the planning area and its resources on the ground with the whole community and all other important stakeholder groups concerned,

2) Transfer of the resources map to a brown paper with a smaller group of workshop participants (which preferably showed good skills in geographical orientation during the modelling exercise) and

3) Transfer the „brown paper-resources map“ to a technical map.

For the purpose of the third step the participatory facilitator together with the LUP/GIS task force member need to prepare a **base map** of the planning area and its surroundings beforehand. Different types of maps can be used: satellite images, aerial photographs or maps based on topographic maps, whereas the use of **orthophotos** should be preferred. It has been proven easier for local populations to work with this type of maps because they easily recognize the natural features shown on these maps.

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3 Orthophotos are “georeferenced” satellite images or photographs, which means that they were fit into the coordinate system and geometrical errors were corrected.
images/photos (riverbeds, mountains, etc.). The base maps should include basic features which facilitate the orientation like settlement areas, townland or farm boundaries, roads and rivers.

Orthophoto of a planning area:

Base map of a planning area developed on the basis of a topographic map:
Participatory mapping process (i.e. transfer of the “brown-paper-resources map” to the technical map)

The workshop participants who will take part in this activity will first need some time for orienting themselves on the map. They should first locate their settlement and the planning area and preferably align the map on the table they will do the mapping exercise on so that the directions to the North, South, East and West are the same like in reality.

When transferring the information from the brown paper into the map, the local stakeholders will use the same **symbology and colours** they used for the brown paper maps. They need to indicate the respective meanings in the legend. The GIS consultant should be present during the exercise in order to be enabled to transfer the spatial information given into the GIS system. Within this process, the same symbology and colours should be maintained, so that the stakeholders can still recognize their own work.

If necessary, the PLUP team should also apply “**ground-truthing methods**”, that means that important features, sites and areas are visited in reality and surveyed with a GPS in order to optimally georeference the map (which means that points, features and areas will be located on the map exactly where they are in the real world).

**Mapping in the planning phase**

When the analytical phase has been successfully completed and the discussion on solutions and future land use concepts start, the facilitators can apply further mapping tools with view to encourage the development of ideas and visions on adequate zonings and/or the location of different (spatial) development projects. This process can involve joint discussions on the basis of the “resources map” drawn.

Different options and scenarios can be developed by several interest groups or in a joint process. Wherever necessary, expert’s advice should also be requested in to assess potentials from a technical viewpoint, to determine the best use for different areas or to identify the optimal location for a development project like an irrigation site or a touristic lodge. The process aims at the **development of a future land use map** which is agreed upon by all stakeholders.

Future land use maps shall:
- show the future allocation of different land uses (zonation concept) and
- point out clearly the identified future location of different development projects.

Another important aspect of the planning process is the agreement on the respective **land use regulations**, for instance:
- Permits or restrictions for specific forms of land use,
- Definition of carrying capacities and maximum livestock or wildlife sizes in the different zones
- Quantities which are allowed to be extracted (fuelwood, timber or other resources)
- Fees, charges and possibly fines
- Monitoring and control systems (responsibilities, timing, etc.)

Future land use maps are developed on the basis of the current resources / land use map by
1) Drawing a new map on a brown paper showing the basic features of the planning area and the future land uses allocated / the location of future development projects and
2) Transferring the „sketch future land use map“ to a technical map.

The process can also be simplified if applicable by directly pointing out and integrating the new land uses and/or development projects on the technical map developed in the analysis phase. In both cases, the participatory facilitator together with the LUP/GIS consultant need to prepare again a base map of the planning area and its surroundings beforehand where the points, areas and zones are then transferred to (see map examples above).

Whenever accuracy of data for the exact location of future boundaries or points is needed, technical surveys with the help of GPS will become necessary. These surveys need to be conducted by GPS/GIS specialists jointly with all concerned stakeholders in order to transfer the information into official maps. Like for the base maps, the future land use maps should use the symbology and colours preferred by the stakeholders to ease up later recognition.

If the land use planning process reveals the need for zoning of land uses in order to resolve conflicts arising from overlapping land uses for example, the following general considerations regarding zonations should be taken into account:

**Zonations need to:**
- reflect the existing and future needs for different types of land uses,
- allocate specific uses for different portions of land within a defined area (if certain land uses can be harmonised, some zones can also be allocated for more than one use (for example grazing/tourism; conservation/tourism), but land uses which are in conflict with each other need to be separated from each other (for example grazing/conservation or mining/conservation),
- be based on participatory decision-making although expert’s advice can be brought in for advice if needed and desired,
- be realistic (considering for instance actual carrying capacities of areas and whether user’s regulations can be complied with without endangering the livelihood systems)
- incorporate land use regulations.

In the following three sub-chapters some practical examples will further illustrate the processes (and challenges) of land use planning with the use of participatory mapping tools.
6.1 Example for the participatory development of a future land use zoning concept in Caprivi

(This chapter was developed with assistance of Dina Katataiza)

Problem description
Between 1999 and 2000, MLR had commissioned a consulting company to identify unutilised land in communal areas for the purpose of development of small-scale commercial farms (SSCF). The company identified an area in Sibinda and Linyanti constituency on the basis of the population and livestock density without considering other land utilisation types in the area. To commence with the development of the SSCFs the identified areas were found to overlap with the Sobbe conservancy.

Overview map on the study area

Land use planning approach
In the context of a 6-weeks study for a master thesis a student from ITC-Netherlands investigated the case and applied a number of participatory land use planning tools in order to facilitate the development of solutions from the perception of the local communities. Semi-structured interviews, focus group discussions, participatory mapping tools and transect drives were applied. The local stakeholders were split into interest groups (men and women inside the conservancy area and farmers of neighbouring villages). The study revealed that the Southern area of the conservancy is currently used as hunting area and that people opposed the development of a SSCF scheme in this area. Furthermore the eastern part of the area which was also identified as unutilised by the consulting company is actually seasonally be used the neighbouring farmers, which have cattle posts inside the area.
Through the means of participatory mapping exercises the local communities showed their ideas for an optimal utilisation of the conservancy area by pointing out different zones. Both interest groups, men and women, identified the Southern part of the conservancy area to be an ideal hunting area, the South-eastern part ideal to be used for tourism and the Northern areas to be best used for grazing and mixed farming.

The results of the mapping exercises were later transferred into a GIS. The study was handed over to MLR. It serves as a good example for the importance of involving local stakeholders into the planning of development and land use projects.
6.2 Example for the participatory development of a town land management plan in Aus

Problem description
The settlement of Aus is located in a biodiversity-rich area bordering the Namib-Naukluft desert. Therefore the local Conservation Trust with assistance of the Regional Council and different donors and consultants developed a management plan for the town lands. The process lasted for two years (2005 – 2007) and aimed at a more sustainable utilisation of the townlands with its extremely sensitive environment.

Land use planning approach
The participatory planning process itself consisted of a visioning process and different mapping exercises for the purpose of defining current and future user zones. The process furthermore based on two expert’s studies on biodiversity and tourism potentials. These studies had proposed several zones within the townlands to be used for conservation and tourism purposes exclusively and to restrict grazing and fuelwood collection activities in them.
The proposed touristic zones were compared with the current zones used for grazing.

The following zoning concept was then agreed upon by the community of Aus and user’s regulations were defined (prohibition of grazing and fuelwood collection in the zones reserved for tourism and conservation- marked in green colour):

Weaknesses in the implementation of the zonation concept:
Discussions held during further land use planning activities in the area later on revealed that the populations and farmers cannot comply with the restrictions defined in the zonation/townlands management concept since grazing and fuelwood resources of the area already became to scarce to limit the respective activities to certain areas. Furthermore, livestock is not herded in the area, which means that it roams freely in the townlands. The zonation concept was thus not developed with a realistic management concept. Further discussions on possible solutions became necessary in order to protect the natural resources of the area in the long run.
6.3 Example for zonations in CBNRM-projects

(This chapter was developed with assistance of Britta Hackenberg)

Problem description
Community-based resource management projects require for the development of management plans in community forests and conservancies, whereas zonation concepts only need to be developed in conservancies. However, zonation planning is also a helpful instrument to regulate different types of uses in community forests, like domestic and commercial harvesting or forest clearing. In addition, in both community forests and conservancies the management of grazing rights for livestock and game shall be regulated, but the legal framework is unclear on this. Consequently, in areas where both programmes are in place, an integrated planning approach to harmonise potentially conflicting land and resource uses should be followed.

Land use planning approach
An attempt for integrated land use planning was undertaken in the context of the Sachona Community Forest and Mashi Conservancy which do overlap. The Mashi Conservancy as part of Mudumu North complex does have an existing zonation plan, which allocates the south as wildlife zone. The same area is part of the Sachona Community Forest. Participatory resources inventories were undertaken here in order to identify the different quantities of forest resources and their spatial distribution in the forest. On this basis, together with considerations on the distances to Sachona village as well as on the existing wildlife zone, commercial timber harvesting zones were identified in the far north and far south of the community forest. The areas closer to the village were allocated for domestic fuelwood, pole collection and grazing.

Participatory forest resources inventories and evaluations
Although the joint use of the southern part of the area for both wildlife management and commercial timber harvesting might still cause conflicts, these land uses can be further regulated regarding different seasons of the year to harmonise them as best as possible.
7. Conflict management

One of the main concerns of the IRLUP process is to address conflicts on land use at different levels. The task force, alongside other regional and local institutions, will be in charge of analysing the conflicts and to decide on the best way to address them. The latter will depend to a large extent on the nature of the conflict, the interests, powers and relationships of the parties involved as well as on outcomes of previous attempts to solve the conflict. In the following some examples for typical land use related conflicts in the Namibian context are given:

- Whenever different land use on the same land or on neighbouring land cannot be harmonised conflicts occur, only one example of this kind are human-wildlife conflicts. The latter arise where game that is managed for economic gain of communities such as conservancies cause damage to livestock and/or crops. These are common conflicts particularly in areas with conservancies and big game in the north-western, north-eastern and eastern regions of Namibia.

- Uncoordinated, sector-oriented, top-down planning systems leads to overlapping and non-harmonised land use allocation, like in Caprivi, where the MLR has demarcated land for the development of small-scale livestock farming in areas that were registered as conservancies already. In addition MAWF is setting up an irrigation farming scheme in the sub-region. All these land uses border a National Park. Without following a coordinated, bottom-up planning approach, which puts emphasis on participatory decision-making of the local population, the planning scenarios would lead to severe conflicts.

- Some land uses are given a non-negotiable priority by the state, esp. mining: The current legal framework governing prospecting for and exploitation of minerals does not provide for negotiations between current land users and mining companies, regardless of whether it is state or freehold land. However, an Environmental Act and clear compensation guidelines are in place which regulate the compensation of land owners in case their exploration or exploitation activities are going to take place on their land. In practice, little guidance and support is given to people affected by mining operations.

- Unfavourable tenure rights of communal land users and resettlement farmers also bring up conflicts. They refer to a) communal land where the rural population only has customary land use rights and b) to resettlement farmers, the majority of whom have not received leasehold agreements yet. De facto, therefore, both groups are living on state land which makes them especially vulnerable vis à vis new development projects and the risk of losing land. Moreover, they are disadvantaged regarding access to credit and other land use related support.

The following picture gives an indication of the conflict risk between different land uses in relation to the first type of conflict mentioned.
Conflict risks between land uses in Namibia

<table>
<thead>
<tr>
<th>Conflict potential</th>
<th>Crop farming</th>
<th>Livestock farming</th>
<th>Game management</th>
<th>Tourism</th>
<th>Community forestry</th>
<th>Mining</th>
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</thead>
<tbody>
<tr>
<td>Crop farming</td>
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</table>

**Legend**
- None
- Low
- Medium
- High

*Source: Adapted from a presentation by Hackenberg, B. and Sprung, R. (DED) at the Technical Team Meeting on LUP on 24th of March 2010*

The following section provides an overview on some basic aspects of conflict management and explains four selected tools of conflict analysis which were found to be helpful for the Namibian context.
7.1 Basic understanding of conflicts: definition, stages and responses

What is a conflict and what characterises conflicts?

Conflict is a relationship involving two or more parties who have, or perceive themselves to have, incompatible interests or goals (Engel et. al, 2005).

A conflict, as defined by sociologists, is a social fact in which at least two parties are involved and whose origins are differences either in interests or in the social position of the parties. Consequently, a land related conflict can be defined as a social fact in which at least two parties are involved, the roots of which are different interests over the property rights to land: the right to use the land, to manage the land, to generate an income from the land, to exclude others from the land, to transfer it or the right to compensation for it (adapted from Wehrmann, 2008).

Conflicts indicate social problems. However, they should not only be seen negatively since conflicts can have positive impacts: they stimulate communication and change, promote innovation and creativity and might contribute to empower groups of people and to let them move forward.

Conflict can also be an important force for social change, because it alerts people to grievances in the wider socio-economic or political system, competitive or contradictory laws or policies regulating access to or control over natural resources, weaknesses in the ways in which natural resource management policies or laws are implemented, people’s need or desire to assert their rights, interests and priorities or undesirable environmental conditions, such as overharvesting of renewable resources.

Conflicts need to be addressed in a sensitive manner regarding their intensity, their underlying sources and the institutional set-up. There is a need for a thorough analysis of these aspects before taking action.

Stages of conflicts

To be effective, those working to manage conflicts must analyse each conflict carefully, on a case-by-case basis, and must be sensitive to the different stages and elements at play in that conflict.

Conflicts are dynamic interactive social processes. They often share similar patterns and stages of development. The following graph shows typical stages, but in reality conflicts do not develop in a linear fashion.
Latent conflicts
When a conflict is not open but is a potential threat, it is described as being latent. Latent conflict refers to social tensions, differences and disagreements that are hidden or undeveloped.

Emerged conflicts
Conflicts can emerge gradually and steadily, or develop rapidly in response to a few significant events. As differences increase and intensify, conflicts become manifest, expanding into a full-blown public issue that cannot be avoided. In the manifest stage, opponents’ differences become more prominent and more central to group dynamics. As incompatibilities become clearer, they become the defining issues: debate revolves more and more around differences. Opponents begin to define themselves and their groups on the basis of such cleavages, in terms of “us versus them”. These differences might then be used to mobilise sections of the population on behalf of a “cause”. Manifest conflicts can escalate and become violent. When a conflict reaches this stage, violence often produces counter-violence, leading to further escalation.

Ideally, conflicts should be managed at the latent stage, before they emerge or escalate. When a conflict reaches the manifest stage, it may either become blocked in a stalemate or impasse in which the conflict parties refuse to modify their positions, or fall out of control through tensions and violent actions (Engel et al., 2005).
Responses to conflict

Five possible responses to conflict are usually distinguished:

1. **Competition/Force**: one party imposes its interests over the other or uses violence, threats, harassments, sanctions or other forms of pressure; this way of response to conflict creates hostility and resentment, the parties lose interest in maintaining an relationship; results in a win-lose situation.

2. **Avoidance (or withdrawal)**: parties retreat, avoid getting involved, use delay tactics and postpone decisions; creates a lose-lose situation and might be only a temporary solution.

3. **Accommodation**: Satisfies one parties’ interest while neglecting the other ones’ need; may be a solution if one party has more power or is willing to preserve the relationship; results in a lose-win situation.

4. **Compromise**: Both parties make a sacrifice in order to achieve a mutually workable solution. Each party must give up something in order to gain something else; results in a win-win-yet-lose-lose-situation.

5. **Consensus**: Work for mutual gain and to satisfy underlying interests and needs for both parties; focuses on goal of building consensus agreements; takes time so that all parties are actively and equally involved in the process; both parties are committed to the resolution. Results in a win-win situation.

*Source: Workshop material handed over from Engel, Antonia in 2006*

Source: Engel et. al, 2005
7.2 Behaviour in and elements of conflict management

When becoming confronted with conflict, the IRLUP/PLUP team should always bear in mind the following basic principles which are important when addressing a conflict:

**Distinguish between the people and the problem and treat the two separately!**
This means to remain neutral and to treat both conflict parties in a friendly manner and with respect and not to let personal feelings about the problem interfere neither in your relationship with the people involved nor in between the two parties. The main aim should be to keep a good relationship with all conflict parties.

**Foster stakeholder collaboration and restore trust!**
It will only be possible to settle a conflict in a collaborative way (through negotiations between the two or more parties involved) if all parties are willing to negotiate with each other. The facilitators should try to build up positive attitudes and visions without forcing something. They should also try to build up trust between the conflict parties.

**Avoid further escalation of tensions: “do no harm”!**
Always be aware of risks when entering a conflict, you might reinforce tensions without intending to do so. Try to find “connectors”, people who maintain good relationships with both parties and to make use of them. On the other hand, if you identify “spoilers”, people dividing conflicting parties, try to develop a strategy (isolation or incorporation) to cope with the person(s).

**Improve and manage information!**
Check for information needs the parties might have and seek for neutral and technical expertise if needed. All parties need to know their rights, roles and responsibilities.

**Use and/or build up local capacities for conflict management!**
Most communities or societies have existing institutions and structures that help to resolve conflicts. To avoid undermining existing local capacities, an assessment should be made of whether these structures have been used already to settle the conflict and if so, why they were not successful. New efforts to mediate between two conflicting parties should in any case also enhance the capacities for autonomous conflict management in future.

**Concentrate on interests and not on positions!**
The conflict parties often position themselves about the issue of the conflict. Examples for respective expressions are: “We don’t want the new National Park” or “We don’t want the land to be used for mining”. Underneath these positions, there are a number of interests, needs, desires and fears, like the interest in gaining more income by intensifying farming activities, the need to sustain a family or the fear of water becoming contaminated.
You can never reconcile between positions, because they tend not to be flexible, but you need to work out the underlying interests, needs and fears (see also tool 1 of conflict management: the conflict onion).

![Conflict Onion Diagram]

*Source: Wehrmann, 2008*

Having moved from positions to interests, the aim in conflict resolution is to find mutual interests of both parties involved to achieve collaborative solutions:

![Win-Win Situations Diagram]

*Source: Engel et. al, 2005*

Try to reach win-win situations!

The main objective of becoming involved as a third party in a conflict should be to develop more options for a possible solution of the conflict. To concentrate on interests / needs / desires and fears instead of positions will be the first step to identify more options to settle the conflict.
7.3 Conflict management approaches: Conciliation, negotiation, mediation, arbitration and adjudication

In the following section an overview of common approaches for conflict resolution is provided. These approaches depend on a) the stage of the conflict (how violent it is), b) whether the parties are willing and interested in resolving the conflict and to negotiate or not and c) whether an informal agreement can be reached or not.

**Conciliation** (not shown in the graph): is the attempt by a neutral third party to communicate separately with the disputing parties for the purpose of reducing tensions and agreeing on a process for resolving the dispute.

**Negotiation**: refers to a voluntary process where parties talk, exchange ideas, information and opinions in order to resolve opposing interests.

**Mediation** is a process of guided negotiation by a third party. Mediators ensure that the different stakeholders agree upon process and logistics and remain impartial to the dispute. They have no power to render a decision; the “conflicting parties” remain responsible for resolving the conflict. Mediators try to encourage resolutions for the benefit of both parties (win-win-situations)

**Arbitration** means a voluntary process in which people in conflict request the assistance of an impartial and neutral third party to take a decision for them regarding contested issues. It may be conducted by one person or a panel of third parties. It may be “binding” or “non-binding” (the parties agreed to stick to the judgement or just to consider it). The third party is a person or organisation recognized by the conflicting parties.

**Adjudication** is relying on a judge or administrator to make a binding decision.

*Source (picture and information): Engel et. al, 2005*
7.4 Tools for conflict analysis

The analysis of a conflict helps to identify the underlying roots of the conflict and the interests, needs and views of the stakeholders. It also assesses the relationships between the conflict parties and increases the understanding of the links between the broader social, political and economic context and the land use conflicts. The analysis will lead to the development of an appropriate strategy to approach the conflict. It should be done in a participatory way in order to enhance the analytical and problem solving capacities of the conflict parties. Although a thorough analysis is needed, the team needs to find a balance between information needs and unnecessary information.

An in-depth analysis should only start if all conflict parties have shown their willingness to work on the conflict and have accepted the PLUP team as mediators team in their role as neutral third party!

It is suggested to use at least the following four tools of conflict analysis:

The **conflict onion** helps to identify the underlying interests, needs and fears to a position that a conflict party holds up and can either be applied by the mediators team alone (after specific interviews) or with the stakeholders.

The **conflict analysis table** helps to analyse different aspects of a conflict. The mediator's team should work with this tool alone and not use it as facilitation aid. They will rely on the information received from interviews and discussions with the conflict parties.

A **conflict map** can be used to show the geographic set-up where the land or resource use conflict exists or may exist in future. It can also help to determine the main issues the conflict is about and should be applied whenever a conflict has a spatial dimension.

The **actor analysis** helps to identify all the stakeholders involved. It should be applied with each conflict party.

Additional questions for the analysis should be:

- What conflict management strategies have been tried in the past?
- Which approach to address the conflict do the parties involved suggest?

After the application of the tools and in-depth discussions with both/all party/ies involved, the team should decide whether it is possible to continue the process. The process should only continue if

a) the analysis indicates that existing (traditional) conflict management mechanisms are unlikely to succeed,

b) differences in power are not too big and the legal framework provides room for negotiation,

and c) an atmosphere of trust was created and the intervention of the mediator team will do no harm or contribute to an escalation of the conflict.
8. Literature / Further reading


DRFN / Urban Dynamics (2005): “Cheat Sheets” for PPA. Windhoek


FAO (2006): Land tenure alternative conflict management. FAO Land Tenure Manuals


Haub, Olaf (2009): Understanding of Land Use Planning and its relevance in Namibia. NID/MLR. Windhoek. 24 pages


Namibia Nature Foundation (NNF) / USAID (2010): Land Use Planning framework for the Kavango Region of Namibia within the Okavango River Basin. March 2010, Windhoek, 142 pages


Wehrmann, Dr. Babette (2008): Land conflicts- a practical guide to dealing with land disputes. Eschborn: GTZ. 122 pages


Annex 1: PRA tool-kit
PRA-Tool 1: Resource map

Main objectives of the tool:
1. Identification of the present resources and their spatial distribution including:
   - Type and availability of resources and their spatial distribution, how they are used, interpreting the present forms of land use
   - Geographic boundaries of the community and main facilities and features (roads, settlements, socio-economic infrastructures, etc.)
   - Natural resources (water streams, lakes, forests) and land use patterns (agricultural land, grazing land, protected areas, etc.)
   - Problems and conflicts (for example areas with high level of natural erosion, areas in which conflicts arise between user groups)
   - Land tenure, access and control over land and resources
   - Areas with high potential for alternative uses
2. Start a dialogue and create a baseline for further discussion on problems and potentials regarding the use of land and natural resources

Participants: Mixed group of people or different groups with specific interests: men, women, young people

Number of participants: 10-15; for the transfer of the model onto brown paper and orthophotos a smaller sub-group (5-7 people max.)

Time frame: The tool is applied in 3 sub-steps: modelling will last at least 3 hours; another 2 hours should be calculated for a sub-group to transfer the model to a brown paper and additional 2-3 hours to transfer the results to an orthophoto for the integration into the GIS.

Resources:
- For modelling: Local material (for example stones, wood, seeds)
- For copying of the model to brown paper: Brown paper and markers in all colours
- For transferring the map to an orthophoto: Orthophoto (alternatively aerial picture, satellite image or topographic map) of the area and its surroundings showing also the main boundaries (of town lands, farms, etc.) and markers in all colours

Steps for modelling:
- Let the participants choose a suitable place for the first step (modelling) on the ground, preferably outside. The place should be large enough for all to see the map and to become involved.
- Explain the purpose of the map
- Agree on the boundaries (administrative community boundaries or areas where resource utilisation by community members stop or similar)
- Start to encourage somebody of the group to go ahead by using some local materials to indicate the settlement areas and some basic features (roads, rivers, area or farm boundaries and the like). As you go along, try to verify with the help of participants whether the different distances between features are “correct”. Pull back as they go ahead.... ctd.
Steps for copying of the model to brown paper:

- Ask a sub-group of the participants to copy the model to a sheet of brown paper so that they can keep the map for the further planning process. You might suggest some people who were very active during modelling and seem to have a good understanding of spatial dimensions to be part of the group!
- Let them choose their own colours and symbols for different aspects.
- Check with the map drawers whether everything has been captured.
- Remind them to develop a legend!
- The note taker should also compare the version on the brown paper with his/her own the IRLUP/PLUP task force will take along.

Steps for transferring the information to an orthophoto (alternatively aerial picture, satellite image or topographic map):

- The same sub-group who transferred the model to a brown paper can now transfer the information to the orthophotos. You need to help them first to orient themselves on the photo by identifying jointly some main features like roads, rivers, settlement areas or forests which they recognize.
- Let them use the same colours and symbols they have chosen before.
- Let them also put a legend at one side or on an additional sheet of paper.
- Check with the map drawers whether everything has been captured.
- The IRLUP/PLUP team will take this result along since it will be used to be integrated into the GIS system of the MLR.
- When inserting it into the GIS the same symbols and colours the local population used should be kept so that they will recognize “their map” later on in the process!
Example for resources maps:
Fig. 3: RESOURCE MAP OF BODA BOSOGA PA

KEY

spring

Settlement (village)

Church

Forest

DANDI SULU PA

Farmland

Grazing land

Deep gulley

Permopene

Seasonal stream

All weather road

Highly degraded area

Foot path

MARENO GANJO PA

FAKTARU PA

BAGA KOFI

Daraba Outsole mill

Daraba

To Busa Town

Gilla

Tolcho hill

Balchi Gully

Gilla hill

Dakuru forest

Gille forest

DANDI SULU PA

HONCHE BITE PA

To Gilla Town

Ootukiller
Transfer of information from participatory mapping exercises to orthophotos:

Examples for results from the transfer of information from participatory mapping exercises to a GIS:

Source: Dina Katataiza
PRA-Tool 2: Flow diagram

Main objectives of the tool
This tool can show the linkage between
- a problem and its underlying causes or root-causes and
- the effects of a problem or issue on current land use patterns and livelihoods
It can be used to discuss possible solutions and their intended and unintended impacts. Implementation of the tool will give rise to important discussions among participants. Facilitators have to probe into all the causes and effects as well as the solutions mentioned by the participants.

Participants: Depending on the context mixed group of people or focus group

Number of participants: 5-12

Time frame: 3-4 hours including the discussion on solutions

Resources: Brown paper, markers, coloured cards

Steps:
- Let the participants choose a suitable place for the exercise, where everybody can see the brown paper and participate
- Explain the purpose of the exercise: you want to define and discuss the causes and the effects of a pre-defined problem and to also discuss possible solutions
- Agree on the key issue / key problem (which was probably already identified in the preparatory work of the meeting, but it should be reconfirmed by all participants and maybe be adapted again!)
- Let them write down the key issue / problem on a card and if necessary find a symbol for it together with the participants.

Analysis of causes / root-causes and effects:
- Ask what the causes of the problem are and facilitate the discussion in a way that different causes will emerge clearly and that the linkages between the different causes will also become clear. Help them through your facilitation to identify also the underlying root-causes of the problem. Probe into all causes they mention by asking further questions (“Why?”)
- When the causes are clear, ask about the consequences or effects of the problem on the current situation.
- Again, let them discuss and guide them in the discussion by further probing into the different comments they make and help them to analyse the linkages between the different effects.
- The note taker must record all discussions and the flow diagram arising from them.

Solution analysis:
- Once the analysis of root causes and effects has been exhausted, start with the solution analysis. It is useful to ask participants to turn each root causes of the problem into a positive statement, or a solution.
- You should also ask deeper into the implications of the solutions and their impacts.
- At the end, summarise the findings together with the participants and thank them.
- The note taker records all the discussions and the additional cards which were added to the flow diagram.
Examples of flow diagrams developed in the Namibian context

**Key problem: Limited profitability of farming in Karas region**

- Lack of education
- Crime
- Food insecurity

**Causes**
- Lack of farming skills
- Small farm sizes
- Predators
- Unfavourable weather conditions
- Lack of tenure security
- Diseases
- Drought
- Lack of access to markets
- Lack of farm infrastructure
- Lack of veterinary services
- Lack of transportation
- Stock theft
- Lack of roads
- Lack of vehicles

**Effects**
- Break farmer’s confidence
- Low production
- Low income
- Breaks farmer’s reputation
- Low income
- Breaks farmer’s reputation
- Low production
- Break farmer’s confidence

**Examples of flow diagrams developed in the Namibian context**
Grass gets old in other areas
Overgrazing at water points
Weak conditions of animals
Far distances to water points
Farming is not viable
Animals die due to sickness because they cannot afford vet services
Low income

Key problem: Underutilisation of grazing areas

Effects

Causes

Water scarcity
Many dry boreholes
Weak boreholes (low yield)
Local people not informed about siting of boreholes

Water distribution
Shallow drilled boreholes
Few earth dams
Animals destroy the dam walls
Shallow earth dams
Rain washes silt and clay into earth dams
Key problem: Tourism potential cannot be utilised fully

Effects
- Homelessness
- Deforestation
- Depopulation
- Loss of concession

Causes
- Lack of vehicles
- Lack of marketing
- Lack of tour guides and waiters
- Lack of finances
- Lack of knowledge to develop business plan
- Lack of knowledge how and information
- Lack of capacity building

Diseases
- Criminal record (crimes)
- School drop-out

Lack of income
- Unemployment

No development

Loss of concession

Village status unlikely

Negative impact on business

Poverty

Lack of income
PRA-Tool 3: Venn-diagram (institutional analysis)

Main objectives of the tool:
- To identify key institutions which exist inside the community or which support the community from outside specifically with regard to the key issue under discussion
- To establish the level of knowledge of the community about existing institutions and organisations related to the key issue
- To understand the different functions of institutions in and outside the community in relation to the key issue

Participants: Mixed group

Number of participants: 8-12

Time frame: 3 hours

Resources: 2 pin boards, brown paper, white paper cut in circles (3 sizes) and markers

Steps:
- Let the participants choose a suitable place for the exercise (around a pin board). The place should be large enough for all to see the board and to become involved.
- Explain the purpose of the exercise; you want to identify and analyse all institutions in and outside the community in relation to the key issue.
- Draw a circle on the brown paper. Explain that the circle represents the community.
- Ask the participants which institutions and organisations exist inside the community. They may first want to develop a list. Going through each organisation and institution listed, ask participants where the organisation is important (do effective work, have a lot of influence) or less important or not really relevant (failing to work, with few influence on the issue at stake) and let them decide according to these criteria whether they want to use a big, a medium or a small circle size for the institution. The size of the circle indicates the importance of the institution for the community: big means important, medium less important, small relatively unimportant.
- Let them write the name of each institution on the white paper of the selected size and let them stick it into the black circle that you have drawn on the brown paper to symbolise the community.
- Ask them whether some of these organisations collaborate; if this is the case, let them arrange the circles in a way that the circles of the collaborating organisations overlap.
- Now ask them for the institutions and organisations which support the community from outside, including the ones they know but which are difficult to access. They can develop another list first.
- Let them choose again the sizes of the circle for each institution (big: important, medium: less important, small: relatively unimportant). Then ask for each institution/organisation whether they are in close contact with it or not. If they are in permanent/close contact and the institutions are easily accessed, let them place the circle close to their community; if they are not in close contact/the institutions are not easy to access let them place them far away.... ctd.
This gives an indication of whether the community lacks contact to and assistance from important institutions and organisations.

- Identify the nature of the relations between the community or stakeholders and the institutions during discussions (e.g. who is providing which kind of service / support and plays which role). Document this separately on a board.
- Ask different questions arising from the discussion context regarding each institution
- The note taker takes notes of all discussions and copies the final version of the Venn-diagram.
- Thank the participants at the end!

Examples of Venn-Diagrams from the Namibian context:

RWS: Rural Water Supply (MAWF)
TA: Traditional Authority
RC: Regional Council
LC: Local conservancy
NDT: Namibian Development Trust
MET: Ministry of Environment and Tourism
DEES: Directorate of Extension and Engineering (MAWF)
MLR: Ministry of Lands and Resettlement
SNAFU: Southern-Namibian Farmers Union
ACCT: Aus Community Conservation Trust
SKEP: Succulent Karoo Ecosystem Project
CI: Conservation International
KRC: Karas Regional Council
MET: Ministry of Environment and Tourism
UNDP- SGP: United Nations Development Programme, Small Grants Programme
NNF: Namibian Nature Foundation
PRA-Tool 4: Transect walk or drive / site visits

Main objectives of the tool:
A transect walk allows the team to further familiarise itself with the community and its environment. Different issues of interest (present land uses, soil qualities, cropping systems, limitations for resource use, problems, conflicts and the like) can be directly discussed in the field as well as different land use options or ways to address the key issue at stake.

Community members which did not take part in the event can be visited during the transect walk.

Information gathered from other tools especially mapping tools can be cross-checked.

In the Namibian context, it will often be necessary to use vehicles because of the spatial dimensions and do “transect drives” instead of walks. Especially in the more arid southern regions, visits of specific sites of interest instead of complete transects can be undertaken.

Participants: Mixed group of people

Number of participants: 5-15

Time frame: approx. 3 hours (the time frame depends totally on the sites you are going to visit or the way you are going to walk and on the topics you want to address…)

Resources: Note paper, pens

Steps:
- Decide together with the participants about the line/way to walk or drive (according to the focus subjects) and agree on who is going to accompany the walk/drive. Sometimes the arrangements need to be done already in the evening before the walk/site visit so you need to agree on a gathering point of all participants in the morning and on the vehicle(s) to be used.
- Explain the purpose of the exercise before starting to walk or drive.
- Walk/drive slowly and look carefully, stop at important places; discuss with the community members what you see.
- Do not always follow the main (foot) paths but also small tracks.
- Stop and talk to other people you meet on the way.
- Draw a transect diagram and also note down other observations. You might split this task amongst the members of the facilitation team.
- Thank the participants after the walk/drive
- Later on, call a team meeting with all task force members / facilitators and discuss the different findings of the exercise. Transfer the final results of the exercise into your note book.
Examples for transect walks:

<table>
<thead>
<tr>
<th>SOIL</th>
<th>Clay soil, small patches of sandy soil.</th>
<th>Sandy soil, small patches of clay loam</th>
<th>Clay loam, sandy soils and rocky</th>
<th>Sandy soil, small patches of sandy soil, rocky patches</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER</td>
<td>2 small pans poorly maintained, roof settlement (2 houses) - poor allotted</td>
<td>Roof settlement at school - poorly kept</td>
<td>Bungguha dam with sandy bottom, broken embankment - one pan poorly kept</td>
<td>Shallow well (pan) well maintained; Chombo dam with lake, 2 pans poorly maintained; River not just water, dry Allen with cane fields</td>
</tr>
<tr>
<td>VEGETATION</td>
<td>Natural bush, shrubs, consisting of acacia, species, (coconut, etc.), few hardwood trees, mori (indigenous)</td>
<td>Natural bush, shrubs for school and market centre, trees: e.g., Ardisia indica, Eugenia, Melastoma obovata</td>
<td>Indigenous bush, consisting of acacia, kedia, and ferns, species.</td>
<td>Natural bush and thickets consisting of acacia, trees</td>
</tr>
<tr>
<td>SOCIO-ECONOMIC INDICATORS</td>
<td>Majority one transaction living, houses of brick and grass, few constructed from trees</td>
<td>School with constructed iron sheets and the market centre</td>
<td>Majority grass thatched huts with mud walls</td>
<td>Majority and grass thatched huts, a few constructed iron sheets</td>
</tr>
<tr>
<td>FOOD CROPS</td>
<td>Noize, pigeon peas, green gram, cow peas</td>
<td>Noize, pigeon peas, cow peas, cassava</td>
<td>Pigeon peas, cow peas, water melon, green grams, noize</td>
<td>Noize, pigeon peas, green grams, cow peas</td>
</tr>
<tr>
<td>CASH CROPS</td>
<td>Coconut, cashewnut</td>
<td>Coconut, cashewnut</td>
<td>Coconut, cashewnut</td>
<td>Coconut, cashewnut</td>
</tr>
<tr>
<td>FORESTRY</td>
<td>Mango trees; citrus, fanning trees, planting of, chorda, indica, tephra, petras</td>
<td>Fruit trees - Mangos, citrus, few squash</td>
<td>Mangos</td>
<td>Mainly Mangos, Mangoes with mangoes</td>
</tr>
<tr>
<td>AGRO-FORESTRY</td>
<td>P*</td>
<td>P*</td>
<td>P*</td>
<td>P*</td>
</tr>
<tr>
<td>RESOURCE MANAGEMENT</td>
<td>TERRACING OF SIDES OF FARM, PANS, GRAZING, POORLY MAINTAINED PANS</td>
<td>LIMITED SOIL CONSERVATION, POORLY MAINTAINED PANS</td>
<td>CASH CROPS LEFT IN DRY SEASON, POORLY MAINTAINED PANS</td>
<td>ONE PAN WELL MAINTAINED, OVERGRASSING</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>PROBLEMS</td>
<td>INADEQUATE WATER SUPPLY, LACK OF WATER TREATMENT FACILITIES, POOR PLANTING PRACTICES</td>
<td>INADEQUATE WATER SUPPLY, INADEQUATE SCHOOL FACILITIES, POOR TRANSPORT, LACK OF HEALTH FACILITIES</td>
<td>INADEQUATE WATER SUPPLY, DISORGANIZED COMMUNITY, FOOD SCARCITY, MIGRATION OF PEOPLE</td>
<td>INADEQUATE WATER SUPPLY, LEACHING</td>
</tr>
<tr>
<td>OPPORTUNITIES</td>
<td>REHABILITATION OF DROUGHT DAM, REHABILITATE CATTLE, TREATMENT OF DROUGHT</td>
<td>IMPROVE DROUGHT, REHABILITATE DROUGHT PLOTS, TECHNICAL ASSISTANCE, EXTERNAL ASSISTANCE</td>
<td>REHABILITATION OF DROUGHT, INTRODUCE CASH CROPS AND DROUGHT RESISTANT CROPS</td>
<td>REHABILITATION OF DAMS, INTRODUCE SOIL CONSERVATION</td>
</tr>
</tbody>
</table>

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**Transect walk on the Namseb Lodge (Namibia)**

<table>
<thead>
<tr>
<th>Location Criteria</th>
<th>Up- Hill close to the lodge</th>
<th>Down- Hill along the river</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation</td>
<td>!Kaba- bushes (Cataphrates alexandri), different grasses (p.e. stipagrostis uniplumis)</td>
<td>Soetdoring- shrubs, few grasses only</td>
</tr>
<tr>
<td>Current land use</td>
<td>Extensive game farming / tourism lodge</td>
<td>Extensive game farming</td>
</tr>
<tr>
<td>Water situation</td>
<td>Water is pumped from down- hill to up-hill for the lodge</td>
<td>Underground water is not deep (3-30m), but the quality is not good in most areas</td>
</tr>
<tr>
<td>Grazing situation</td>
<td>Is fine because few animals graze on the land. The land was overutilised for many years.</td>
<td>Is poor because of bush encroachment. Land was overutilised for many years.</td>
</tr>
<tr>
<td>Problems</td>
<td>Sensitive area. Grasses need to recover (perennial). Game might have to be reduced in future.</td>
<td>Soil erosion caused by river. Animals cannot pass through the bushy areas to access the river. Predators in the bushes. Bushes displace grasses.</td>
</tr>
<tr>
<td>Opportunities</td>
<td>Income from game hunting. Recovery of grass: increase stocks, revenues and employment</td>
<td>Goats (browsers) can slow down the further encroachment. Rehabilitation of the area: - Ripping the soil (but expensive!) - Place old tires on ground (but this is not beautiful)</td>
</tr>
</tbody>
</table>
PRA-Tool 5: Future land use map

Main objectives of the tool:
Visioning and planning of future land uses including the location and expansion of future (land use related) development projects.
The map can be based on the map of current resources and land uses (i.e. the basic features and boundaries need to be copied). It should show all basic geographic features of the community (roads, settlements, socio-economic infrastructure, natural resources like water streams, lakes or forests) as well as all the desired land use related activities to optimise land use or land use changes as well as possibly the location of future development projects (You can also include different scenarios in one or several maps). The discussions should also address management rules and regulations!

Participants: Mixed group or different groups with specific interests: men, women, young people

Number of participants: 5-12 (per group)

Time frame: The step involves two sub-steps: the development of sketch maps and the transfer of the sketch maps to orthophotos. For both steps, 2-3 hours or more should be scheduled depending on the complexity!

Resources: Brown paper, markers in all colours, a pen, pin board, resource map.
Orthophotos for the transfer of the information in order to integrate the map into the GIS

Steps:
- Let the participants choose a suitable place for the mapping exercise around a pin board. The place should be large enough for all to see the map and to become involved.
- Explain the purpose of the future land use map
- Start like for the current land use map: Agree on the boundaries (administrative community boundaries or areas where resource utilisation by the community members stops or similar); let the participants use the resource / current land use map to draw basic features of the area (river, roads, settlement areas, etc.) on a brown paper.
- Now start the discussion on future land use options. Some of these are likely to have been raised already during the resource mapping exercise, the transect walk/drive and other tools used or discussions held.
- Ask the participants to point out where land can be used for different purposes in future or where projects and activities they have indicated can be located.
- Encourage discussion on the different proposals and listen carefully. Probe into the different arguments (“Why?”) and also rise the questions of how the land will be utilised, through whom and the like!
- The note taker needs to note down the different options.
At the end of the session, thank the participants and ask them to store the map carefully. The note taker will take a photograph of the map and copy it.

If the exercise was done in different sub-groups, these sub-groups will present their findings and proposals to each other. The groups will then need to find a common proposal through the help of the facilitators and if necessary in additional planning sessions.

**Steps for transferring the information to an orthophoto** (alternatively aerial picture, satellite image or topographic map):

- The participants or a sub-group will transfer the information to an orthophoto. Since they already developed the resource map and transferred this map to an orthophoto they will have less problems in orientating themselves on the photo of their area. The can also use the maps already developed for orientation.
- Let them use their own colours and symbols.
- Let them also put a legend at one side or on an additional sheet of paper.
- Check with the map drawers whether everything has been captured.
- The IRLUP/PLUP team will take this result along since it will be used to be integrated into the GIS system of the MLR.
- When inserting it into the GIS the same symbols and colours the local population used should be kept so that they will recognize “their map” later on in the process!
- A copy of the technical map arisen from the process is given back to the community afterwards for reference purposes!
PRA-Tool 6: Matrix scoring and ranking

Main objectives of the tool:
In matrix ranking a number of options are ranked by applying different criteria (e.g. suitability, time, profit, or the like). Criteria are developed within specific contexts. For example, different tree species can be evaluated according to criteria such as suitability as firewood, for building, as fruit trees, as medicine, etc. Different livestock options can be evaluated in terms of criteria such as capital required to buy and maintain, susceptibility to disease, labour intensity and financial returns. For each option, participants assign a value for each criteria identified. Values between 5 ("well-suited") and 1 ("poorly suited") are used. It is important to formulate criteria as positive attributes (example: investment costs need to be formulated as “low” investment costs) if you want to sum up the results. If this was not done, you can only use the exercise for scoring purposes.

Participants: Depending on the context mixed group of people or separate interest groups like men, women, young people

Number of participants: 5-10 per group

Time frame: 3 hours

Resources: Brown paper, local materials (stones or seeds), coloured cards, markers

Steps:
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the ground or the brown paper and to become involved.
- Explain the purpose of the exercise and the key question
- Start to talk about the topics you want to compare (problems, solutions, different land use options or the like). Make sure first that all participants have the same understanding of each alternative and let them note down these “objects” on cards. They can also agree on a symbol for each topic.
- Start the discussion about the criteria which should be taken into account. You can propose criteria, but participants should be encouraged to come up with their own criteria. All criteria need to be well understood and agreed upon. Once this has happened, the criteria must be written on a card accompanied by an agreed symbol if need be.
- Prepare a grid together with the participants (on the ground or on a brown paper) and lay down the cards in form of a matrix (objects in a row; criteria in the column to the left side)
- Explain the evaluation mechanism (5: highest rank, 1: lowest rank) and go object by object criteria to criteria. Let participants take over the process; they will do the scoring on their own, provided that sure they understood the underlying criteria well. Do not influence their evaluation.
- The note taker will document the different explanations they give and the scores.
- At the end of the exercise, sum up the total scores together with them (if suitable, see explanation above) and discuss the overall result.
- Summarise the conclusions of the exercise together with the participants and thank them.
Examples for matrix scoring and ranking from the Namibian context

Scores:
● = very low, ● ● = low, ● ● ● = medium, ● ● ● ● = high, ● ● ● ● ● = very high

Comparison of farming options in Karas region

<table>
<thead>
<tr>
<th></th>
<th>goats</th>
<th>sheep</th>
<th>cattle</th>
<th>game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation potential</td>
<td>● ● ● ● ●</td>
<td>● ● ● ●</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>Low sensitivity (Healthiness)</td>
<td>● ● ●</td>
<td>●</td>
<td>● ● ● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>Low investment costs</td>
<td>● ● ● ● ●</td>
<td>● ● ● ●</td>
<td>● ● ●</td>
<td>● ●</td>
</tr>
<tr>
<td>Profitability</td>
<td>● ●</td>
<td>● ● ●</td>
<td>● ● ● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>Low labour intensity</td>
<td>●</td>
<td>●</td>
<td>● ● ● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>Score</td>
<td>16</td>
<td>13</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Rank</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>New borehole and infrastructure</td>
<td>Pipeline from Gunab</td>
<td>Earth dam rehabilitation</td>
<td>Install engine, pipeline with air clips and tank at existing borehole (Pfalz)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------</td>
<td>---------------------</td>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Low investment costs</strong></td>
<td>●</td>
<td>⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿</td>
</tr>
<tr>
<td><strong>Low running +maintenance costs</strong></td>
<td>⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿</td>
</tr>
<tr>
<td><strong>Water availability</strong></td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
</tr>
<tr>
<td><strong>Improved grazing</strong></td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
<td>⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿ ⬿</td>
</tr>
<tr>
<td><strong>Score</strong></td>
<td>14</td>
<td>15</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
PRA-Tool 7: Pair wise ranking

Main objectives of the tool:
To prioritise issues or problems.
A useful guiding question could be: if you have only a limited amount of money, which issues would you address first?

Participants: Depending on the context a mixed group of people or separate interest groups like men, women, young people

Number of participants: 10-12 per group

Time frame: 2-3 hours

Resources: Brown paper, local materials (stones or seeds), coloured cards, markers

Steps:
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the grid and to become involved.
- Explain the purpose of the ranking exercise
- Recapture the issues identified earlier on (i.e. different problems)
- Allow the participants to add new issues / problems
- Make a list of the issues and transfer them onto cards together with them. Each problem/issue needs to appear twice. If there are too many issues, participants should be asked to select not more than 6 issues they want prioritise.
- Draw a grid with them on the floor or on a brown paper and place one set of cards along the top row and the other set along the left column as shown in the examples.
- For each horizontal and vertical intersection ask participants to decide which one of the two issues they regard as more pressing. Constantly probe their reasons for taking specific decisions.
- When all boxes are filled, count how many times each problem occurs and enter the number in a score column that you draw on the right hand side. Compare the scores and rank them.
- Discuss with the participants whether the result reflects their overall point of view.
- The note taker needs to document the different discussions which take place and he / she copies the final results into his / her note book.
- At the end of the session, thank the participants.
Examples for pair wise ranking from the Namibian context

Which factor hampers more the development of our community?

<table>
<thead>
<tr>
<th>Lack of water</th>
<th>Unemployment</th>
<th>Drought</th>
<th>Lack of grazing</th>
<th>Animal health</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of water</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Lack of water</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Drought</td>
<td>Lack of water</td>
<td>Drought</td>
<td>X</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Lack of grazing</td>
<td>Lack of water</td>
<td>Unemployment</td>
<td>Drought</td>
<td>X</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Animal health</td>
<td>Lack of water</td>
<td>Unemployment</td>
<td>Drought</td>
<td>Lack of grazing</td>
<td>X</td>
<td>5</td>
</tr>
</tbody>
</table>

Which factor affects the farming potential in Karas to a larger extent?

<table>
<thead>
<tr>
<th>Marketing problems</th>
<th>Droughts</th>
<th>Winter colds</th>
<th>Lack of farm infrastructure</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing problems</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Droughts</td>
<td>Droughts</td>
<td>X</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Winter colds</td>
<td>Winter colds</td>
<td>Winter colds</td>
<td>X</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lack of farm infrastructure</td>
<td>Lack of farm infrastructure</td>
<td>Lack of farm infrastructure</td>
<td>X</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
PRA-Tool 8: Ranking of problems and solutions

**Main objectives of the tool:**
- To identify priorities with regard to issues related to land use or development problems in more general terms (depending on the issues at stake)
- To enable the community to discuss, analyse and prioritise its problems and possible solutions
- Discuss potentials and constraints for future land use

**Participants:** Different groups with specific interests: men, women, young people

**Number of participants:** 8-12 per group

**Time frame:** 3 hours

**Resources:** Brown paper, coloured cards, local material (stones or seeds), markers

**Steps:**
- Let the participants choose a suitable place for the ranking (on the ground or on a table). The place should be large enough for all to see the place or the brown paper (which needs to be put on the ground) and to become involved.
- Explain again the purpose of the ranking (to list all problems and solutions the community faces with focus on the land use related problems as well as to come up with possible solutions).

**Problems:**
- Invite participants to state problems the community faces, maybe you can also recall the mapping exercise and which problems were mentioned for a start.
- List all the problems on the coloured card together with them and find symbols for each problem if necessary.
- Ask if there are any additions to make (further problems).
- When the list is complete, draw a grid together with them and place the coloured cards with the problems in the first column (on the ground or on a brown paper).
- Now give each person a certain number of stones (for example 20). Ask them to place the stones at the side of the problems they feel are most important. They are free to place the stones where they want (no need to attribute stones to all of the problems if they feel that some are not really pressing).
- Let them allocate their stones.
- When all have finished the scoring, count the stones attributed to each problem and note down the number in the second column right aside of each problem. Then proceed with the ranking by marking the problem with the highest score as first, the second highest score as second and so on. Verify with them, whether this reflects the opinion of the group. Ask them about the criteria and reasons for the judgement to better understand their opinions and viewpoints.
- Evaluate together with them which of the problems fall under problems related to land use and which are beyond the scope of MLR/the LUP process
- The note taker will record all discussions and results.
Solutions:
- Now let them suggest possible solutions to each of the problems. Note down the solutions in the next column in separating rows (see example). You might also start a new grid if necessary.
- Whenever all solutions are listed, give all participants 3 stones and let them score for each problem which solution they would feel most appropriate (they can put all three stones on one solution or distribute them).
- For each solution, you can now do a scoring and respective ranking.
- Verify always, whether the result really reflects what the majority thinks.
- You might also ask some additional questions to better understand their judgement.
- The note taker will record all discussions and results.
- At the end of the exercise, thank the participants

Example for a problem and solution ranking:

<table>
<thead>
<tr>
<th>PROBLEMS</th>
<th>SCORES</th>
<th>RANKING</th>
<th>SOLUTIONS</th>
<th>SCORE</th>
<th>RANKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases</td>
<td>12</td>
<td>2</td>
<td>Education</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Low Income</td>
<td>7</td>
<td>7</td>
<td>Farming Business</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Aids</td>
<td>11</td>
<td>3</td>
<td>Education</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Sanitation</td>
<td>6</td>
<td>8</td>
<td>Education</td>
<td>ALL</td>
<td></td>
</tr>
<tr>
<td>High Birth Rate</td>
<td>10</td>
<td>4</td>
<td>Educate women</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Transport</td>
<td>31</td>
<td>1</td>
<td>Matatus</td>
<td>ALL</td>
<td></td>
</tr>
<tr>
<td>Illel Plans</td>
<td>9</td>
<td>5</td>
<td>Insulate Booth</td>
<td>ALL</td>
<td></td>
</tr>
<tr>
<td>Food Security</td>
<td>5</td>
<td>9</td>
<td>Machinery</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Women Empowerment</td>
<td>8</td>
<td>6</td>
<td>Education</td>
<td>ALL</td>
<td></td>
</tr>
</tbody>
</table>
PRA-Tool 9: Mobility map

Main objectives of the tool:
- To understand the spatial mobility of different land user groups / groups of villagers
- To understand the importance of specific geographical features to the people (like waterholes or forests far away from the place where people live)
- To understand the importance of other aspects for the villagers (access to health centres, education, supply centres, markets, etc.) and to have a better impression of their living situation

Note!: This tool can easily be adapted to investigate other points of interest. You could for instance map the households of different water point users by adapting the tool slightly!!

Participants: Mixed group or different groups with specific occupations: crop farmers / farmers or men / women / young people

Number of participants: 5-12 (per group)

Time frame: 1-1.5 hours

Resources: Brown paper, local material (stones, wood, seeds) if applied on the ground, markers in all colours, cards, pin board

Steps:
- Let the participants choose a suitable place for the mapping (on the ground, on a table or at a pin board). The place should be large enough for all to see the map and to become involved.
- Explain the purpose of the mobility map
- Ask the participants how far and to which destinations outside the community they walk or drive.
- For which purpose do they go there?
- How frequently do they go there?
- Start to encourage them to visualise the information by drawing a circle on the ground or on the brown paper which symbolises the village. The can then draw the places they go to on cards and place these cards close or far away from the village according to the distance of the places.
- Let them find symbols to indicate what they do in which place by using different materials or different colours/symbols for each line between the village and the place (see example).
- Ask for more details if needed.
- At the end of the session, thank the participants.
- The note taker records all comments during the session and copies the final result!
Example for a mobility map:
PRA-Tool 10: Historical transect and time trends

Main objectives of the tool:
Historical transects and time trends show quantitative changes over time. They can be used to analyse various variables at a time or a single variable and they help to sensitise about environmental problems. Examples for key questions are:
- Historical transect: How did the environment change over time (forest cover, agricultural lands, water resources, cattle, yields, etc.)?
- Time trends regarding a single variable or several variables: How did rainfall change over time? How did yields change over time? How did prices change?

Participants: Mixed group of people. Some elderly people should participate!

Number of participants: 5-10

Time frame: 1-1.5 hours

Resources: Brown paper, local material (stones or seeds, sticks), markers

Steps:
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the ground or the brown paper and to become involved.
- Explain the purpose of the exercise and the key question(s).
- Agree on the time frames (time periods). Each point in time and each period must be clear to the people by remembering specific events, political periods or the like. Take your time to do so. Write down the time periods. If it seems necessary try to find symbols for each time period.
- Ask about the variable in question during the first time period agreed upon, for example: “How was the forest cover during this time? Were there more forests than today or less?” If you work on an historical transect, then ask participants to find a symbol for the variable and to draw it (if forests were thick, they will draw a lot of trees, if forests were degraded, they draw a few trees, etc.) and continue time period for time period for each variable. If you work on a graph, explain that the horizontal line symbolises a quantity (the higher the more) and encourage them to lay down short sticks for each time frame in the height they feel adequate as to symbolise the changes.
- Encourage discussion on the reasons for the changes and listen carefully. Probe into the answers (“Why?”).
- The note taker needs to carefully report the comments and discussions.
- Agree on the key problems which led for instance to environmental degradation, increasing lack of water or the like.
- At the end of the session, thank the participants.
- The note taker will copy the final visual result of the exercise into his/her notebook.
Example for historical transect:

<table>
<thead>
<tr>
<th>Year</th>
<th>Forest</th>
<th>Agriculture</th>
<th>Water</th>
<th>Livestock</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
<td><img src="image4.png" alt="Diagram" /></td>
<td><img src="image5.png" alt="Diagram" /></td>
</tr>
<tr>
<td>1950</td>
<td><img src="image6.png" alt="Diagram" /></td>
<td><img src="image7.png" alt="Diagram" /></td>
<td><img src="image8.png" alt="Diagram" /></td>
<td><img src="image9.png" alt="Diagram" /></td>
<td><img src="image10.png" alt="Diagram" /></td>
</tr>
<tr>
<td>1970</td>
<td><img src="image11.png" alt="Diagram" /></td>
<td><img src="image12.png" alt="Diagram" /></td>
<td><img src="image13.png" alt="Diagram" /></td>
<td><img src="image14.png" alt="Diagram" /></td>
<td><img src="image15.png" alt="Diagram" /></td>
</tr>
<tr>
<td>1985</td>
<td><img src="image16.png" alt="Diagram" /></td>
<td><img src="image17.png" alt="Diagram" /></td>
<td><img src="image18.png" alt="Diagram" /></td>
<td><img src="image19.png" alt="Diagram" /></td>
<td><img src="image20.png" alt="Diagram" /></td>
</tr>
<tr>
<td>1989</td>
<td><img src="image21.png" alt="Diagram" /></td>
<td><img src="image22.png" alt="Diagram" /></td>
<td><img src="image23.png" alt="Diagram" /></td>
<td><img src="image24.png" alt="Diagram" /></td>
<td><img src="image25.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>
Examples for time trends:

The volume of water in the pan was measured over the years:

- **1961**: The banks of the pan were washed away.
- **1974**: Worst drought took place.
- **1984**: Fruits started to grow.
- **1992**: Kiwassa spread.

Graph showing the trends in water volume over time.
PRA-Tool 11: Proportional piling or pie charts

Main objectives of the tool:
Proportional piling or pie charts are useful to quantify proportions of a whole, particularly when absolute values are difficult to calculate and quantify for the communities or when they might be unwilling to give exact quantities.

Key questions can be:
- How important are different sources of incomes for the community?
- What is the proportion of different land use types in the community area?
- What is the importance of different livestock types for household income?

Note: This tool might be used during a semi-structured interviews or the application of other tools in order to visualise a topic you are discussing.

Participants: Depending on the context. Often done in mixed groups (men, women, young people...)

Number of participants: 8-12

Time frame: 1 hour

Resources: Brown paper, coloured papers, local material (stones or seeds), marker

Steps:
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the ground or the brown paper and to become involved.
- Explain the purpose of the exercise and the key question
- Ask the participants for example to list all the different types of incomes or all the different types of land uses according to the topic you discuss, and let them note down the topics on coloured cards. If necessary, let them agree on symbols for the different items which they can draw on the papers.
- When everything is listed, put a fixed number of seeds like 50 or 100 on the ground and explain that they symbolise the total. Proceed to ask them how much value, i.e. how many of the total number of seeds, they would allocate to each of the different types of things they listed. Let them discuss and take as many seeds as they want. They might still shift back and forth some of the seeds during the discussion.
- Ask “why” something is more important or less important; the note taker has to record the discussion.
- Whenever the piles are ready, you can count each pile and you can transfer the exercise to a pie chart on a brown paper by dividing the pie into pieces according to the relevance attributed to during the exercise (Draw a circle and divide it into pieces).
- Thank the participants
- The note taker will transfer the results of the exercise into his/her note book.
Example for a pie chart:

1. Agriculture
2. Livestock
3. Fishery
4. Trade
5. Mason (plantation)
6. Tailoring
7. Carpentry
8. Bicycle repair
9. Cobbler
10. Laundry
11. Others
**PRA-Tool 12: Seasonal calendar**

**Main objectives of the tool:**
This tool helps to identify main activities, problems and opportunities through the annual cycle and will show key linkages between components. It also helps to identify the months of greatest difficulty and vulnerability or other significant facts which have an impact on people’s lives.

**Participants:** Depending on the context mixed group of people or separate groups (men / women) if emphasis is put on gender differentiation.

**Number of participants:** 5-10

**Time frame:** 1-2.5 hours, depending on the complexity

**Resources:** Brown paper, coloured papers, local materials (stones, wood, sticks, seeds), markers in different colours

**Steps:**
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the ground or the brown paper and to become involved.
- Explain the purpose of the exercise and the key question
- Start to talk about the 12 months of the year and encourage the participants to put symbols for each month on the ground or to mark the symbols on cards. The 12 months should be placed into columns of a table you want to establish.
- Now indicate together with the participants all the items / variables you are interested in like rainfall, diseases, harvesting, economic situation, etc. by using symbols if need be and by putting them as “header” above each column or alongside each row.
- Now discuss the issues and indicate relative quantities or relevance by using the local materials or by discussing the issues. Find out more details if needed.
- The note taker reports the discussion.
- At the end of the exercise thank the participants.
- The note taker transfers the results of the exercise into his or her note book.
Examples for seasonal calendars:

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>JAN</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>CREDIT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INCOME</td>
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Seasonality - ZACIALO 7 February 1994

1. Too much labour leads to: 
   - No pasture
   - Lack of water
   - Hunger
   - Brought to: Livestock problems
   - Laran (drought)

2. Healthy livestock: plenty of milk, plenty of pasture
3. No pasture: lack of water, hunger, brought to: Livestock problems
   - Lerkane (lack of pasture)

4. Plenty of milk, plenty of pasture
5. Plenty of milk, plenty of pasture

6. Seasonality: ttuamum (lack)
   - Problems: livestock die, malaria

7. January, February, March, April, May, June, July, August, September, October, November, December
<table>
<thead>
<tr>
<th>MONTH</th>
<th>RAINFALL</th>
<th>TILA CONSUMPTION</th>
<th>WATER-PAN</th>
<th>WATER QUALITY</th>
<th>DISEASES</th>
<th>HARVESTS</th>
<th>MIGRATION</th>
<th>ECONOMY</th>
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</tbody>
</table>

**Key:**
- Drought: Low Water Consumption
- Rainfall: Clean Water
- High Water Consumption: Dirty Water

**Legend:**
- Few Diseases
- Many Diseases
- No Harvest
- High Population Due To
- Low Population Due To

*Copied by: David Karisi Penda. 11/3/97.*
Example of a seasonal calendar developed in the Namibian context:

Scores:
● = very low, ● ● = low, ● ● ● = medium, ● ● ● ● = high, ● ● ● ● ● = very high

<table>
<thead>
<tr>
<th>Month</th>
<th>Need for fodder</th>
<th>Rainfall</th>
<th>Condition of livestock</th>
<th>Water availability</th>
<th>Livestock sales</th>
<th>Labour intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>November</td>
<td>-</td>
<td>● ● ● ● ●</td>
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<td>December</td>
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PRA-Tool 13: Semi-structured interview

What is semi-structured interviewing? What is a focus group interview?
It is a dialogue-like interview where only some of the questions are predetermined and new ones come up during the discussion. It can be used with a group of community members for general community-level information or with a focus group of some of the community members (only women, only herders or the like) in order to discuss a specific topic in detail.

Main objectives of the tool:
Find out more and discuss a topic with the community or a focus group.

Participants: Depending on the context mixed group of people or focus group

Number of participants: 8-12

Time frame: 2-3 hours

Resources: Interview guideline, note book, pen

Steps:
- Let the participants choose a suitable place for the exercise and mind to sit at the same level like the respondents.
- Explain the purpose of the exercise.
- Start with an easy and understandable entry question which introduces the topic.
- Make follow-up questions short and easy to understand. Do not ask more than one question at a time and don’t use ambiguous questions. Ask open-ended questions so that they cannot be answered with a simple YES or NO. It is more useful to ask “What”? “Where”? “Why”? “Who” “When”? “How”? Be careful to use the “why” as not to force the informants into a defensive position and avoid sensitive questions.
- Be sensitive and respectful and a good listener. Never finish a sentence for them or suggest an answer. Never interrupt.
- Try to distinguish whether the answers are facts, opinions, rumours…
- Avoid indications of contempt or disbelief, remain neutral and learn.
- Motivate quiet persons to take part in the discussions.
- Use visualisation tools if this seems to be helpful to guide the discussion.
- End the interview by asking them whether they want to add anything else.
- The note taker will capture all ideas and discussions (and observations) throughout the interview / the discussion
- Thank the participants at the end of the session.

What is semi-structured interviewing?
What is a focus group interview?

It is a dialogue-like interview where only some of the questions are predetermined and new ones come up during the discussion. It can be used with a group of community members for general community-level information or with a focus group of some of the community members (only women, only herders or the like) in order to discuss a specific topic in detail.
Annex 2: Conflict analysis tools
Tool 14: Conflict onion

**Main objectives of the tool:**
- To identify the underlying interests and motivations of a position a conflicting party took
- To start a discussion on different options to satisfy the needs and interests through alternative solutions to the conflict
- To understand the basic needs and fears of the conflict party

**Participants:** Mixed group of participants of one conflict party

**Number of participants:** 10-15

**Resources:** Brown paper, markers

**Steps:**
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the brown paper and to become involved.
- Explain the purpose of the exercise: you would like to deeper analyse the existing conflict by regarding the position the party has towards this issue.
- Draw the onion model on the brown paper and explain the levels of the onion.
- Start then with the position the conflict party has, without judging it or commenting it.
- Ask them about what they feel their underlying interests are that make them stick to this position.
- They can list the interests on the brown paper.
- Let them discuss the issue and just listen. Don’t interfere much and never judge. Take notes.
- When having discussed the interests, come to the needs: what are the basic needs of the participants, how are they interlinked with the interests and the position?
- Afterwards, go over to the desires and fears they have deeply inside themselves. Let them note the needs and desires / fears on the brown paper if they want. Listen to the discussions and take notes.
- If it becomes obvious that out of the analysis of the underlying interests, needs and fears, there might be different solutions to the conflict than remaining on the position let them themselves summarise these findings.
- At the end of the exercise thank the participants and end up your notes.
Tool 15: Conflict analysis table

Main objectives of the tool:
- To examine the reasons contributing to a conflict and the specific issues that give rise to a conflict in more detail, focusing on seven categories:
  - Interests of the parties (as assessed through the onion tool or through interviews)
  - Needs and fears of the parties (as assessed through the onion tool or through interviews)
  - Values of the parties
  - Powers of the parties
  - Rules and regulations which play a role for the conflict
  - The relationships between the two or more conflict parties
  - Information constraints that the parties face
  - Benefits and losses that the parties have through the conflict and/or will have if the conflict cannot be solved.

Note: This tool is an internal tool for the mediators’ team and will not be applied with the stakeholders!

Participants: none.
The information will arise from interviews and discussions with the parties.

Steps:
Use the seven categories listed to develop some key questions and consult the conflict parties on the aspects listed, alongside the application of other tools like the onion tool. The tool itself consists of the development of a table by the team of mediators and shall help to give a clearer picture of the conflict.
The team discusses each focus subject of the analysis regarding the parties involved and regarding the conflict itself and notes down the key findings. The team can mark the most important findings with asterisks.
The team can then use the tool to discuss further options for addressing the conflict based on the analysis and which steps can be taken in mediation. These options and proposed actions can be noted down in the last row.
The table on the next page gives an overview on all subjects and “tasks” of the conflict analysis.
Conflict analysis table

<table>
<thead>
<tr>
<th>Focus subject of the analysis</th>
<th>Description of the parties</th>
<th>Analysis of the conflict itself (What gives rise to the conflict?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interests</td>
<td>Party A</td>
<td></td>
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<tr>
<td></td>
<td>Party B</td>
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<tr>
<td>Underlying needs and fears</td>
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<tr>
<td>Underlying values</td>
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<td>Power</td>
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<td>Rights and responsibilities</td>
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<td>Relationship between the parties</td>
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<tr>
<td>Information and communication constraints</td>
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<tr>
<td>Benefits and losses</td>
<td></td>
<td></td>
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<tr>
<td>Options to address the conflict and proposed actions</td>
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</tbody>
</table>
Tool 16: Conflict map

**Main objectives of the tool:**
- To show geographically where land or resource use conflicts exist or may exist in the future
- To determine the primary issue of conflict

**Participants:** Mixed group of participants of one conflict party or of both/all conflict parties during the negotiation process

**Number of participants:** 10-15

**Resources:** Brown paper, markers in all colours. An orthophoto, satellite image, aerial picture or a technical map of the region (for example a topographic map). You can either let the participants develop the map on the brown paper or on the photo/map.

**Steps:**
- Let the participants choose a suitable place for the mapping (on the ground, on a table or at a pin board). The place should be large enough for all to see the map and to become involved.
- Explain again the purpose of the map: to show where exactly land or resources are source of the conflict you are talking about.
- Let somebody go ahead to draw some basic features for orientation (rivers, roads, villages) and the relevant boundaries of tenure or use the technical map for this purpose. You may also want to include main vegetation types or important areas to locate the conflict (forest areas, agricultural lands, boundaries of a national park, etc.).
- Let one conflict party show and explain now where the area in conflict is and what the conflict is about and cross-check afterwards with the other group(s) if you apply the tool in a joint meeting.
- Initiate a discussion on the most important areas and aspects within this conflict, on the different options to solve the conflict and on the consequences the different options for solution have for the actors groups and the environment.
- At the end of the meeting, thank the participants.
**Tool 17: Actor analysis**

**Main objectives of the tool:**
- To identify and assess the relation, interdependence and power of different stakeholders in a conflict

Note: The tool is similar to a Venn diagram.
It might be repeated during the process as more information will become available and new actors might play a role!

**Participants:** Mixed group of participants of one conflict party

**Number of participants:** 10-15

**Resources:** Brown paper, coloured paper cut in circles of three different sizes and in triangles of three different sizes*, markers (*the triangles can also be drawn with pens)

**Steps:**
- Let the participants choose a suitable place for the exercise (on the ground, on a table or at a pin board). The place should be large enough for all to see the brown paper and to become involved.
- Explain the purpose of the exercise: you would like to identify all people and organisations directly or indirectly involved in the conflict or affected by the conflict.
- At the centre of the brown paper you can draw a circle and note down in a few words the issue of the conflict (the wording should be agreed upon by the participants).
- Ask the participants to name the different stakeholders who are part of the conflict and to choose a size of paper (bigger or smaller circles) according to the degree to which the stakeholders are involved in and affected by the conflict. You might work with 2 or 3 different sizes here. Whenever a size was attributed to a stakeholder group and everybody agrees, the name of the person/group/organisation can be put on the paper.
- Ask the participants now to position the paper circles around the conflict in a way which reflects the closeness to each other and to the conflict.
- In a last step, let the participants attribute larger or smaller triangles to the stakeholder groups to show whether the groups are more or less powerful (2 or 3 different sizes of triangles). The triangle should be positioned (or marked) on each circle with a stakeholder.
- Try to involve all participants during the discussion and let them take their time to discuss every step.
- Whenever they have agreed on all the sizes and positions of the circles and triangles, try to let them do a summary of the situation according to their analysis.
- Ask them now which in their opinion the stakeholders are who should be primarily involved in solving the conflict.
- Discuss the different power levels and how this might influence the conflict solution.
- At the end of the discussion thank the participants and take your notes after the session.
Example for an actor analysis:

Source: Engel et. al, 2005
Annex 3: General checklists and hints to prepare and facilitate meetings
Preparation of a meeting:

- What is the objective of the meeting?
- Who are the participants? Will there be different interest groups present/groups with different powers?
- Which topics shall be discussed to attain the objective of the meeting?
- How can these topics be addressed and with who (shall the participants be split into sub-groups)?
- How many facilitators need to be present (to structure the work, to guide the work and discussion with different sub-groups)?
- Which methods/tools shall be applied?
- Which materials will be needed?
- What is the time frame for the whole event and for each method/tool/discussion point?
- Where can the meeting take place?
- Who shall invite to the meeting?
- How can a good participation be assured?

Invitations need to be sent timely and specify the exact objectives, time, venue and programme of the meeting!

Before the meeting:

- Arrive well before the meeting to get the room/place prepared (to arrange chairs, materials, etc.)
- Prepare tools beforehand
- Start the meeting on time when everything is prepared and the participants arrived

At the beginning of the meeting:

- Welcome all participants
- Let everybody introduce him or herself
- Give a frame to the session (objectives, results, time frame, organisation)
- Define some rules if it seems necessary (no smoking, no interrupting, no aggressive language, etc.)

During the meeting:

- Motivate the participants (invite them to talk and to discuss)
- Be a good listener
- Use a clear language, speak loud and clearly
- Be neutral
- Concentrate on the objectives of the event/tools you apply
- Use different methods including visualisation tools (cards, rankings, group works, presentations, role plays, videos)
• Visualise the discussion in a good way (simple and precise, creating overviews, not overloading the visualisation)
• Be patient and relaxed
• Have a sense for humour
• Always keep your natural authority as facilitator
• Be consequent
• Mind your body language (be calm, attentive, seek eye-contacts with the participants from time to time, do calm gestures)
• Speak into the direction of the participants
• Change your position according to the topic and role you play
• If the participants shall read something you present, give them enough time to read

At the end of the meeting:
• Wrap-up by summarising the topics of the meeting and the decisions taken
• Thank the participants
• Explain how the process is going to continue (responsibilities, follow-up, etc.)

Tool: Visualisation by using cards

Use visualisation techniques during the meetings as much as possible and appropriate.

Visualisation is important to:
• make the subject clearer and transparent,
• guide the discussion,
• to raise interest and better involve the participants,
• to simplify complex issues.

You can make use of flipcharts, brown paper or boards to write on or to pin cards on. If you present something, prepare the presentation with visual helpers (cards, notes on flipchart paper, etc.). To guide a discussion, the use of coloured cards is advisable since they can be moved at any time to structure the discussion.

You should remember the following basic rules when using cards to structure your discussion:

<table>
<thead>
<tr>
<th>One card = one idea!</th>
<th>3 lines max. per card!</th>
<th>Use precise wording!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write clearly!</td>
<td>Use the whole surface of the card!</td>
<td>Use capital and small letters!</td>
</tr>
</tbody>
</table>

! Different colours of the cards stand for different ideas!
Structure the cards according to the topic at stake. You can use for example clusters, graphs, tables, lists, etc.

**Example for clustering**  
(Imagine as example an internal discussion of the task force related to a focus area in which a key issue needs to be addressed... the cards help to visualise and summarise the findings of the discussion...))

<table>
<thead>
<tr>
<th><strong>Existing land uses in the focus areas:</strong></th>
<th><strong>Stakeholder groups:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Small-stock farming</td>
<td>Communal farmers</td>
</tr>
<tr>
<td>Game mgmt./conservancy</td>
<td>Traditional authority</td>
</tr>
<tr>
<td>Tourism</td>
<td>MAWF</td>
</tr>
</tbody>
</table>

**Topics which need to be addressed:**

- Conflicting plans of MET and MAWF
- Expansion of conservancy
- New irrigation scheme

**Example for lists**  
(Imagine an internal discussion on the positive and negative frame conditions which need to be considered when addressing the issues at stake):

**Positive frame conditions:**

- Active conservancy committee
- Farmers welcome irrigation scheme
- RDCC can be used as platform

**Negative frame conditions:**

- Conservancy and irrigation not compatible
- xxx...
- xxx...