

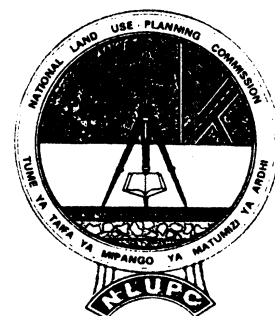
Guidelines for Participatory Village Land Use Management in Tanzania



first edition
December, 1998



The United Republic of
Tanzania



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Notes on the first edition

This edition is based on the current legal context as well as the bill of The Land Act (1998) and the bill of The Village Land Act (1998), published in September 1998. Both bills are expected to be enacted by the Parliament and approved by the President in 1999. During this process, modifications may occur that will have consequences for some sections of this guidebook. In case adjustments appear necessary, they will be made available as soon as possible.

It is also aimed at improving the guidelines on a regular basis to keep pace with new experiences and the ever changing conditions, including policies and legislation.

Everybody should feel free to reproduce parts of this document in form of copies or otherwise, if it serves the purpose of disseminating and applying the guidelines for the benefit of rural people in Tanzania or elsewhere, and if reference is made to this guidebook as source.

The publisher

Foreword

Land is the basic resource for our livelihood and since the vast majority of the Tanzanians live in rural areas, village land use management can be considered as one of the most important tools for natural resource management and sustainable rural development.

Appropriate strategies are required more than ever to counteract the consequences of the increasing pressure on land resources, such as the increase of land conflicts and degradation, which hamper rural development and even may further marginalise the majority of the rural population.

The participatory approach has become a promising and gradually accepted alternative for the conventional development strategies which have not yielded the expected results in many sectors.

In 1991, the Ministry of Lands and Human Settlements Development, through the National Land Use Planning Commission and the Dodoma Regional Lands Development Office, initiated, with assistance from the Netherlands Development Organisation - SNV, the Dodoma Land Use Management Project. This project aimed at developing a methodology for participatory village land use planning and management which should better address to the needs of the rural population than the conventional top-down oriented approaches. This has resulted into guidelines which are based on experiences from various projects operating in different parts of the country, training and research institutions such as the University College of Lands and Architectural Studies, and departments of the relevant sectoral ministries.

A National Workshop on the Institutionalisation of Participatory Village Land Use Management in Tannia (Dodoma, October 1997) was organised to present the guidelines to an assembly of decision makers, researchers and practitioners from various sectors and disciplines involved in land use planning and management, thus having a broad representation from National level to the village level. During this workshop, it was resolved that: the guidelines provide a sufficient basis for large scale application in Tanzania; and that a National and multi-sectoral task force, with its secretariat at the National Land Use Planning Commission, should be formed to incorporate the workshop recommendations in the guidelines and lay down strategies for its nation-wide dissemination and application.

These guidelines are in the first place formulated for application by district staff in Tanzania mainland to introduce and institutionalise participatory land use planning and management at the village level, so that villagers can use their land and other natural resources in a way that leads to an improved and sustainable agricultural production, and better living conditions for all- stakeholders, including women. Good land management requires an effective system of involving people in preparation and implementation of village land use plans whereby villagers and their institutions gradually build their capacity to manage village land.

The desired results are only obtained when: development efforts of all relevant sectors are well integrated; the technical and political roles of the institutions concerned are well defined; and opportunities are provided whereby stakeholders come to agreements which reflect their interests in a balanced way. Meetings of the Village Assembly, Village Council, land user groups, and women groups are examples of opportunities whereby stakeholders at the village and sub-village levels may forward their interests, negotiate and ultimately come to a compromise. Agreements can be formalised through minutes or other written documents, leading to land use plans, by-laws, certificates of occupancy, etc. attributing to improved land security and a more efficient use and development of land resources. Since women use most of their time working on the land than men, efforts to enhance their involvement in the management and use of land may result in a better utilisation of villages lands.

These guidelines are based on the current legal context as well as the bills of The Land Act (1998) and The Village Land Act (1998). Changes that may be effected to the bills in its due process to become the basic Land Law of the land, may have consequences to some sections of this guidebook. Users of the guidelines are therefore requested to be well informed on this matter and take keen interest to read and understand the provisions of the law when it will, be in place.

This document should not be considered as a blue print; it provides guidelines which have to be applied according to the local agro-ecologic, socio-economic and cultural context. The guidelines contained in the document should not be taken as final, since they have to be revised continuously to incorporate new experiences and changing needs of plural rural communities.

I extend my sincere appreciation to all who have taken efforts in developing these guidelines. I urge all stakeholders involved in the rural development process to apply these guidelines which inter alia, increase women empowerment in land use management, land ownership and land security in rural areas of Tanzania. The guidelines offer an avenue whereby both men and women can democratically participate in bringing about rural development in an environmental friendly manner.

Hon. Gideon A. Cheyo (MP)

Minister for Lands and Human Settlements Development

1998

Preface

The guidelines for participatory village land use management have come at a time when the Government is carrying out major reforms aimed at strengthening local government authorities. Special attention is paid to village governments in recognition of the fact that most of our people live in rural areas. There is also a growing consensus that problems affecting villagers are better addressed through encouraging their involvement in planning and decision making, and through integration of sectoral efforts in natural resource management.

Emerging policies and legislation, the ongoing reforms and projects, as well as the resolutions of national workshops do clearly reflect this trend. Examples of recent policies are:-

- Agricultural Policy of 1997 whose aim is to promote integrated and sustainable use and management of natural resources, such as land, soil, water and vegetation in order to conserve the environment.
- National Land Policy of 1995 which states inter alia, that land use planning will be done in a participatory manner to involve beneficiaries.
- Tanzania Forest Policy of 1998 aimed at enabling participation of all stakeholders in forest management and conservation, joint management agreements with appropriate user rights and establishing benefits.
- The Wildlife Policy of Tanzania of 1998 which emphasises on involving rural communities and other stakeholders in taking joint responsibility for the sustainable management of wildlife and other natural resources.
- National Environmental Policy of 1997 with the overall objective of raising public awareness and understanding of the essential linkages between environment and development, and to promote individual and community participation in environmental action.
- The National Policy on NGOs in Tanzania, 2nd draft of 1998 which calls for dynamic and working NGOs which will promote peoples participation in the development process of the country.
- The Local Government Reform Agenda 1996 - 2000 which states in part that the local governments will facilitate the participation of the people in planning and executing their development programmes; and foster partnerships with civic groups.
- In the Development Vision 2025 for Tanzania, great emphasis is placed on equal opportunity to all citizens to participate in and contribute to the development of the nation, by empowering people in determining their lives and managing their own development, and to promote broad-based grass- root participation in order to build upon the reserves of knowledge and experience at grass-root level and unleash initiatives and creativity.

In short, all the major policies of our country are hinged on involving people in the decisions affecting their daily lives.

This document charts out practical guidelines for district technical staff on how to involve all stakeholders in the planning and implementation process and how to integrate their sectoral development efforts for a better management of the natural resources at the village level. This is carried out through the Village Council, which is answerable to the Village Assembly and works under the auspices of the District Council.

I am informed that already the relevant political and technical institutions both at village and district levels have been identified and lined up to play their role in this process.

The participatory approach, which implies strengthening of local institutions, is fully in line with the current Governmental policy of restructuring, whereby local institutions are empowered and given more mandate to play their role in rural development. The guidelines, as presented in this document, are therefore in place and I strongly recommend them for the widest possible use.

Contributors

The guidelines for PLUM, the development of which was initiated by DLUMP with the assistance of the NLUPC and SNV, is the result of Contributions made by many people, working for a variety of projects and institutions from the grass root to the national levels.

DLUMP personnel who played a key role are: Ms. A.E. Nyanda, P.L.A. van Enkevort, R. Muro, G. Loth, Ms. S. Mwangoka, R. Rogati and Ms. E. Sloomweg, being staff or seconded staff of the Regional Lands Development Office in Dodoma Region. Since the inception of the project in 1992, extensionists and staff members from the various departments of Dodoma Rural District contributed through their fieldwork. The inhabitants of the DLUMP research villages, Mzula and ilolo, provided the project with indispensable, on-the-job experience in the field.

The NLUPC, in particular through J. Kami, brought the guidelines to the national agenda, and improved and enriched the guidelines much with additional experience from other projects.

UCLAS (UDSM), through Dr. F. Lerise, provided very appreciated input through his comments for improving the guidelines, and writing parts dealing with the legal and administrative aspects of land-use management, land security issues and the history of land-use planning in Tanzania.

Other institutions which provided input are IRA (UDSM), TGNP and IRDP. Valuable input regarding the development of step 5 of the guidelines was gained from Mr. S. Zongolo, consultant who formerly worked for TIP.

Important recommendations for improvement of the draft version of the guidelines were provided by the participants of the National Workshop on the Institutionalisation of PLUM in Tanzania Dodoma, 30-31 October 1997).

The National Task Force on PLUM, which was approved during the National Workshop in October 1997, has provided valuable information during improvement of the guidelines. The members of the Task Force are representatives from: Land Use Planning and Soil Conservation Department (MOA); Livestock Division (MOA); UCLAS (UDSM); WS (UDSM); Forestry Division (MNRT); Wildlife Division (MNRT); Local Governments (PMO); NEMC (VPO); Irish Aid; GTZ; SNV; The Land Commissioners Office (MLHSD); Department of Human Settlements (MLHSD); and NLUPC (MLHSD).

Input for the guidelines has also been obtained through project exchange visits and workshops. Special reference is made to: HIAP in Handeni, HIMA in Iringa, die agro-forestry programmes in Songea and Mbinga, LAMP in Babati, TFAP North Pare Project in Mwangi, MDP Monduli, TIP in Lushoto, Arumeru & Mwangi, SSIPDO in Mpwapwa, SECAP in Lushoto, FRMP and NRBZ around Selous, Ruaha and Serengeti. Examples have been incorporated in the guidelines from most of these projects/programmes.

The guidelines have been translated into Kiswahili by J. Shilungushela and edited by J. Kami. English corrections have been made by Ms. M.E. Dyer.

Acknowledgement is given to all who contributed and made it possible to come up with the guidelines as presented in this document: the numerous villagers which have been the source of experience; the involved staff from the different projects and institutions; and the international development organisations, in particular SNV and DGIS.

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Summary

Participatory village land-use management entails planning of land-use and the management of natural resources. This is achieved in an integrated manner, through full involvement of villagers and their institutions, for the benefit of all stakeholders.

The increasing demand to regulate the use of land resources, and the growing awareness that land-use management problems are better addressed through a participatory and integrated approach, has initiated the development of this guidebook in Dodoma, in 1992. The guidelines, which are replacing the conventional, top-down and sectoral oriented land-use planning methods, are based on experience from various institutions and projects dealing with land-use planning and natural resource management, working at the local levels in different parts of the country.

The guidebook is in two parts: Part A gives an introduction to the guidelines and presents the basic elements of the methodology. The first chapter outlines the concept of the methodology, its relevance for rural development, and the need to change from conventional to participatory. The chapter ends with a clarification on the use of the guidebook.

The second chapter discusses the basic elements and focal points of the methodology, which are founded on the principles of efficiency, equitability and sustainability. These are: stakeholder involvement; gender sensitivity; step-by-step planning and implementation; local level institutional development; land security enhancement; decision making in accordance with the level of planning; planning according to the bio-physical and socio-economic conditions; systematic planning, monitoring, evaluation and documentation; and integration of the methodology in ongoing development efforts.

Part B shows, in detail, how these basics can be used and combined for implementation. It guides the reader through six steps on how to introduce and facilitate participatory land-use management in a village. These are referred to as steps since their order of implementation is important. In each step a package of activities is proposed to get the desired results. These results facilitate carrying out the following step. Where applicable, more options are given to deal with specific land issues.

Not all activities, as proposed in part B, have to be necessarily carried out to attain the desired results. The guidelines are presented in a way in which they can be adapted to the local context.

The appendices provide background information such as: procedures; a brief on the development in land-use planning in Tanzania; reference materials; and additional examples that may be required or helpful during application of the guidelines.

Output at the village level that may be expected from applying the guidelines are categorised as follows:

- Perceptions of villagers have changed and their institutions have improved the capacity to plan and manage land matters, through: considering the interests and strengths of all stakeholders; resolving land conflicts; allocating land; maintaining land security; up-dating land-use plans; and communication with the district;
- The village has a sound land-use plan (actually a land-use agreement) which reflects the interests of all parties involved at the village and higher levels in a balanced manner and which is well respected;
- Natural resources are managed in a more efficient, equitable and sustainable way, leading to a higher production in agriculture and other land uses, and improved standards of living, particularly for those whose positions are most at risk, such as pastoralists, women and youth.

The guidebook is written primarily for experts, administrators and politicians working at the district to village levels, to help them play their role as facilitators in empowering villagers and strengthening village institutions to manage land resources optimally. The guidelines will also be of interest to training institutions and development agencies at both the regional and national level.

Part A: An Introduction to participatory village land-use management

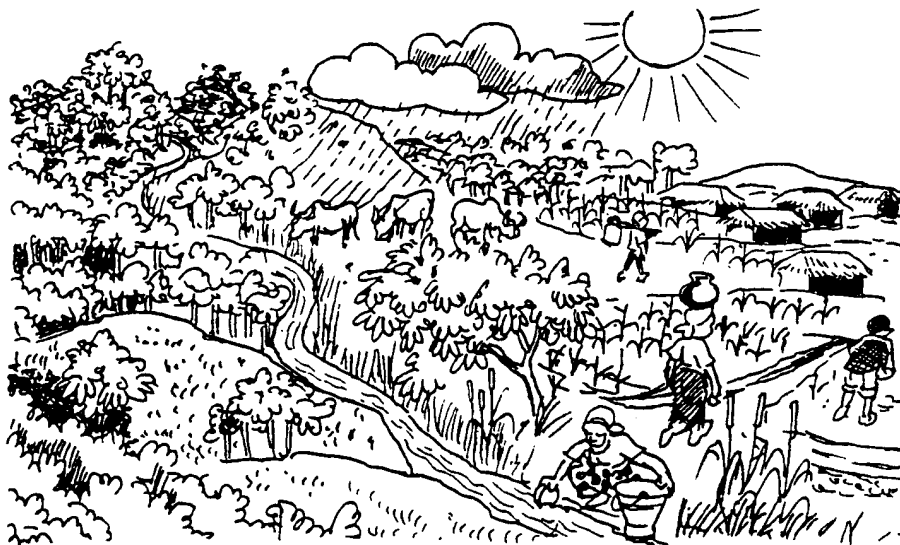
*Land is not given to us by our ancestors,
it is lent to us by our children*

1 Introduction

1.1 Village land-use management and its role in rural development

Land is the platform for our living and we make use of it for crop production, livestock keeping, forestry, housing, etc. Village land-use planning is the process of evaluating and proposing alternative uses of natural resources in order to improve the living conditions of villagers. Important natural resources at the village level are soils, water, sunshine and plants (figure 1.1). The optimal use of these natural resources depends mainly on: the potential of people to utilise and manage them; their priorities; the socio-economic conditions and; the carrying capacity of the natural resources.

Figure 1.1: Natural resources at the village level, such as soils, water, plants and sunshine.



Village land-use management is the process of designing, implementing and revising village land-use plans. It is believed that this process only becomes effective when it is carried out in a participatory way, which means that the principal users of land, the villagers, are fully involved. To ensure full participation it is important to consider the different socio-economic groups in a village (including gender) which have different interests and expectations.

The vast majority of the Tanzanian population, mainly small holder farmers living in about 3,500 registered villages', depends almost entirely on land resources through agriculture, livestock and forestry. These resources are under enormous pressure due to the fast growing population (which has increased from about 7.5 million to 22.5 million people between 1948 and 1938)² in combination with stagnant land productivity and slow development of production sectors which make less use of land resources. This has led to the expansion of settlements, agricultural areas, livestock grazing, tree cutting for fuel wood, water demand, etc.

The increasing pressure on land for different uses has resulted in³:

- a growing number of conflicts between the different land users;
- insecurity of land use and tenure;
- poor development of land markets;
- degradation of soil and water resources;
- deforestation;
- increasing migrations of people and livestock.

The most recognised land conflict on macro scale is between crop producers and pastoralists. The expansion of agricultural land into grazing land, due to population increase and land degradation, forces pastoralists to overgraze their remaining areas or to move with their cattle into areas with formerly low livestock densities, creating new land conflicts in these areas.

Land uses, which have become conflicting as well are between agriculture and forestry; agriculture and wildlife; and the uncontrolled expansion of settlements into farming land (particularly township expansions).

Other common, and often more hidden land conflicts are those between and within villages, different socio-economic groups (gender), families and individuals claiming user rights on the same land resources.

The conflicts mentioned above, whose extent and character differ between various areas of Tanzania, constrain sustainable land use and may undermine rural development. Experience shows that attempts to mobilise small holder farmers to invest in sustainable land use often fail when land conflicts are not sorted out well, and when there is no feeling of land security⁴. Crop producers are often more willing to invest in their land for higher and sustainable production when they are sure to use it for a long period and hence benefit from their investment.

Village land-use management attempts to regulate the use of land resources such as sorting out land conflicts, enhancing security of land tenure and use, allocation of land and improvement of land husbandry measures according to the priorities and capacities of the stakeholders. Therefore, it plays a vital role in rural development and can be considered one of the most important tools for natural resource management in Tanzania.

1.2 Village land-use planning and management approaches

Most development approaches, which have been applied since the colonial period, are sectoral and 'top-down' oriented and therefore hardly consult villagers, who are the major stakeholders. These approaches are referred to as conventional. Major guidebooks prepared on rural land-use planning are:

- The *Model Village Layout Planning Handbook*⁵ prepared in 1975 deals mainly with the residential part of the village.
- The *Land Use Planning Handbook*⁶ prepared by the Tabora Rural Integrated Development Project in 1983 pays more attention to agricultural development, but little to villagers' involvement in the planning process.
- The *Village Land Use Planning and Implementation Guidelines for Tanzania*⁷ prepared by the NLUPC in 1993 encourages a multisectoral approach but overemphasises on plan making by experts rather than guiding local decision-making.

Typical characteristics of these conventional approaches are:

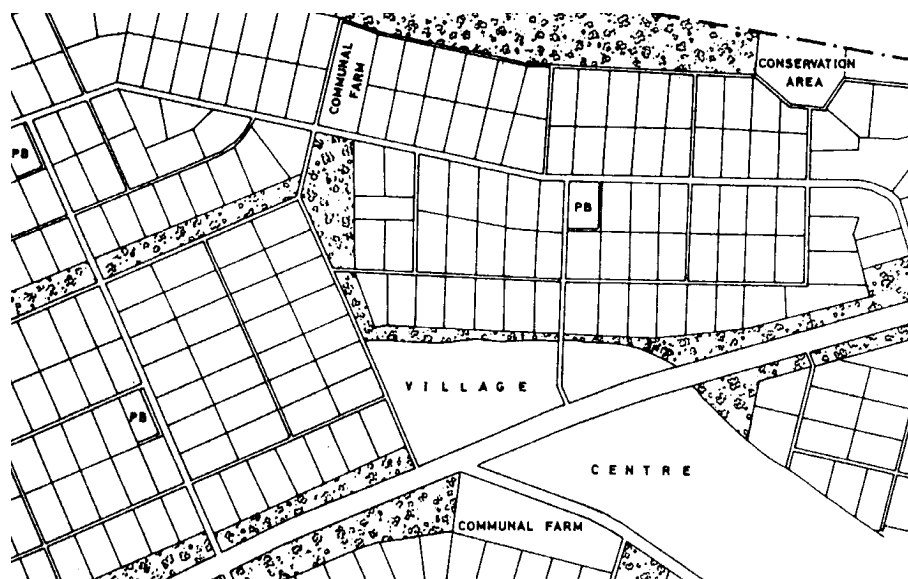
- Outsiders define the villager's needs and local knowledge is seldom used;
- Local decision-making is often constrained rather than improved;
- The methods applied are often rigid, require a lot of data and are expensive;
- The results (reports and maps) often cannot be used at the local level, or are not available and known to the villagers.

These approaches have not yielded the expected results because

- Most of the plans did not well reflect the priorities of villagers (fig. 1.2);
- Most of the plans have not been implemented due to lack of local participation and its high dependence on external inputs. Local communities do not recognise the need for the plans, and the outputs (maps and reports) were often understood and supported only by outsiders;
- There has been a tendency to focus solely on land allocation, neglecting the other aspects of land-use planning and management, such as how to use, conserve and share the available land resources.

Figure 1.2: Detail of the Manvali village land-use plan (Dodoma Rural District), which has been prepared in a conventional way.

The land has been divided into rectangular plots without considering existing land uses and rights. The plan has not been implemented.⁹



After becoming aware of the poor results, many institutions have been looking for alternatives. This has resulted in the participatory development approach, which is becoming a widely spread and accepted alternative for the conventional approaches in many countries, including the land-use planning sector of Tanzania. A historical overview of land-use planning approaches in Tanzania is presented in appendix C.

The participatory land-use management approach has the following outstanding characteristics:

- The needs for land-use planning and management are, in the first place, identified by the land users themselves, who are directly affected by the land conflicts and land degradation, and who are likely to benefit from improved resource management;
- The villagers participate fully in agenda setting, resource allocation and controlling the planning process. The capacity of local decision-making is built through mobilisation of local institutions and knowledge;
- The process of information gathering and analysis, priority setting and the formulation of village plans is local-people-centred, flexible and fosters collaboration between disciplines and sectors;
- The major role of district staff (outsiders) is introducing, guiding and facilitating the idea of participatory land-use planning and resource management rather than making the plans themselves.

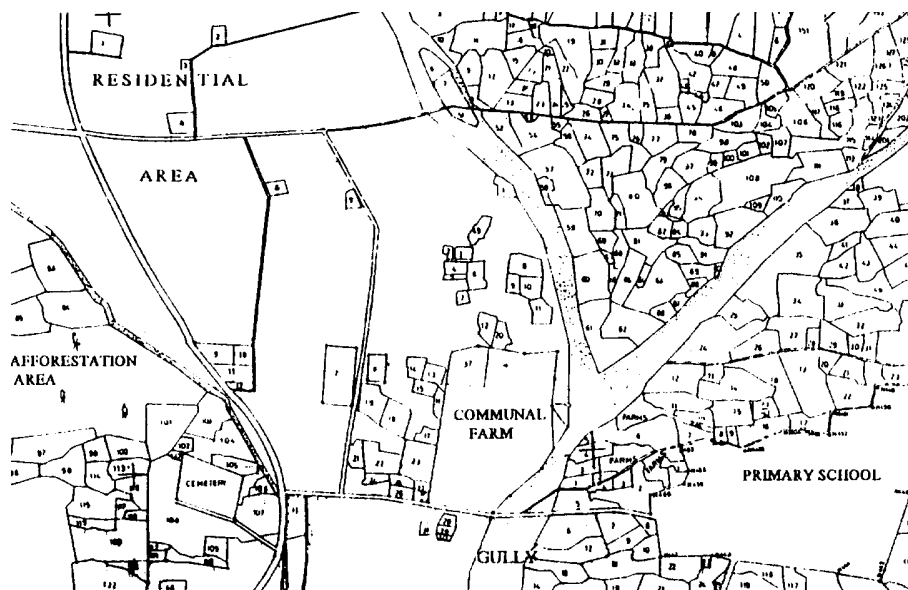
The expectations of this approach are as follows:

- Village land-use plans are implemented and, since they are created by the village communities themselves, reflect their needs and are better adapted to local conditions (figure 1.3);
- Land disputes are minimised and the interests of the various stakeholders (men, women, youth, crop producers, pastoralists, etc.) are likely to be balanced and respected, since the plans have been created through dialogue;
- The land productivity will increase and benefit the various stakeholders since the plans reflect the stakeholder's interests and are really implemented;
- The plans can be adjusted and maintained with less inputs from outside since the local institutions have been enabled to deal with most of the land-use management issues themselves.

The proposed methodology accommodates elements and techniques of the conventional planning approach which remain relevant, such as: the use of the legal and institutional tools to regulate the use of land resources; survey and mapping techniques to document property boundaries and land-use agreements; and, techniques to assess soils, land suitability and socio-economic conditions.

Figure 1.3: Detail of the Iloilo village land-use plan (Dodoma Rural District) whereby planning and implementation have been done concurrently with assistance of DLUMP in 1995.

In this Ujamaa village priority was given to demarcation of individual farms in order to improve land security and to sort out land conflicts. Through dialogue, existing land uses have been respected, plot boundaries determined and land allocated for community facilities.¹⁰



Whereas top-down planning and implementation attempts fail if not supported by local communities, local efforts may collapse without higher level support¹¹. A two-way communication assures that village land-use plans tune with higher level plans, interests and policies, and that planners and decision makers at the District to National level are sufficiently informed about the priorities identified by villagers.

Since most villages accommodate various land uses, which influence each other, co-ordinated efforts from the different, relevant sectors may have a higher efficacy than when employed autonomously. Settlement planners, foresters, community development workers, agriculturists, livestock and wildlife specialists should therefore not only change their efforts from top-down to participatory, but should also look beyond their professional boundaries and realise the advantages of the integrated concept of natural resource management.

The idea of improved stakeholder involvement in rural development planning, whereby district and village governments are given more mandate to play their role is advocated by: the Governmental reforms taking place (Local Governmental Reform Agenda of 1996), various recent policies such as the National Land Policy of 1995, Tanzania Forest Policy of 1998, Wildlife Policy of Tanzania 1998, National Environmental Policy of 1997 and the NGO National Policy - 2nd draft of 1998 as well as the bill of The Village Land Act of 1998 and the Development Vision 2025 for Tanzania - draft of December 1997¹².

The guidelines presented here aim to facilitate implementation of the new policies, the forthcoming land tenure legislation and governmental reforms. Practical ways are presented to improve the capacity of local institutions in dealing with village land-use planning and natural resource management through encouraging stakeholder's participation and integration of sectoral development efforts. Background information about the development of the guidelines is presented in appendix G.

1.3 Uses of this guidebook

This document presents back-ground. information and guidelines for application of Participatory Village Land Use Management. These guidelines aim to enable District Councils to support villagers in managing their land and other natural resources in an optimal way. This means that management of land becomes sustainable and leads to improved living conditions of all stakeholders (including women), whereby the required input from the village and the district levels are affordable and give economic returns.

The aim of this guidebook is to facilitate the dissemination of the participatory village land-use management approach in Tanzania. It can be used for training purposes and, as a reference and guide during application of the approach.

Users of the guidelines

The guidelines are written primarily for politicians, experts and administrators at the district to village levels, who are involved in rural land-use planning and management. Staff of the departments of Lands, Agriculture & Livestock, Forestry, Natural Resources & Environment and Community Development are most likely to apply the guidelines in their districts.

This guidebook will also be of great interest to training institutions and development agencies at both the regional and national level: policy makers, project leaders, trainers and students.

Structure of this document

Part A of this guidebook gives an introduction and explains the basics of the proposed methodology. Chapter 2 goes into the basic principles, assumptions, legal and administrative aspects and tools which are vital for village land-use management, and which are expected to be valid for the whole of Tanzania.

Part B shows in detail how these basics can be used and combined for implementation. It guides the reader on how to implement participatory village land-use management through six steps. These are referred to as steps since their order of implementation is important. Where applicable, more options are given to deal with specific land issues. Examples of field experiences from DLUMP and other projects are included for a better understanding.

The guidelines, as given in this part, should not be considered as a standard formula which automatically lead to success. The wide variety of natural and socio-economic conditions in Tanzania, as well as the very nature of planning involving people, may require adaptation of the steps to the local context. Success relies on both a sound methodology as well as the skills and attitudes of the actors.

The appendices give background information and reference materials which may be required when participatory land-use management is applied.

This document goes together with a guidebook **for villagers** and their institutions to assure they have access to the most important information, independently from the district level. This is necessary for a full participation in formulating, implementing and revising village land-use plans.

The contributors of the guidebook have tried to avoid complicated language, and have used illustrations and examples to make it easier to read and comprehend.

2 The basics of participatory village land-use management

2.1 Introduction

This chapter discusses the basics of the methodology which are important for a sound design and implementation of village land-use plans.

A sophisticated definition of land-use planning formulated by the Food and Agricultural Organisation of the United Nations is as follows³:

Land use planning is the systematic assessment of land and water potential, alternatives for land use and economic and social conditions, in order to select and adopt the best land-use options. Its purpose is to select and put into practice those land uses that will best meet the ideas of the people while safeguarding resources for the future. The driving force in planning is the need for change, the need for improved management or the need for a quite different pattern of land use dictated by changing circumstances.

This definition provides the following basic elements:

Assumptions

- Land use planning is necessary because of the need for change and through planning the utilisation of land resources can be improved.

Approach

- The approach emphasises systematic assessment of the physical, ecological and socio-economic conditions with respect to peoples' need now and in future, through stakeholder involvement and integration of the relevant sectors.

Principles

- The basic principles are: efficiency (available land resources are used in such a way that they produce maximum benefits), equitability (provide benefits to all socio-economic categories of land users including women and youth) and sustainability (do not result to degradation of the resource base and are viable in the socio-economic context). Additionally, land-use planning should improve rather than constrain local decision-making.

On the basis of these considerations the following components have been incorporated in the participatory village land-use management (PLUM) methodology:

- Through a participatory approach, the principle users of the land (villagers), are fully engaged in the whole PLUM process (section 2.2);
- The differences in access to and control over land between men and women makes it necessary to apply a gender sensitive approach in order to ensure that both parties participate and benefit from the PLUM exercise (section 2.3);
- PLUM is established in a village through various phases, called steps, since their order of implementation is important (section 2.4);
- Local level institutional development is a requisite to enhance local decision-making in land-use management. An improved local capacity makes the process more sustainable and lowers the dependency of village communities on external support (section 2.5);
- Land security enhancement is usually a precondition for land 'owners' or users to take measures to minimise land degradation and to increase land productivity (section 2.6);
- The various levels of village land-use management which can be distinguished involve different type of decisions and activities. Major levels identified are: (farm) plot level, sub-village level, village level, joint village level, district level, regional level and national level (section 2.7);
- Knowledge about ecological and socio-economic conditions remains vital for efficient and sustainable land-use management (section 2.8);
- Planning, monitoring, evaluation and documentation is integrated in all steps of the methodology to enhance its efficiency (section 2.9);
- Rural development programmes can easily apply the guidelines within their own setting (section 2.10).

2.2 Villagers participation

The participatory approach refers to the direct involvement of the stakeholders in the various steps of the development activities, and has become a common and widely accepted method to meet the needs of the resource poor rural population¹⁴.

In conventional approaches local people do not participate fully in influencing decisions that affect their lives. The activities promoted are based on what experts feel the people need for their development. Little effort is made to ask the people what they feel is needed. As a result, people lose confidence in their own ability to decide important matters for themselves and develop a dependence attitude towards solving problems concerning natural resource management.

In this guidebook the participatory approach is a central issue throughout the whole process of PLUM whereby villagers are fully involved in the creation, implementation and revision of village land-use plans. In order to ensure the involvement of all stakeholders, it is important to consider the different socio-economic groups in a village with their various interests, expectations and powers. The various stakeholders involved can be grouped according to their sex (men, women), age (elders, middle-aged, youth, children), land use (pastoralists, crop producers), wealth, etc.

Resource management issues can be investigated, development activities planned and resources mobilised with full stakeholder involvement through a Participatory Rural Appraisal (PRA)¹⁵. This method generates relevant information showing the real conditions of villagers, resulting in development activities which can be easily adopted by local communities. Villagers supply and analyse most of the information for development planning and subsequently prepare a Community Action Plan to address immediate problems and long term issues in a balanced way. PRA enables a community to become directly involved in and responsible for assessing their own problems and to agree on future actions (see step 2 of part B).

It is believed that sustainable development is only possible if community action plans and village land-use plans are:

- Built on the priorities and capacities of all stakeholders involved;
- A result of a dialogue between the various stakeholders, i.e. groups and subgroups depending on the land resources concerned;
- Considering local cultural values, institutions and knowledge systems.

The participatory approach creates awareness, ensures commitment as people feel the project plan is theirs, and it enables villagers to deal with local problems themselves with less dependency from outside.

The participatory approach also attempts to change the attitudes of experts and development agencies. Extension workers have to be prepared to listen and learn without putting forward their own ideas. Outsiders, in the first place, facilitate the planning and implementation process rather than taking decisions.

Participation should not become a 'means' to persuade the intended 'beneficiaries' to take part in activities from which the basic contents have already been decided by outsiders. The aim of participation is to enable or empower the people so that they may obtain greater control over the planning process, resources and their lives. Through participation, rural communities and local institutions may search their own ways to sustainable development, based on their real needs, skills and strengths.

Unlike conventional, top-down oriented planning methods, data collection through participatory techniques concentrates on the data which are most relevant, and therefore cheaper and faster. The participatory planning process requires more time than conventional planning because of the consultation and negotiation process by the stakeholders involved. However, this assures that the stakeholders will feel the plans are their own, and that they are ready to implement and maintain them. The various types of meetings which are required for this planning process as proposed in part B are outlined in appendix A.

2.3 Considering gender

Gender¹⁶ refers to the roles men and women play in a community, i.e. the differences in tasks, responsibilities, constraints and opportunities between both groups. These roles are deeply fixed in peoples minds and hearts but can be changed and actually do change over time.

Considering gender or applying a gender sensitive development approach in a village, as part of the participatory approach, means that the different roles, interests and expectations of men and women are taken into account.

Traditionally, women are mainly involved in activities such as fetching water, collecting firewood, production of food crops, preparing food and taking care of the children. Meanwhile, men are mainly involved in commercial activities such as cultivating cash crops⁵, livestock herding and charcoal production.

Women in subsistence farming produce between 70% and 80% of their families' food supply. Yet, they usually only have access to land (usufructuary right), while men own, control and inherit land⁷. Some practical consequences of this are:

- The husband (or clan leader) usually decides on the management of the land the women cultivate, and on the use of its products;
- In case of divorce, the woman is often forced to return to her parents' family, leaving behind most property, including the land she cultivated;
- In case a woman becomes a widow the property is inherited by the male children or other male relatives who should take care of her;
- Since women lack control over land, and since they have a high workload compared to their husbands, often times women show little interest to invest in sustainable land use.

Cultural practices, which were once sufficient in the traditional African society in safeguarding the interest of women and their children, have become insufficient and are abused due to the rapid socio-economic changes taking place. As a result to these changes, many women have become dissatisfied and have begun demanding equal rights.

The rationale of considering gender in development activities is ¹⁸:

- Women have, according to the national constitution, equal rights as men in access and control over land and other natural resources, as well as the benefits from development;
- Most conventional development projects are unconsciously biased towards men, leading to a further marginalisation of women compared to their husbands;
- Insufficient involvement of women in the planning process leads to an enormous under-utilisation of a development potential, since their knowledge and role is ignored.

Development strategies should therefore consider gender and include;

- A. Gender analysis to get a better understanding of the relations between men and women, which are required, to identify opportunities that will improve the position of women for the benefit of both sexes. Such an analysis should look at three key areas:
1. *The division of labour between men and women.* What are their activities and responsibilities in the reproductive, productive and community management sphere? How are their time and energy divided? What are their respective workloads?
 2. *The access to and control over resources.* How much access and control do women and men have over land, information, technology, education, health care, time, labour, income, agricultural products, etc.? Are there taboos? How should they be dealt with?
 3. *The participation in decision-making* How do women and men participate in decision-making at the family, community and other levels?
- B. Awareness creation to both sexes about their respective workload, needs, expectations, potential for development, etc. This is often a result of gender analysis when carried out in a participatory way. It fosters a; dialogue and identification of actions which benefit both men and women. Separate training activities may be useful in order to make women more aware of their strengths, legal rights and opportunities to negotiate for or claim their rights. For instance, section 20.2 of the bill of The Village Land Act (1998) states that any rule of customary law which denies a woman the right to land, should *not* be applicable (see appendix E2).
- C. Identification of appropriate actions based on the results of the gender analysis and awareness creation, in order to involve women fully in the development process and to bring more gender equality between both sexes. It is important to be aware of its sensitive and complex nature of this topic when identifying and implementing activities that address gender. This will avoid unnecessary conflicts and the possibility that the exercises could be more harmful than beneficial.

Specific conditions and opportunities to improve the role of women in the PLUM process (see part B) are:

- During the preparations for PLUM at the district level: There should be sufficient gender expertise, awareness and balance in the PLUM and PRA teams which initiate the process at the village level (activities 1.3.1 and 2.3.1).
- When specifying the goals of PLUM (activity 1.3.2): Improved gender equality should be addressed explicitly in terms of work load, access to and control over resources, and participation in decision-making.
- During institutionalisation of PLUM in the village; Formation of a gender balanced VLUM committee (activity 2.3.4).
- During the various meetings at the village, sub-village and the individual levels (see appendix A): Separate meetings for women to give them the opportunity to discuss their views more freely before puffing them forward in more formal meetings.
- During the process of land registration (activity 4.3.3): Encouragement of men to register part of their land in name of their wife/wives and daughters or to have a joint tenancy with their wife(s). It is however cautioned that such activities may increase land disputes when gender conceptions are left to remain very traditional (section 2.6).
- Formation of (land user) groups: Women's groups may be in a better position to obtain access to and control over resources, through:
 - information; negotiation for their rights; leasing land (to cultivate commercial crops) for their communal interests; applying for credit, etc.
- Training of Village Technicians (activity 5.3.7): Women should also be trained to assist fellow villagers in implementing improved land management measures.
- Agreements on appropriate land management measures: The PLUM process provides many opportunities to change traditional (implicit) agreements concerning use of and control over natural resources between the sexes into new explicit agreements which improve the position of women (such as, user rights on land, water for irrigation and village forest for collection of firewood). Experience shows that women may be able to improve their rights to land by puffing physical improvements to it, such as soil conservation or irrigation structures, or planting trees.

It is also important to facilitate the involvement of youth in the PLUM process so that their potential to contribute to development is better utilised.

2.4 A step-by-step planning and implementation

The establishment of PLUM in a village requires a number of activities, which should be carried out in the right sequence, in order to get the desired results. Basic components of conventional rural development projects and their common order of application are: preparation (identification); assessment (information gathering and analysis); planning (formulation and resource allocation); implementation; monitoring and evaluation. The complicated and unpredictable nature of participatory land-use management, whereby PLUM is a learning process for both the village community and district staff, does not allow application of these components (one after each other as phases). Instead, it is proposed to intermingle these components as indicated below:

1. A proper preparation is required at the district level before entering the villages. This involves: agreeing on the need for PLUM; specifying the goals; ensuring institutional support; mobilisation and allocation of human resources, materials and funds, and; the preparation of a plan of operation with priority villages. The last requires a preliminary assessment to allow a planning which is based on rational criteria.
2. Subsequently the idea of PLUM needs to be introduced to the selected villages and after the village community agrees, data are gathered and analysed for the planning process. A PRA focused on land-use management is considered the most appropriate method for this.
3. The planning process requires local institutional building and may involve many issues such as: land allocation for different communal and private uses; settling land disputes; formulation of by-laws; land registration; and, improvement of land husbandry practices. Therefore, it is not practical to deal with these activities all at the same time. Better results can be expected when planning and implementation are completed in steps. For instance, it is better to solve land conflicts and improve land security before planning for improved land husbandry measures.
4. Towards the end of the intervention, emphasis should be made to consolidate PLUM in the village, in order to assure the village community is able to proceed with the planning and implementation process afterwards.
5. Monitoring and evaluation should be integrated in all steps of the process in order to allow the identification of problems and taking of corrective measures in the early stages.

The considerations indicated above have led to a methodology of six steps, (table 2.1) which have been worked out into detailed guidelines in part B.

Each step has a package of activities in order to obtain the defined output (results). These results facilitate carrying out the following step. This means that not necessarily all six steps of the methodology have to be conducted. It is possible to carry out a certain step without having conducted the previous step, if the facilitating conditions have already been met. For example, if the output of a PRA conducted by another project or rural development programme shows a need for PLUM, it is possible to start with step 3 without having to conduct the previous steps.

Table 2.1 shows the activities which are part of the six steps to PLUM as proposed in part B. This is not a blue-print, since the decision to conduct these activities depends on the priorities of the stakeholders. For example, when improved land security is not a priority, due to absence of major land-use conflicts and/or abundance of land (see example 4.1 in part B), the activities for village land registration (see steps 3 and 4) can be omitted or replaced by a general planning exercise. This set-up assures flexibility while maintaining the required quality.

Table 2.1: Overview of the proposed steps and activities of PLUM as worked out in Part B

NATURE OF THE ACTIVITY	STEP	ACTIVITY	RESULT
PREPARATION	1. PREPARATION (DISTRICT LEVEL)	• FORMATION OF LAND USE PLANNING TEAM	• PLUM INITIATED AT THE DISTRICT LEVEL AND HUMAN RESOURCES MOBILISED
PLANNING		• PREPARATION ACTION PLAN AND MOBILISING THE CONCERNED INSTITUTIONS	• A SOUND WORK-PLAN AND ACTION PLAN • CONCERNED INSTITUTIONS MOBILISED
ASSESSMENT		• COLLECTION & ANALYSIS OF DISTRICT DATA	• SUFFICIENT KNOWLEDGE FOR THE PLANNING EXERCISE
PLANNING		• PREPARATION OF A PLAN OF OPERATION WITH PRIORITY VILLAGES	• A SOUND PLAN OF OPERATION • APPROVAL FROM THE CONCERNED INSTITUTIONS • FUNDS; MATERIALS & HUMAN RESOURCES ALLOCATED

NATURE OF THE ACTIVITY	STEP	ACTIVITY	RESULT
PREPARATION	2. PRA FOR LAND USE MANAGEMENT	<ul style="list-style-type: none"> FORMATION OF PRA TEAM INTRODUCTORY VILLAGE COUNCIL MEETING ADDITIONAL INTRODUCTORY VOSITS VILL. ASSEMBLY MEETING & FORMATION VLUM COMMITTEE BRIEFING VLUM COMMITTEE 	<ul style="list-style-type: none"> DISTRICT HUMAN RESOURCES ALLOCATED (PRA TEAM) VILLAGE COUNCIL MOBILISED VILLAGE COMMUNITY MOBILISED VLUM COMMITTEE FORMED AND BRIEFED
ASSESSMENT		<ul style="list-style-type: none"> DATA GATHERING IN VILLAGE RANKING OF PROBLEMS AND OPPORTUNITIES 	<ul style="list-style-type: none"> SUFFICIENT UNDERSTANDING ABOUT THE VILLAGE
PLANNING		<ul style="list-style-type: none"> CREATION OF A COMMUNITY ACTION PLAN FOR VILLAGE LAND-USE MANAGEMENT 	<ul style="list-style-type: none"> A TECHNICAL SOUND COMMUNITY ACTION PLAN REFLECTING STAKEHOLDERS INTERESTS VILLAGERS AWARE OF PLUM AND MOBILISED TO IMPLEMENT IT
PREPARATION	3. SUPPLEMENTARY SURVEYS	<ul style="list-style-type: none"> MEETING WITH THE VILLAGE COUNCIL & VLUM COMMITTEE PREPARATION FOR THE SUPPLEMENTARY SURVEYS 	<ul style="list-style-type: none"> VILLAGE INSTITUTIONS MOBILISED DISTRICT HUMAN RESOURCES ALLOCATED
IMPLEMENTATION		<ul style="list-style-type: none"> ESTABLISHMENT OF VILLAGE BOUNDARIES ESTABLISHMENT OF VILLAGE REFERENCE POINTS PREPARATION OF A VILLAGE BOUNDARY MAP 	<ul style="list-style-type: none"> A CERTIFICATE OF VILLAGE LAND WHICH EMPOWERS THE VILLAGE COUNCIL LEGALLY TO DEAL WITH PLUM LAND CONFLICTS WITH NEIGHBOURING VILLAGES RESOLVED
IMPLEMENTATION AND ASSESSMENT		<ul style="list-style-type: none"> GENERAL LAND SURVEY FOR PREPARATION OF A VILLAGE BASE MAP 	<ul style="list-style-type: none"> VILLAGE BASE MAP CONDITIONS FULLFILLED FOR LAND ADMINISTRATION
ASSESSMENT		<ul style="list-style-type: none"> ASSESSMENT OF EXISTING LAND USE ADDITIONAL SOCIO-ECONOMIC SURVEY ADDITIONAL AGRO-ECOLOGIC SURVEY 	<ul style="list-style-type: none"> EXISTING VILLAGE LAND-USE MAP ENOUGH UNDERSTANDING FOR THE PREPARATION OF A DETAILED VILLAGE LAND-USE MANAGEMENT PLAN
PLANNING		4. PARTICIPATORY LAND USE PLANNING & ADMINISTRATION	<ul style="list-style-type: none"> DRAFTING OF A DETAILED VILLAGE LAND-USE PLAN
PLANNING; ASSESSMENT & IMPLEMENTATION	<ul style="list-style-type: none"> DEMARCATON; MAPPING AND REGISTERING PUBLIC AREAS DEMARCATON; MAPPING AND REGISTRATION OF PRIVATE LAND PARCELS 		<ul style="list-style-type: none"> LAND CONFLICTS ARE MINIMISED LAND SECURITY IS IMPROVED WOMEN'S CONTROL OVER LAND IS IMPROVED ALLOCATION OF LAND IS OPTIMISED
PLANNING	<ul style="list-style-type: none"> FINALISING DETAILED VILLAGE LAND-USE PLAN; NATURAL RESOURCE MANAGEMENT STRATEGIES AND DRAWING OF AN AGREED LAND-USE MAP 		<ul style="list-style-type: none"> A WELL DOCUMENTED VILLAGE LAND-USE PLAN, REFLECTING STAKEHOLDERS' AGREEMENTS
IMPLEMENTATION	<ul style="list-style-type: none"> ESTABLISHMENT OF A VILLAGE LAND REGISTRY ISSUING CERTIFICATES OF CUSTOMARY RIGHTS CREATION OF BY-LAWS 		<ul style="list-style-type: none"> THE VILLAGE IS EMPOWERED TO SETTLE LAND ISSUES AGREEMENTS CONCERNING LAND OWNERSHIP AND LAND USE MANAGEMENT ARE ENFORCED
PREPARATION	5. IMPLEMENTATION OF APPROPRIATE LAND MANAGEMENT MEASURES		<ul style="list-style-type: none"> ARRANGEMENTS WITH CONCERNED EXTENSIONISTS AND OTHER EXPERTS MEETING WITH VILLAGE COUNCIL & VLUM COMMITTEE
ASSESSMENT		<ul style="list-style-type: none"> SUPPLEMENTARY LAND MANAGEMENT APPRAISAL 	<ul style="list-style-type: none"> LAND MANAGEMENT ISSUES FURTHER ANALYSED AND OPPORTUNITIES IDENTIFIED
PREPARATION & PLANNING		<ul style="list-style-type: none"> VILLAGE ASSEMBLY MEETING MEETING AT THE SUB-VILLAGE LEVEL 	<ul style="list-style-type: none"> VILLAGERS ARE MOBILISED A WORK PLAN IS PREPARED TO APPLY IMPROVED LAND MANAGEMENT MEASURES

NATURE OF THE ACTIVITY	STEP	ACTIVITY	RESULT
PLANNING & IMPLEMENTATION		<ul style="list-style-type: none"> • PLANNING & IMPLEMENTATION OF THE IDENTIFIED MEASURES • CONTINUATION; BUT WITH ON-THE-JOB TRAINING OF VILLAGE TECHNICIANS 	<ul style="list-style-type: none"> • VILLAGERS PLAN; IMPLEMENT AND MONITOR THE SELECTED MEASURES • VILLAGE TECHNICIANS RECRUITED AND TRAINED
ASSESSMENT	6. CONSOLIDATION	<ul style="list-style-type: none"> • ASSESSMENT IMPACT OF PLUM PROCESS IN THE VILLAGE AND THE CAPACITY OF VILLAGERS AND THEIR INSTITUTIONS TO PROCEED 	<ul style="list-style-type: none"> • ENOUGH UNDERSTANDING BY THE VILLAGE INSTITUTIONS AND THE PLUM TEAM TO PLAN THE CONSOLIDATION PROCESS
PREPARATION & PLANNING		<ul style="list-style-type: none"> • AGREEING AND FORMALISING THE ROLES OF THE STAKEHOLDERS IN PLUM 	<ul style="list-style-type: none"> • ROLES OF THE STAKEHOLDERS WELL DEFINED AND AGREED UPON TO ASSURE CONTINUATION OF PLUM
IMPLEMENTATION		<ul style="list-style-type: none"> • LOW PROFILE FOLLOW-UP 	<ul style="list-style-type: none"> • GOOD COMMUNICATION BETWEEN VILLAGE AND DISTRICT INSTITUTIONS

2.5 Local level institutional development

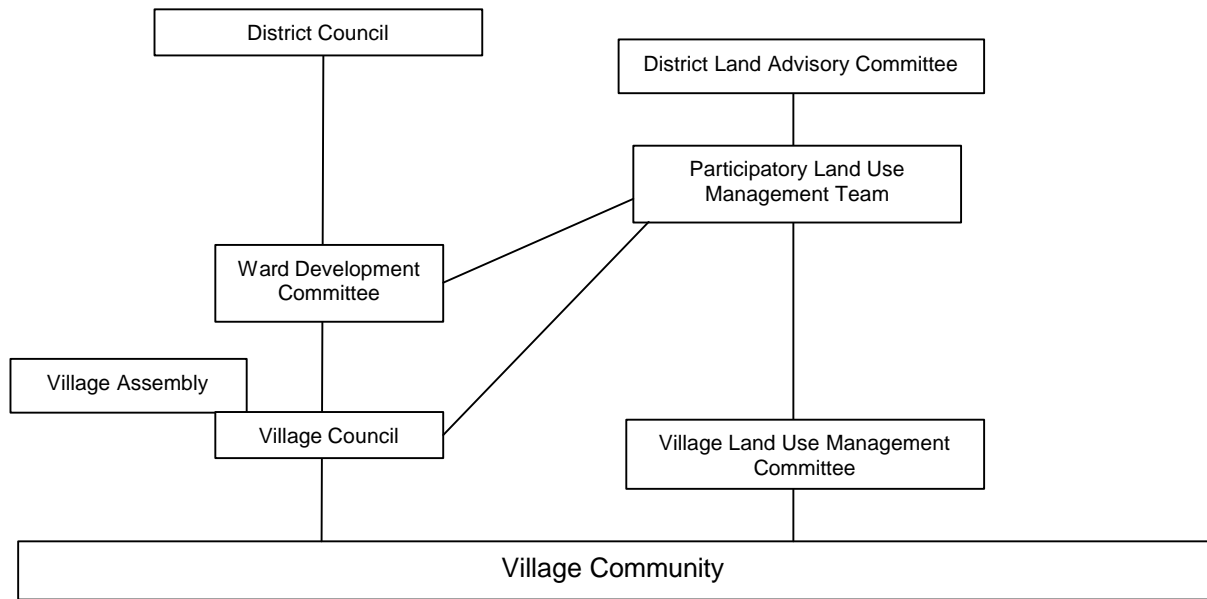
Participatory land-use management implies strengthening of local level decision-making through building the capacity of district and village level institutions. After improving the capacity of District Councils, through creation and training of respective PLUM teams, it is the duty of the PLUM teams to improve the capacity of village level institutions, enable them to take responsibility, and become better organised to manage land and deal with land-use problems which directly affect their lives.

This strategy makes villages less dependent on external support and lowers the manpower and financial input requirements from respective District Councils. Although the investment for introducing the participatory approach in the district and village land-use management system is higher than carrying out village land-use planning in the conventional way, there are more advantages. It enables the villages to carry out a substantial share of the land-use planning tasks and to manage their resources in a more efficient and sustainable way. Likewise, District Councils are in a position to give better advice and to assist more villages.

Since PLUM is a complicated process, improving decision-making at the district and village levels requires strong local institutions with well defined, well known tasks, and a mandate within the existing legal and administrative framework.

A proposal for an organisational set-up to link PLUM teams to the rest of the institutions, from the district up to the grass-roots, is given in figure 2.1. Institutions like the District Council, Ward Development Committee, Village Assembly and the Village Council have political roles and assist the teams and committees to organise and run public meetings. In addition, land-use agreements arrived at through assistance of a PLUM team and the VLUM committee have to be approved by these political institutions. Villagers as individual land users, or in groups, are involved in participatory land-use management through working together with the VLUM committee members and with village technicians. In other situations, villagers are also able to directly consult members of the Village Council, like the Village Chairman, the Village Executive officer, etc. The main role of the PLUM team is to introduce the idea and methods of carrying out participatory land-use management to all the different institutions. Furthermore, it ensures that the practice of participatory decision-making is well institutionalised in the district and in the village.

Figure 2.1: Proposed set-up to link PLUM from the grass root to the district level within the existing local governmental administrative structure



The mandate for District and Village Councils to carry out land-use planning within their areas of jurisdiction is mainly provided by: The Local Government Act, no.7 of 1982 in case of rural District Councils; Local Government Act. no. 8 in case of urban districts; and the bill of The Village Land Act of 1998. In addition the Town and Country Planning Act of 1961 has limited provision with respect to District Councils, which are empowered to carry on certain land-use planning functions upon delegation by the Minister responsible for Lands. According to these pieces of legislation, District Councils are empowered to initiate, guide and advise Village Councils in the process of village land-use planning. Village Councils have the responsibility to manage all land within their jurisdiction.

The section below summarises important parts of the legislation with respect to implementing participatory land-use management. For additional information see appendices B and E.

A. District level activities and mandate

District Councils are empowered to establish committees for assisting in managing land. At least three types of committees can be formed with mandates for land-use planning and management issues.

- District Land Advisory Committees (DLAC) can be established in the district through section 6 of the National Land Use Planning Commission Act, no.3 of 1984 is one of such committees. The National Land Use Planning Commission (NLUPC) works through these committees and is responsible for overall supervision of all activities pertaining to land use in the respective districts. The committee consists of about 13 members from different sectors and disciplines (see box 2.1).

Box 2.1: Composition of the District Land Advisory Committee:

- District Commissioner - Chairperson
- District Land Development Officer - Secretary
- District Executive Director
- District Magistrate
- MP/MPs in the District
- District Natural Resources Officer
- District Agricultural & Livestock Officer
- District Water Engineer
- District Trader/ Industrial Officer
- Zonal Mineral Officer
- NEMC - Representative
- NLUPC - Representative
- Outstanding District Farmer/Pastoralist

b) The Programme for Implementation of the Agriculture and Livestock Policy (*Programu ya Kutekeleza Sera ya Tarifa ya Kilimo na Mifugo*) prepared by the Ministry of Agriculture, 1985, proposes special land-use planning teams at the district level to deal with issues related to the establishment of village boundaries, land conflicts, etc. Box 2.2 shows the composition of such a team.

Box 2.2: Composition of the District Land Use Planning team:

- District Planning Officer
- District Town Planning Officer
- District Agricultural Officer
- District Livestock Development Officer
- District Forestry Officer
- District Water Engineer
- District Community Development Officer
- Three members from political parties

c) The Ministry of Lands issued a circular on 21 July, 1989 which sets up a system of Land Allocation Committees at district, regional and ministerial level. The District Land Allocation Committees consist of about 14 members as shown in box 2.3. Tasks of this committee are to:

- allocate plots for residential, commercial, industrial and community services;
- allocate farmers fields of not more than 100 acres.

Box 2.3: Composition of the District Land Allocation Committee

- District Commissioner - Chairperson
- District Land Development Officer - Secretary
- District Executive officer
- District Land Surveyor
- District Town Planning Officer
- District Water Engineer
- District Civil Engineer
- District Agriculture & Livestock officer
- District Health Officer
- Five councillors (Diwani) appointed by the Regional Commissioner

Although any of these committees could be considered relevant for advising Village Councils in land management, the DLAC (box 2.1) seems to be the most appropriate committee to co-ordinate PLUM teams at the district level. However, the fact that the NLUPC has the power to issue directives, notices and orders to the committee, a power which is not provided for by the District Council, suggests that the DLAC is more of a Central Government than a local institution.

In order to initiate the participatory land-use planning process at the village level, it is proposed that PLUM teams are formed. It is proposed that a PLUM team consists of two to three technical staff from the district, and/or from the extension staff at the ward or village level. The inclusion of some of the extension staff in the PLUM team will not only enhance the capacity of the District Council at the local level, but may also reduce the costs of maintaining the PLUM team in the respective village. The main task of the PLUM team is to initiate and facilitate the participatory planning exercise in villages. The respective district council committee, like the DLAC, maintains a supervisory role and may occasionally provide technical, as well as administrative support, to the PLUM teams. A detailed profile of the PLUM team is shown in part B section 1.3.1. In order to establish a PLUM team which is both legally and administratively recognised, procedures outlined in box 2.4. should be observed.

Box 2.4: Procedures to establish a PLUM team at the district level

- i. The District Council approves a proposal to apply participatory land-use planning in its area of jurisdiction.
- ii. The District Council may have to establish a relevant committee (like DLAC) if it does not exist.
- iii. The District Planning Officer together with the DLAC proposes a PLUM team and works out the resources (funds, human resources and materials) required.
- iv. The District Planning Officer forwards and defends the proposal to the District Management Team (DMT), which is attended by most of the heads of department.
- v. After the DMT agrees, the PLUM team works out a plan of operation with a detailed budget, and presents it to the concerned institutions for final approval before starting in the selected villages (see step of part B).

B. Village level activities and mandate

In general Village Councils have the mandate to establish committees and to convene meetings. The bill of The Village Land Act (1998) provides for a certificate of village land issued by the Commissioner for Lands and giving the respective Village Council the mandate to manage village land. An important management tool is a land-use plan which may cover the whole village or part of it, and which has to be approved by the Village Assembly. The bill enables Village Councils also to issue a certificate of customary right of occupancy and to maintain a village land register (see section 2.6 and step 4).

Where village boundaries have not yet been agreed upon, demarcated and registered, PLUM facilitates the process. By June 1991, the boundaries of 1836 villages (22% of total) have been surveyed¹⁹ and village boundary demarcation is still taking place on a large scale basis.

Village Councils are entitled to organise meetings of the Village Assembly and of the Council to discuss and decide upon any matter of extraordinary importance. Established procedures have to be followed in order to make these meetings administratively proper (see appendix A). The bill of The Village Land Act (1998) requires that, at least once every two months, the Village Councils report to and take into account view of the Village Assembly on the management of village lands.

Village Councils are entitled to establish committees whenever required, and to delegate any of its functions to such committees. Committees can be established to advise and make recommendations with respect to managing village land. However, such committees do *not* have the power to make any decision that concerns land management.

In introducing the PLUM approach in a village the initial steps, as outlined in box 2.5, are important.

The Village Council is also empowered to prepare village level by-laws to ensure compliance with land-use agreements as well as implementation of plans. After a village level by-law has been approved by the Village Assembly it should be forwarded to the respective Ward Development Committee where the respective councillor should be informed about the contents of the by-laws. Subsequently, it should be forwarded to the respective District Council for approval before the bylaw can be applied.

Box 2.5: Initial steps to introduce PLUM at the village level

- i. After the District Council has approved the selected villages where participatory land-use management should be applied, the PLUM team starts its intervention by asking the Village Chairman and Secretary (by letter) to organise a special village council meeting to introduce themselves and to explain the idea of PLUM.
- ii. When the idea is accepted, the Village Council calls for a village assembly meeting and proposes a committee to carry out participatory land-use management, together with members of the PLUM team.
- iii. Once the Village Land-Use Management Committee is established and approved by the Village Assembly, the process has been formally initiated and implementation of PLUM can start.

Guidelines on how to formulate and approve by-laws, together with an example of a village level by-law, are shown in section 4.3.7 of part B.

The Village Council is not only entitled to prepare plans within the village boundaries, but also to enter into joint land-use agreements between two or more villages when they share a common land resource, like a grazing area. Guidelines for such agreements are given in box 4.1 of part B.

C. Communication between the Village Council, the District Council, the Commissioner of Lands and the NLUPC

The Village Council is supposed to brief the respective District Council on its decisions regarding land-use planning and land management at least once every two months. On the other hand, District Councils are supposed to give advice and guidance to Village Councils on matters of land-use planning and management. That requirement provides a legal mandate for the District Council to introduce participatory land-use management and to facilitate its implementation in respective villages, while giving the powers to Village Councils to formulate, implement and revise village land-use plans.

The Commissioner of Lands may provide advice and directives to Village Councils on the administration and management of village land, and may intervene when the Village Council does not manage the land according to the regulations. The Commissioner may, for instance, provide directives regarding the premium and rent for Customary Rights of Occupancy, application of Customary Rights of Occupancy made by non-village organisations, administration of Granted Rights of Occupancy, and granting a lease over a piece of village land which is more than 30 hectares.

The NLUPC has the mandate to provide advice and guidance to District Councils and Village Councils concerning village land-use planning.

These modes of communication assist Village Councils to plan and manage village land, and reduce the risk that village level decisions contravene District and National level interests.

D. PLUM activities at the village level and the parties involved

Table 2.2 summarises the activities which should be accomplished at the village level and shows the main actors. In short, the main activities are as follows:

- a) The PLUM team initiates and guides the process of participatory planning and implementation in the village. The PLUM team co-ordinates the involvement of technical staff from different disciplines in the district as needed. It delegates tasks as much as possible to the extension staff and enhances sustained support for the PLUM process at the district level. Technical experts are only involved when required and may include: community development officers during the PRA stage; land surveyors during land registration; and agricultural extensionists for soil conservation measures during implementation of improved land-use management measures. It is important that the PLUM team ensures an interdisciplinary approach and that tasks carried out compliment each other. In this way the team takes care that the available human resources at the district level are utilised effectively and efficiently.
- b) The Village Assembly is the main decision-making institution at the village level and identifies, through participatory ways, issues and problems which are of priority for the village community. It may decide to create village (sub-)committees, land-use plans and village level by-laws in order to deal with identified problems.

- c) The Village Council has the executive powers and responsibilities for land-use planning and may have to delegate some of its tasks concerning land matters to the Village Land Use Management (VLUM) committee.
- d) After that delegation, the VLUM committee works together with the PLUM team and receives on-the-job training to become sufficiently experienced to carry out the required tasks during and after the presence of the PLUM team members in the village. By improving the capacity of the VLUM committee and given their interaction with the Village Council, the capacity of the village council members also improves. More information on VLUM committees is presented in part B section 2.3.4 and in Appendix F5.

Table 2.2: The parties which are responsible (R) and assist (A) to perform land-use management at the village level

Tasks	Village Assembly	Village Council	VLUM & PLUM Team	Hamlet Leaders	Village Elders	Village Techn.	Villagers
Organising meetings and preparation of minutes	A	R	A	A			
Establishment of a VLUM committee		R	A				A
Communication with other actors		R	R			A	
Mobilisation of villagers		R	R	A			A
Identifying and prioritising land-use problems	A	R	R	R			A
Ensuring participatory (and gender sensitive) decision making		R	R				
Formulation land-use plans and by-laws	A	R	R	R			
Approval plans and by-laws	R	A					
Negotiation concerning land-use issues		R	R	R			
Resolving land disputes		R	A	A	R		
Land registration and creation of village registry		R	R			A	
Improving land management measures			R			R	A
Monitoring and evaluation			R			A	

The VLUM committee can assist the Village Council in the following tasks:

- Organising meetings and preparation of minutes;
 - Mobilising villagers;
 - Identifying and solving land conflicts;
 - Ensuring that decisions made reflect the interests of all socio-economic groups (including women) in the village;
 - Preparing village land-use plans, joint village land-use agreements and by-laws;
 - Making follow-up to see whether agreements are respected;
 - Negotiations concerning land allocation and boundaries;
 - Land registration and maintaining the village land registry;
 - Promoting the improvement of land-use management practices;
 - Monitoring and evaluating the performance of the PLUM process and suggesting changes in the work plans;
 - Communicating with other institutions for administrative or technical purposes, for instance, irrigation experts in case of irrigation farming, soil conservation experts for improving soil fertility, land surveyors in case of land registration, etc.
- e) The Hamlet (Kitongoji/Mtaa) leaders organise meetings on the basis of village residential neighbourhoods; farming sub-areas (blocks); group of pastoralists in a given area; or water user group,

etc. It is also the responsibility of the Hamlet leaders to communicate with the VLUM committee and the Village Council so that ideas and suggestions from the different groups are incorporated into the village plans.

- f) Clan elders and Village Elders traditionally play an important role in conflict mediation, including resolving land disputes regarding boundaries, ownership and user rights. Traditional elders usually still command respect, and their decisions carry authority and legitimacy in the village community²⁰. A clan elder often resolves land disputes amongst members of the same clan, while village elders (a selected group of clan elders) may deal with land disputes between different clans or members from different clans. Based on this customary dispute settling system, section 60 of the bill of the Village Land Act (1998) provides for a Village Elders Council (*Baraza la Wazee*) (see box 2.6), which acts rather independently from the Village Council.

Box 2.6: The Village Elders Council as a land dispute settlement institution at the village level

(sections 60 and 61 of the bill of The Village Land Act, 1998)

- Each village should have a Elders Council which consists of not less than five nor more than seven persons, of which not less than two shall be women.
- The members of the Elders Council should be nominated (for three years with the option for re-nomination) by the Village Council and approved by the Village Assembly.
- The members of the Elders Council should be:
 - Reputed for his/her integrity and knowledge of the customary law;
 - A resident of the village concerned.
- The Elders Council elects a convenor who chairs the meetings of the Council and who takes care that the outcome of the meetings are recorded.
- The quorum of the Council is four persons, including at least one women.
- Where a conflict of interest arises, the member concerned should report it and not take part in the meeting where the subject of conflict is on the agenda. The Elders Council may be asked by the parties involved in the land dispute (individuals, non-village organisation and/or Village Council) for their services, or may on its own motion persuade the involved parties to make use of the Council.
- The Council or its members may act to mediate between and assist those parties to arrive at a mutually acceptable solution to the dispute.
- The convenor of the Council may after discussing the matter with the concerned parties decide either, to convene a Elders Council meeting, or appoint one or more members of the Elders Council to act as mediators.
- The Council may refer the concerned parties to the Ward Tribunal, the Primary Land Court, etc. when the parties or any of them do not accept the services and/or conclusions of Council.

- g) Village Technicians (or para-professionals) are committed villagers who have received on-the-job training during implementation of PLUM, particularly in carrying out improved land-use management measures. They continue assisting villagers in various land-use management issues *after* the presence of the PLUM team in the village. The role of the Village Technicians is to assist their fellow villagers in applying proposed techniques. For instance, in soil conservation, managing forest resources, managing pastoral lands, sighting buildings and footpath alignment within the residential area, land registration, etc. More information on Village Technicians is presented in part B section 5.3.7 and in Appendix F6.

In Village Wildlife Management areas and Village Community Forests (see examples 4.6 and 5.1 of part B) village youth can be assigned to become Village Scouts resp. Village Forest Guards.

- h) other relevant actors with often less central or direct roles include:
- other committees in the village, for example Kamati ya Maji, Kamati ya Shule, Kamati ya Mazingira, (resp. Water, Education & Environment) etc;
 - Leaders of neighbouring villages;
 - Ward Secretary and members of the Ward Development Committee;
 - Donor organisations, NGOs, CBOs (see box 2.7) and other institutions implementing rural development projects in the area;
 - Central government staff in the ministries or in the respective regional secretariats.

Box 2.7: The role of non-governmental and community based organisations

The role of non-governmental and community based organisations (NGOs & CBOs) NGOs are service and development oriented non-profit organisations. They are voluntarily formed by private individuals at the local, national or international levels for the purpose of enhancing the living conditions of their target group. These organisations are usually registered by the Government and have a democratic organisational structure not associated to political parties.

There are NGOs dealing with social services, gender, youth, pastoralists, environment, agriculture, small scale enterprises, etc. through providing training, awareness creation, credit schemes and other means to support their target group.

CBOs are rather similar to NGOs, but are based and mainly active at the grass-roots level. Examples of CBOs are women 5 groups, youth groups, groups of specific land users, religious groups and cultural groups, aiming to improve the living conditions of their members through training, exchange of experiences, communal activities of economic or other kind. CBOs are usually not registered.

CBOs are sometimes initiated and often supported by NGOs through training, credit schemes, etc. NGOs are usually member of and may receive support from national level umbrella NGOs (such as TANGO and TACOSODE in Dar Es Salaam and ANGOZA in Zanzibar) through consultation, co-ordination with other NGOs and the Government. Intermediary NGOs at the national and regional levels support NGOs and CBOs through co-ordination, advocacy and training activities for the NGOs/CBOs they represent. Examples of such Intermediary NGOs are: PINGOS (pastoralists), DONET (environment). YADEC (youth) and TGNP (gender).

NGOs and CBOs aim to assist the Government in providing services to the public in order to improve their living conditions. The governmental reforms taking place of reducing their direct implementary role in development activities, decentralisation, privatisation, encouragement of free markets and multi-party governance has lead to a rapid emergence of NGOs. Currently, there are more than 800 registered NGOs in Tanzania. Although most of them are still weak and lack the required managerial and financial capacity, it is believed that in various sectors NGOs and CBOs can become more flexible, efficient and cost-effective in carrying out community based development activities than governmental agencies. In such cases NGOs and CBOs may complement governmental efforts at the district and village levels.

The Government recognises the role NGOs and CBOs can play in strengthening the civil society and is coming up with a national policy to provide a conducive environment for NGOs and CBOs.²¹

It should be kept in mind that the regulatory role of the Government can not be taken over by NGOs and CBOs. For instance when it comes to land registration, NGOs and CBOs may play an important role in training and mobilisation of those involved, but the registration itself has to be done/approved by governmental staff or staff appointed/licensed by the Government.

When it comes to applying PLUM, it may be important to collaborate with the NGOs and CBOs involved in natural resource use in the area concerned, and hence, to utilise their capacity and potential to facilitate the PLUM process.

2.6 Land security enhancement

As outlined in the introduction, land security is usually a precondition for land 'owners' or users to invest in land for an increased and sustainable production. However, land security in rural Tanzania is under threat for reasons such as: the increasing population pressure on land; commercialisation of land use; land degradation; governmental procedures for acquiring land which are not adapted to the conditions of most smallholders; and insufficient awareness among villagers about their legal rights over the land use. These developments have lead to increased land conflicts, land grabbing, marginalisation of the disadvantaged members of the society, etc.

In reducing pressure on land²², the guidebook proposes strategies of encouraging villagers to implement land management measures which will improve land productivity per unit area, and thereby reduce the need to expand the land under cultivation (see step 5 of part B). However, such management practices are likely to become effective in villages where land rights are secured, well known and accepted, and where boundary conflicts are minimal.

This guidebook distinguishes three types of land security:

- A. Users are sure to continue using the land for a specific use (e.g. crop production, livestock or housing) for a given period;

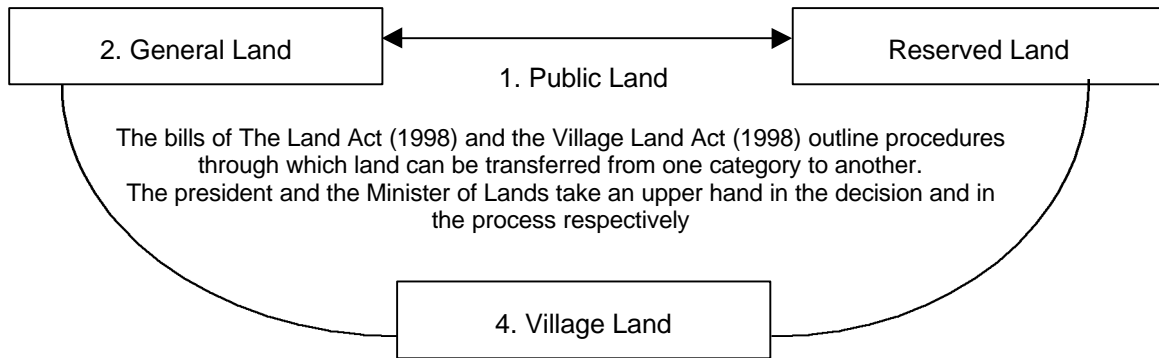
- B. Those 'owning' land are aware of and feel secure about their rights;
- C. Those having subsidiary rights to land resources (usufructuary, lease, etc.) are protected. The terms of their rights are clear and agreed upon.

A. Land-use security improvement

Land-use conflicts between different users; e.g. between pastoralist and crop cultivators or residential development and far'ming, or cultivation and forest reserves, etc. can be solved most effectively through dialogue, whereby each user, individual or group, can put forward claims on the land (resources) concerned. Land-use agreements may result from day to day negotiations amongst users or from a more profound planning exercise leading to a long term agreement which may be mapped in form of a land-use plan. Long term land-use agreements provide a more secure environment for villagers. This security is an incentive for carrying out land-use management practices because the users are assured of some returns over the hfe period of the agreement. For instance, investments in improved land husbandry require that the land in question remains under crop cultivation, and shall not be subdivided and allocated for housing. Likewise, investment in irrigation infrastructure requires that the land surface to be irrigated is known and secured from other uses, in order to ensure that the investment will be utilised fully.

To enhance land-use security, the guidebook proposes land-use agreements in the form of approved village land-use plans, or joint village land-use agreements, which are formulated in a participatory way (see part B). This should start with registering the village land with its boundaries after which it is protected from re-allocation for other uses (see figure 2.2 and box 2.8). It is proposed that the PLUM team works together with VLUM committee members and the Village Council, and involves all the different land users in the village. A detailed discussion on the proposed land-use planning process is presented in step 4 of part B.

Figure 2.2: Categories of Land in Tanzania



Box 2.8: Categories of land recognised by the bill of The Land Act (1998)

The four categories are:

1. Public Land

All land of Tanzania.

2. General Land

All public land which is not reserved land or village land, and includes unoccupied or unused village land.

3. Reserved land

Includes land designated for use such as: forest reserves, national parks game reserves, conservation areas and townships. Land declared as hazard land also falls into this category. The procedure through which general land is designated as reserved or village land depends on the type of land use. Amongst the laws which provide that land to be reserved is the planned Land Act, The Land Acquisition Act no 17 of 1967, The Forest Ordinance, cap 209, The National Parks Ordinance, cap 412, The Wildlife Conservation Act, no 12 of 1974, Marine Parks and Reserves Act, no 29 of 1994, The Town and Country Planning Ordinance of 1961, etc.

4. Village land

Any public land in which the boundaries have been demarcated under any law or administrative procedures as village land falls into this category. In addition, land within a registered or designated village under The Local Government (District Authorities) Act, no.7 of 1982 and The Village Settlements Act, no.27 of 1965 respectively is also village land. The bill of The Village Land Act (1998), categorises land as village land when it is not reserved land which has been occupied by villagers during the twelve years preceding its enactment.

The transformation of village land into reserved land or general land requires special procedures which may protect villagers from 'land grabbing' by outsiders.

B. Land 'ownership' security improvement

This section highlights strategies and methods which are relevant for upgrading land ownership security, and which are worked out in the guidelines of step 4 in part B. Some background information and procedures for registering and allocating village land are presented in appendix B. Relevant sections of the bill of The Village Land Act (1998) and the Local Government (District) Authorities Act, no. 7 (1932) are presented in appendix E.

For improving clarity about land ownership rights the following options are proposed:

1. Verbal agreements between neighbours

To determine the boundaries of a parcel of land, two or more neighbours can make an agreement over the location of the boundary line in the presence of other neighbours, local leaders or elders (wazee). In situations where land is rented out, conditions of the lease may also be verbally agreed upon among the owner and the user in the presence of other villagers. Verbal agreements characterise most agreements under customary rights and are a cheap means of clarifying rights, but they may be insufficient when land pressure increases.

2. Verbal agreements and marking of the agreed boundaries

Once a verbal agreement exists, hedges, shrubs or trees can be planted along the common boundary. Since trees and shrubs are not easily uprooted and replanted in another place, (like beacons and pegs), they serve as permanent witnesses for the agreed boundary alignment. In addition plants as boundary marks may act as soil conservation measures, provide fodder and firewood through pruning, and with aerial photos, may act as marks to identify and accurately map individual parcels of land.

3. Transform verbal into written agreements

When land pressure increases it becomes necessary to strengthen verbal arrangements by converting them into written and properly documented agreements. This can be achieved through a land registration process as outlined in step 4 of part B.

Land registration entails two components:

- i. A spatial component, which indicates the location and the boundaries of the land parcel.
- ii. A textual component which indicates issues such as the name of the owner(s), registration date, the nature of the tenure (statutory or customary) and the conditions on the use of the parcel of land.

The spatial component is connected with the written component through a unique parcel reference number to assure that it remains clear who owns which parcel; and under what conditions. The spatial component can be documented as follows:

- a) Where the boundaries are descriptive which is still the case in many village lands, physical features such as hills, rocks, rivers, gullies, roads, big trees, etc. can be used as reference in the description. Since the boundary marks can be described by villagers themselves it is a cheap method, and expensive input from the outside are hardly needed. Although such descriptions may lack accuracy, they are legally acceptable because boundaries for game reserves, national parks and central government forest reserves are also presented in their respective legislation in a descriptive form (see for instance The Wildlife Conservation Act, no 12 of 1974).
- b) Plot boundaries can be sketched or mapped whereby measurement is made through pacing. The sketch may show the boundaries with their estimated corners and length together with some reference points. It is also possible to support the sketch by text through descriptive methods. This technique can be applied by the villagers with assistance from the VLUM committee members and or the village technicians, after on-the-job training from district staff or from the PLUM team. The method works well for private plots and the low input requirements makes it affordable for large scale application.
- c) A boundary recording method which provides more accurate registration is through compass traversing using control stations as reference points. Compass traversing allows mapping of all plot boundaries into the 'village base map'. Traversing is done by land surveyors, and trained villagers can assist to increase the speed of the registration, and to make it cheaper. However, experience in DLUMP shows that this method which may result in a full registration and issuance of customary or granted rights of occupancy, is still too expensive and laborious for large scale 'application.
- d) Plot boundaries can also be recorded with the help of air photography when the boundaries have sufficient marks, like hedges, shrubs or trees, which can be seen on the photos. The accuracy of this method can be high if sophisticated equipment is used. However, the applicability of this method is limited as long as most plots in rural Tanzania lack the required boundary marks.
- e) A registration based on a fill survey in accordance to the Land Registration Ordinance - cap 334 of 1959 is done by qualified land surveyors using sophisticated equipment. Beacons are planted, registered and co-ordinated at a very high accuracy. However, the costs and human resources required for a full registration are currently not justifiable when compared to the value of land in most villages in Tanzania.

Once a land parcel is registered, the bills of The Land Act (1998) and The Village Land Act (1998) provide for two options of a right of occupancy (see box 2.9). The most relevant option for villagers is the customary right of occupancy the certificate of which can be issued by the respective Village Council in case the registered plot is located within registered village lands. Customary rights can also be granted in general land and reserve land (see box 2.8), but it is not clear which authority takes responsibility.

Granted right of occupancy can be issued by the Commissioner for Lands on behalf of the President when a plot is located within general land or reserved land which is not village land.

Both types of right of occupancy involve charges such as an annual rent and registration fee, which may be varied from time to time and has to be paid by the holder of the certificate (see appendix E4). Guidelines and procedures for issuing certificates of customary rights in village land are presented in step 4 and appendix B.

Box 2.9: The types of tenure documents the bills of The Land Act (1998) and The Village Land Act (1998) provide for...

Letter of Offer

Is a document issued to an applicant of a right of occupancy. It sets out the terms and conditions upon which a grant may be made to that applicant. Once the applicant accepts the conditions in the letter of offer by signing and returning it back to the land allocating authority, the right of occupancy can be prepared and issued.

Certificate of Customary Right of Occupancy

Is a document issued to a land occupier and user following tribal customs and traditions on land. Under the customary land tenure system, land belong to the whole tribe, clan and family. The tribal leaders are the custodians on behalf of the members. According to the bill, Village Councils will be empowered to issue certificates of customary rights to villagers with land located within the village.

Certificate of Granted Right of Occupancy

Is a document issued to applicants of right of occupancy who have qualified and may have their land rights fully registered in accordance to the Land Registration Ordinance, cap 334, According to the bill, a certificate of right of occupancy shall be issued in the name of the President and has to be duly signed and sealed by the Commissioner.

C. Improvement of subsidiary rights to land

Subsidiary rights are very common. They refer to the various types of rights that make use of land and/or its resources without 'owning' them. Examples of subsidiary land rights are:

- Usufructuary rights of women to use land from their husbands or their father's clan;
- Marginalised men, who no longer 'own' sufficient land, may be allowed to temporarily utilise the land of someone else, often from a member of their own clan;
- Lease of land for a given period and under specific conditions;
- Cattle from pastoralists grazing the crop residues on lands from crop producers (dual land use);
- Rights to utilise resources from common lands (for collecting fire wood, timber wood, medicinal plants, water, for grazing, crop production, etc.)

Subsidiary rights often are open-ended and may have to be renegotiated from time to time. when pressure on land increases, those having subsidiary rights to land may lose them easily.

Options to improve rights, for those having subsidiary rights to land or its resources, depend on the type of subsidiary right and prevailing socio-economic conditions and customs. An important strategy is to recognise such rights and formalise them after they have been negotiated. In case of lease, the terms (rent, period, etc.) agreed upon may be properly documented. Where appropriate, usufructuary rights of women and informal user rights of marginalised men may be formalised or converted into customary 'ownership' rights. Subsidiary rights to utilise common lands and arrangements between different land user groups may be formalised through village land-use plans and by-laws.

D. Final Remarks

When the pressure on land resources increases, more clarity is required about the rights to use them. At that stage, a well functioning system of local institutions (see table 2.2) with clear regulations and procedures for negotiations, handling disputes and recording agreements are required.

- The meetings at the village and sub-village levels, which are organised to encourage participatory decision-making, provide a forum in which land security related issues can be addressed. Various ways of holding formal and informal meetings are outlined in different stages of the guidebook, as proposed in part B and worked out in detail in appendix A.
- In most rural areas of Tanzania, indigenous systems of land and natural resource management are still prevalent and are believed to have worked well. Experience shows that *strategies* to improve land security should not ignore and aim to *replace* customary systems, but should recognise and aim to *adapt* them²³.
- The choice of the various options presented in this section to enhance land security, and which can be directly applied over village lands, depends on conditions such as: indigenous systems of making

agreements; type and seriousness of land insecurity; land value; pressure on land; levels of land degradation; farming systems; living standard; available resources at the village and district levels; and the current governmental policy on land tenure and management.

- A combination of methods can be applied at the village level for different areas and types of land use, taking into account the interests and capacities of the community and individuals, as well as the technical and legal requirements for the various methods. For more information see step 4 of part B.
- Detailed surveys of smallholders' plots is, for the time being, not an advisable practice for large scale application in the majority of the Tanzanian villages. The actual value of most villagers' land parcels as well as the expected benefits of such a survey and registration exercise do not currently justify the expenditure for carrying out this practice. At the same time, the long-term implications of this practice for various land user categories have yet to be well understood.
- Land security is one of the key factors in determining investment in land for improved and sustainable production. Some other important factors to observe of are: insufficient awareness on innovative land management practices; lack of transparent decision-making and participation; local customs; the capacity of the land resource base; and economic factors, such as insufficient access to markets, etc. Most of these issues are dealt with in this guidebook.

2.7 Levels of land-use planning and natural resource management

The guidelines distinguish the following levels or scales in land-use planning: plot and farm level; sub-village level; village level; joint village level; district level; regional level; and national level. Each level deals with different type of decisions and has its own institutions, ways to involve stakeholders and set of planning tools. Therefore, for a good planning practice it is important to perform the respective activities at the appropriate level. The PLUM guidelines focus on the local levels whereby district staff play a facilitating role and ensure that all levels are sufficiently linked.

- A. Plot and farm level activities refer to activities carried out on individual (residential) plots and on farms, that do not interfere much with those of the neighbouring plots. Decisions at this level are usually made by the owner(s) of the land, e.g. individual, family or clan elder.

Land management activities at this level are, for instance, those related to crop production, such as land preparation, planting, fertiliser application, weeding and harvesting. Typical soil & water conservation measures planned at this level are: cut off drains (fanja juus), contour ridges, mulching and green manuring.

- B. Sub-village level (or village block) activities can not be planned at the plot level because of their effect on neighbouring plots. This level is an intermediate between the farm/plot and the village level.

Sub-village planning areas can be defined in various ways:

- geographically, by physical features such as hills and gullies, resulting in *micro catchments*, comprising of farms which are hydrologically interdependent;
- administratively, whereby a village is sub-divided in Hamlets (neighbour-hoods) and/or Village Satellites;
- by dominant land use, such as farming, grazing, forestry, residential and irrigated areas.

Land issues which are too difficult to discuss and to plan in a village assembly meeting, or issues which only concern part of the villagers, are dealt with in sub-village meetings (see appendix A). A smaller number of people gather in sub-village meetings, and often have more communal interests than at the village level.

Land management activities at the sub-village level refer to: solving minor problems of conflicting land uses; minor boundary changes of individual plots; alignment of access paths; distribution of water for irrigation purposes and possibly the management of parts of the village forest which border farms. Soil and water conservation measures planned at this level are those which protect several farms at the same time, such as: check dams, cut off drains, infiltration ditches and wind breaks.

- C. Village level activities can only be planned at the village level because they concern the whole village community and need to be conducted with the awareness and agreement of the Village Council and the Village Assembly.

Land management activities at this level refer to planning and management of areas for community facilities, such as land for public uses (school, market, roads, cemetery, dispensary, football ground). At this level, agreements and bylaws are formulated to regulate better management of the village forest, farming and grazing areas, and to solve conflicting land uses. other issues at this level 'night be rehabilitation of degraded areas and construction of water harvesting structures.

- D. Joint village level activities affect neighbouring villages and have to be planned and agreed upon by the village communities concerned.

Land management issues at this level refer to land resources located in one village that are also of importance for user groups living in one or more of the neighbouring villages. Examples are: micro-catchments, grazing land, water points, cattle tracks and forest which are used by people living in more than one village. In such cases, the Village Councils of the respective villages can enter into joint village land-use agreements (see box 4.1 of part B).

- E. District level land-use planning concerns land issues within the district boundaries, which can not be regulated at the village and joint village levels, because of its geographic extension or importance for the district in general.

Land-use planning and management issues at this level are for instance: the distribution of roads and social services, protection of major water sources, planning of grazing, forest and water catchment areas which cover various villages. District land-use plans may distinguish planning zones whereby recommendations on land use are formulated for each zone. These recommendations support decision-making at the lower levels (see also item G).

Direct stakeholder involvement becomes more difficult at the district level. District executive staff, with support of regional and national level specialists, prepare district land-use plans which should consider the interests of all stakeholders at the various levels in a balanced way. The proposed plans are presented to the District Council and higher level institutions concerned for their approval.

- F. Regional level land-use planning plays a role when the planning area is located in two or more districts within the same region. The regional authorities prepare a land-use plan by combining the district plans within its administration.

- G. National level land-use planning is concerned with policies, legislation, directives, guidelines, training and awareness creation as well as the provision for an institutional and administrative set-up to regulate land and natural resources management at the national to the grass-roots levels.

Land-use planning at this level may comprise land uses of national concern (national parks, reserves, etc.), and the division of the country into planning or recommendation zones, based on the prevailing agro-ecologic and socio-economic conditions. The recommended land-use systems (e.g. farming systems) and related land-use management practices provide guidance for planning at the lower levels.

2.8 Land-use management according to the bio-physical and socio-economic environment

Planning goals are more easily met when the stakeholders are fully aware of the effects of the identified options. It is the responsibility of the PLUM team and other technical staff involved to ensure this condition is met, so that decision-making by villagers is based on sufficient knowledge, resulting in village land-use plans which are technically sound. This requires a systematic assessment of the biophysical and socio-economic conditions of the area concerned, and the implications of the identified options.

The bio-physical (or agro-ecologic) environment refers mainly to the conditions related to the natural resources, e.g. rainfall, temperature, wind, sunshine (climatic), soil fertility and texture, slope, erosion (soils), drainage, flooding risks (hydrology), land coverage by crops, grass, forest (land use/vegetation), etc.

The socio-economic environment refers to issues such as: living standard, sources of income, expenditure pattern, market for inputs and products, housing, education, health, local institutions, land tenure, land conflicts, etc.

During the PLUM process, staff from the various sectors use their knowledge and experience to advise and provide technical information to villagers. This section gives remarks on a few common methods to gather and analyse relevant data. These methods help to identify and select promising opportunities for improved land management in a rational and technically sound way.

The PLUM guidelines, in step 1 of part B, propose a way to gather and analyse data at the district level in order to support selection of priority villages.

The guidelines to conduct a PRA focused on land-use management (see step 2 of part B) show how to collect and analyse the most relevant bio-physical and socio-economic data together with the village community in order to formulate and prioritise opportunities and to develop a community action plan.

If the PRA shows a need for more specialised assessments, which did not fit within the scope of the PRA, the guidelines suggest to conduct them in step 3. In step 3, supplementary surveys can be carried out, which are required as input, to conduct the activities of the following steps successfully.

Among the methods to support decision-making on the use of land are:

land evaluation; farming systems analysis; land capability classification; and determination of the carrying capacity. Soil surveys may be carried out as part of land evaluation. The same applies to socio-economic surveys as part of farming systems analysis.

The land evaluation method assesses the suitability of the land in an area for different land uses. It is a method whereby the planning area is subdivided in *land units*, based on the results of a soil survey. Each land unit is defined by a set of characteristics (which refer to soil fertility, climate, slope, drainage, etc.) important for the various land uses. Various *land utilisation types* are defined (for instance, for maize, cassava or paddy cultivation, grazing land, irrigation, forestry, etc.) whereby each utilisation type has a number of land-use requirements.

The next step is to compare the characteristics of the various defined land units in a planning area with the requirements of all interesting land utilisation types. When the characteristics of a land unit do not meet the minimum requirements of a specific land utilisation type, the land is considered unsuitable for that use. For instance, wetlands in valleys may be suitable for paddy, but moderately suitable for maize which needs a good drainage. Hilly land can be suitable for extensive grazing and forest, but moderately suitable for maize because of erosion risks, while it is unsuitable for paddy because of water limitations. Various levels of suitability can be distinguished, and expected economic returns calculated for the different land units in an area and land utilisation types (options) considered.

This method supports decision-making on how to use the different lands in an area for the different uses. The land evaluation method is usually carried out by national level institutions, since it is a complicated procedure requiring specialists. However, the results of the evaluation, if available for the planning area concerned, may be very supportive to PLUM.

The land capability classification method is much simpler and more general than land evaluation. The advantage is that it can be carried out by district staff and village extension workers after a short training. In this system, land is often classified in eight classes according to its degree of limitation (which can not easily be corrected by villagers) for a number of general land-use categories. These categories may be: annual crops (maize, sorghum, sweet potatoes, etc.); semi-perennial and perennial crops (banana respectively coffee, etc.); pasture; forestry; and reserve (no significant utilisation recommended). The limitations may refer to: topography (slope and existing erosion); soils (soil depth, texture, stoniness, nutrient availability, salinity/toxicity (presence of salt/heavy metals, etc.), drainage, flooding risks, climate (rainfall classes, temperature, etc.). District agricultural extension staff for instance, may, together with some villagers, categorise the lands in a village based on the severity of the possible limitations and recommend uses as outlined in table 2.3. For instance, when considering the slope as limitation for the cultivation of annual crops: There may be no limitation for it on flat land; little limitations on gentle slopes, which can be corrected with moderate soil conservation measures, such as contour ridges; and severe limitations on steep lands, which may not enable sustainable and economic viable use for annual crops.

Table 2.3: Land capability classes (example for demonstration purposes).

Land capability class	Degree of limitations (not worked out)	Capability	Example
I	Not significant	- For all land uses, with normal land management practices	- Flat, well drained and fertile lands
II	Little	- For all land uses, but moderate conservation practices in case of annual crops	- Gently sloping and slightly eroded lands
III	Moderate	- For all land uses, but intensive conservation practices in case of annual crops	- Sloping and moderately eroded lands
IV	Moderately severe	For all land uses, but annual crops on occasional basis only and with intensive conservation practices	- Moderately steep and moderately eroded lands
VI	Severe	- For pasture and (semi-) perennial crops with moderate conservation practices and forestry	- moderately steep, stony and eroded lands
VII	Very severe	- For forestry only	- Steep, stony and eroded lands
VIII	Extremely severe	- Very extensive utilisation only (<u>reserve/wildlife</u>)	- Very fragile lands

Several land capability classification systems have been developed for practical use, as guidance at the village and farm levels in various countries. For Tanzania²⁴, an adapted system may be applied, which has been developed in one of the neighbouring countries for similar environmental conditions.

Farming systems analysis describes and analyses the various types of farm households (with its cropping and livestock systems) in an area, that produces crop and animal products for consumption and sale. This

exercise covers both agro-ecological and socio-economic aspects. It focuses on identifying constraining factors that require intervention, and indicates potential improvements for small holder farmers. The area concerned (a district, region or country) can be zoned whereby each zone is characterised by a more or less homogeneous group of farmers with similar circumstances, for whom similar recommendations can be made.

Like land evaluation, carrying out farming system analysis requires expertise and resources which are usually not available at the district level. However, existing studies may provide valuable technical input for more informed decision-making on land use at the local level.

The carrying capacity of land²⁵ refers to the number of people or livestock a given area can support, without leading to land degradation. The carrying capacity for livestock is calculated by the estimated biomass production of a grazing area. This is then divided by the average consumption of a specified type of livestock. The carrying capacity of people is calculated in a similar but more complicated manner.

The carrying capacity for a given area is not fixed, but depends on the management of the land resources. In areas (villages, zones or districts) where the number of people and/or livestock exceed the carrying capacity, strategies are required to improve the carrying capacity by adapted farming systems and innovative land management practices. Other options are to encourage development of sectors which make less use of land resources, or to encourage migration of livestock to neighbouring areas with less pressure on the land resources.

Development activities have to give economic returns in order to be sustainable. This means that the effect (output, impact) of a development effort should have a value which is higher than the value of required input (investments or sacrifices).

In order to know if the returns of a project or development activity are economic a cost-benefit analysis can be carried out. This exercise may be part of an economic appraisal, whereby the value of a project (for the society) is assessed, or a financial analysis, whereby the profitability of a project or activity to individuals or organisations is assessed.

It is usually easier to estimate the value of the required input than of the effects of a development activity or project. The required input, for instance, to apply the six steps of PLUM as indicated in part B of this guidebook, are mainly mandays (expertise), materials and transport which are supplied by the district, village and household levels. This input can be monitored and easily calculated, when the costs of the required labour, allowances, materials and transport are known (see appendix D).

The value of the *effects* of development activities are often much more difficult to monitor and estimate. For instance, reduced land conflicts, improved involvement of women in decision-making, and even regeneration of land resources are difficult to value in monetary terms. The valuation of the effect or impact of PLUM (or any compound development effort) is a complicated exercise which is disputable and requires economic specialists who are often not available at the district level. An alternative is to quality the effects of PLUM through a good monitoring and evaluation system, as indicated in section 2.9, and to compare that package of effects with the total value of all input that has been used for it.

Application of PLUM requires resources (investments) which often are scarce at the district and village levels. The more limited (financial) resources are, the more difficult it is to reserve part of the resources for investment rather than consumption. When the living standards are low, small holders are more interested in short term benefits and to minimise risks, than in optimisation of production or profits, and sustainable use of land. When introducing PLUM in marginal areas, with low standards of living, efforts should be made in an early stage to apply activities resulting in short term (one season) economic returns.

The financial resources of the District Council will depend mainly on revenue collection within the district area. An efficient use of this revenue, leading to development activities which give economic returns, is therefore vital for assisting the population in enhancing its living standard and capacity to pay tax for further improvement of the services delivered by the district.

2.9 Planning, monitoring, evaluation and documentation

The success of a development project relies on: proper work-plans; regular monitoring of its progress; evaluation of the impact of the development activities; and a proper documentation of the findings and agreements.

A. Planning

Planning is an attempt to regulate the use of human, financial and natural resources through proposing appropriate activities, which are based on: identified objectives, assessment of the current situation, opportunities and specified planning ethics (see section 2.1).

It is important to make a distinction between work-plans (action plans or plan of operation) and land-use plans. A work-plan indicates activities, with a time-frame, which are carried out to achieve the defined objectives (targets or milestones); a division of responsibilities; the required resources, etc. A land-use plan is mainly an agreement of the various stakeholders concerning the use of land resources in a defined area. A work-plan is a *tool to implement* PLUM, while a land-use plan is one of the products of PLUM.

For the application of PLUM it is proposed that the PLUM team prepares, in consultation with the parties involved, a general action plan for all steps of PLUM. This should be followed by more specified short-term work-plans, e.g. on a weekly and monthly basis. The guidelines form the basis and starting point for preparation of the work-plans. For more information see section 1.3.2 of part B.

During preparation of a work-plan it is essential to assess the resources available and that can be mobilised, as well as to estimate the required human and financial resources. A realistic work-plan, whereby the available and required resources are well tuned, will minimise the risk that activities stop abruptly during the process. The fifth section of each step in part B is helpful for the preparation of work-plans. It gives an indication of the required time and input to carry out the activities. Appendix D provides an example of how calculations can be made to estimate the required human and financial resources, necessary to carry out the different activities, as proposed in the various steps.

B. Monitoring

Monitoring is gathering data on the progress and impact of the development activities, in order to know if the objectives are being met. For that purpose verifiable indicators should be identified before monitoring is carried out.

The *progress* of activities is monitored against the work-plans, whereby those responsible for the activities often provide the information. It may be practical to prepare a table format which combines the work-plan with the monitoring of its progress by adding columns for information such as: achievements; rate of achievement; reasons for deviation; corrective measure (if required); and, where to verify the data (documentation). For instance, for monthly planning and progress meetings, the form may be used first to document the planning for the coming month, and to document monitoring of its progress in the next meeting.

The *impact* of each PLUM step and activity is monitored against the expected results (targets, objectives) of that step or activity. For each objective, specific indicators are identified to measure the impact of the development effort.

The impact of PLUM on the physical environment, such as the increase in crop production or application of soil and water conservation measures, are in general easier to monitor than its impact on the activities, attitude and socio-economic environment of villagers. The physical impact can easily be assessed by measuring: yields; number and quality of soil conservation measures applied; the regeneration of formerly degrading forest, grazing and other areas; the improvement of settlements, etc.

The impact on the activities, attitude and socio-economic environment of people has to be measured in a more indirect way. For instance, the degree to which women have improved their participation in decision-making may be measured by the extent to which: they attend the various village meetings; put forward their views;- their interests are incorporated in land-use agreements and respected by their male counter-parts; they increase their investments for improved production, etc.

Indicators should be selected in such a way that they allow to be well informed about the progress without utilising too much resources for the monitoring exercise. For more information about indicators see appendices A4 and F3).

Monitoring can take place during the activity itself, e.g. preparation of minutes from village meetings, or as a separate activity afterwards, e.g. recording progress of implementing soil and water conservation measures.

C. Evaluation

Evaluation is the process of assessing the impact of activities carried out with a view to possible measures for improvement. Evaluation is based on the results of monitoring.

The already mentioned 'fifth section' of each step in part B provides more specific guidelines to monitor and evaluate the activities carried out in the respective step against the expected results.

Simple baseline-studies are included in steps 1 and 2 of the guidelines (for the district and village levels respectively) so that the impact of PLUM can be assessed during application (steps 3, 4 and 5), at the end (step 6) and afterwards (long term impact). Indicators for these baseline studies are proposed in appendix F3. Section 4 of appendix A presents additionally some guidelines for how to evaluate the 'success' of village meetings.

Since the environment in a district and village is subject to continuous change, evaluation of the effects of PLUM after some years should not only use, as reference, the data of baseline studies, but also compare it with the 'without-project situation'. The latter is the situation where prevailing trends (concerning land use, production, etc.) continued without application of the PLUM approach.

D. Documentation

Proper documentation of work-plans, monitoring and evaluation exercises may enhance the flow of information and maintain the involvement of the various stakeholders in the PLUM process. This documentation can be in standard forms, progress reports, minutes of meetings, etc.

E. Final remarks

The **PLUM** guidelines encourage villagers participation in planning, as well as monitoring and evaluation. The various meetings at the village level, as proposed in this guidebook, provide a good environment for planning and evaluation of the PLUM process. Monitoring and reporting are part of the tasks of the Village Government, the VLUM committee and Village Technicians. This refers to: the minutes of the various village meetings; recording on implementation of the community action plans and land-use plans, identified land management practices, major changes of land use (and if applicable) land tenure, etc. The results of the monitoring are presented to the Village Assembly and the District Council for evaluation.

- The PLUM team assists the village institutions in performing these duties during the six steps of PLUM. After the presence of the PLUM in the village ends, the concerned village institutions report directly to the district officers in charge. The PLUM team reports to the members of the DLAC and the DMT. The DLAC and DMT monitor and evaluate the activities carried out by the PLUM team and may delegate their tasks to one or more of its members for weekly and monthly follow-up.
- In short:
 - ⇒ *Planning* helps to utilise the available resources effectively and efficiently in order to reach the targets;
 - ⇒ *Monitoring* enables to follow well the progress of the development activities;
 - ⇒ *Evaluation* enables to assess the effectiveness of the development activities and to take corrective measures for further improvements;
 - ⇒ *Documentation* of the planning, monitoring and evaluation exercises provides information to the various stakeholders and enables them to maintain their support to the PLUM process.

2.10 Application of participatory land-use management in ongoing rural development projects and programmes

The PLUM guidelines can be applied as a project on its own, but also used in ongoing rural development projects or programmes which are active at the district and village levels. The following suggestions are made.

- A. Various districts have integrated rural development programmes covering the various sectors which operate under the District Council. The aim of such programmes often includes capacity building of district and village institutions to facilitate the development process. The value of stakeholder involvement and integration of sectoral efforts are increasingly recognised for development planning in order to encourage local ownership and effective use of the available resources. Since the same concepts have been used to formulate the PLUM guidelines, they can be applied in district programmes to strengthen their component of land-use planning and natural resource management.
- B. One of the possible entry points is the PRA which are commonly used by district programmes at the village level to analyse problems, prioritise opportunities and to come up with a community action plan. Such a community action plan may include various elements to enhance natural resource management. At that stage, the proposed guidelines, which include a PRA for land-use management (see step 2 of part B), may be applied to address the various natural resource management issues.

- C. Sectoral projects dealing with land management, such as agriculture, horticulture, irrigation, human settlements livestock, forestry, wildlife or water supply may realise the need to widen their scope or to collaborate with the other land related sectors in order to be more effective. The PLUM guidelines provide options for it.

For instance, integration of sectoral efforts at the village level may become very necessary in case of competing land uses, e.g. between agriculture and livestock, or expanding settlements into irrigated areas. Village land-use agreements, in form of land-use plans or bylaws, which reflect the interests of the various stakeholders in a balanced way, are effective tools to achieve such an integration. See also box 2.10.

- D. The PLUM guidelines may even be interesting for projects not directly involved in land issues. For example, projects dealing with education, public awareness, local governance or road construction may find useful elements in the guidelines when formulating their activities.
- E. Like the District Council, also civil and religious NGOs may find the guidelines useful for their rural development activities. Although such organisations can not play the regulatory role of the Government in land-use management, NGOs may support village communities and complement the PLUM activities of District Councils regarding training, awareness creation and mobilisation.
- F. It is expected that the guidelines may be useful as well for the private sector when it interacts with land management at the village level. For instance, a mining company, requesting to occupy an area within village lands, may receive more co-operation from the actual land users and other stakeholders, and hence secure its investments better, when agreements are made in a participatory and transparent way, and have a full legal backing.

Box 2.10: Examples of projects adopting PLUM

Various projects dealing with natural resource management in a rather sectoral manner during early stages, have adopted the participatory village land-use management approach in order to facilitate co-ordination of sectoral efforts. These projects experienced the disadvantages of dealing with one type of land use in a village, and realised that community goals are better attained when sectoral efforts compliment each other. Some examples are given.

The Handeni Agroforestry Project (HIAP)²⁶ started in 1992 with an orientation phase, aiming at developing an agroforestry concept to be integrated in the extension approaches and to test it in four pilot villages in Handeni District. Based on that experience, the project extended its scope during its second phase (1994 - 1997) to:

- Further develop the agroforestry concept and to introduce it in more villages;
- Develop the concept of participatory land-use planning as the main tool to address land-use conflicts and to plan the sustainable use of the available resources. This concept was introduced in 13 villages and resulted in the final establishment of 4 land-use plans.

In its third phase (1998 - 2000) the project aims to extend its scope to:

- Facilitate appraisals in 52 villages;
- Introduce participatory village land-use planning as a basis for all activities carried out jointly by the villagers and the project;
- Support co-ordination of all actors (sectors) active in natural resource management and community mobilisation.

The Tanzania Forestry Action Plan - North Pare Project (TFAP-NP)²⁷ started in 1992 with a focus on participatory forest management in the North Pare Mountains of Mwanza District. With the help of a three-dimensional village model, villagers were encouraged to identify areas for village afforestation or village forests which require appropriate management techniques. The scope of the project has been widened and for its third phase (1998 - 2002) it has been recommended that:

- The development and implementation of participatory village land management is supported (for that purpose village land-use planning, neighbourhood land-use planning and village afforestation will merge as integral parts of proper village land management);
- The introduction and implementation of Joint Forest Management of territorial and local authority (catchment) forest reserves is supported;

The capacity at District, Divisional and Ward level to fulfil steering and management tasks required to support communities is strengthened.

The environmental conservation (Hifadhi ya Mazingira) project (HIMA)²⁸ operating in Iringa Rural District started in 1990 with the focus on soil and water conservation as part of land husbandry and farming systems. The project expanded its activities to 40 villages in 1997, and applies participatory village land-use planning after having experienced that the adoption of proper land husbandry practices depends much on this planning process.

The Natural Resources Management and Bufferzone Development Programme (NRBZ)²⁹ co-ordinated by the Wildlife Division of MNRT and in collaboration with other concerned actors, has initiated the provisional establishment of Wildlife Management Areas in 60 villages which border Selous Game Reserve, Serengeti National Park and Ruaha National Park. This is in accordance with the new wildlife policy of 1998 which puts much emphasis on community based conservation. These wildlife areas are regarded as village reserves, exclusively set aside for the benefit of the people and the wildlife, whereby village institutions are given responsibility for its management and protection (see example 4.6 of part B).

Also in this sector, there is an increasing interest to integrate the planning and management of wildlife areas with that of other land uses in the villages through participatory village land-use management. This will enable balanced development. Wildlife may affect, through its mobile nature, other land uses the village, while villagers depend on other land uses (such as for agriculture and settlement). As a result, some of the villages involved in the bufferzone programme are revisiting their plans to integrate wildlife management with that of other natural resources.

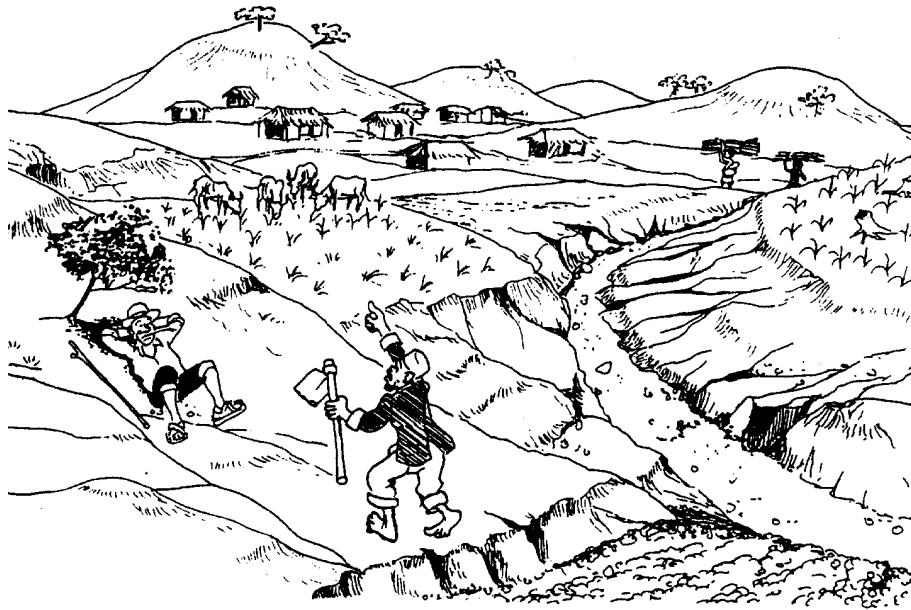
The Dodoma Land Use Management Project (DL UMP)³⁰, was started in 1992 under the Ministry of Lands to develop a methodology for participatory village land-use management that addresses the needs of the rural population in Tanzania better than those which are currently used. Also this project tended to be rather sectoral during its first phase and an evaluation mission in 1995 commented that: 'The emphasis of the project on mapping and land registration undermines the process of developing the expected methodology'. During the second phase, the project focused more on the integrated concept of land resource management. Experiences show that efforts to deal with settlement issues, to minimise land conflicts and to improve land security become more effective when they are integrated with other aspects of land management.

Endnotes and references³¹

- 1 About 8471 registered villages have been recorded by June 1991. See page 46 of URT, 1994. *Report of the Presidential Commission of Inquiry into Land Matters. Volume I.* Dar es Salaam: MLHSD in co-operation with SIAS Stockholm.
- 2 URT, 1988. *Population Census Books.* Nat. Bureau of Statistics. Dares Salaam.
- 3 De Pauw, E. 1995. *Development of Land Use Planning and Land Tenure in Tanzania. Alain report.* FAO Rome & NLUPC Dar es Salaam.
- 4 Bakema, R.J. 1984. *Land Tenure and Sustainable Land Use.* Bulletin 332. Royal Tropical Institute, Amsterdam.
- 5 MLHSD, 1975. *Model Village Layout Planning Handbook.* Dares Salaam.
- 6 ODA, 1983. *Land Use Planning Handbook.* Tabora Rural Integrated Development Project - Land Use Component. Land Resources Dev. Centre, England.
- 7 NLUPC, 1993. *Village Land Use Planning and Implementation Guidelines for Tanzania.* MLHSD, Dar es Salaam.
- 8 See references in notes 1 & 3 and:

- * Mango, G.K. 1997. *From Conventional to Participatory Land Use Planning in Tanzania*. pp. 10-17. In: *Proceedings of the National Workshop on the Institutionalisation of Participatory Village Land Use Management in Tanzania*. DLUMP-NLUPC, Dodoma, 30-31 October 1997.
- *Kauzeni, A.S. et. al, 1993. *Land Use Planning and Resource Assessment in Tanzania: A Case Study* IIED Environmental Planning Issues No.3 & IRA Research Paper No. 35. Institute of Resource Assessment - Dar es Salaam & International Institute for Environment and Development - London.
- *NLUPC et. al, 1996. *Proceedings of the Workshop on Developm. of Land Use Planning and Land Tenure System in Tanzania*. Morogoro, 12-14 March 1996.
- 9 MLHSD, 1988. *Land-use Plan of Manyali Village in Dodoma Rural District*. Prepared by the Dodoma Regional Lands Development office and approved at the Department for Urban Development of the Ministry of Lands in Dar es Salaam.
- 10 DLUMIP, 1995. *Land Use Plan of Iloilo Village in Dodoma Rural District*. Prepared by DLUMP at the Dodoma Regional Lands Development office.
- 11 See reference in note 4 and: Bakema R.J., 1984. *Local Level Institutional Development for Sustainable Land Use*. Bulletin 331. Royal Tropical Institute, Amsterdam.
- 12 See also the preface of this guidebook.
- 13 FAO, 1993. *Guidelines for Land-use Planning*. FAO Development Series 1, FAO, Rome.
- 14 An abundance of international literature has been published about participatory approaches and tools. The latest developments and practical information can be found in *PL4 Notes*, which is a magazine published by the International Institute for Environment and Development, United Kingdom.
- 15 Regarding PRAs various institutions organise training courses and publish guidebooks. More information can be obtained from: Participatory Resource Network of Tanzania (PARENT), PD Box 478, Morogoro. Phone: 056-3416, fax: 056-3723.
- 16 It is important to distinguish between sex and gender. Sex refers to the biological differences between men and women, while gender refers to the cultural determined differences.
- 17 Koda, B. 1994. *Women, Agriculture and Rural Development - Final Report*. National Report Prepared for FAO/MDOS, Rome. UDSM - Institute of Development Studies, Dar es Salaam.
- 18 * Agarwal, B. 1994. *A field of one's own. Gender and Land Rights in South Asia*. South Asian Studies 58. Cambridge University Press.
- * Bashagi, W. 1997. *Gender Considerations in Participatory Land Use Management*. pp. 45-49. In: *Proceedings of the National Workshop on the Institutionalisation of Participatory Village Land Use Management in Tanzania*. DLUMP-NLUPC, Dodoma, 30-31 October 1997.
- 19 See note 1.
- 20 See page 105 of URT, 1994. *Report of the presidential Commission of Inquiry into Land Matters. Volume I*. Dar es Salaam: MLRSD in co-operation with SIAS Stockholm.
- 21 *The National Policy on Non-Governmental Organisations in Tanzania - Second Draft*. 1998. Vice President's Office, Dar Es Salaam.
- 22 A supplementary option to reduce land pressure, which is outside the scope, of this guidebook, is the encouragement of non-farming economic ventures which do not require much land.
- 23 Studies on the effect of large scale, top-down land registration and titling programmes in various African countries (such as Kenya and Uganda) show that they have failed to improve the security of land rights for most small holder farmers. Instead, it has led to land concentration where those in positions of economic, administrative and political power took advantage at the expense of the less powerful. A formal title often did not lead to an increased feeling of tenure security and access to credit by small holders. Traditional perceptions concerning land rights and use may often be stronger than the guarantee of a formal title, particularly when governmental institutions remain weak. For more information see: Bruce, J.W. and S.E. Migot-Adhola (eds) 1994, *Searching for Land Tenure Security in Africa*. Cendall - Hunt Publishing Company. Dubuque, Iowa.
- 24 An example of a general land capability classification for the National level can be found in: URT, 1976. *Atlas of Tanzania (second edition)*. Pages 4 and 5.
- 25 This concept is discussed in more detailed in the *Village Land Use Planning and Implementation Guidelines for Tanzania* (see note 7); and further worked out for Villages, people and livestock in: Part 5 Rapid Rural Appraisal, of the *Land Use Planning Handbook* (see note 6).
- 26 Source: HIAP, 1998. Various Project Documents such as: *Village Land Use Planning Proceedings within HIAP and HIAP Presentation*.
- 27 Source: TFAP North Pare Project, 1998. Documentation of Planning Workshop for Third Project Phase (Nov. 1998 - Oct 2002) Arusha, February, 1998.
- 28 Mwalusanya J., 1997. *Improved Land Husbandry through Village Land Use Planning (HIMA, Iringa)* pp. 26-30. In: *Proceedings of the National Workshop on the Institutionalisation of Participatory Village Land Use Management in Tanzania*. DLUMP-NLUPC, Dodoma, 30-31 October 1997
- 29 Source: Ndunguru, I.F., 1997. Personal communication and: *Improved Wildlife Management through Village Land Use Planning: Experiences around Selous Reserve*. pp. 35-36. In: *Proceedings of the National Workshop on the Institutionalisation of Participatory village Land Use Management in Tanzania*. DLUMP-NLUPC, Dodoma, 30-31 October 1997.
- 30 Sources: DLUMP I, 1995. *DLUMP Extension Proposal II*. and DLUMP II, 1998. *Final Report*.
- 31 Most of the documents referred to in this section are available at the office of the National Land Use Planning Commission.

Part B: Application of participatory village land-use management



Step 1: Preparation



Participatory village land-use management (PLUM) can be a project on its own or part of a programme. The initiative for PLUM may come from the District or a village. These and many other factors determine the point of departure for PLUM. It is a necessity to be well prepared before starting in a village. This step presents guidelines for such a preparation. Before starting to implement PLUM it is strongly recommended to study chapter two of part A, which goes into the basics of the methodology.

1.1 Objectives

- A. To organise a PLUM team
- B. To establish co-operation within and between sectors in the district and with other institutions.
- C. To come up with an agreed action plan.
- D. To obtain background knowledge about the district and its villages.
- E. To prepare and agree on a plan of operation with priority villages.

1.2 Conditions to start

It is necessary to meet a number of conditions before starting with the first step to minimise problems during its implementation. Important ones are:

- ⇒ The District Council has been well informed and has approved the idea of implementing PLUM in the villages (see section 2.5 and box 2.4 of part A);
- ⇒ It is expected that there is a need for PLUM in the villages concerned;
- ⇒ Enough human and technical resources, as well as funds, will be allocated to implement PLUM in the villages.

1.3 Activities

1.3.1 Form a PLUM team

After the District Council has decided to implement PLUM in their area, it assigns the District Land Advisory Committee (DIAC) to initiate the process. The DIAC has the statutory role of *overall supervision of all activities pertaining to land use in the respective district* (see section 2.5 of part A).

The DIAC forms one or more teams to be responsible for carrying out the proposed activities, which are components of the six steps to participatory village land-use management. Such teams are called PLUM teams. The DIAC guides the PLUM teams and ensures that the required support in terms of funds, materials and manpower is available throughout implementation.

A PLUM team consists of two to four members who are involved full-time throughout all steps. Since the activities proposed for PLUM require different disciplines, various professionals are temporarily involved when their skills are required. This interdisciplinary working method improves the efficiency of the available human resources.

The profile of a PLUM team member should be:

- Knowledge of and experience with land-use planning and management;
- Knowledge of and some experience with participatory approaches;
- Good communication skills both oral and written;
- Ability to gather various information, analyse it and present results in a comprehensive manner;
- Gender aware and sensitive;
- Used and prepared to be in the field for most of the time;
- Innovative.

One of the PLUM members should be a land-use planner op under the District Lands Office, since that office has the mandate to ratify changes in land use and tenure. The other member(s) can be from the departments of Agriculture & Livestock, Forestry, C Development and Natural Resources, depending on the main type of land use and social environment in the area concerned. The PLUM team should, if possible, be gender balanced to facilitate addressing gender issues at the village level. A village extension officer, who is residing in the village or nearby, can be included in the PLUM team and/or join the VLUM committee as an advisor (see section 2.3.4). Such a person can easily follow-up after PLUM has been introduced in the village.

After the candidates for the PLUM team have been selected, they have to be well acquainted with the tasks ahead for introducing PLUM in the villages before they can proceed with the following activities. This may be achieved through a workshop at the District level whereby members of the DLAC are involved as well.

1.3.2 Prepare an action plan and mobilise the concerned institutions

The first task of the PLUM team is to prepare an action plan in consultation with the concerned institutions and specialists;

Objectives of such a plan are:

- A. To specify the goals (see section 2. i of part A);
- B. To organise the required activities for PLUM in a systematic and optimal way;
- C. To mobilise and facilitate communication with other district staff concerned;
- D. To maintain support from the District Council in terms of manpower and fluids;
- E. To facilitate monitoring and evaluation of the process.

A. How to prepare an action plan?

The methodology, as worked out in this guidebook, forms the basis for preparation of the action plan. The action plan should indicate issues such as:

1. Name of the activity;
2. How should it be done;
3. When should it be done and how much time is needed to finalise it;
4. How much is it expected to cost and from where do the funds and materials come;
5. Who(m) will be responsible and from which department or institution;
6. What are the expected results.

Such a plan can be made in table format with the issues, as mentioned above, forming columns and the successive activities forming rows. For monitoring and evaluation purposes (see section 1.5 of this step) it is convenient to add columns 'Achieved results' and 'Comments'.

It is advisable to prepare a general action plan which covers all steps of the PLUM process, and subsequently a detailed work-plan for the first step only. Later on, the detailed work-plans for the various PLUM steps and activities are prepared and reviewed during weekly or monthly meetings. Appendix FI shows as example a detail of the draft action plan prepared by the PLUM team of Songea Rural District.

When PLUM is implemented in an integrated rural development programme with its own planning and monitoring format, it may be good to adjust the above mentioned proposals in order to maintain uniformity within the programme's procedures.

Ensure that the plan is in accordance with the available resources (see section 2.9/A of part A) and receives sufficient support from the institutions concerned (see below) to avoid disappointments during later stages.

B. How to get the relevant institutions involved in formulating the action plan?

Land-use planning and management is, by its very nature, multi-sectoral. Therefore it is essential for the PLUM team to collaborate continuously with the major sectors concerned (see section 2.5 of part A). Co-operation will be easier when the relevant sectors and other institutions are involved from the beginning.

After a draft action plan has been prepared, the PLUM team makes an inventory of institutions and projects active in the concerned area that have a linkage with PLUM. One can think about integrated programmes, sectoral projects and NGOs focused on agriculture, livestock, forestry, soil and water conservation, settlements development, wildlife, and to a lesser extent projects dealing with infrastructure provision (roads, water supply, etc.), tourism, milling, education and health.

Select the institutions projects and experts which should be involved in the planning and possibly implementation of PLUM. The selection depends on various factors such as the linkage of the institution, sector or project with PLUM and its ability to contribute to the process (in terms of expertise, fluids, materials, reputation, etc.).

One of the selected institutions should be the District Planning Office where the action plan has to be finally approved for allocation of fluids and manpower.

Economic and gender experts should be consulted as well, so that the action plan is economically viable and includes elements which improve the position of women and youth.

The drafted general action plan (and the idea of PLUM) is presented to the selected institutions whereby staff members of the institutions have the opportunity to put forward their ideas to improve the action plan and to agree on future co-operation and commitment. Such a commitment not necessarily means an extra workload; it means that the various sectoral activities related to PLUM are carried out in a co-ordinated manner so that they complement each other. The presentation can be done through visiting the concerned institutions separately, or through a district level workshop. It is important that the outcome of these meetings is well documented in form of minutes or resolutions, and sent to the concerned institutions afterwards, together with the updated action plan.

1.3.3 Collect and analyse relevant data about the district

After the concerned institutions have been informed and mobilised the PLUM team can start collecting and analysing relevant information.

The objectives of this activity are:

- A. To have enough background information about the district and its villages to enable preparation of a plan of operation with priority villages (see next activity);
- B. To have enough basic information about the villages which will be approached to ensure a good start in step 2;
- C. To have base-line information which enables an impact assessment of PLUM at the later stages (see section 2.9/C of part A)

Make a checklist of the most relevant information required for PLUM. It is important to find a balance between collecting too much information, which may consume a lot of time, and collecting too little information, which increases the risks of taking wrong decisions. Table 1.1. shows an example of such a checklist and how the items can be categorised. It should be emphasised that this checklist is only indicative and that the PLUM team collects information according to the conditions in the district.

Table 1.1: Example of a checklist for data collection to prepare a district plan with priority villages

<p>General information</p> <ul style="list-style-type: none"> • Location • Elevation • Accessibility (roads, distances) • Relevant infrastructure • Administrative division <p>Climate (annual, distribution and extremes)</p> <ul style="list-style-type: none"> • Rainfall • Temperature • Wind velocity • Potential evapotranspiration • Growing period <p>Soils</p> <ul style="list-style-type: none"> • Relief (slopes) • Erosion • Soil fertility • Other soil related limitations <p>Hydrology</p> <ul style="list-style-type: none"> • Rivers and minor streams • Drainage • Groundwater level and quality <p>Land suitability</p> <ul style="list-style-type: none"> • Suitability for different land uses: crops, livestock grazing, forestry, etc. • Land capability • Carrying capacity 	<p>Actual land uses</p> <ul style="list-style-type: none"> • Agriculture: major crops • Livestock • Forestry • Natural vegetation • Other uses <p>Economy</p> <ul style="list-style-type: none"> • Living standard • Sources of income • Expenditure pattern • Agricultural & livestock production • Farming systems • Availability of (agricultural) inputs • Labour availability • Markets • Farm size • Land security and tenure systems <p>Sociology/social services</p> <ul style="list-style-type: none"> • Demography: number of people per village & the age and sex composition • Land pressure • Presence of major conflicts (in particular to land use) • Inter- and intra-regional migrations • Settlement pattern • Housing • Status of & services for education & health (schools & dispensaries) 	<ul style="list-style-type: none"> • Other (social) services: shops, godowns, water supply, milling machines, etc. • Presence & effectiveness of local institutions: governmental organisations, civil & religious NGOs/CBOs • Effectiveness of village leadership <p>Land management related policies, laws, etc.</p> <ul style="list-style-type: none"> • Laws, policies, regulations, etc. concerning land, water, livestock, forestry, wildlife, settlements, tourism, etc. • By-laws for land management <p>Projects active in the area</p> <ul style="list-style-type: none"> • Sectoral projects • Integrated projects <p>Existing land-use plans and development plans</p> <ul style="list-style-type: none"> • District, division • Village • National, zonal, regional
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These data can be collected from the various offices in the district or region which are, in one way or another, involved in rural development and natural resource management. Some of these data apply to the national level (such as laws), others apply only to the village level (such as number of people, land use, services, etc.).

Where applicable, data should be disaggregated to socio-economic grouping, such as sex, age and land use.

Try as much as possible to use recent and comprehensive studies containing most of the above information about the district, rather than to collect the basic information yourself. District environmental profiles or district land-use plans, if they have been prepared, should be used not only as a source of basic information, but also as a guide to ensure that the plan of operation tunes well with these general district plans or profiles. Appendix F2 shows an example of a list of studies selected for data gathering by the PLUM team of Ngara District.

Evaluate the information and present it in a report. Formulate conclusions regarding needs and opportunities for participatory village land-use management in the district and its villages.

If the PLUM team is not sufficiently familiar with the concerned area, it is advisable to make a field trip to verify some of the data and issues before finalising the above mentioned report.

To be efficient, the data needs should not be confined to the requirements of PLUM but to a more general group of users within the district and in the region. The compiled information can be used for the

establishment and maintenance of regional and district data banks which may form a base of information for regional and district environmental profiles.

1.3.4 Prepare a plan of operation with priority villages

Based on the collected information, the PLUM team selects villages to start with and submits the plan to the District Council for approval

The PLUM team, in consultation with the DLAC committee, prepares a plan of operation indicating the villages that will be approached first and giving a long term vision for covering all villages in the district. The plan of operation takes into account and includes the general action plan.

For a proper prioritisation of villages, selection criteria should be formulated. For that purpose, the following guidelines are important:

- A. The expected need for PLUM in a village;
- B. Presence of factors that will limit or facilitate a successful implementation of PLUM in a village;
- C. The impact of successful establishment of PLUM system and practice in a village for the district in general.

These general guidelines can be subdivided in the following specific criteria:

- A1. The extent of land-use conflicts (such as conflicts between pastoralists and crop producers; conflict over property boundaries; conflicts over access and utilisation of natural resources like woodland and water resources);
- A2. Occurrence and seriousness of environmental degradation (such as soil erosion, soil mining ¹, destruction of woodland and depletion of water resources);
- B1. Efficiency of the leadership in a village (conflicts or laxity on the leadership level can frustrate the implementation of PLUM);
- B2. Activities of other projects in a village (which can be a facilitating as well as limiting factor);
- B3. Presence of village extension staff residing in or in a nearby village and who can become a member of the PLUM team;
- B4. Accessibility of the village throughout the year, travel distances and/or opportunities for the PLUM team and associated members to stay in or nearby the village;
- C. Additional considerations include: village size (population and land area), its administrative function (as ward or divisional head quarters), its economic function (its importance as a producer of crops or livestock, etc.), its environmental function (as important water catchment), etc.

The way the criteria is formulated, depends on the strategy employed. For instance, a strategy could start with pilot villages, which will be used as a source of experience and examples to facilitate the expansion of PLUM to neighbouring villages. In such a case, the selected villages should have characteristics which are typical for a larger area (catchment area, planning zone or division).

The possibility of selecting a group of neighbouring villages with a communal land management problem should also be considered. The bill of The Village Land Act (1998) provides procedures for joint land-use management agreements between villages if they use to share land resources. One could think about the conservation of a micro-catchment area, or the communal use of woodland in hills, grazing areas or water points (see box 4.1 of part B).

During this selection process, it may be important to consider political factors, such as the wish of district councillors to involve one or more priority villages in their respective area of constituency. It may be important to use such factors for the selection process in order to facilitate approval of the plan by the council. However, the filial plan should meet the required standards based on the selection criteria, so that means are used most effectively.

Besides the above indicated factors the plan of operation should also consider factors such as the available resources², other development priorities, expected co-operation and the growing season (which determines the time villagers are available for the PLUM process).

The prioritisation process involves matching of the selection criteria (demands) with the characteristics of each village (which have been compiled in the previous activity). In order to facilitate this process one may rank the villages in a systematised way as outlined in table 1.2.

The plan of operation takes into account the commitments made by the concerned institutions during preparation of 'the general action plan. It indicates, in the form of a report, the villages to start with as well as

the number of villages which will be assisted in the medium and long term. The report presents the collected data, results of the analysis and the used selection criteria. Appendix FI shows an example of a list of priority villagers as part of a plan of operation which was drafted during a training workshop on PLUM in Songea District, July 1998.

Table 1.2: A system for village ranking* by matching the identified selection criteria with the characteristics of each village.

The classes for matching are in this example: 0: not favourable, 1: neutral, 2: favourable.

Selection Criteria	Village								
	V1	V2	V3	V4	V5	V6	V7	V8	Etc.
A1	1	0	2	0	2	1	1	1	
A2	2	1	1	0	1	0	0	1	
B1	0	1	2	0	2	1	2	2	
B2	2	2	2	1	2	1	2	2	
B3	2	1	1	1	1	2	1	1	
B4	1	1	2	1	2	1	2	1	
C1	1	2	1	0	2	0	2	2	
C2	1	1	1	0	1	1	1	0	
Score	10	9	12	3	13	7	11	10	

The plan of operation is finally presented to the DLAC, District Planning Office and District Council for approval, and will be used as a reference during further application of PLUM in the district.

A copy of this plan should be sent to the institutions which have been consulted in earlier stages and committed themselves for some activities of the remaining five steps of PLUM. This may keep them well informed and more motivated to fulfil their commitments.

When a PRA for land-use management is conducted in a selected village (step 2) and new information from the villagers show little need and/or interest for PLUM, it may be necessary to reconsider the priority list.

1.4 Required input and expected output

In order to accomplish the activities of this step, input is required from the various actors. Table 1.3 gives a general indication of the required input for each activity and sub-activity, expressed in time, human resources and materials. The table is only indicative since the actual input requirements depend on the conditions in the district and other less predictable (human) factors. The input for this step is mainly manpower, stationery, reports, maps, reference books and some transport.

Major output of this step is:

- An increased awareness among the district government and executive staff regarding the benefits of participatory and integrated approaches in land-use planning and natural resource management;
- One or more efficient PLUM teams;
- A realistic plan of operation with priority villages that is supported by the district authorities and related institutions;
- Funds and human resources are allocated as envisaged in the general action plan and the plan of Operation.

1.5 Monitoring and evaluation (M & E)

M & E is done in each step to see whether the activities are carried out according to the work-plan, the objectives are reached and if corrective measures have to be taken (see also section 2.9 of part A).

For the activities of this step, the following proposals for M & E are made (see also the last two columns of table 1.3):

- Ensure a weekly or monthly follow-up of the work-plan. The PLUM team should use the same (reporting) format for planning, implementation, monitoring and evaluation (as explained in activity 1.3.2) throughout the whole PLUM process. The achieved results are compared with the expected results, and when there is a significant difference, plans are revised accordingly.
- Minutes and notes of the various meetings should be made, indicating the location, time and aim of the meeting, attendance, issues discussed and agreements made.

C. Examine the effectiveness of the PLUM team members and the extent in which the approached institutions have been mobilised and committed themselves to apply PLUM. This is done with the results of activity A and B;

D. Examine the quality of the report presenting the results of the data analysis and the plan of operation.

M & E activities A and B are mainly the responsibility of the PLUM team, while activities C and D are done by a steering committee of a few selected staff which may be members of the District Land Advisory Committee, the District Planning Officer, the District Community Development Officer and/or head of another department involved.

The results of M & E would be reported to the heads of the concerned departments, the DLAC and the District Council on a regular basis.

Table 1.3: Indicative planning for preparation of participatory village land-use management (step 1): time, input, monitoring and evaluation requirements for each activity

Activity	Sub-activity	Number of days required to complete	Accumulative number of working days	Human resources (required from the involved parties)	Materials and equipment	Monitoring and evaluation	Results and comments
Formation of a PLUM team	• Selection of candidates	1	1	• DLAC, DMT, district staff • PLUM team, DLAC, NLUPC	• Stationery	• Written confirmation of selection PLUM team	• PLUM team formed and well informed about their tasks
	• Acquaintance PLUM team leader with their tasks	3	4				
Preparation of an action plan and mobilisation of the concerned institutions	• Drafting of a general action plan and detailed work-plan	2	6	• PLUM team	• Stationery, transport	• Follow-up work plan • Minutes of meetings and / or workshop resolutions	• Detailed work-plan for step 1 • General action plan for PLUM, indicating the required resources • Relevant institutions mobilised
	• Inventory and selection of institutions	1	7	• PLUM team			
	• Involvement of the institutions (workshop)	4	11	• PLUM team, DPLO, concerned institutions			
	• Updating action and work plan	1	12	• PLUM team			
Collection and analysis of data	• Preparation of a checklist	1	13	• PLUM team • PLUM team, relevant institutions • PLUM team, villagers • PLUM team	• Stationery, transport, reports, maps and other reference materials	• Follow-up work-plan	• All relevant information compiled, analysed and well presented in a report
	• Collection of data	6	19				
	• Field trip for data collection / verification • Analysis and reporting	1 6	20 26				
Preparation plan of operation with priority villages	• Formulation of selection criteria	1	27	• PLUM team	• Stationery	• Examination quality plan of operation	• Prioritised villages listed • Medium and long term vision on application of PLUM • Plan of operation approved by Council • PLUM team well acquainted with the prioritised villages
	• Prioritisation of villages	2	29	• PLUM team, district staff			
	• Preparation and submission of a plan of operation for approval	3	32	• PLUM team, DPLO, District Council			

Step 2: Participatory rural appraisal for land-use management



After the activities required for a proper preparation have been completed in the previous step, the PLUM team will visit the selected villages in order to conduct a Participatory Rural Appraisal (PRA). This appraisal will focus on land-use management, but the outcome of a PRA conducted through an integrated development programme can also be an early point for initiation of PLUM. The description presented below does not go into all details which are important to conduct a good PRA (there are enough manuals available about it), but shows more how to use the PRA methodology for PLUM.

2.1 Objectives

- A. To form a PRA team
- B. To get a good working relation with the village community.
- C. To introduce the idea of PLUM to the villagers.
- D. To form a village land-use management (VLUM) committee
- E. To assist villagers in analysing and evaluating their problems and opportunities.
- F. To assist villagers in the preparation of a community action plan for land-use management.
- G. To obtain a general knowledge and baseline data about the villagers and their environment.

2.2 Conditions to start

Important conditions which should be met before starting this step are:

- ⇒ The PLUM team should be efficient and sure of the required support from the district;
- ⇒ There should be a good understanding & co-operation with related sectors and other institutions active in the district and selected villages;
- ⇒ The village is selected for sound reasons and there are opportunities for successful implementation of PLUM;
- ⇒ The PLUM team should have enough background knowledge about the village and its surroundings.

2.3 Activities

2.3.1 Form a PRA team

The PLUM team forms a PRA team by involving four to eight development workers to conduct the PRA. The required number of PRA members depends on the size of the village.

The PRA team is composed of a team leader (PLUM team member) and staff from different social and technical disciplines, such as agriculture, livestock, lands, forestry, community development, gender, water and wildlife. For the most relevant sectors, it is good to have more than one member of the same discipline, since the PRA team will split in two to three groups of three to four people during some of the PRA activities.

Gender should also be considered in the team formation. One or more members should be extension officers familiar with the village. All members should have considerable experience with working at the grass-root level as well as good understanding about rural institutions and processes. At least two to three team members should be conversant with the approach and should have undergone a full PRA training.

Before going to the village, the PRA team should prepare a tentative work-plan for this step and ensures that the required resources are available, and the Village Council is informed in advance.

It can be worthwhile to form a more permanent district PRA team which conducts step 2 in the selected villages on request and with support of the PLUM team.

Issues of this meeting are:

- A. To introduce the PRA team;
- B. To introduce the idea of PLUM;
- C. To be briefed by the Village Council about the actual situation in the village;
- D. To explain why this village has been selected;
- E. To introduce and discuss the activities of PLUM;
 - It is advisable to focus mainly in the activities of step 2. The purpose and the activities of the PRA should be well understood. Discuss also the formation of a VLUM committee and its role (see remarks of activity 2.3.4).
 - The activities of the other steps should be mentioned only briefly. The concept of PLUM is probably new to the Village Council and the introduction of too many issues at once may cause confusion. The activities of the succeeding steps will be explained and discussed in detail when it becomes actual.
- F. To decide on whether or not to proceed with PRA;
 - Allow the Village Council enough time to ask questions and to make sure they have understood well the intentions of PLUM and its implications for the village before they agree.
 - Possibly the Village Council needs more time to decide. In such case objectives G and H are forwarded to the next activity.
- G. To agree about and to arrange some additional introductory meetings with representatives of different socio-economic groups and leaders of community groups, committees, etc. (see next activity);
- H. To ask the Village Council, in case they respond positively, to organise a village assembly meeting and to approach community members for the VLUM committee. A date and time for the assembly meeting should be fixed, before ending the meeting.

Additional remarks

- ◆ Important information for preparing, facilitating and evaluating participatory village meetings is presented in appendix A.
- ◆ If required, the PLUM team may arrange a separate meeting in advance with the village chairperson and village secretary.
- ◆ The PRA team can be introduced to the Village Council by an authority (such as the village chairperson or ward secretary) and preferably with a letter from a district official (DED or DPLO).
- ◆ In order to be briefed about the actual situation in the village the PRA team may ask the Village Council in advance to present a village report about the inhabitants, their socio-economic activities and environment. These reports are normally made annually by the Village Council.
- ◆ Village Councils have legal powers to convene meetings, prepare land-use plans and to establish a committee for land-use management (see section 2.5 of part A). Depending on the situation in the village, the council may decide to establish a new committee or to allocate the assignment for land issues to an existing committee, which already covers such matters. In the last case some adjustments of the existing committee may be required in order to meet the conditions as proposed under activity 2.3.4. In this guidebook, these committees are referred to as village land-use management (VLUM) committees.
- ◆ During this and following meetings, the required input from the village and district should be negotiated. This applies also to the condition that women, men and youth should benefit fairly from the PLUM process.

2.3.3 Make additional introductory visits

After the village leaders have been well informed, the PRA team familiarises itself with the community and makes itself known by the community members to gain their confidence.

Less formal meetings are made with: villagers; elders; leaders of various loc4 institutions, committees and religions; representatives of various socio-economic groups; teachers; etc. The PRA team gets a broad and general impression of the community and its environment. The team also explains about PRA and PLUM. Clarification is given about the aim to gather information and to assist the community in analysing their problems and opportunities, as well as to introduce a system of village land-use management which includes a village land-use plan. Such a plan aims to improve local resource management through mobilisation of the community in implementing the identified and prioritised activities.

A follow-up - meeting may be organised with the Village Council to discuss and plan the subsequent PRA activities:

- During this meeting, the issue of a VLUM committee and the recruitment of candidates can be discussed again (see next activity).
- Another issue is the division of the village in sub-village planning areas or village blocks. The boundaries of these sub-areas can be defined by physiographic features (such as hills, micro-catchments and big gullies), administratively (Hamlets) or by its dominant land use (residential area, farming area, grazing area, etc.) (see also section 2.7 of part A).

The introductory visits may take one or two days. Its purpose is to enable community members to get familiarised with the idea of conducting a PRA in their village and to gain confidence in the members of the PRA team. This is essential for a successful PRA.

2.3.4 Arrange a vrnage assembly meeting and the formation of a VLUM committee

When preliminary arrangements have been made with the local leaders and administration, it is time to inform all villagers what PRA and PLUM is all about. At the same time the proposed VLUM committee is presented for approval by the assembly.

Issues of this meeting are:

- A. To introduce officially the PRA team members to the villagers;
 - The introduction is done by the village chairperson or other local leader, and will help to gain confidence from the community.
- B. To introduce the objectives of PLUM and PRA;
 - This should be done by a PRA team member. It is important to explain well the characteristics of the participatory approach in PRA and PLUM. To avoid false expectations, it is also important to explain clearly the type of problems PLUM can deal with and which ones cannot (see box 2.1). For problems which are beyond the scope of PLUM, the team can only assist by informing the sectors concerned.
- C. To present and discuss the activities of PLUM.
 - It is advisable to focus mainly on the activities of step 2. The purpose and the activities of the PRA focused on lan4-use management should be well understood.
 - The activities of the other steps should be mentioned only briefly. The concept of PLUM is probably new to the village community and the introduction of too many issues at once may cause confusion. After the PRA, when the village community decides to proceed with PLUM, there will be ample opportunity to explain more about the activities of the succeeding steps.
- D. To decide on whether or not to proceed with PRA;
 - Allow the village community enough time to ask questions and ensure that they have understood the intentions of the PRA team well before they decide.
- E. To approve the VLUM committee.
 - Names of the candidates for the committee are presented by the Village Council and approved by the village assembly. The importance of a VLUM committee and the tasks of their members should be explained well in advance. The VLUM committee is further briefed about their role in future during a separate meeting (see next activity).
- F. To agree about and to arrange the first meetings for data gathering;

- For each meeting date, time and location is fixed as well as its purpose and with whom. More meetings can be organised simultaneously at the sub-village level by splitting up the PRA team into smaller groups. The new elected VLUM committee members make follow-up to ensure the meetings are well attended.

Box 2.1: Examples of typical problems PLUM can deal with and not PLUM can deal with:

- * Causes of land degradation, low production and deforestation;
- * Conflicts through livestock which damages farmers fields;
- * Boundary conflicts between neighbouring villages or farms;
- * Unavailability of water points for pastoralists;
- * Insufficient access to district extension services for improving agriculture, livestock and forestry;
- * No land available for community facilities in the village centre, such as a playground, market and cemetery.

PLUM can not deal with:

- * Bad condition of the primary school
- * Bad roads
- * Insufficient health services
- * Lack of wells or pumps for water
- * Lack of transport to the nearest market / service centre
- * No milling machine in the village

Composition of the VLUM committee

- ◆ For the success of PLUM it is important to form an efficient and well balanced VLUM committee since it will be closely involved in all further PLUM steps in the village.
- ◆ To be efficient, the VLUM committee members need the following qualifications:
 - Living in the village;
 - Energetic, motivated and responsible;
 - Having a good relationship with the village community;
 - Knowledge of the villagers' residences and farms in the different village areas;
 - Able to speak Kiswahili and the local language fluently;
 - Critical but able to understand and accept innovations rapidly;
 - Able to explain, plan and negotiate with fellow farmers and the Village Council;
 - Ability to read, write and make simple calculations is an advantage;
- ◆ The committee needs six members or more, depending on the size of the village. A small group is sufficient for the projected tasks and it is easier to make arrangements with a small group.
- ◆ To ensure the committee is able to represent the interests of the various stakeholders, it should be balanced in terms of:
 - Number of men and women;
 - Each sex being represented by a young, middle age and old person;
 - Each sub-village area being represented by at least one person;
 - Each land-user group being represented (such as pastoralists and crop producers) according to their size in the village.
 - Any other socio-economic category, if applicable, based on religion, tribe, etc.
- ◆ It is recommended that some VLUM members are also members of the Village Council for good communication in the initial stage.
- ◆ The VLUM committee should have a chairperson and a secretary to organise their tasks efficiently.
- ◆ The PLUM team facilitates the process by creating an environment where the proposed procedures are followed so that the election of VLUM members is free and fair. This environment enhances the capacity of the village community to react accordingly when democratic decision making is constrained (see example 2.1).

Additional remarks

- ◆ The Village Council is responsible for mobilisation of the villagers to attend the village assembly meeting.
- ◆ More information about village meetings is given in appendix A.

Example 2.1: Election of a VLUM committee in Mzula village

Election of the committee in Mzula Village of Dodoma Rural District went in 1992 as follows:

The PLUM team had asked during a village council meeting to select VLUM committee members as indicated in activity 2.3.4. During the following village assembly meeting the village chairman surprised the villagers by introducing twelve people among whom the *villagers* could choose. The villagers refused the choice of the village chairman by saying that the twelve were all his friends. After a long discussion it was decided that the Village Council should decide who should form the committee. Afterwards, the committee was selected by the Village Council and introduced for approval during the next village assembly meeting.

Commentary: During the whole process of introducing PLUM in a village, the PLUM team should be aware of the risks **that it** can be frustrated through the interests of *one* individual or group. In this example, the *villagers* could solve the problem themselves by using the proposed procedures.

2.3.5 Prepare the VLUM committee for its tasks

A meeting is organised to establish a good working relationship between the PRA team and the VLUM committee. The PRA team explains more about PLUM, the PRA exercise and the role which the VLUM committee will play to facilitate the whole PLUM process.

The tasks of the VLUM committee will be, in general terms, as follows (see also section 2.5 of part A):

- A. To assist the PLUM team in conducting the PRA in the village. The VLUM committee members work together with the PRA team; facilitate communication between the PRA team and the villagers; organise and mobilise the villagers for the various meetings; act as interpreters (if necessary) and; assist in giving additional explanations about PRA and PLUM to the villagers.
- B. To proceed working with the PLUM team during the subsequent steps.
- C. To continue with the initiated PLUM activities after the presence of the PLUM team in the village ends.

Efforts should be made to sensitise the VLUM committee members for the different interests of the various socio-economic groups in the village, related to gender, age, wealth, land use, etc.

The VLUM committee can legally be assigned by the Village Council to advise and to make recommendations concerning village land-use management, but it has *no* power to make any decisions.

For good co-operation, clear arrangements should be made between the PLUM team and the VLUM committee members. For instance, the VLUM committee members may alternate each other during the PLUM steps, in order to spread their workload. The village leadership should be involved if arrangements are required to compensate the VLUM committee for their work. To ensure sustainability of PLUM after the presence of the PLUM team in the village ends, these arrangements should have the same nature as for the other village committees (see also example in appendix F5).

2.3.6 Gather data from the village community

The PRA team and the VLUM committee collect primary data by organising small groups of villagers into meetings, and interviews. Different participatory techniques are used to collect each type of information. This information is used in the two following activities to select opportunities leading to a community action plan for village land-use management.

The objectives of this activity are:

- To encourage and assist villagers to think systematically about their problems and possible solutions;
- To enable the PRA team to understand the situation in the village.

The PRA team splits up into two to three groups (of three to four people) to enable more meetings or interviews at the same time. Each group is accompanied with at least one VLUM committee member. The meetings are organised per sub-village planning area or otherwise (see section 2.7 of part A and appendix A). In such meetings of small groups of people, villagers are likely to feel more free, and thus have more opportunities to talk than in a big village meeting.

At the end of each day, the whole PRA team comes together to present and compare their findings, to discuss possible inconsistencies and identify information gaps for follow-up. Based on the findings of that day, a work-plan is made for the next day. VLUM committee members are encouraged to join these discussions.

Data collected in this activity are categorised as follows:

- ⇒ Spatial data
- ⇒ Time-related data
- ⇒ Socio-economic data
- ⇒ Technical data

The text below summarises recommended techniques of data gathering⁴, which are designed to maximise local participation in data collection and analysis.

Spatial data can be collected through community sketch maps and transects, which are tools that provide general information related to the position in a village:

- A village sketch map shows the village boundary and features which are important to villagers (figure 2.1). It helps to understand the location and extent of resources, problems and opportunities.
- A transect map provides information gathered during village walks, it verifies information of the sketch map and adds specific information to understand better the relation between the physical environment and land use (such as crops in the valleys and forest in the hills).

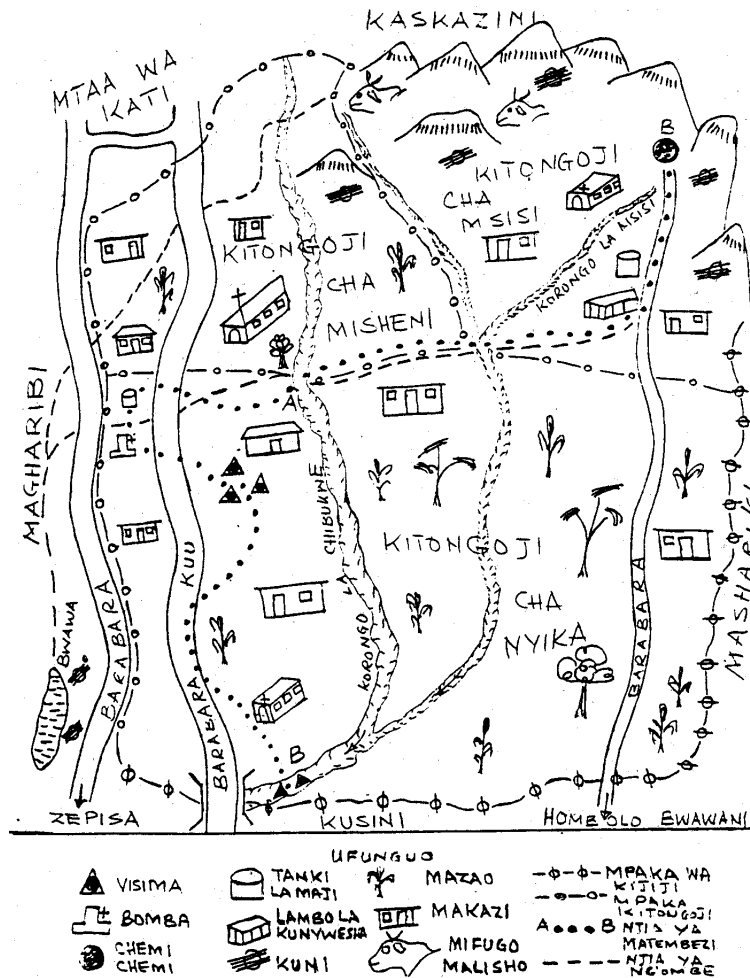
Time-related data can be collected through time lines, trend lines and seasonal calendars:

- A time line lists all significant events which have occurred in the village and helps to identify trends, problems and achievements.
- Trend lines show changes of important issues such as land productivity and population density over a number of years. It helps to understand the villagers' perceptions of important changes in their community.
- A seasonal calendar attempts to investigate the patterns of activities and events within a community over a year. It helps, for example to determine the labour availability and the best timing for project activities.

Socio-economic data can be collected through household interviews, farm sketches, institutional analysis, gender daily calendar and livelihood mapping:

- The purpose of household interviews is to understand variations between families. It also enables the team to compare community-wide issues (discussed during bigger meetings) with family-level conditions. Land-use issues should be especially considered during these interviews (see example 2.2).
- Farm sketch maps shows individual farm management practices and enables the PRA team to compare the facilities and strategies on farm level with those on communal or village level
- Villagers are also asked to list all institutions of their concern, to rank them according to their importance for the community and to analyse the relationship among them. This exercise helps to understand the villager's perceptions about the actual and potential role of local institutions in community development.
- A gender daily calendar shows a typical timetable for men as well as women indicating their daily routine activities. It shows who is doing what in the community. It helps later to formulate an action plan and to divide the activities for implementation among the sexes.
- Livelihood mapping is the process of identifying all basic items which are required to support life in the village and their availability within and outside the community. For instance, maize which can be fully available within the community, cement which has to be bought in town and water which is available in the village during part of the year only. The use of land resources, located in neighbouring villages (such as for firewood, grazing and water) should be indicated as well. This exercise helps to understand what the villagers consider as their basic needs and to what extent they are self-reliant.

Figure 2.1: Example of a village sketch map prepared during a PRA in Hombolo Makulu village in Dodoma Rural District, August 1996.



Technical data may be collected through simple surveys during the PRA when they are required to facilitate analysis and ranking of problems and opportunities (which is done in the next activity). This should only be done if the survey is fast, cheap and necessary for the subsequent activities of the PRA. Otherwise it should be done during the next step of PLUM.

Example 2.2: Observations during household interviews in Mzula village

During the household interviews carried out by DLUMP in Mzula Village of Dodoma Rural District in 1992, it was discovered that many people, women in particular; had not attended the first village assembly meeting (activity 2.3.4).

The interviewees were interested to know about PLUM by mentioning various land issues which were bothering them. Some of them wished to go back to the areas where they used to live before villagisation and where they still cultivate. It was suggested that it would also solve the problem of congested residential area if they were allowed to move to their farm plots again.

It was also mentioned that another project (HADO) has prohibited them to collect firewood from the hills. Although most people understood the reasons for it, many villagers still cut trees in hilly areas because of lack of alternatives.

Additional remarks

- ◆ Each of the above mentioned data gathering techniques supply relevant information to identify needs and to mobilise the villagers for PLUM. Special attention should be paid to land use related issues such as land conflicts, land tenure, land productivity, land husbandry practices and land degradation. Part of this information also serves as baseline data in order to enable an assessment of the impact of PLUM at the later stages (see section 2.9/C of part A and section 6.3.1 of step 6).
- ◆ During the data gathering process, it is important to identify the various stakeholders and to disaggregate data collection per socio-economic grouping. In particular, this applies to gender issues so that the division of labour; the access to and control over (land) resources and; participation in decision making, etc. between men and women becomes more clear (see also section 2.3 of part A). if applicable, ensure also that people with a nomadic life style (pastoralists) are sufficiently involved in the PRA and PLUM process. Depending on the situation, changes or additions to the above proposed set of data gathering techniques may be needed to understand the situation and to sensitise villagers according to the required level.⁵
- ◆ The different data gathering techniques allow the PRA team to capture the diversity of rural life and to cross-check the data (i.e. whether the data confirm or contradict each other). Combining primary data from the village community with the secondary data gathered in step 1 allows additional cross-checking and increases further the accuracy of the analysis.

2.3.7 Ranking of problems and opportunities

After the relevant data is gathered, problems and opportunities are assessed and ranked in this activity, which forms the base for preparation of a community action plan.

The PRA team prepares a preliminary list of problems and opportunities which were identified by the villagers during the process of data gathering. The problems are listed without any notion of their importance. Related problems may be listed together (such as soil erosion & low crop production). Subsequently, opportunities are listed for each problem.

The PRA team may add opportunities to the list which have not (yet) been identified by the village community. Technical staff can, due to their specialisation, list opportunities which villagers would not easily identify.

The preliminary list of problems and opportunities is not presented to the villagers as such, but is used by the PRA team as a reference during the village meetings.

The PRA team arranges sub-village meetings, as done in the previous activity, where it explains and facilitates the whole procedure of ranking the problems and opportunities as outlined below.

- A. The villagers make a list with all problems that affect them and their village. This exercise will take a shorter time, since most of the problems have been discussed by the villagers during data gathering.
- B. The next exercise is to select the problems which are most important in terms of impact on villager's lives and on the development of the village. Unlike conventional development planning methods, here
- C. the villagers decide themselves which problems they would like to deal with first. Since the list of problems can be long, it is necessary to use a systematic method of ranking.
- D. For the selected problems, villagers make a list with opportunities. Problems with similar opportunities can be put together. When villagers fail to mention promising opportunities, ask for advice, or mention technical advice as an opportunity, the PRA team can make proposals. The number of problems to deal with should be according to the capacity of the community.
- E. For each problem the opportunities are ranked based on criteria which has to be identified first. These criteria should relate to the following factors: local acceptability, technical, socio-economic and cultural feasibility, sustainability, equitability (gender), productivity, required input (financial, material, human and time) and the required period of expected returns (benefits). The ranking exercise helps the community to decide which projects to start implementing, taking into account locally available resources, skills and capacities. Various ranking techniques have been developed for this exercise⁶.

Additional remarks

- ◆ Due to the amount and complexity of the ranking exercises, it is often advisable to carry out the activity in two meetings, in successive days.
- ◆ During problem analysis and priority setting, it is important to give enough attention to the cause-effect relations involved. For instance, the cause of low production can be land degradation, which can be a result of land mismanagement. This can be enhanced by land insecurity and conflicts. This sort of analysis is very important and helps villagers to balance between coping with immediate problems and those which require a medium or long term planning. The last ones are often located in the productive sector and involve land-use management. The immediate needs often refer to the service sector, such as schools, dispensaries and water supply. It is important for villagers to be aware that the required investments for the service sector are generated in the productive sector. The PRA team should facilitate this kind of analysis and awareness creation, but should also be careful to avoid influencing the participants in priority setting in order to assure that the appraisal can focus on land issues without affecting the basic principles of the participatory approach.

2.3.8 Create a community action plan

The most concrete output of the entire PRA exercise is a community action plan focused on land-use management. It should become part of the village development plan and the basis for the detailed village land-use planning and management activities in the succeeding steps of PLUM.

The community action plan for land-use management (CAP) is in the first place a work-plan, rather than a land-use plan (see section 2.9/A). A CAP includes the required activities to improve the prioritised natural resource management components, as suggested in the following steps of PLUM (see overview in table 2.1 of part A).

The CAP should be as specific as possible and cover the following issues (see example 2.3):

- Development priorities;
- Proposed actions and requirements;
- Duties & responsibilities for individuals and groups;
- Work schedules;
- Identification of areas where the community needs external assistance.

If the PRA already leads to a strong consensus on land management issues, which are quite straightforward, they may be taken up during the formulation and formalisation process of the CAP. One may think about preliminary agreements regarding fragile areas, water points, farming and livestock areas, settlement issues, and the use of specific land resources by the various stakeholders (user groups).

During preparation of the CAP, the PRA/PLUM team members provide advice so that the plan meets the technical standards, as well as that the identified PLUM activities are scheduled in the right sequence and with a realistic time frame (see section 2.4 of part A).

Example 2.3: Preparation of a CAP in Mzula village

The villagers of Mzula (a pilot village of DLUMP in Dodoma Rural District) created in 1992 a community action plan as follows. The village community identified and prioritised the following problems:

- | | |
|---------------------------------|---|
| 1 Lack of food | 5. Lack of a dispensary |
| 2 Lack of sufficient water | 6. Lack of a milling machine |
| 3 Lack of a road to Dodoma town | 7. Overcrowded residential areas |
| 4 Lack of shops | 8. Lack of areas for common uses, such as a cemetery and a playground |

Item 1, 7 & 8 are clearly within the scope of PLUM and item 1 was analysed as follows:

Identified causes for lack of food were:

- | | |
|---------------------------|---|
| a) Unreliable rains | C. Infertile and deteriorated soils |
| b) Too little arable land | d. The forced de-stocking in the division by the Government |

When the community discussed about the opportunities to improve food production, it became clear that it is not possible to increase the farm plots since there is already a land shortage. This shortage has resulted in land conflicts and many villagers are already farming in the hills which causes erosion. People believed most in increasing production per area through improving soil fertility, use of improved seeds, soil and water conservation measures and through zero-grazing. Some farmers remembered well that the soil was producing much more in former days and they understood that they have to invest much in their land to regain its productivity. Therefore the majority supported the idea of the PLUM team to create an action plan for improving the use of the natural resources in their village land.

The idea of making clear agreements about the allocation of land for different uses was embraced, as well as the idea of improving the security of their farms through land registration.

An action plan was created for the problems of lack of food, overcrowded residential areas and lack of areas for communal uses. The PLUM team assisted the village with the other problems through contacting the concerned institutions. For the first development priority, lack of food, the action plan contained the following issues:

<u>Opportunities</u>	<u>Actions to be taken</u>
a. Solving land conflicts and improving land security	-Negotiation, demarcation & registering common and private lands
b. Improving land husbandry practices	-Improved seeds and methods of cultivation - Soil and water conservation measures (it was decided to deal with this opportunity after finalising the first opportunities)
c. Zero grazing	- Contact the Mvumi Rural Training Centre - Planting of suitable grasses

The duties and responsibilities for the first opportunity were divided as follows:

- The Village Council will keep the villagers mobilised and makes follow-up to ensure that the activities and required additional surveys (step 3) are done accordingly.
- The VLUM committee assist the Village Council with their tasks, and assist the parties involved to agree about and demarcate the boundaries of their land before the land surveyors come to measure them.
- The PLUM team assist the Village Council and the VLUM committee by giving technical advice and in contacting the surveyors.
- All villagers who want their land registered should be available for showing the boundaries of their land, agree with those of the neighbouring land and act as witnesses during registering in the field. They decided also to plant shrubs along the agreed boundaries or boundary corners.

A general working schedule was prepared indicating who is required on what time and where. This schedule was used as reference to make detailed work-plans during the meets which took place in the succeeding steps.

It is advisable that villagers formulate the CAP during sub-village meetings (where the number of people allows everybody to contribute). Subsequently, the various CAPs are presented in a village council meeting, whereby the Village Council compares and combines the action plans into one plan. This combined action plan is presented to the Village Assembly for approval.

The proposed procedure to come up with a CAP is as follows:

- A. In the sub-village meetings the PRA team leader explains the process and importance of creating a formal CAP. This can be done as follows:
 - The ranked problems and options are first confirmed and if necessary revised;
 - Subsequently, the villagers recommend, based on the rankings, specific actions to accomplish the activity. A technical officer (of the PRA team) advises on material inputs and estimated costs. The villagers identify local resources and labour available within the community. During this process there is² a great deal of dialogue and consultation, since decisions are made through negotiations.
 - A schedule should be prepared linking duties and roles to a time frame. It will help the community and others to evaluate their performance later.
 - If external resources are needed, external institutions which can provide them will be identified and the person who makes the follow-up.
- B. In the village council meeting the CAPs created during the sub-village meetings are presented (by the Hamlet leaders) to the council. The different plans are compared and combined to one plan with assistance of the VLUM committee and the PLUM team. The combined CAP is approved by the council before it is presented to the village assembly.
- C. In the village assembly meeting the combined plan is presented for approval by the assembly. During this meeting it is advisable to have representatives of institutions which have been approached during step 1. Their input in terms of technical and financial support may be important for a successful implementation of the CAP.

Status of an approved Community Action Plan

- ◆ Once a CAP on land-use management is approved, it should become part of the village development plan with respect to land-use management and land development in the village.
- ◆ The PLUM team should guide the preparation of the CAP in such a way that the formulated and approved plan can be used by the Village Council as part of the development plan and at the same time ensure that the plan is recognised and used by the District Planning Office.
- ◆ At the end, the PRA team and VLUM committee finalise the PRA report, and attach the minutes of the last village assembly meeting (signed by the village chairperson and secretary) and send copies to the Village Council, the District Planning Office and other institutions involved.

Final remarks

- ◆ During the last two activities of the PRA (activity 2.3.7 & 2.3.8) it becomes clear whether villagers want to proceed with PLUM and in which way. If the village community prioritises activities which are outside the scope of PLUM (such as improvement of a road, school or water supply), the PRA team should contact and invite the concerned institutions for the village assembly meeting where the final version of the CAP is presented and approved. In case the village community wants to start first with activities *not* related to PLUM, the PLUM team may wait till these activities have been carried out before it continues in the village.
- ◆ Sometimes it may be advisable to implement immediately after the PRA, some selected land management measures (see step 5) which provide short term benefits to villagers. This may help to keep the momentum in the PLUM process and makes villagers confident of the advantages regarding the presence of the PLUM team in their village.

2.4 Required input and expected output

Table 2.1 gives for this step a general indication of the required input from the different parties involved for each activity and sub-activity (see also section 1.4 of step 1). During the whole process, both the district as well as the villagers involved, commit themselves to reaching the agreed targets. Both parties are expected to keep their promises and to remind each other about their responsibilities.

Expected outputs from this step (used as indicators for evaluation) are:

- Villagers have a better understanding about their problems and opportunities;
- Villagers are aware of the need for PLUM and are mobilised to implement it;
- The village has a well balanced and efficient VLUM committee dealing with land issues;
- The villagers have increased their gender awareness regarding land related matters;
- The village community has created a community action plan focused on land-use management which fits within the overall village development plan and meets the following conditions:
 - a) It reflects the priorities of the different socio-economic groups in the village in a balanced way;
 - b) It deals with short and medium to long term needs and land-use matters in a balanced way;
 - c) It does not contradict district, regional and national plans and policies, and is supported by the district authorities.
- The PLUM team has an understanding about the village which is sufficient to facilitate the following steps towards PLUM;
- The PRA team has collected sufficient baseline data about the village to enable an assessment of the impact of PLUM at the later stages.

2.5 Monitoring and evaluation (M & E)

For the activities of this step, the following proposals for M & E are made (see also the last two columns of table 2.1):

- A. The PLUM/PRA team ensures the preparation and follow-up of the work-plans on a weekly or monthly basis;
- B. The PRA team members make notes during all activities, which are used for evaluation purposes and preparation of the PRA report. It is advisable to prepare the PRA report simultaneously with the various activities of the PRA in the field, and not to wait till the very end. Although a report is not the main product of the PRA, it is important to have the results of the whole PRA process well documented for the villagers and the PLUM team as a reference during implementation, as well as for the district officials to ensure their continued support.
- C. The suggested steering committee in section 1.5 of step 1, assesses the quality of the PRA report in order to see whether:
 - The PRA team has established a good relation with the village community, has worked efficiently and has proceeded according to their work-plan (in terms of timing and use of resources);
 - The PRA has been carried out according to its principles and has resulted in the expected output (see previous section);
 - The PRA justifies the continuation of PLUM or another type of project.

Table 2.1: Indicative planning of the participatory rural appraisal for land use management (step 2)

Time, input, monitoring and evaluation requirements for each activity (based on assumptions as outlined in appendix D)

Activity	Sub-activity	Number of days required to complete	Accumulative number of working days	Human resources (required from the involved parties)	Materials and equipment	Monitoring and evaluation	Results and comments
Formation of a PRA team	• Recruitment members of the PRA team	2	2	• PLUM team, district staff, related institutions • PRA team	• Stationery	• Written assignment of PRA team members • Work plan	• PRA team formed and well informed about their tasks • Good planning and working relationship
	• Preparation of a work-plan	1	3				
Introductory meeting with the village council	• Informing the council	1	4	• PRA team leader • PRA team	• Stationery, transport, living allowances	• Follow-up work plan • Minutes of the meeting	• Village Council well informed and mobilised
	• Village Council meeting	1	5	• Village council			
	• Preparation of minutes	1	-				
Additional introductory visits	• Meeting with individual villagers and council	2	7	• PRA team, villagers, Council	• Stationery, transport, accommodation, living allowances	• Follow-up work-plan	• Villagers and PRA team familiarised with each other • Candidates for VLUM Committee identified
Arrangement of a Village Assembly Meeting and a VLUM committee	• Meeting with the village assembly	1	8	• PRA team, Village Council and Assembly • Village Council	• Stationery, transport, accommodation, living allowances	• Follow-up work plan • Minutes	• Village community is informed and has approved the idea of PRA, PLUM and VLUM committee
	• Preparation of minutes	1	-				
Preparation VLUM committee for its tasks	• Briefing of the committee of its role	1	9	• PRA team, VLUM committee	• Stationery, transport, accommodation, living allowances	• Follow-up work-plan • Minutes	• Committee briefed & working relationship established
Data gathering from the village community	• Various sub-village meetings and interviews	10	19	• Villagers, PRA team, VLUM committee	• Stationery, transport, accommodation, living allowances	• Follow-up work-plan • Notes (tables and drawings)	• All required data gathered and increased awareness of villagers
Ranking of problems and opportunities	• Various sub-village meetings	2	21	• Villagers, PRA team, VLUM committee	• Stationery, transport, accommodation, living allowances	• Follow-up work-plan • Notes (tables and diagrams)	• Problems and opportunities analysed and ranked by the villagers
Creation of a community action plan (CAP)	• Sub-village meetings	1	22	• Villagers, PRA team, VLUM committee	• Stationery, transport, accommodation, living allowances	• Follow-up work-plan • Quality of the PRA process and the CAP	• Village community aware of the various aspects of PLUM and committed to implement their CAP • PRA report with the CAP prepared and recognised by the village and district authorities
	• Village Council meeting	1	23	• Village Council			
	• Village assembly meeting	1	24	• As above but with Village Assembly and concerned institutions			
	• Finalisation and submission of the PRA report	2	26	• PRA team			

Step 3: Supplementary Surveys



The PLUM team initiates this step after the village community has shown its commitment to deal with PLUM, as indicated in the Community Action Plan. This step enables villagers to meet the required conditions for land use planning and registration (step 4). It may involve demarcation, mapping and registration of the village boundaries. Depending on the outcome of the PRA, the step may include preparatory surveys for land registration, as well as surveys for recording the existing land use, and the socio-economic and bio-physical conditions in the village.

3.1 Objectives

- A. To establish village boundaries and register the village land.
- B. If required, to carry out preparatory land surveys for land registration.
- C. To map the existing land use and management problems.
- D. If required, to collect additional socio-economic and biophysical information.

3.2 Conditions to start

Important conditions which should be met before starting this step are:

- ⇒ A Community Action Plan for land-use management created by the village community, which is part of an overall village development plan;
- ⇒ The PLUM team and VLUM committee are efficient, and have a good understanding of and relationship with the village society;
- ⇒ A proper justification for the selected supplementary surveys and sufficient inputs (in terms of manpower, expertise, materials & funding) allocated for its implementation.

The entry point of step 3 is not necessarily step 2, but can also be a PRA conducted through an integrated rural development programme or a sectoral project. When the results of such a PRA show a priority for PLUM, the District Lands Office or DLAC should be contacted. If there is room for implementing PLUM, some activities of the previous steps have to be carried out first in order to meet the above mentioned conditions.

3.3 Activities

3.3.1 Arrange a meeting with the Village Council and the VLUM committee

Issues of this meeting are:

- A. To review briefly the results of the PRA and the planning ahead, as documented in the Community Action Plan for land-use management (CAP);
- B. To discuss the objectives and activities of step 3;

- C. To agree with and make arrangements for the planned activities of this step: Depending on the CAP, this can be to:
- agree on and survey the village boundaries;
 - select and survey the reference points within the village area;
 - survey and map the major physical features in the village;
 - survey and map major existing land uses and related problems;
 - conduct a socio-economic survey;
 - conduct a bio-physical survey.

3.3.2 Make preparations for the supplementary surveys

The PLUM team briefs and makes arrangements with the concerned staff in the district to carry out the activities which have been selected and planned at the village level.

The required experts in the district are identified, approached and briefed about their tasks regarding the planned activities in this step. Arrangements are made and a work-plan is prepared for their involvement. The PLUM team takes care that the experts are available at the right moment, introduces them to the Village Council and the VLUM committee, and ensures a good working relationship.

The involved experts become temporarily part of the PLUM team and their selection depends on the chosen activities, the desired accuracy of the land surveys and specific conditions in the village. For each activity proposed in this step, suggestions are made concerning the desired expertise. It may be useful to involve a village extension worker who is familiar with the village during various activities.

3.3.3 Establish village boundaries

Before proceeding with PLUM, the planning area has to be well agreed upon with neighbouring villages and properly documented.

This activity is carried out to know the planning area and is divided in the following sub-activities:

- A. Representatives of the village agree with those of the neighbouring villages about the village boundaries;
- B. Beacons are erected on the corner points of the boundaries;
- C. The positions of the beacons are determined and recorded.

A. Agree about the village boundaries

The councils of the neighbouring villages are approached for selecting representatives to negotiate and agree in the field about the boundaries with those of the village being surveyed. The 'village boundary negotiation team' is made up of at least two representatives from each village. They can be elders (wazee) and/or village councillors who are well respected and have good knowledge about the village boundaries.

The team, together with one or two members of the VLUM committee and a surveyor visits all corners of the village boundary. Negotiations and agreements are made on the exact location of each corner, whereby the corner is temporarily marked by a hole or peg. The agreements are recorded as minutes or otherwise, indicating a description of the location of the corner points and bearing the names and signatures of the team.

If the representatives can not agree, they should report it to the Village Council of their village. In such cases, the PLUM team may propose to involve the 'Elders Council' (Baraza la Wazee) of the respective villages (see section 2.5 / f and box 2.6 of part A) to mediate in the negotiation process. If the neighbouring villages still can not agree, the concerned institution at the higher levels should be involved, such as the Ward Tribunal, Primary Court and the District Land Court (see section 62 of the bill of The Village Land Act, 1998). The position of the boundaries is of high importance since it influences the villagers' access to resources such as farm land, grazing land, forest, water, roads, etc. If it becomes difficult to agree, the option of a joint village land-use agreement (see box 4.1 of step 4) may be used as part of the negotiation process. In such a case, villagers may, for instance, agree and formalise the use of land resources in a neighbouring village under specified conditions.

B. Erect beacons on the boundary corners

After the agreement, the surveyors and VLUM committee members, witnessed by some of the members of the negotiation team if necessary, replace the temporal marks in the corner points by permanent boundary beacons.

C. Determine the geographic position of the beacons

After the corners of the village boundaries have been fixed in the field by permanent beacons, their geographic position is measured and registered according to the procedures as provided for in 1959 Land Registration Ordinance.

Example 3.1 illustrates some practical aspects of demarcating and surveying village boundaries.

Example 3.1: Demarcation and surveying of village boundaries

In 1992 and 1994, DLUMP assisted Mzula and Ilolo villages to have their boundaries established. After the neighbouring villages agreed about their common boundaries, beacons were erected and their geographic positions determined as follows:

1. The survey technicians with some VLUM committee members prepared the beacons (out of cement and sand) and placed them on the agreed locations. The placement was witnessed by representatives of the villages involved and done soon after the temporary demarcations (before they have been moved or disappeared).
2. The bush was cleared first to allow inter-vision between the beacons. The people involved were split in groups to allow working at more locations at the same time. Each group included a survey technician, a VLUM committee member and about three villagers.
3. The beacons were co-ordinated by theodolites using traversing methods. Existing control stations (beacons with accurately known co-ordinates) in the vicinity were used as reference. The people involved in this activity were: a surveyor, a survey technician, a VLUM committee member and one or two villagers.
4. The co-ordinates of the boundary corners were calculated in the field by the district surveyor, and if it appeared that there were closing errors, part of the measurements were done again.

Additional remarks

- ◆ Although village boundary demarcation in Tanzania is taking place on a large scale basis, the boundaries of most villages still are not yet well established. They are often defined through description, whereby physical features, such as hills, roads and rivers, are used as reference.
- ◆ Once the village boundaries are surveyed and the concerned authority (Commissioner of lands) has issued a Certificate of Village Land to the Village Council, it becomes (according to section 7 and 8 of the bill of The Village Land Act, 1998) legally responsible for the management of village land. It implies that the council may establish village land registers and issue certificates of Customary Rights of Occupancy (see section 2.6 of part A).
- ◆ Since the village is the basic planning unit for village land-use management, it is important to pay enough attention to this activity, so that the village boundaries reflect the interest of the stakeholders in a balanced way. This minimises the risk that boundary conflicts with neighbouring villages may frustrate the PLUM process at the later stages. Rapid and cheaper methods may have the risk that they become more costly in the long run (see example 3.2).

Example 3.2: Establishment of village boundaries by FRMP

The FRMP (Forestry Resources & Management Plan), a project involved in large scale establishment of village boundaries in Tanzania, uses the following approach:

1. The leaders and other influentials of the concerned villages (such as village chairmen and executive officers, ward executive officers, divisional secretaries, councillors, head teachers of primary schools and extension officers) are invited to attend a seminar to be informed and educated about the whole exercise of village boundary demarcation and registration. The participants learn how to negotiate about the boundaries and how to place the beacons themselves.
2. After that has been done in the field, the leaders of the villages involved jointly sign the minutes of their deliberations, which will remain as a testimony of the agreement.
3. Later, the surveyors determine the geographic position by GPS equipment and let the Village Councils sign a so-called beacon certificate of acceptance of boundaries, which is used for the village boundary registration and binds the councils on their agreement.

Comment: Although the method applied may be cheap and fast, it presumes that a seminar for local leaders is sufficient to ensure that final decisions on boundaries adequately reflect the interests of the various villagers. If this condition is not met, the village boundaries may be disputed later on, even when they have been formalised by higher authorities through a certificate. In such cases there is a risk that the exercise may have negative effects on land-use management in the villages concerned.

- ◆ This activity is omitted if the village boundaries already have been established and a village title has been issued in accordance with the 1959 Land Registration Ordinance. After the bill of The Village Land Act (1998) is enacted, it is expected that all village titles are transferred into certificates of village land.
- ◆ When there are still boundary conflicts with neighbouring villages, despite the existence of a village title or certificate of village land, it may be necessary to sort them out first before proceeding with PLUM, for reasons as indicated before.

3.3.4 Establish reference points in the village

This activity is needed if it has been planned to survey accurately the public areas and/or individual (farm) plots in step 4. Like the previous activity, this has to be done according to the procedures as stipulated in the referred Land Registration Ordinance. Example 3.3 shows briefly how this activity can be carried out in the field.

Example 3.3: Establishment of village reference points by DLUMP

The project assisted in establishing the reference points as follows:

1. Locations of the reference points were selected by two groups, each group consisting of a surveyor, a survey technician and at least one VLUM committee member. The reference points were located where there was inter-visibility with at least one village boundary point and one other reference point;
2. Subsequently, the survey technicians with some VLUM committee members prepared these beacons and placed them on the agreed locations
3. Bush clearing, co-ordinating of the beacons, calculating and checking was done as indicated in example 3.1.

3.3.5 Draw a village boundary map

After receiving the data from the surveyors, a cartographer at the district office maps the village boundaries together with the positions of the boundary beacons and (if measured) the village reference beacons.

The map is checked and forwarded by the district surveyor to the ministry of lands for approval and application of a certificate of village land.

3.3.6 Conduct a general land survey

Knowledge of the geographic position and extent of the major physical features and land uses in a village is indispensable for detailed land-use planning and administration.

After the village boundary map has been prepared, the surveyors, together with the VLUM committee members, conduct a 'general land survey'. During this activity, observations of two types of features are made and carried out according to the desired accuracy for land-use planning and administration.

A. The geographic position and extent of the major physical features in the village are determined, such as:

- Hills.
- Existing roads;
- Major water ways (rivers & big. gullies).

These features are drawn in the village base map (see next activity).

B. At the same time, the position of the boundaries of the various general land uses in the village are determined. This will be used to upgrade the village base map to an existing land-use map (activity 3.3.8). General land uses which can be identified are:

- Areas used for community facilities (for a school, dispensary, market, cemetery, etc.);
- Residential areas;
- Cropping/farming areas;
- Grazing areas;
- Forest and bush areas
- Large water bodies like swamps, etc.

Topographic maps (of scale 1:50,000) are enlarged to the required scale of the village base map and used as a reference for this survey. If there is already a base map which covers the village area, it can help to finalise this activity much faster by updating it. However, this depends much on the quality and the scale of the map, as well as its date of preparation.

Survey of the above mentioned features can be carried out at various levels of accuracy such as:

- a) Accurately through a full survey by qualified land surveyors using sophisticated equipment in accordance with the referred 959 Land Registration Ordinance;
- b) Semi-accurately through for instance compass traversing (example 3.4);
- c) Sketched on the basis of aerial photos.

Selection of the most appropriate method depends on the priorities of the village community as reflected in the CAP and the available resources in the district. The method of sketching is the fastest and cheapest one and often most advisable since a full survey of public and private lands is usually not a priority and is too expensive. It may be advisable to combine different methods whereby the physical features are surveyed more accurately than the boundaries of the general land uses. For more information see section 2.6/B of part A.

Example 3.4: General village land surveys carried out in Mzula and Ilolo villages

The positions of the above mentioned physical features and boundaries of general land uses were surveyed by traversing methods. Long distances were measured with a theodolite while short distances were done with a prismatic compass and a measuring tape. The beacons on the village boundaries and within the village land were used as reference points. Some of the co-ordinated physical features were temporarily marked by wooden pegs and used, again as reference points to survey the public and private plots as indicated in step 4.

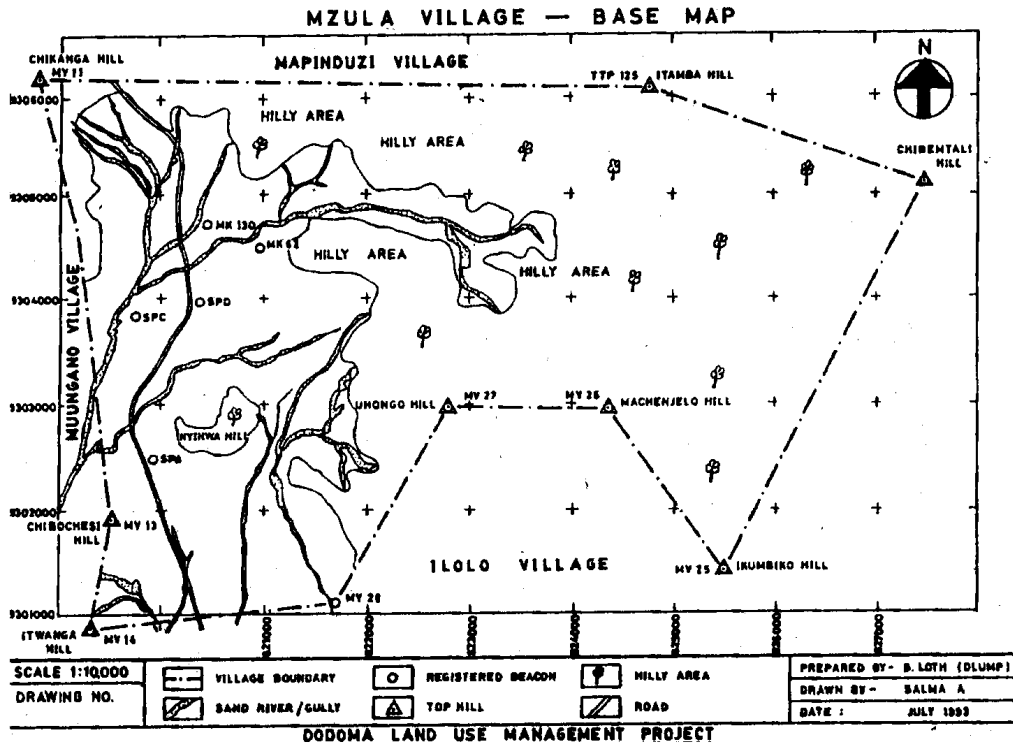
This job was done by several groups at the same time, each group consisting of a surveyor, a survey technician, assistant survey technician and one or two VLUM committee members.

3.3.7 Draw a village base map

A village base map forms the basis for: survey of public areas and individual plots in step 4; preparation of the existing land-use map (next activity); and possibly to carry out the bio-physical survey (activity 3.3.10).

A cartographer draws the village base map by entering the major physical features (not the general land uses) in the village boundary map, after receiving the survey data from the field. Depending on the desired accuracy and plot sizes in the village, a map scale of 1:5,000 or 1:10,000 will suffice (see example in figure 3.1).

Figure 3.1: A village base map in Mzula village prepared in 1992



3.3.8 Prepare an existing land-use map

This map forms the basis for detailed village land-use planning in step 4 and implementation of improved land management measures in step 5.

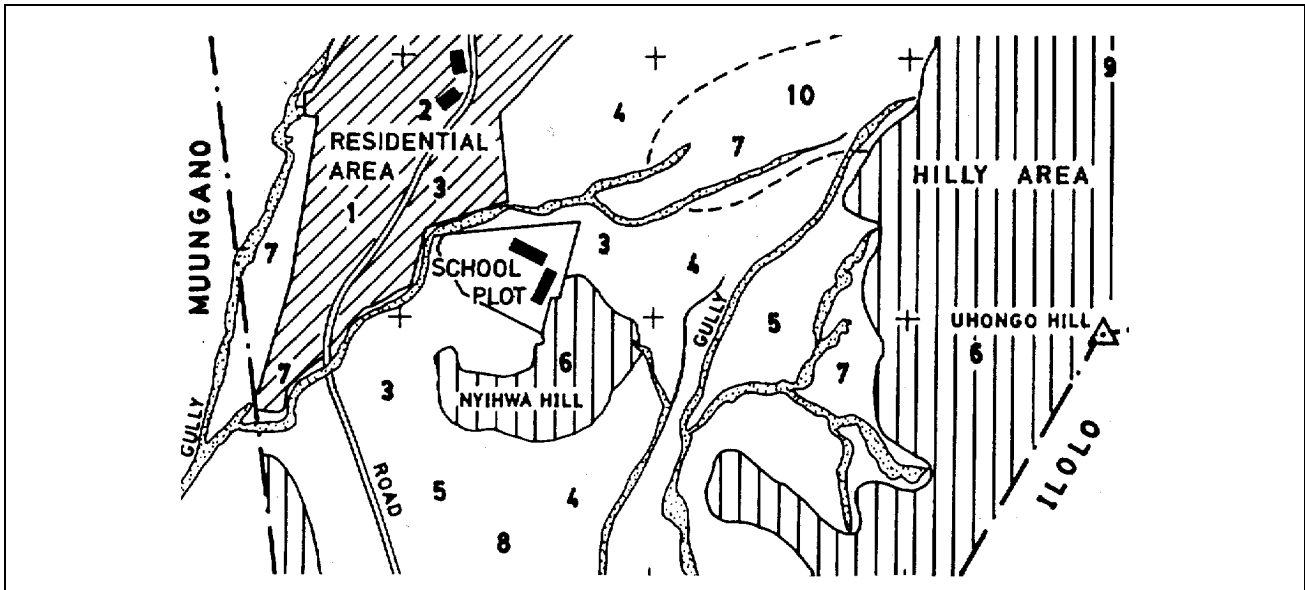
An existing land-use map is a base map where the surveyed boundaries of the general land uses have been added (see activity 3.3.6). Additional features and attributes which should be presented in an existing land-use map are (see example in figure 3.2):

- Major buildings such as a school, dispensary, church, mosque; government office, godown, water tank, mill and shops;
- Any other land resources, such as wells, construction materials, etc.;
- Existing land management practices for the identified land uses;
- Land related problems such as land-use conflicts, land tenure conflicts and land degradation (erosion & fertility loss);

This activity may be carried out through village walks whereby the above mentioned additional features are recorded separately for each identified sub-village planning area (see section 2.7/B of part A). The data collected during the PRA should be the starting point for this exercise. It is important to involve extension officers from agriculture, livestock and/or forestry in this exercise, rather than land surveyors.

The people involved form small groups, each group accompanied with at least one VLUM committee member and various villagers using the land in the concerned area. Besides the village base map, recent aerial photographs (scale 1:10,000 - 1:30,000) are very helpful during this exercise. All the additional features are drafted on a copy of the village base map in the field during the observations.

Figure 3.2: Example showing part of an existing land-use map of Mzula village with management problems which were identified by the villagers in 1992.



Major existing land-use types:

residential area, farming area, primary school, forest in the hills (for wood collection, incidental farming and grazing), gullies and roads.

Land Management Problems:

1. Land conflicts in the residential area between new users and customary users before Ujamaa;
2. No land allocated for common uses in the village e.g. play ground; market, cemetery etc.
3. No trees for shade and to act as wind breakers;
4. No access roads to the farming area;
5. Low crop production in the fields;
6. Farming, burning and tree cutting on the Uhongo and Njihwa hills causing serious soil erosion in the farming area;
7. Gullies destroying farmers fields;
8. Land conflict between neighbouring farmers;
9. Overgrazing by intruders from neighbouring villages which enhances erosion in the nearby farming area;
10. Severely degraded area with hardly any vegetation and therefore hardly need

After the existing land-use map is drafted for each sub-village planning area, it can be combined to one map and, if there is a need, be re-drawn more neatly by a cartographer afterwards.

The existing land-use map with its attributes gives the current status of land-use management in the village. It shows the land resources in more detail than the village sketch map which was prepared during the PRA in step 2 (see figure 2.1). The existing land-use map also shows land related problems and their distribution over the village land. It forms a basis for the detailed village land-use planning exercise in step 4 and the planning for improved land management measures in step 5. Together with the results of the PRA, it can also be used as base-line information to enable an impact assessment during step 6 (consolidation) and some years later.

3.3.9 Conduct a socio-economic survey

This activity is optional and only carried out if the PRA did not generate enough data to deal properly with important land related problems. The survey should be justifiable in terms of input (fluids, materials, manpower and time) compared with the expected output (land productivity). The survey should only deal with knowledge gaps which need to be filled for a proper planning.

The PLUM team, in consultation with the DLAC and VLUM committee, prepares a terms of reference and recruits the needed expertise for this survey. The PLUM team and the VLUM committee should be involved in this survey in order to assure that it is carried out according to the PLUM strategy.

A socio-economic survey within the setting of PLUM combines the investigation on social, cultural and economic issues related to land use.

Typical issues in such a research are: land tenure Systems, population studies, gender issues, land conflicts, economic viability of land management innovations, market studies, etc. Since the need for and the general objectives of the survey have been identified by the village community during the PRA of step 2, it is expected that villagers are more prepared to assist in supplying information and to use the outcome of the study.

3.3.10 Conduct a bio-physical survey

This activity is like the previous one optional. The considerations whether or not to carry out this activity and the general procedure to involve the required expertise for it are the same as outlined for the socio-economic survey.

A bio-physical (or agro-ecological) survey within the setting of PLUM combines the investigation on soil, climate and other land resources, resulting in an assessment of the capacity and potential of the land to fulfil the needs of the village community. It should also result in recommendations which are in accordance with the capacity of villagers to deal with the identified constraints, such as land degradation and other causes of low production. Typical issues in such a study are (see also section 2.8 of part A):

- Assessment of the land suitability for the different uses, i.e. types of agricultural, livestock and forestry uses;
- Options to improve land productivity;
- Availability of water.

3.4 Required input and expected output

Table 3.1 gives for this step a general indication of the required input from the different parties (see also section 1.4 of step 1). During the whole process, the district, the Village Council, the VLUM committee and the villagers commit themselves to reaching the agreed targets. The concerned parties are expected to keep their commitments and to remind each other about their responsibilities.

Expected outputs from this step are:

- Village boundaries are established, a village boundary map prepared and an application made for a Certificate of Village Land;
- A village base map has been drawn or sketched, based on survey data;
- An existing village land-use map has been sketched indicating major features and land management constraints which are important for the land-use planning exercise in the next step;
- If applicable, lacking socio-economic and/or bio-physical data are gathered, analysed and available to improve the immediate and long-term planning activities.

3.5 Monitoring and evaluation (M & E)

For the activities of this step, the following proposals for M & E are made (see also the last two columns of table 3.1):

- A. The PLUM team ensures the preparation and follow-up of the work-plans on a weekly or monthly basis, i.e. if work proceeds according to planning in terms of time, materials, budget, and leads to the desired results. This includes the activities of the PLUM team members, other experts involved in this step as well as of the VLUM committee members: At this stage, the PLUM team may encourage to involve one or more VLUM committee members (like the chairperson) in the M & B activity;
- B. The PLUM team members and staff more temporarily involved make notes during all activities which will be used for discussion, evaluation and preparation of the required reports and maps;
- C. The PLUM team monitors the co-operation among the district staff and with the villagers. The attendance and performance of the staff and villagers concerned during the various activities are important indicators;
- D. The PLUM team monitors if decision making at the village level is carried out in a participatory manner and if the supplementary surveys have the required quality;
- E. The 'steering committee' (see section 1.5 of step 1) follows the progress of the activities in this step, based on the work-plans and other documentation (maps, reports) prepared during this step.

Table 3.1: Indicative planning for Supplementary Surveys (step 3)

Time, input, monitoring and evaluation requirements for each activity:

Activity	Sub-activity	Number of days required to complete	Accumulative number of working days	Human resources (required from the involved parties)	Materials and equipment	Monitoring and evaluation	Results and comments
Meeting with village Council and VLUM committee	<ul style="list-style-type: none"> Village Council meeting Preparation of minutes 	1 1	1 -	<ul style="list-style-type: none"> Village Council, VLUM committee, PLUM team Village Council 	<ul style="list-style-type: none"> Stationery, transport, living allowances 	<ul style="list-style-type: none"> Work plan Minutes of the meeting 	<ul style="list-style-type: none"> Agreement of CAP regarding this step worked out and confirmed
Preparation for the supplementary surveys	<ul style="list-style-type: none"> Briefing of concerned staff and planning for their involvement 	2	3	<ul style="list-style-type: none"> PLUM team, concerned staff such as land surveyors 	<ul style="list-style-type: none"> Stationery, transport 	<ul style="list-style-type: none"> Work plan 	<ul style="list-style-type: none"> Concerned staff briefed and arrangements made
Establishment village boundaries	<ul style="list-style-type: none"> Agreement with neighbouring villages Placement of beacons Positioning of the beacons 	4 2 4	7 9 13	<ul style="list-style-type: none"> Vill. Council, VLUM c., negotiation team, surveyor, PLUM team VLUM c., neg. team, PLUM team, surveyor Surveyors, VLUM committee 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances, pegs Beacons (cement, etc.) Survey equipment 	<ul style="list-style-type: none"> Follow-up work-plan Documentation of the agreement and positioning of the boundary points 	<ul style="list-style-type: none"> Village boundaries known, documented and agreed upon
Establishment of reference points (optional)	<ul style="list-style-type: none"> Selection of locations Placement of beacons Positioning of beacons 	2 3 4	15 18 22	<ul style="list-style-type: none"> VLUM committee, surveyors, PLUM team 	<ul style="list-style-type: none"> Stationery, transport, accom., living al., pegs Beacons (cement etc.) Survey equipment 	<ul style="list-style-type: none"> Follow-up work-plan Documentation positioning of the reference points 	<ul style="list-style-type: none"> Reference points established This activity is only required when an accurate survey (of plots) is planned
Drawing of village boundary map	<ul style="list-style-type: none"> Drawing and checking of the map 	3	16 25	<ul style="list-style-type: none"> Cartographer, district surveyor 	<ul style="list-style-type: none"> Stationery 	<ul style="list-style-type: none"> Follow-up work-plan Quality of the map 	<ul style="list-style-type: none"> Map ready and submitted for approval and certificate
General Land Survey	<ul style="list-style-type: none"> a) Full survey or b) Semi detailed or c) Sketched 	40 20 5	65 45 21	<ul style="list-style-type: none"> Surveyors, VLUM committee, PLUM committee 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances, survey equipment, aerial photos 	<ul style="list-style-type: none"> Follow-up work plan Documentation of the co-ordinates 	<ul style="list-style-type: none"> All relevant features surveyed according to the desired accuracy
Drawing of village base map	<ul style="list-style-type: none"> Drawing the base map 	4	25 49 69	<ul style="list-style-type: none"> Cartographer 	<ul style="list-style-type: none"> Stationery 	<ul style="list-style-type: none"> Follow-up work plan Quality of the map 	<ul style="list-style-type: none"> Map is ready
Preparation of an existing land-use map	<ul style="list-style-type: none"> Village walks Completing map 	4 1	29 53 73 30 54 74	<ul style="list-style-type: none"> VLUM committee, village extension officers, PLUM team, cartographer 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances, aerial photos 	<ul style="list-style-type: none"> Follow-up work plan Quality of the map 	<ul style="list-style-type: none"> Map is ready and understood by VLUM committee
Socio-economic survey (optional)	<ul style="list-style-type: none"> According to objectives and applied methods 	Maximum 6	36 60 80	<ul style="list-style-type: none"> Selected experts, VLUM committee, PLUM team DLAC 	<ul style="list-style-type: none"> Stationery, transport, accommodation, etc. according to method 	<ul style="list-style-type: none"> Follow-up work plan Quality report 	<ul style="list-style-type: none"> Report with the required information and recommendations
Bio-physical survey (optional)	<ul style="list-style-type: none"> According to objectives and applied methods 	Maximum 6	44 66 86	<ul style="list-style-type: none"> Selected experts, VLUM committee, PLUM team DLAC 	<ul style="list-style-type: none"> Stationery, transport, accommodation, etc. according to method 	<ul style="list-style-type: none"> Follow-up work plan Quality report 	<ul style="list-style-type: none"> Report with the required information and recommendations

Step 4: Participatory Village Land-Use Planning and Administration



The community action plan for land use management which was created by villagers at the end of the PRA, is further implemented in this step and worked out in detail. The supplementary surveys in the previous step enable villagers to deal fully with land conflicts, land reallocation, land security enhancement, land registration and the management of public lands. Various strategies are proposed to deal with these issues, whereby the village community selects with assistance of the PLUM team the most appropriate options for the village.

4.1 Objectives

- A. To prepare a village land-use management plan with villagers considering public as well as individual interests.
- B. To solve land-use conflicts in public and private lands.
- C. To agree about, and if necessary to demarcate, survey and register land for community facilities as well as village public lands.
- D. To agree about and if required, demarcate, survey and register private lands.
- E. To establish a village land registry.
- F. If required to formulate by-laws to enforce various land-use agreements in the village.

4.2 Conditions to start

Important conditions which should be met before starting this step are:

- ⇒ A CAP for land use management which reflects the interests of the stakeholders in a balanced way;
- ⇒ Village boundaries established and well recognised by the village community, and by villagers of neighbouring villages;
- ⇒ An up-to-date existing land-use and base map being prepared;
- ⇒ Villagers are aware of the need for PLUM and well mobilised;
- ⇒ An efficient and motivated PLUM team and VLUM committee;
- ⇒ The required resources for this step are made available.

4.3 Activities

4.3.1 Draft a village land-use plan

The land-use plan drafted and work-plan prepared during this activity are used to carry out the selected activities of this step, leading to a final land-use plan which enables an improved use of the land resources.

The PLUM team and the VLUM committee organise meetings with the Village Council and meetings at the sub-village level in order to discuss and work out further the development priorities, land-use management issues and proposed areas of action as identified during the PRA in step 2.

A. Meeting(s) with the Village Council

These meetings should address to the following issues:

- A. To review briefly the results of the PRA (step 2) and findings from the supplementary surveys (step 3);
- B. To discuss and work out further the development priorities, proposed areas of action and the land-use planning issues which should be considered in the detailed plan formulation process;
- C. To present interests and views of the various stakeholders;
- D. To agree on how to incorporate gender aspects in the planning process;
- E. To start identifying the objectives⁹ of a village land-use plan and to agree on how to proceed in making the plan;
- F. To draft a village land-use plan on the basis of
 - the results of the PRA and in particular the CAP;
 - the existing land-use map (prepared during activity 3.3.8) and results of the socio-economic and bio-physical surveys (activities 3.3.9. and 3.3.10, if conducted);
 - the various levels of planning which should be taken into account (since they require different type of decisions, see section 2.7 of part A):
 - a) individual plot or farm level;
 - b) sub-village level;
 - c) overall village level;
 - d) joint village level (applicable in some cases) for land-use agreements covering a resource area involving two or more villages, to be treated as a single planning area (see box 4.1).
- G. To make arrangements for sub-village meetings for directly involving the different groups of stakeholders in the process.

B. Meetings at the sub-village level

These meetings are organised to work out plans and agreements for the specified sub-village areas. The recommendations made during the village council meeting are used as starting point. Specific issues of these meetings are:

- A. To review together with different groups of land users, the results of the PRA, the supplementary surveys and the general land-use problems and issues as raised by the village council meeting;
- B. To discuss the objectives for the formulation of a land-use plan for the concerned sub-village area;
- C. To formulate detailed land-use management proposals which are specific for the respective sub-areas, but within the context of the overall village land use plan;
- D. To agree about and make arrangements for the different activities at this planning stage, such as:
 - Identification and registration of areas for general land uses and for community facilities within the village residential area, Arrangements for the registration of individual farms within the farming areas. This may involve addressing boundary conflicts and requesting land owners to demarcate their farm boundaries as described in activity 4.3.3.

Box 4.1: The importance and application of joint village land-use management agreements

A joint village land-use plan may help to solve or avoid land conflicts between two or more neighbouring villages, and to improve the management of the 'shared' area. The need arises when land resources located in one village are (also) of importance for user groups living in one or more neighbouring villages, or in other words, when the inhabitants of neighbouring villages depend on each other's land-use management agreements. Examples are: micro catchments, grazing land, water points, forests and places of particular cultural interest which are shared by more than one village.

The process of a joint village land-use management planning may start in step 3 or during activity 4.3.1, while its need may be recognised during the PRA (step 2).

Based on the provisions of the bill of The Village Land Act, 1998 (section 11) the following procedure is proposed for entering into such an arrangement

- 1) When the need for such an agreement is expected or identified by the councils of the villages involved, they can form a joint area planning (JAP) committee which is composed of 3 to 4 councillors from each village.
- 2) This JAP committee organises one or more meetings whereby the nature, purpose and proposed content of the agreement is explained to the different groups of persons (from the concerned villages), using the land in question. During these meetings, they have the opportunity to put forward their interests and views about their use of land and the content of any agreement about that use.
- 3) The JAP committee drafts (with assistance of the VLUM committees of the concerned villages and the PLUM team) a joint village land-use management agreement which takes into account the views and interests of the users concerned, and presents the proposal to the councils of the villages concerned for their approval.
- 4) The JAP committee informs the respective District Council on the contents of the proposed agreement and the District Council can make comments which have to be presented together with the agreement to the Village Assemblies for their approval.
- 5) After the agreement has been presented to and approved by all the assemblies of the villages involved, it will take effect.

Additional remarks

- ◆ It is the responsibility of the VLUM committee to arrange sub-village meetings and to make a follow-up by mobilising individual villagers for carrying out the planned activities.
- ◆ The village land-use plan should indicate the different land uses (see box 4.2), their allocation and the agreed general management for each category of use. Depending on the priorities, the locality of the various land uses and individual plots can be registered at the desired level of detail and accuracy (see next two activities). The general land management agreements for the different uses are worked out into detail during step 5. Example 4.1. illustrates the process of village land-use planning in a participatory manner.
- ◆ The need for by-laws to enforce land-use agreements should be considered (see activity 4.3.7), as well as the need to arrange for compensation in case of re-allocation of private lands.
- ◆ When the land-use plan involves land re-allocation with significant changes in property boundaries, the Village Council should, according to the bill of The Village Land Act (1998), form a village adjudication committee. The adjudication procedure aims to ensure that existing user rights to land are recognised and recorded. Procedures for carrying out village adjudication are outlined in appendix B 1. The PLUM team and the VLUM committee should assist the village adjudication committee to accomplish this task. In activities 4.3.2 and 4.3.3, the adjudication and demarcation of plots is combined.

Box 4.2: Proposed categories of land use in a village¹⁰ with some common examples

(see appendix B4 for detailed information)

General land uses	Common (or public) lands	Private lands
<ul style="list-style-type: none"> • Agriculture • Grazing • Forestry • Wildlife • Residential 	<ul style="list-style-type: none"> • Grazing areas • Forest • Water ways/bodies • Land for community facilities: roads, access paths, cemetery, market, school, la rounds 	<ul style="list-style-type: none"> • Farmer's plots • Residential plots

4.3.2 Demarcate, map and register the areas for general land uses and community facilities

Areas which the Village Council, with assistance from the PLUM team and the VLUM committee, have identified and allocated for general land uses and for community facilities (see box 4.2) are demarcated, surveyed and registered. Before the survey starts, exact boundaries have to be agreed upon by the Village Council and villagers having land rights in the proposed areas and in the neighbouring plots.

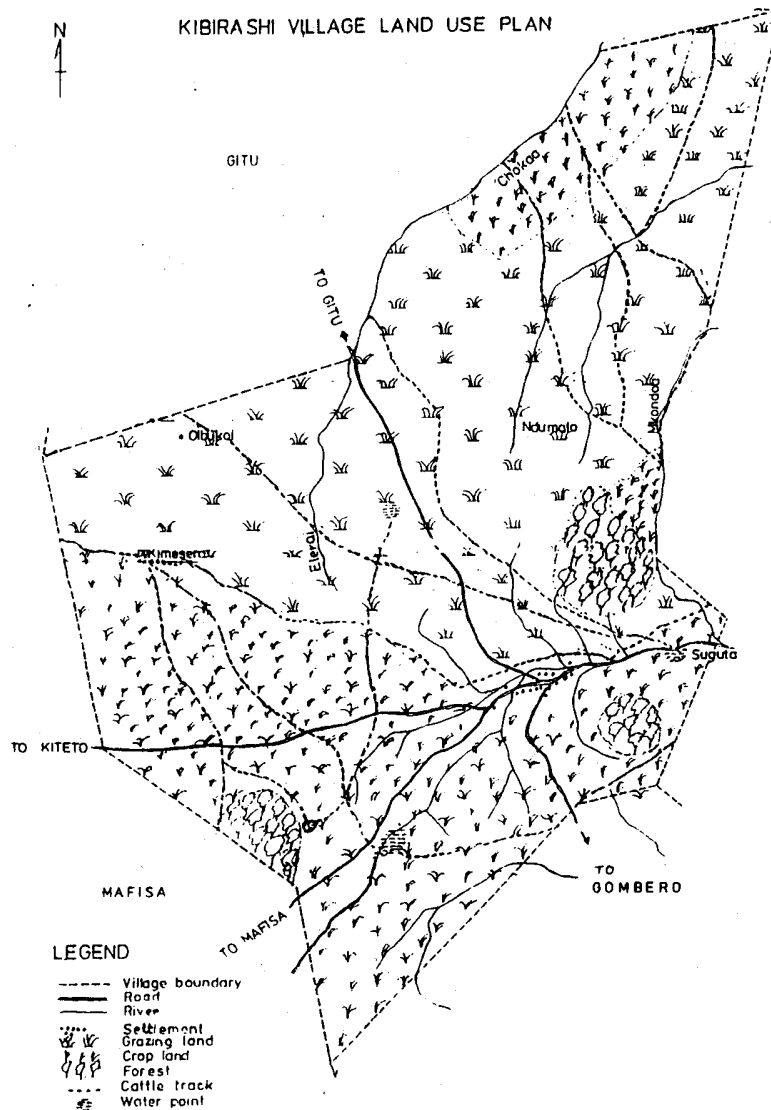
During the process of negotiation for the allocation of public areas and their boundaries, all parties concerned (individuals, land user groups, Village Council) should be given ample time to negotiate and agree. The VLUM committee assists, while the PLUM team is involved only to facilitate negotiations and rational decision making according to recognised procedures.

Example 4.1 Village land-use planning in Kiberashi village facilitated by HIAP

This example illustrates the process of participatory village land-use planning in Kiberashi Village, which was facilitated by the Handeni Integrated Agroforestry Project (HIAP). The project started as an agro-forestry venture, but later incorporated participatory village land-use planning, covering 30 villages in 1997. The land-use plan of Kiberashi Village was in the first place initiated to minimise land conflicts between pastoralists and crop cultivators. The plan (see figure 4. 1) was created through the following stages:

1. The idea of making a general land-use plan was introduced in Kiberashi village by the HIAP staff. Later on, data on the existing land-use situation was collected and analysed. Negotiations and sketching of various land-use boundaries followed.
2. A village base map was prepared after agreement about the village boundaries with the neighbouring villages of Gombero, Mafisa and Gitu. The boundary points were then demarcated on the ground by land surveyors and mapped into a topographic standard sheet at scale 1:50,000. Major physical features were also indicated.
3. Village level institutions involved in the process are: The Village Council; Hamlet (Kitongoji) leaders and; about 20 members of the village land-use planning committee, the majority of which are also members of the Village Council. Although most pastoralists move with their cattle from one village to another during the negotiation and planning stages, there were always enough committee members or representatives of pastoralists who attended the meetings.
4. During the planning and negotiation process the major resources and land uses such as farms, grazing areas, forests, water sources, settlements and cattle tracks, were identified and demarcated by the villagers themselves. The villagers realised that, though the number of land users was increasing, the village land can not be increased and that a proper agreement in form of a village land-use plan would be beneficial for all of them. The agreements entailed not only the allocation and boundaries of the various land uses, but also its management.
5. The existing land uses formed the base for the land-use planning exercise. Other important considerations were: farming land needs a more fertile soil than grazing areas; the water points should be accessible for livestock through cattle tracks and; hills should be allocated for forestry (see figure 4.1). In the beginning villagers found there is no need to demarcate the boundaries of the different land uses since there were enough physical features in the village (such as tracks, paths, outstanding trees and slopes) which could easily be used as reference points. However, later villagers decided to consolidate these boundaries by planting trees and sisal around the cattle tracks.
6. Various compromises were made during the planning process. Villagers who have farms in the zones which were earmarked as grazing areas may proceed using their farms but are not allowed to expand them. New lands for cropping can only be obtained in the zones allocated for it.
7. Villagers were not interested to register their farms and wanted the village land to remain under the village government. The major reason is that shifting cultivation is still a common practice in the village.
8. Because land conflicts were serious villagers decided to enforce their agreements through by-laws in order to enable them to control and penalise any individual who does not respect the agreements (see activity 4.3.7).

Figure 4.1: Kiberashi agreed land use map (source: HIAP, Handeni)



There are various options to record the boundaries of a plot (as outlined in section 2.6 of part A) which differ in accuracy and input requirement, such as:

- Descriptive boundaries (cheap but often insufficiently accurate);
- Sketched boundaries through pacing (cheap and little accurate);
- Sketched boundaries through compass traversing (moderate costs and moderate accuracy);
- Drawn boundaries based on air photos, if available and feasible (cost and accuracy depends on the applied method);
- Full surveyed boundaries according to the 1959 Land Survey Ordinance (very accurate but also very expensive).

Decisions on the registration methods to apply are best made during formulation of the CAP in activity 2.3.8, since it influences activities 3.3.4 and 3.3.6 of step 3. The decision, as already emphasised in section 2.6 of part A, should take into account factors such as:

- Village level priorities in land registration;
- Expected land productivity;
- Available resources at the district and village level to support the registration within a reasonable period.

In considering these and other factors, a decision may be made to use different registration methods in different parts of the village, as illustrated in example 4.2.

4.3.3 Negotiate about and register the private lands

In this activity land occupied by individuals is surveyed and registered according to requests made by individual villagers. The extent and the level of accuracy of the registration should depend on the

circumstances in the village. Considerations for the survey methods to be adopted are the same as those outlined for the survey of public lands in the village (see previous section).

The role of the PLUM team is similar as in the previous activity, whereby it is as little as possible involved in the negotiation process. The VLUM committee members are fully involved and have been given guidelines in advance for smooth operation. This makes the method more affordable and sustainable.

Example 4.2: Working Procedures for land registration applied by DLUMP

Two survey methods were used by DLUMP in Mzula and Ilolo villages:

- i. The village boundaries and areas for community facilities were fully surveyed (option e);
- ii. Physical features such as wide gullies, roads and boundaries between the farming area and the conservation areas were surveyed partly through compass traversing and partly with theodolites (combination of option c and e);
- iii. Farms were surveyed through compass traversing (option c);
- iv. Residential plots were not surveyed, but the residential area as a whole was demarcated in accordance with option e.

The following working procedure was used:

1. The PLUM team with land surveyors were split into 3 to 4 groups. Each group worked separately with VLUM committee members, elders, members of the Village Council, school teachers, village dispensary staff, villagers running business at the village market, and other villagers who use land bordering to the identified public areas.
2. National procedures and directives for land registration and for space standards for areas identified for community facilities were used (see appendix B5). In case a villager lost part of his or her land in the process of demarcating areas for community facilities, arrangements were made for compensation. In most cases compensation was in the form of alternative land from the village communal farm.
3. The technical part of demarcation and mapping was done by the surveyors after agreement was reached. Pegging the boundaries and the corners was witnessed and assisted by the villagers involved.
4. After an area of land for a specific community facility was registered and demarcated on the ground, survey co-ordinates of the corners of the boundaries were calculated and checked in the field by the district surveyor.
5. Subsequently, the survey data from the public areas was forwarded to the Regional Lands Development Office for mapping, checking and submission to the Director for Surveys in the Ministry of Lands for approval.

Once villagers agree about the boundaries of their (farm) plots, they are requested to demarcate the boundaries of their lands with assistance from the VLUM committee members.

To simplify the work, the VLUM committee can make arrangements for groups of villagers with their lands in a particular village sub-area to meet in the field. At an agreed time and in the presence of some VLUM committee members, the parties involved agree on the boundaries of their plots and demarcate them with pegs or otherwise. The VLUM committee should finalise the boundary negotiations and demarcation exercise before dealing with another group in a different sub-area.

During the process of boundary fixing, land re-allocation may be necessary to:

- Suit individual farmers views and interests;
- To straighten boundary lines, to minimise corners and thereby simplifying the surveying and registration process;
- To ensure sufficient areas for access paths and roads to different (farm) plots.

Demarcation of boundaries (after pegging) is preferably done with local materials such as shrubs, trees or grasses (see section 2.6 of part A). Example 4.3. provides a case of boundary negotiations.

Depending on the survey method adopted, the VLUM committee members may involve district surveyors, or survey the (farm) plots themselves through pacing. If the involvement of district staff is required, the VLUM committee members may request for them after the owners of a number of neighbouring plots have agreed and demarcated the boundary points.

Example 4.3: Negotiation and survey procedures applied for private land

In Mzula and Ilolo villages, DLUMP employed the following procedure for negotiation, surveying and registration of individual farm plots:

1. Since both villages are a result of the Ujamaa villagisation exercise, most houses are concentrated in the residential area. This has resulted in many and small residential plots, which was considered too expensive to survey accurately. It was therefore agreed to survey the private farms only (besides the lands for community facilities).
2. The different farming areas in the village were divided in sub-areas. For each sub-area the VLUM committee asked farmers to meet in the field for discussions and making agreements about their boundaries. The farm boundaries were subsequently demarcated with pegs. If a farmer was not able to attend he/she made arrangements for sending a representative. This procedure made it possible to cover a sub-area every day.
3. The VLUM committee asked the surveyors to survey and map the neighbouring farms after the owners had fully agreed and demarcated the boundary points on their plots. The survey was witnessed and assisted by the VLUM committee and the farmers concerned.
4. The survey was done through compass traversing, using a prismatic compass and a measuring tape. This method is fast and cheap but produces less accurate data compared to the use of a theodolite (and therefore not yet accepted for a full survey and land registration).
5. The owner of the farm plot as well as the owners of the neighbouring land signed the registration form in the field, immediately after the plot was surveyed. Each registration form was later also signed by the village chairperson (see figure 4.2).
6. The survey team was split into two groups: each with a surveyor, assistant surveyor and assistant survey technician. Each group surveyed, depending on the size of the plots, about 7 to 10 plots a day. At the end of each day the survey team drafted the plot on an A4 page, to see whether there are errors which should be corrected in the field. Figure 4.3 shows an example of such a sketch which includes the distances and bearings of the boundary comers as well as the provisional plot number.
7. The drafts together with the accompanying survey data were forwarded to the district/region where the cartographer drew the plot boundaries accurately in the village base map.

Figure 4.3: Example of a sketch with data from a survey carried out by compass traversing in Ilolo village

[This figure is not included in this version of the document.]

When a simple surveying method is applied, like pacing, it is proposed that VLUM committee members are trained to sketch the plot on the backside of the registration form right in the field. The back side of the form should have grid squares to simplifying sketching. The sketch should be made with agreed mapping symbols, an approximate scale, some reference points and a north indication (see also appendix B6).

Fees for surveying and registration may be requested from villagers to cover all or a part of the inputs from the district and from the Village Council. The amount depends on several factors (see activity 4.3.6).

The agreement of ownership and boundaries of the plot are finally formalised by means of a land registration form which is signed by the owner, the owners of the neighbouring plots, the village chairperson and/or secretary (see figure 4.2 and appendix B6). The registration form also indicates issues such as the (provisional) plot number, sex of the owner, the names of the people who have signed (and where they live), the registration date, (agreed) use of the land and the names of the village area, village, district and region. Issues which can be added are: names of the family members of the plot owner; kind of witness (owner of neighbouring plot or his/her representative), VLUM committee member and/or a surveyor who was present; First time registration or change of registration; the surveying method which has been applied and; the name of the person who carried out the survey.

At this stage, men being encouraged during and after the PRA, and having several plots, can now allocate one or more of them to their wives and/or daughters and let them be registered in their names (see example 4.4 and for more background information section 2.3).

Example 4.4: Allocation of land to women in Mzula and Ilolo villages

In the pilot villages of Mzula and Ilolo, the VLUM committee asked men to allocate one or more of their farm plots to their wives or daughters. The process of gender awareness creation started during the PRA. In both villages, more than 95 per cent of the families registered their lands. While 12 per cent of the registered farm plots in Mzula were owned by women the figure for Ilolo was 14 per cent. The average size of the plots owned by women is in the two villages equal to that of men.

In both villages it is not yet clear if registration of land to women has actually led to improved control over the land and its products by women. The majority of the men refused to allocate land to their daughters for the reason that when they marry, the land will go to the family of their husbands, which is considered a loss.

The registration is done in the field. It is advisable to fill and sign three registration forms for each plot. One form is kept by the owner of the plot; another by the village government for the village registry and the third one by the district for the district land registry.

Example 4.5 shows a land registration process, based on option b (section 4.3.2) as carried out in Chekereni village, Moshi Rural District.

Example 4.5: Land registration by villagers in Chekereni village

The registration process described below is extracted from an interview with Mr. Kamuu, a member of the Chekereni Village Land Committee (*Kamafi ya Ardhi ya Kijiji*), who was involved in the outlined process. The interview was carried out by F. Lerise (for the Village Plan Research project of UCLAS) in December 1994 in Chekereni village, Moshi Rural District.

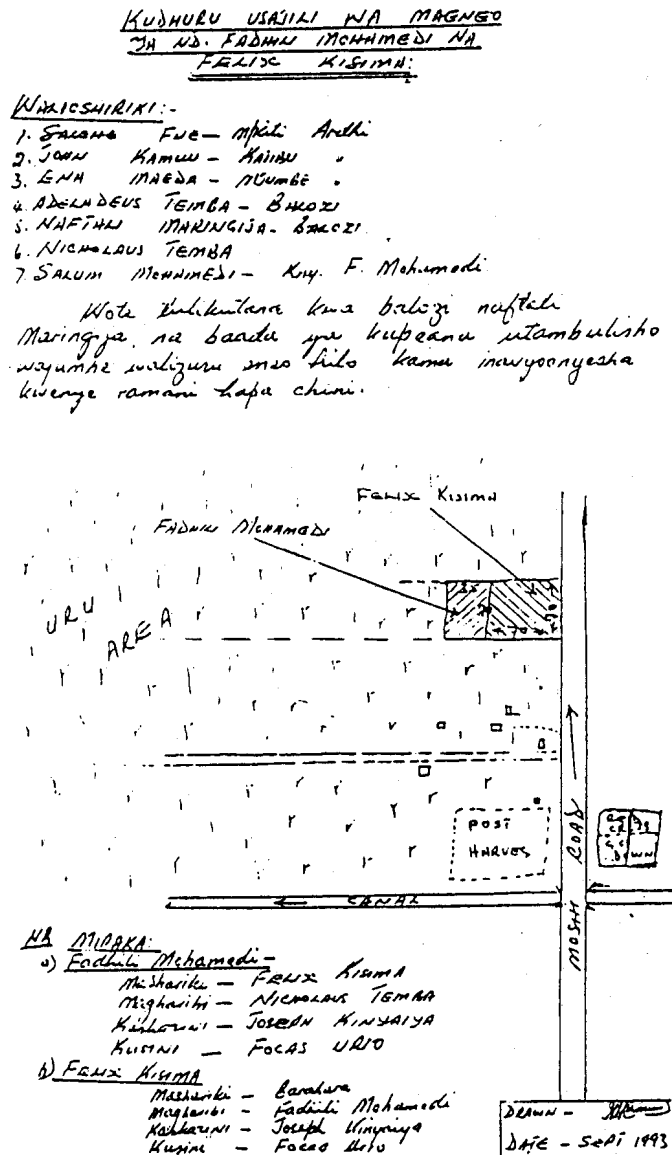
1. On September 24, 1993, Mr. Kisima of Chekereni visited the village office where he consulted the village chairman and requested for assistance to register his farm plot.
The need to register the land was triggered off by an order from the village chairman that, private farms located in the Wauru Hamlet should be registered, in terms of land rights Chekereni village is divided into two areas: where the Ujamaa village acquired land which later was allocated to members of the village and; an area where villagers have customary rights to land. More than one third of the land is occupied under customary rights. The order from the village chairman was meant to provide the Village Council with information on land occupiers in the Wauru Hamlet where land rights are held under customary regulations. Mr. Kisima was therefore responding to that order.
2. The Village Chairman wrote a small note to the secretary of the Village Social Services Committee whose functions include dealing with matters of land allocation and land disputes in the village. The note from the Chairman read: '*Kamati ya Ardhi, nendeni kusajili shamba la Mzee Kisima*' (Lands committee, proceed to register Mr. Kisima's land).
3. Mr. Kisima presented the note to the Committee Secretary and was told to report at the village office three days later with his neighbours and his ten cell leader (*Balazi*) who will act as witnesses over the boundaries of his land, and be ready to pay Tshs 1000/= . He was given three days so that the Committee secretary could consult with the other members to get prepared for the registration exercise.
4. On the registration day, Mr. Kisima reported at the village office with two witnesses. The other witnesses were waiting for the registration party at the site. Three members of the *Kamafi ya Ardhi* accompanied Mr. Kisima to the site. On their way to the site they went through the ten cell leader's compound where they found him with another neighbour to Mr. Kisima waiting for the registration party
The ten cell leader, informed the party that one witness had promised to come but had not yet arrived. After a short discussion between the ten cell leaders and the members of the *Kamafi ya Ardhi*, they agreed to proceed without that witness. It was possible to agree to proceed because the ten cell leader argued that there has not been a boundary dispute reported to him over the land in question. It was therefore a straight forward case, which did not require all the four neighbours to be present.
5. When they arrived at the site, Mr. Kisima showed the extent of his farm through walking along the boundaries. In one of the corners there was an ant hill which Mr. Kisima referred to as one of his boundary marks.
Then the Secretary of the *Kamafi ya Ardhi* started to pace the length of the different sides of the farm. The farms were found to be seventy paces by seventy paces, which is approximately one acre in area.
6. After taking measurements one member of the *Kamati ya Ardhi* wrote a small report mentioning those who were present and witnessed the registration. In addition a small sketch was also prepared. The sketch (see figure 4.4) shows the location of the site with respect to known features in Chekereni, for instance the Paddy Processing Plant. Two adjacent farms were registered and included in one sketch.
7. Once the sketch was ready, it was shown to the party. They all agreed. Each member of the party including the ten cell leader and members of the *Kamati ya Ardhi*, received Tshs 500/= from Mr. Kisima and the same amount from the other villager whose farm was registered. The members of the *Kamati ya Ardhi*, requested Mr. Kisima to visit the village office next day for a copy of the registration report, and an identity card that he has land within Chekereni village boundaries.
8. On the following day Mr. Kisima reported at the village office. He met the secretary to the *Kamafi ya Ardhi* who directed him to the Village Accountant Office to pay Tshs 1000/= as registration fees charged by the Village and Tshs 1050/= as costs for the identity card. Mr. Kisima paid the same and was issued with a village receipt and an identity card, which Mr. Kisima should show to the village secretary before he is registered into the 'village master book' as it is called in Chekereni.
9. Mr. Kisima was registered in the village master book by the village secretary who informed him that, after registration, the Village Council recognised his land rights in Chekereni and in case of boundary disputes the Village Council will defend him in accordance to the data and information included in the sketch made by the members of the *Kamati ya Ardhi*.

Commentary

- After including Mr. Kisima's land rights in the village master book, he has improved his land security for he is promised assistance and support from various sources:
 - a) The Village Council in general;
 - b) Members of the village lands committee whose names appear on the sketch;
 - c) The witnesses who were present during the registration and whose names also appear on the sketch;
 - d) The sketch as it is signed by a member of the Village Committee on Social Services, which is administratively recognised and legally supported;
 - e) The Village Register (master book).
- The Chekereni experience is simple and does not cost the government or the Village Council anything. It is basically self financing and thus sustainable in a village environment where individual villagers are able to raise a small amount for the whole process (in the Chekereni case Tshs 3500/= which Mr. Kisima paid in total for the seven witnesses and Tshs 2050/= which he paid to the Village Council).
- During a mass registration in a village, these costs can be reduced considerably. In such case there may be, for instance, no need to pay witnesses since owners of neighbouring plots witness for each others plot registration.
- However the data generated and the sketch map from the Chekereni example can be improved through a short training of members of the *Kamafi ya Ardhi* (VLUM committee).

Figure 4.4: Example of registering land through a simple documentation in Chekereni village, Moshi Rural District

(source: F. Lerise, UCLAS)



4.3.4 Finalise the village land-use plan

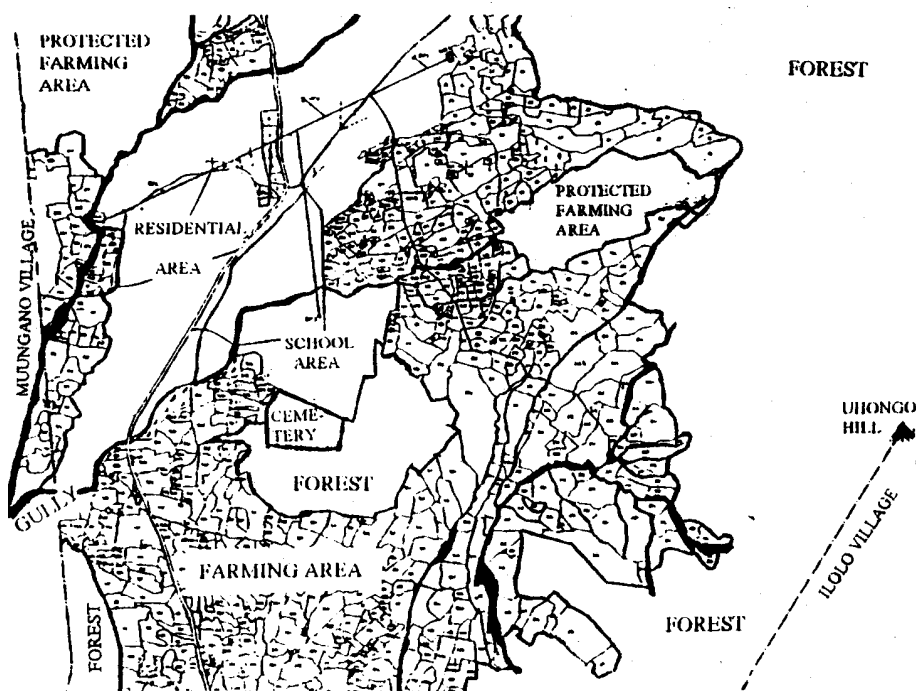
During the tedious work of negotiations, surveying and registration of the private and public lands in the village, new issues may arise. They should be included in the village land-use plan. Thus exercise can be done during a meeting with the Village Council, the VLUM committee and the PLUM team. However, depending on the type and importance of these issues, one or more sub-village meetings and/or a village assembly meeting may be required. During these meetings proposed changes are discussed and approved, and thus become part of the final village land-use plan¹¹. The final village land-use plan is presented to the District Council for their support. If applicable, this can be combined with submission of by-laws (see section 4.3.7) to enforce implementation of the land-use plan.

During this activity, the PLUM team may assist the VLUM committee to prepare a village land-use map which documents the spatial part of the land-use plan, i.e. the boundaries of the major land uses, areas for community facilities, private lands (if applicable), etc. For each land use indicated in the map, land management strategies¹² which were identified during the various activities (sections 2.3.8, 3.3.8 & 4.3.1) should be documented as part and parcel of the village land-use plan. These strategies are worked out in the next step to identify appropriate land management measures. Example 4.6 illustrates the management of areas designated to wildlife.

The agreed village land-use map is drawn into the village base map section 3.3.7). Depending on the type of land survey method adopted by the public lands and the private plots, this can be sketched or drawn accurately by a cartographer. Figure 4.5 shows an example of a detailed and-use plan. Figure 4.1 shows the

map of a more general village land-use plan indicating the sketched boundaries of the general land use together with the major features, such as roads, rivers and cattle tracks.

Figure 4.5: Example showing part of a detailed village land-use map from Mzula village, together with some management strategies for each land use.



Example 4.6: Community based wildlife management in 60 villages

Wildlife is a source of conflict, since it can cause loss of life and damage to crops in villages bordering game reserves and national parks. Conventionally, villagers do not participate in decision making on wildlife issues and are not allowed to hunt. Revenue derived from 'tourist hunting' goes to the central government. This often resulted in conflicts between villagers and the authorities, while the number of animals has been decreasing dramatically due to poaching, mainly by outsiders.

As a response, the new wildlife policy of 1998 has introduced the concept of wildlife management areas. These are village reserves, exclusively set aside for wildlife and managed by villagers with technical guidance from the wildlife division of the ministry. These village reserves are aimed at being beneficial for both, the villagers and wildlife.

Through the NRBZ programme (see box 2.10 of part A) 60 villages bordering conservation areas have adopted this concept and manage their village reserves as follows:

- a) Villagers are provided with a sustainable hunting quota, so that villagers have legal access to a quantity of meat, that can be taken from the area without affecting its ecosystem. Villagers can improve their diet and derive revenue from the sale of meat from their quota. According to the new wildlife legislation, currently under preparation, villagers will have also the right to lease the hunting rights for their quota to (tourist) hunting companies.
- b) In return, villagers are required to appoint and equip village scouts, who patrol wildlife areas in order to discourage illegal hunting. The village scouts and the village leaders receive special training from the wildlife division in order to perform their tasks well.

The results of this management system have been encouraging. In the villages under this scheme, wildlife is not seen anymore as a source of conflict only, but also as a source of nutrients and income that needs to be protected. The revenue collected by villagers from their hunting quota is usually more than sufficient to appoint and equip the village scouts, while the remaining funds are allocated by the village government for village development projects.

At the same time, there is evidence that this system has decreased poaching in the concerned areas, and that wildlife is coming back where it has been absent for many years.

4.3.5 Establish a village and district land registry

A well recorded and organised data which is stored and frequently up-dated in maps and text files should be a prerequisite for establishing a registry at the village and district level.

The bill of The Village Land Act (1998) empowers the Registrar of Land Titles to establish district land registry offices which shall fall under the jurisdiction, supervision and direction of the Registrar (section 21.3). Therefore, the PLUM team can contribute data to the District Land Registry. The PLUM team should ensure that the (cadastral) data generated from PLUM activities, in the respective villages should form part of the data for the village land register as well as for the district land registers. Maps and land registration

forms used in the process of establishing and demarcating property boundaries should be structured in such a way that the data can be used in building up the district land registry.

The cadastral data generated during activities 4.3.2 and 4.3.3 is now stored in a safe and easily manageable way in the village and in the district in order to facilitate the process of issuing land registration documents. After consolidation (step 6) the village land register should remain up-dated to keep pace with future changes in land use and rights (through inheritance, selling, etc.). This requires a good communication between villagers, Village Council and the district staff, which may be achieved through PLUM teams.

A. Village land register

The above mentioned data are kept in the village office and it is proposed that the register is managed by the Village Executive Officer with assistance of some VLUM committee members under the mandate of the Village Council.

The management of the village land register entails the following issues:

- Keeping record of all changes in land tenure and use;
- Reporting of the changes to the District Council in order to enable updating of the district land register;
- To avail information on land use and tenure in case of land disputes, etc.

A detailed proposal for a village land registry is given in appendix B6.

B. District land register

At this level all the cadastral information is stored, managed and updated by the district lands officer. This officer should be able to use the cadastral data-base in order to facilitate issuing title deeds or any other type of documents, and to play its role if land disputes can not be solved at the village level only.

Districts which are equipped with computers and having a conducive environment (including well trained staff) for smooth operation of the computers, may consider a computerised cadastral data-base to supplement the conventional filing system. A computerised data-base facilitates the compilation, storage, analysis and reporting of cadastral data and herewith facilitates issuing of land registration documents during and after the introduction of PLUM in a village.

The land registration forms, duly signed, should be stored in hard copy as a legal document to support the computerised data-base.

4.3.6 Enable issuing of certificates of customary rights

(Hati ya Ardhi ya Mila)

During this activity the PLUM team assist the Village Council to issue registration documents to all villagers who have applied for certificates of customary rights. This can be carried out after the required activities for adjudication, negotiation, demarcation and registration of land have been done out according to the provisions of the bill of The Village Land Act (1998). The previous sections of step 4 and the relevant sections of appendices B and E present guidelines and procedures to accomplish this condition.

As outlined in appendix B3, the Village Council may grant (issue) Customary Rights of Occupancy to villagers who applied for it and who accepted the Letter of Offer. The Letter of Offer indicates the conditions under which the customary right will be granted to the applicant. This includes conditions on how the land parcel concerned should be used and the payment of a fee for issuing the certificate, as well as the amount of land rent to be paid annually. Sections 28 and 29 of the Bill, which deal with the user conditions and the land rent, are presented in appendix E4 and E5 respectively.

4.3.7 Create by-laws

By-laws refer to regulations which are made by a local authority, which are binding in a certain area, and which can not be covered easily by general laws. By-laws can be created for the district and the village levels and should not contradict national laws. For PLUM, by-laws provide the legal basis and are considered as powerful tools to enforce specific local level agreements concerning natural resource management and village land-use plans. They can be created to allocate land for different uses and to give restrictions and directives for the management of the different delineated uses, in order to protect various land resources such as water, soil and vegetation (forest).

Village by-laws are necessary in areas with serious land conflicts whereby agreements approved by the village assembly are expected to be insufficient to make them respected by all members of the community.

On the basis of the Local Government Act of 1982 (see appendix E7), experiences from rural development projects (HIM) - Handeni) and other sources such as Nchimbi (1996), the following procedure for creating by-laws is outlined:

- A. The Village Council may initiate this process when it expects a need to create a by-law. It discusses the objectives and contents of the by-law with the VLUM committee. Meanwhile, the PLUM team gives technical assistance.
- B. The Village Council assigns the Hamlet leaders (often also council members) and/or the VLUM committee members to organise Hamlet or other type of sub-village meetings for discussions with villagers (see appendix A).
- C. The Hamlet leaders and/or VLUM committee members report the results of the sub-meetings to the Village Council. The Village Council together with the VLUM committee use these results to prepare a first draft of the by-law with assistance of the PLUM team.
- D. The PLUM team presents the draft to a District Magistrate (member of the DLAC) or a District Council Solicitor in order to ensure that the contents are in line with district by-laws as well as the national laws and policies.
- E. Subsequently, the village government presents the draft by-law to the Village Assembly for discussion and approval. It is advisable to invite also the Ward Executive Officer for this meeting.
- F. The village by-law is sent together with the minutes of the village assembly meeting to the Ward Development Committee, which ensures that the interests of other villages in the ward are preserved.
- G. The Ward Executive Officer forwards the by-law to the District Council for approval and when needed, supports its execution. The district sends a signed copy of the by-law to the Village Council indicating the date of its effectiveness.
- H. The Village Council announces the decision of the District Council to the villagers (which is their responsibility). This can be done in a village assembly meeting and/or hamlet/sub-village meetings, supported by posting it in a public place.

Example 4.7: A draft by-law for Kiberashi Village (source HIAP-Handeri)

LOCAL GOVERNMENT ACT (VILLAGE AUTHORITIES) 1982 (No. 7)

BY-LAW

Enacted under section: 163

BY-LAWS FOR KIBERASHI VILLA GE LAND-USE PLAN, HANDENI DISTRICT

1. These by-laws be called by-laws for Kiberashi village land-use plan of Handeni District 1996 and will start application after being approved by the Handeni District Council
2. These by-laws apply for the whole area under Kiberashi village, registered as No. KIJ/TA/443 under the Villages Registration Act of 1975.
3. In these by-laws:
 - 'Appointed leader' means the village government chairperson or any other person appointed under these by-laws;
 - 'Government' means Kiberashi village government;
 - 'Village' means Kiberashi village registered under the Village Registration Act of 1975;
 - 'Settlement' means the area inhabited by people;
 - 'Grazing land' means the area where livestock grazes;
 - 'Agriculture' means production of commercial and food crops; 'Livestock' means cattle, goats, sheep, donkeys and dogs;
 - 'Forest' means an area with grasses or trees planted or naturally grown in the areas reserved under these by-laws;
 - 'Water sources' means rivers, streams, springs, wells and water points.
4. Hilly areas listed underneath are conserved by the village:
 - a) Hangs or Oldonyolamila hill;
 - b) Mtego hill;
 - c) Mgora hill;
 - d) Mbaruwani hill.
5. Areas listed underneath have been allocated for the following uses:
 - a) Grazing;
 - Elelai plains,
 - Ndumalo plains,
 - Mkondoa plains,
 - Lolparagu/ Nkonyongo plains,
 - Mbar'uani plains,
 - Hoza, Mandela, Chanika, Komyembe, Kisiwani, Kinwelwe, Mteke, Ndumalo, Lelai, Mgora/Mvivuhendi, Komrindi, Mkondoa and Lolbalagu hamlets

- b) Settlement;
- c) Agriculture;
 - Mgora valley,
 - One kilometre each side of Chokaa valley,
 - Mkondoa valley
 - Farms which have been accepted during boundary demarcation in April 1995 in Hanga/Oldonyololamilia hill
- d) Forestry (not yet planned)
- e) Water sources - Suguta springs,
 - Komtindi water pond,
 - Kwediguyu/Kwechengese springs,
 - Kwamatanga,
 - Kimeresa (Ndorotu) water pond,
 - Mkondoa valley,
- f) Cattle tracks;
 - i. Mugora - Komtindi water pond - Mtego hill - Suguta to Kwamalgwa water pond,
 - ii. Mugora - Naiburundereti - Kimesera,
 - iii. Olumaluhi - Suguta,
 - iv. Olubugoi - Suguta,
 - v. Elelai - Suguta,
 - vi. Ndumalo - Suguta - Komtindi water pond,
 - vii. Ndumalo - Nkonyongo,
 - viii. Mkondoa - Suguta,
 - ix. Mkondoa - Suguta - Lolbalagu,

6. In areas allocated for conservation or special uses, it is not allowed for any person to act or use it contrary to the prescribed uses in that area.
7. It is prohibited for any person to start new uses in an allocated area without first getting permission from the Kiberashi village government.
8. Any person who fails to implement or breaks these by-laws, will have committed an offence and will be prosecuted in court and if found guilty, be fined Tshs. 3000 /= or an imprisonment of not more than three months, or both fine and imprisonment.

The office stamp of Kiberashi village has been stamped on these by-laws in accordance with the resolution passed in the Village Council meeting called and held accordingly in April 1996; and stamped in front of:

Kiberashi Village Government Chairperson
 Handeni District Council Executive Director
 Handeni District Council Chairperson

Additional remarks

- ◆ In practice, there is a chance that some of the above mentioned sub-activities may have to be repeated, before the by-law is operational. Reasons for that can be: the participants have not yet come to an agreement during the village council, hamlet and/or assembly meetings; the Magistrate had to make major changes in the draft by-law; the Ward Development Committee or District Council returns the draft to the village level for amendments before giving an approval
- ◆ The village Council with assistance from the VLUM committee, other villagers, and even the police, are responsible to oversee the implementation of village by-laws. Anybody who violates the by-law can be prosecuted by the Ward Council, (Baraza la Kata) and if found guilty penalised as indicated in the by-law.
- ◆ By-laws should contain the following information: Name of the bylaw; Number of the by-law; Objectives; Date of effectiveness; Penalty (sentence/fine)
- ◆ Example 4.7 shows drafted by-laws which have been created in Kiberashi village of Randeni District with assistance of the Handeni Integrated Agroforestry Project (HIAP). The Kiberashi by-laws, although at that stage not yet finalised and approved by the District Council, was already well respected in the village, where it was drafted and subsequently approved by the Village Assembly.
- ◆ The process of creating a by-law may start when creating the CAP (section 2.3.8) during the PRA in step 2, or afterwards, when considered appropriate. To be efficient, the various meetings at the village and sub-village level required for preparation of the by-law are preferably combined with other meetings which are proposed for the different PLUM steps.

4.4 Required input and expected output

Table 4.1 gives for this step a general indication of the required input from the different parties (see also section 1.4 of step 1). During the whole process, the district, the Village Council, the VLUM committee and the villagers commit themselves to reaching the agreed targets. The concerned parties are expected to keep their promises and to remind each other about their responsibilities.

The output, which can be expected from this step, depend on the priorities and the selected activities. General outputs are:

- A village land-use plan which,
 - * reflects the stakeholder's capacities and interests in a balanced way,
 - * has the required technical quality, and desired level of detail and accuracy for improved land use,
 - * serves as a long term frame to support short and long term decision making on land management and development within the overall village and district development plan;
 - * is respected by the community, approved by the Village Assembly and confirmed by the District Council,
- Land conflicts are minimised;
- Security of land use and ownership is established;
- Control over land resources is more gender balanced.

Depending on the selected activities, the village land-use plan comprises or is linked with:

- By-laws;
- Joint village land-use plan;
- Public and/or private lands being registered at the desired level of detail and accuracy, accompanied with a village registry and leading to the issuing of certificates of customary rights to male and female applicants;
- General management strategies for the various land uses.

4.5 Monitoring and evaluation (M & E)

For the activities of this step, the following proposals for M & F are made (see also the last two columns of table 4.1):

- A. The PLUM team ensures the preparation and follow-up of the work-plans on a weekly or monthly basis, i.e. if work proceeds according to planning in terms of time, materials, budget, and leads to the desired results. This includes the activities of the PLUM team members, other experts involved in this step, as well as of the VLUM committee members. This M & F activity is preferably carried out by both the PLUM team and the VLUM committee;
- B. The PLUM team members and staff more temporarily involved make notes during all activities, to be used for discussion, evaluation and preparation of the required reports, maps, etc.;
- C. The PLUM team monitors the co-operation among the district staff and with the villagers. The attendance and performance of the staff and villagers concerned during the various activities are important indicators;
- D. The PLUM team monitors if decision making at the village level is carried out in a participatory manner, and if the village land use plan and other products of this step have the required quality;
- E. During the negotiation process on plot boundaries, count how many women (as heads of households) are involved. Determine how many women already had control (and not only access) over their land and how many males decide to allocate land to their wives or daughters;
- F. The 'steering committee' (see section 1.5 of step 1) follows the progress of the activities in this step, based on the work-plans and other documentation (maps, reports) prepared during this step.

Table 4.1: Indicative planning for participatory village land-use planning and administration (step 4)

Time, input, monitoring and evaluation requirements for each activity

Activity	Sub-activity	Number of days required to complete	Accumulative number of working days	Human resources (required from the involved parties)	Materials and equipment	Monitoring and evaluation	Results and comments
Drafting of a village land-use plan	• Village Council meeting	1	1	• Vill. Council, VLUM com. PLUM team • Village Council • Villagers, Hamlet I., VLUM committee, PLUM team	• Stationery, transport accommodation, living allowances	• Work-plan • Minutes of the council meeting • Notes of the (sub-) village meetings	• Draft land-use plan for the village & sub-areas • Work-plan with selected activities for this step at the village and sub-village level
	• Preparation of minutes	1	-				
	• Meetings at the sub-village level	4	5				
Demarcation and registering areas for general and public land uses ¹⁴	• Negotiation and demarcation	6		• Villagers, Village Council, VLUM comm. (PLUM team) • Land surveyors, VLUM committee, villagers, plum team, cartographer	• Stationery, transport accommodation, living allowances, pegs, live materials • Survey equipment, maps, etc	• Follow-up work plan • Documentation of the agreements • Compliance with procedures	• Arrangements made and well documented on location and boundaries of general land uses and lands for community facilities
	a) Survey and registering: Full survey	40	45				
	b) Semi-detailed Pacing	20	25				
	c) Pacing	4	15				
Negotiation and registration of private lands	• Negotiation and demarcation per sub-area	30	-	• Villagers, Village Council, VLUM comm. (PLUM team) • Land surveyors, VLUM committee, villagers, plum team, cartographer	• Stationery, transport accommodation, living allowances, pegs, live materials • Survey equipment, maps, etc	• Follow-up work plan • Documentation of the agreements • Compliance with procedures	• Same as above but for private plots
	a) Survey and registering: Full survey	200	245				
	b) Semi-detailed Pacing	100	125				
	c) Pacing	20	35				
Finalisation of the village land-use plan	• Village council meeting	1	36	• Vill. Council, VLUM com., PLUM team • Villagers, Hamlet I., VLUM com., PLUM t., cartographer • Vill. Council, WEO, Distr. Council, PLUM t.	• Stationery, transport accommodation, living allowances	• Follow-up work plan • Quality of the village land-use plan and attached map	• Final village land use plan agreed upon and approved by the concerned institutions
	• Other meetings	3	39				
	• Drawing final land-use plan	3	42				
	• Presentation to District Council	1	43				
Establishment of a village land registry	• Set-up village land registry	2	44	• VEO, VLUM comm. PLUM team • PLUM team, DLDO	• Stationery, transport accommodation, living allowances	• Follow-up work plan • Quality and efficiency of the registry	• Village land registry established, operational and linked with the district land registry
	• Inclusion in district land register	2	46				
Issuing of certificates of customary rights	• Processing and issuing documents	10	- - -	• VEO, VLUM committee	• Stationery, transport	• Follow-up work plan • Compliance with legal procedures	• No experiences yet • Requirements depending on exact procedure
Create by-law	• Village meetings	4	50	• Villagers, Village Council, Hamlet leader, WEO, PLUM team • Council and Hamlet leader	• Stationery, transport accommodation, living allowances	• Technical quality of the by-law	• By-law approved and respected • Activities combined with and done during various steps
	• Submission to Ward and District	3	53				
	• Announcement approval	1	-				

Step 5: Implementation of Appropriate Land Management Measures



After the most important limitations for improved land-use management have been minimised in the previous steps, villagers are more motivated to adopt land management measures in order to stop land degradation, to optimise its production and to improve their living conditions. Appropriate measures can be identified for each land use, such as: improved cropping practices in farm land improved irrigation practices, conservation of the village forest and water sources, infra-structural arrangements to improve the conditions in settlement areas, etc.

5.1 Objectives

- A. To identify and formulate measures for improved land management in areas allocated for crop production, livestock keeping, forestry, residential use, community facilities, irrigation and/or wildlife.
- B. To facilitate implementation of the selected measures.
- C. To build the capacity of villagers for planning and implementation of the selected measures, as well as for monitoring and self evaluation, through recruitment and training of Village Technicians.

5.2 Conditions to start

Important conditions which should be met before starting this step are:

- ⇒ Land-use conflicts are minimised and security of land use and ownership established;
- ⇒ A detailed village land-use management plan is prepared, considering public as well as individual interests;
- ⇒ Villagers are mobilised to implement appropriate land management measures.
- ⇒ An efficient and motivated PLUM team and VLUM committee;
- ⇒ The required resources for this step are made available.

5.3 Activities

5.3.1 Make preparations for the identification and implementation of appropriate land management measures

The PLUM team assists the VLUM committee to involve and brief extensionists and other experts from the ward or district level with enough knowledge about agriculture, livestock, forestry, water sources, settlement issues and/or wildlife. The choice of the disciplines to be included depends on the priorities identified in the detailed village land-use management plan (see step 4). The added staff becomes part of the PLUM team and works together with the VLUM committee, as long as they are needed. For that purpose, a preliminary work-plan is prepared.

5.3.2 Arrange a preparatory meeting with the village Council and the VLUM committee

Issues of this meeting are:

- A. To discuss briefly the achievements of the previous steps, so far;
- B. To discuss and to agree about the objectives and activities of this step;
- C. To arrange assistance from farmers and the VLUM committee for the supplementary appraisal (next activity);
- D. To ask the Village Council to organise a village assembly meeting and subsequent sub-village meetings for each sub-planning area. A date and time for the assembly meeting should be fixed.

5.3.3 Conduct a supplementary land management appraisal

After the preparatory meeting the PLUM team can start with the appraisal, the results of which will be presented and discussed in the village assembly meeting and the following sub-village meetings.

The aim of this appraisal is to confirm problems and needs, and to work out those opportunities for improved land management, which have been identified in the previous steps, but not yet dealt with. This applies to all land-use categories which are of importance for the village (box 5.1). The prioritised problems will be further analysed and possible solutions will be worked out together with the villagers and for each village sub-planning area separately.

The following guidelines are focused on farming area's but the same principles can also be applied for other land uses.

Box 5.1: Examples of land management measures which can be applied in step 5 for the different categories of land use:		
<u>Farming areas</u>	<u>Forest & fragile areas</u>	<u>Residential areas & areas for community facilities</u>
<ul style="list-style-type: none"> • Improved land preparation, seed planting fertiliser use and crop protection measures • Soil & water conservation measures • Mulching, composting • Agroforestry: planting trees, grasses, etc. • Improved irrigation measures 	<ul style="list-style-type: none"> • Tree planting • Soil & water conservation measures • Selective tree cutting pruning, etc., 	<ul style="list-style-type: none"> • Improved housing, pit latrines, waste pits, drainage, access paths roads and other infra structures according to need and affordability • Spacing of houses, pit latrines, access paths, etc • Tree nurseries, planting shade & fruit trees, etc. • Improved sheds for zero grazing • Techniques for water harvesting, biogas, etc. • Use of wood saving & solar cookers, etc. • Improved storage of harvest products
<u>Grazing areas</u>	<u>Wildlife areas</u>	
<ul style="list-style-type: none"> • Measures to improve grass production • Conservation of water points and cattle tracks • Soil & water conservation measures 	<ul style="list-style-type: none"> • Protection of water points • Establishment and maintenance of view points, camp sides, etc • Acceptable measures to minimise wildlife passing into the other village areas 	

It is recommended that this appraisal is conducted as follows:

- A. The PLUM team groups together with 4 to 8 elected farmers (including a VLUM committee member) for the appraisal in the field. During this appraisal the group meets other farmers working in their fields. The meeting should be at a convenient time for the farmers and not take too long.
- B. The PLUM team facilitates the discussions and only proposes solutions if farmers really ask for it. One team member and, if possible, a VLUM committee member or farmer makes notes during the discussion.
- C. The team facilitates the recognition of problems by asking questions that arise from field observations. It is important to visit sites which are indicative of a specific problem and to focus the discussion on land management issues only.
- D. When a problem has been identified, farmers are asked about the causes. For example, one cause of the gully problem could be soil erosion.

- E. Subsequently, farmers are asked about the effects of the problems, in other words, how these problems affect the community and individual farmers. At this point it becomes clear which are the most urgent problems. For example, one effect of the gully problem is the destruction of farmers' fields.
- F. Now farmers are asked how they are dealing with the problem and what local knowledge is available to solve or anticipate it. This is referred to as their coping strategies i.e. what they currently do.
- G. After the coping strategies have been discussed, farmers are asked if there is a need for alternative solutions to solve the problems more effectively. Opportunities will be identified for each type of land management problem. When farmers fail to mention solutions specifically or only mention technical advice, the PLUM team is allowed to propose some solutions which should be discussed.
- H. Steps C to G will be repeated for the next identified problem until each one has been analysed. Every identified problem should be discussed at the spot where the problem has been identified, before moving to another site.
- I. At the end of the meeting, the VLUM committee member or farmer, who has been making notes, is asked to summarise them to confirm the findings. This person will also be asked to assist in the presentation of the findings during the village assembly meeting.

Additional remarks

- ⇒ After the appraisal has been completed for each village sub-planning area, the PLUM team summarises the findings in one table (see example in table 5.1). This table will be used to present the results in the following village meetings.
- ⇒ Based on these findings, the concerned extensionists or specialists work out in detail a number of the most promising land management measures. This is done in terms of how to implement it; required input; risks of failure; and indicators for progress and the effects of the measure (see example in table 5.2). These measures should originate from the coping strategies and proposed measures (opportunities) which have been formulated during the supplementary appraisal. Table 5.2 shows an example of how the findings may be presented.

Table 5.1: Example showing the results of a supplementary land management appraisal, carried out in Mzula Village from 2 to 5 October 1996.

Problem	Causes	Effects	Coping strategies	Opportunities / Proposed Solutions
1. Rills and gullies	<ul style="list-style-type: none"> • Soil erosion • Overuse of foot paths and cattle tracks • Free grazing • High run-off from the catchment area • Free tree cutting (deforestation) • Poor agricultural skills • Sandy soils • Clearing of new farms on hill slopes 	<ul style="list-style-type: none"> • Low yields • Shortage of food • Reduction in size of agricultural fields • Destruction of farmers fields 	<ul style="list-style-type: none"> • Destocking • Prohibition of free tree cutting • Piling of stones inside the gullies • Planting trees and local shrubs, e.g. Minyaa and Minyembampwani across the gullies • Excavation of water control and harvesting structures 	<ul style="list-style-type: none"> • Construction of check dams & cut-off drains • Establishment of tree nurseries • Planting of grass and shrubs, e.g. Minyaa • Encouragement of water harvesting techniques • Controlled tree cutting and tree planting
2. Low fertility on farms	<ul style="list-style-type: none"> • Continuous cultivation on the same farm (soil mining) • Mono-cropping • Soil erosion 	<ul style="list-style-type: none"> • Low yields • Famine • Shifting cultivation in hills • Drought 	<ul style="list-style-type: none"> • Fallowing • Crop rotation • In-situ compost making • Better land tillage • Use of farm yard manure 	<ul style="list-style-type: none"> • Technical advice • Crop rotation • Fallowing • Use of farm yard manure • In-situ composting • Use of fertilisers • Soil conservation • Mulching • Agro-forestry
3. Re-introduction of free grazing	<ul style="list-style-type: none"> • Shortage of grass / fodder in neighbouring villages (Mapinduizi, Buigiri) • Ad-hoc restocking • Village leaders involving themselves in free grazing • Irresponsible village leaders 	<ul style="list-style-type: none"> • Soil erosion • Increase of rills and gullies • Free grazing on hill sides 	<ul style="list-style-type: none"> • Destocking • Prohibition of free grazing 	<ul style="list-style-type: none"> • Ensuring that by-laws are respected • Land allocation for live-stock • Involvement of leaders in all levels • Application of zero grazing • Agreeing with neighbouring villages
4. Bush clearing, tree cutting and fire setting	<ul style="list-style-type: none"> • Land shortage • New farm opening • Irresponsible village leaders 	<ul style="list-style-type: none"> • Soil erosion • Drought • Bare soils 	<ul style="list-style-type: none"> • Restriction of fire setting • Deforestation for clearing of new farms 	<ul style="list-style-type: none"> • Involvement of local leaders • Training of villagers • Use of technical personnel
5. Cultivation steep slopes without soil conservation	<ul style="list-style-type: none"> • Exhausted fields • Land shortage • Low yields • Lack of technical skills 	<ul style="list-style-type: none"> • Soil erosion • Emergence of gravel and stones • Low soil fertility 	<ul style="list-style-type: none"> • Shifting cultivation 	<ul style="list-style-type: none"> • Requesting technical advice • Water harvesting at the catchment
6. High run-off from the catchment area	<ul style="list-style-type: none"> • Rocky catchments • Low infiltration • Cultivation on steep slopes without conservation practices • Free grazing • Soil erosion • Bush clearing for new farms 	<ul style="list-style-type: none"> • Formation of gullies • Unproductive farms • Emergence of rocks • Low crop yields • Shortage of farms • Shortage of food • Famine & death 	<ul style="list-style-type: none"> • Prohibition of clearing new farms in the catchment • Shifting cultivation • Restriction of free grazing • Planting trees • Excavation of water harvesting structures 	<ul style="list-style-type: none"> • Use of more water harvesting techniques • Construction of check dams • Follow-up of by-laws • Planting of trees • Requesting technical advice • Agro-forstry
7. Drought	<ul style="list-style-type: none"> • Free grazing • Tree cutting and bush clearing • Shortage of rain 	<ul style="list-style-type: none"> • Low crop yield 	<ul style="list-style-type: none"> • Excavation of water harvesting structures 	<ul style="list-style-type: none"> • Use of water harvesting techniques • Planting trees • Agro-forestry

Table 5.2: An example outlining the implications of constructing a cut off drain (COD) as soil conservation measure and identified during the appraisal in the example of table 5.1

Basic principle (expected impact)	Brief description for implementation	Required Input		Risks involved	Indicators for progress and effect of the measures
		District	Farmers		
<ul style="list-style-type: none"> Erosion control Cut-off water run-off Safe drainage Reduction of water speed during heavy rains 	<ul style="list-style-type: none"> Applied in areas with high water run-off COD should be graded e.g. 0.25%-0.50% (and more than 0.5% near shallow depressions or areas with sandier soils) Size depending on the run off. Average size: top width – 5 ft; bottom – 2ft; depth – 3ft It can be placed at an interval of 50m or more, depending on length slope and change in steepness of the slope. It has to be implemented accurately; stabilised by grass and trees on the dikes, and needs maintenance before and after the rainy season 	<ul style="list-style-type: none"> Training farmers by PLUM team Mobilisation of farmers groups Follow-up Working material: line level set (spirit level, level poles, nylon rope), excavation set (bush knife, hand hoes, shovel, pick axle, hammer), stationery (exercise book & pens) Stabilisation materials (Makarikari grass) 	<ul style="list-style-type: none"> Manpower for excavation, stabilisation & maintenance of the COD Formation of farmers groups Co-ordination and mobilisation by VLUM committee members Use of local knowledge Use of tools and materials available in the village 	<ul style="list-style-type: none"> Delayed implementation due to lack of communication, planning and commitment by both the villagers as well as the project Destruction of COD's and crops due to wrong implementation Failure establishment life materials due to drought Lose of farmers confidence in the PLUM team due to improper planning and implementation 	<ul style="list-style-type: none"> Effectiveness of group formation Attendance of farmers (male/female) during implementation Number and length of COD's planned, measured, implemented & stabilised Quality of COD implemented Area protected Controlled water flow in the COD Number of rills and gullies controlled

5.3.4 Arrange a village assembly meeting

After the supplementary appraisal, documentation of its results and elaboration of some of the identified measures, the PLUM team and the VLUM committee is well prepared for the village assembly meeting and the following sub-village meetings.

Issues of this meeting are:

- A. To present and discuss briefly the achievements of the implemented land-use management activities so far. This is a short review of the previous steps which can be done by a member of the PLUM team, VLUM committee or Village Council, depending on their capacity.
- B. To explain the objectives and activities of this step. This is done by a PLUM team member.
- C. To present and discuss the findings of the supplementary appraisal
 - As an introduction, some villagers who were involved in the appraisal can briefly explain the way the appraisal was conducted and its outcome.
 - A PLUM team member continues with the presentation in more detail, using a large Sheet of paper summarising the results of the appraisal with a summary. The set-up as in table 5.1 can be used as reference for this presentation.
- D. To explain briefly about proposals to solve the identified land management problems in the village.
 - This will be done by a PLUM team member or extensionist who is conversant with the proposed land management practices. The set-up as in table 5.2. can be used as a reference for this presentation. Distinction should be made between activities at various levels: plot (farm) level; sub-village level; village level; and joint village level as indicated in section 2.7 of part A.
- E. To obtain farmers response to the proposals.
 - Farmers are asked to give feed back: whether they are interested in implementing the proposed activities; and how they think can organise themselves for the individual, group and communal activities required at the respective levels.
- F. To agree about and arrange sub-village meetings.
 - Farmers from each village sub-planning area are asked to propose a day, time and location in the field. VLUM committee members are responsible for follow-up to ensure good attendance.

5.3.5 Arrange sub-village meetings

After the village assembly meeting has been conducted, the PLUM team continues with a meeting for each sub-village planning area before starting to train, plan and implement.

Issues of this meeting are:

- A. To present and discuss the findings of the appraisal.
 - This should be done in more detail than during the assembly meeting. A PLUM team member facilitates the discussion, using the paper sheet mentioned in section 5.3.4.C, containing the table summarising the outcome of the appraisal, as reference. Another team member makes notes.
- B. To let farmers decide which problems are most urgent in their sub-village area and which ones they want most to deal with.
 - It is advisable to start solving land management problems which are well within the capacity of the farmers themselves.
- C. To group the selected problems which require identical measures (opportunities) to solve them
 - In this part, farmers are asked (if possible) to put together the problems which can be solved with similar types of measures. Subsequent actions (activities) are formulated to deal with these (grouped) problems. For example, farmers could mention soil conservation measures, water harvesting, crop rotation, etc. as opportunities to deal with problems of low soil fertility and drought. Farmers can decide to name the action (activity) to deal with these two problems as 'soil improvement on farm'. Table 5.3 shows the format with an example of how the findings can be presented.
- D. Like the assembly meeting, a PLUM team member explains about the measures (opportunities) identified by the farmers to solve or reduce the selected problems. However in this meeting, the measures are better identified by the farmers and should be explained in more detail. The proposed land management measures which were worked out during the supplementary appraisal in activity 5.3.3 (table 5.2) are used as reference. In addition, the PLUM team indicates which measures can be done individually (at the farm or plot level), by a group (at the sub-village level) and communally (at the village level).
- E. To set targets and let the farmers, VLUM committee and the PLUM team (on behalf of the district) commit themselves to reaching these targets.
 - The targets are set, required input identified and a time plan worked out in terms of:
 - a) Amount (number, area) of innovations to be implemented;
 - b) The extent to which the problem should be solved;
 - c) How the farmers will organise themselves to implement the measures of individual, communal and village level.
 - d) The input, which is required from the stakeholders involved (farmers, Villager Council, VLUM committee and the PLUM team with the added experts/extensionists) in order to reach the targets, are discussed and agreed upon. It is important to start with groups of farmers in order to reach more farmers at the same time and hence to increase the efficiency of the PLUM team.
 - e) Farmers are asked within which period they think they can reach these targets and how many days they will reserve in that period to implement these innovations. It is advisable to agree on one or two days per week for communal/group work.
 - f) Farmers, VLUM committee and the PLUM team should agree on a date, time and location to start, as well as to who will come and with which measure they will start.
- F. In order to confirm these agreements and farmers commitment, farmers may be asked to list their names on a registration form and put a mark behind the innovations they want to implement. The VLLM committee member involved makes a follow-up and may present the forms to the PLUM team later for monitoring purposes.

Additional remarks

- ◆ Important information for preparing, facilitating and evaluating participatory village meetings is presented in appendix A.
- ◆ It is recommended that the PLUM team and VLUM committee prepare the minutes of each sub-village meeting in a table format as illustrated in table 5.3. The minutes form the action plan for implementation of appropriate land management measures in the respective areas.

- ◆ The advantage of meetings at the sub-village level is that: there may be more shared interest; and when the number of participants is not big, individual villagers may have more opportunity to discuss problems openly and commit themselves to the identified targets.
- ◆ After the innovations are identified, the PLUM team should arrange the tools required for training of the villagers, planning and implementation.
- ◆ It may be advisable to spend some time to train briefly the PLUM members who are not sufficiently conversant with the identified land management measures, in order to enable all of them to assist villagers in planning and implementing the identified measures (during the following two activities).

Table 5.3 Example of minutes from a village sub-meeting in the eastern farming area of Mzula village.

The meeting was attended by 27 male & 34 female villagers at 9 October 1996 9.15 to 11.30 am in the concerned area. The minutes were prepared by the PLUM team with assistance of two VLUM committee members who attended.

Problem	Opportunities	Activity	Input from:		Time planning	Targets
			Farmers and VLUM-team	District		
1. Rills and gullies 2. High run-off water	<ul style="list-style-type: none"> - Construction of check dams - Establishment tree nurseries - Planting of Minyaa & grass - Encouragement of water harvesting techniques - Controlling tree cutting and planting trees - Follow-up of by-laws - Use of technical advice - Agro-forestry 	- Control of rills and gullies	<ul style="list-style-type: none"> - manpower & management for construction and collection of stones and sticks as well as for stabilisation and maintenance - Formation of groups 	<ul style="list-style-type: none"> - On-the-job training of farmers - Training materials - Supply of additional materials like measurement set and excavation tools - Follow-up 	Oct-Dec 1996 May-Dec 1997 (2 days/week)	<ul style="list-style-type: none"> - All small gullies and rills controlled - All big gullies controlled
3. Low soil fertility 4. Drought	<ul style="list-style-type: none"> - Technical advice - Crop rotation - Fallow practising - Use of farm yard manure - In-situ compost making - Use of fertilisers - On farm soil conservation - Mulching - Agro-forestry & tree planting - Water harvesting techniques 	- On farm fertility improvement and soil conservation	<ul style="list-style-type: none"> - manpower & management - group formation - Collection of materials like crop residues, remains of threshing the harvest & farm yard manure 	<ul style="list-style-type: none"> - On-the-job training of farmers - Training materials - Follow-up 	Oct 1996 to Jan 1997 (1 day/week)	- Improved fertility on farms
5. Cultivation on steep slopes without conservation	<ul style="list-style-type: none"> - Technical skills and advice - Application of water harvesting techniques 	- On farm soil and water conservation	<ul style="list-style-type: none"> - Manpower & management - Group formation - Collection of stabilisation materials like grass and trees 	<ul style="list-style-type: none"> - On-the-job training of farmers - Training materials - Follow-up - Supply stabilisation materials - Supply hand tools 	Oct 1996 to Jan 1997 (1 day/week)	- Five <i>fanya juus</i> excavated by each farmer
6. Tree cutting, bush clearing and fire setting	<ul style="list-style-type: none"> - Restriction of fire setting - Restriction of deforestation for new farmers fields - Involvement of local leaders - Make use of extensionists - Controlled tree cutting and planting new trees 	- Establishment of tree nurseries and tree planting	<ul style="list-style-type: none"> - Manpower & management - Group formation - Collection of available tree seeds in the area 	<ul style="list-style-type: none"> - On-the-job training of farmers - Training materials - Follow-up - Supply of tree seeds & poly caps - Supply of hand tools, etc. 	June-Dec 1997	- Every farmer to have his own homestead tree nursery
7. Re-introduction of free grazing	<ul style="list-style-type: none"> - Ensuring that by-laws are respected and applied - Involvement of leaders at all levels - Development of a sound technical package for zero grazing 	<ul style="list-style-type: none"> - Zero grazing - Planting fodder like elephant grass on small plots and on the conservation structures 	<ul style="list-style-type: none"> - Manpower & management - Collection of available planting materials for fodder production 	<ul style="list-style-type: none"> - On-the-job training of farmers - Training materials - Follow-up - Supply of planting materials for fodder production 	- Continuously	- All livestock keepers apply improved package for zero grazing in order to avoid land degradation

5.3.6 Start planning & implementation of the identified measures and on-the-job training of villagers

After the problems have been analysed, villagers mobilised and targets set, implementation can start.

As agreed during the sub-village meetings, the PLUM team meets with a group of villagers in the sub-planning area concerned to start with the selected measures. This can be communal as well as individual work, but it is important to reach many villagers at the same time in order to increase the efficiency of the team. The field activities may be done for each sub-area involved on a different day. For each sub-area one or two VLUM committee members assist in villagers mobilisation and join the field work.

During this field work, the following activities are important:

- A. Give additional explanation about the selected innovation on-the-job. The results of the appraisal (table 5.1), elaborated measures (table 5.2) and minutes of the sub-village meeting of the respective area (table 5.3) are used as a reference for this activity and the next one (section 5.3.7).
- B. Plan and agree with the farmers on whose field to start.
- C. Plan also which fields will follow. Explain about the advantages of implementation in attached fields and in combination with other innovations. In particular this applies to soil and water conservation practices.
- D. Depending on the selected innovation the PLUM team starts with the on-the-job-training (for instance: measuring, excavation, construction, etc. for physical soil conservation practices).
- E. At the end of each day, the PLUM team together with the VLUM committee record the obtained results. It is recommended to record in a 'progress form', i.e.: the planned activities and the results in terms of attendance (male & female farmers, VLUM committee members) and the achievements (such as length measured, excavated, number of measures constructed, area covered, etc., depending on the type of innovation).

5.3.7 Continue planning and implementation, and start recruitment and training of village technicians (VTs)

The final and most time-consuming activity of this step focuses on expanding the field activities and on capacity building by framing of village technicians.

After a few weeks it is expected that the farmers commitment has been well confirmed by their regular attendance and contribution during the on-the-job meetings. All the PLUM team members are expected to have enough work experience to assist groups of farmers independently.

The work, as indicated in the previous activity (section 5.3.6), will continue. However, the PLUM team will no longer work together, but spread their members to different sites in order to increase their capacity to assist villagers. Although the team tries to work mostly with groups of villagers (communal work), assistance may also be given to individuals when they request for it.

During this activity, VTs are recruited and trained. They will continue to assist farmers when the PLUM team is no longer present in the village.

For recruitment and training of VTs the following suggestions are made:

- A. Candidates for VTs are selected among VLUM committee members who appear capable for this task as well as villagers who attend the field activities most regularly and who understand and implement the innovations rapidly. VTs should be selected on the basis that they:
 - Are energetic, motivated and innovative;
 - Have a good relation with the village community;
 - Live and make their living in the village;
 - Are able to read, write and to make simple calculations;
 - Are critical but able to accept and understand innovations rapidly;
 - Are able to plan with and explain to fellow farmers.
- B. In forming the group of VTs, gender balance should be considered, and it is advisable to have two or three VTs active in each village sub-area. By not only considering VLUM committee members, it will be easier to recruit enough VTs. Besides, not all VLUM committee members are expected to be able to act as a VT.
- C. The PLUM team, in particular the extensionist concerned, gives additional on-the-job training to the candidate VTs.
- D. The PLUM team elaborates, based on their experience in the village, Terms of Reference (TOR) for VTs (see appendix F6). In the next step, these proposed ToR will be discussed with the stakeholders for improvement and approval.
- E. Documents (if available) outlining the adopted land management measures in a user friendly manner, may be given to the VTs for their reference. For this purpose, table 5.2 may be used as well.

Additional remarks

- ◆ As indicated before, the identification and implementation of appropriate land management measures should comprise all land-use categories which are of importance for the various groups and subgroups of the village community. Since the selection of measures for each land use category arises from an overall village land-use plan, implementation of the measures is expected to be complementary rather than contradictory.
- ◆ Example 5.1 outlines a village forest management plan in Chomvu village, which was prepared with assistance of the TFAP - North Pare project in Mwanga district, in order to utilise the forest and water sources of the village area in a sustainable manner.

Example 5.1: A management plan for Chomvu Village Forest¹⁰

The community of Chomvu Village in Mwanga District designated in 1993 with assistance of the TFAP - North Pare project a partly deforested area bordering Kindoroko Forest Reserve as village forest. For this area, a forest management plan was prepared to:

- Provide forest products to Chomvu villagers in a sustainable way;
- Protect, conserve and create vegetation through planting suitable tree species on the open spaces and to maintain the existing natural vegetation.

The area, covering 50.9 hectares, was surveyed and part of it was sub-divided into 40 plots, which were given to individual villagers living around the Kindoroko reserve. The plot holders signed an agreement with the village government that the land remains common land. However, the trees the plot holders planted on their respective plots shall be their property with the right to utilise them in accordance with the agreement (contract) reached between the Village Council and individual plot holders (see appendix F8).

The forest management plan was prepared by the village community, including the Village Council, Village Land Use Planning committee, individual plot holders and foresters from the district. Major elements of this plan are:

- The main users of the forest are the plot holders and other villagers for areas within the village forest which are not sub-divided into plots;
- People from nearby villages are allowed to utilise the forest under special permits issued by the Chomvu village government;
- The Village Council, Village Land Use Planning committee, Hamlet leaders, plot holders and two nominated youths are taking responsibility and carrying out tasks, such as making patrols in the forest to observe and report possible illegal activities;
- The utilisation of the concerned forest is subject to rules which are categorised as follows:
 - a) Uses which are free (such as collecting grasses for fodder, dead wood, wild fruits, etc.);
 - b) Uses which require permit from the village government (such as hunting, beekeeping and collecting poles, rafters and withies for building purposes. People from neighbouring villages are charged for it according to fixed rates);
 - c) Uses which are totally prohibited (such as cutting live trees, free grazing, opening farmers fields, making fires);
- The Village Council can give penalties and fines to anybody who violates these rules. The size of the fines depends on the type of violation as indicated in the forest plan that has been approved by the Village Council (Village Assembly) as well as at the ward and district level.
- The money collected from charges and fines are deposited in a bank account and used for village development projects.

Comments

In a village, the need, for an agreement regarding a village forest reserve may arise during a PRA (step 2), while its demarcation and sub-division in plots (if desired) can be done in steps 3 and 4 respectively. The management plan can be completed in the final stages of step 4 and (if required) incorporated in the village bylaws. Planting of the trees is a typical activity of step 5.

When these steps are considered during the creation of the forest management plan, it will become an integrated part of the village land-use plan, whereby activities related to forestry complement rather than contradict activities related to other land uses in the village.

5.4 Required input and expected output

Table 5.1 gives for this step a general indication of the required input from the different parties (see also section 1.4 of step 1). During the whole process, the district, the village Council, the VLUM committee and the villagers commit themselves to reaching the agreed targets. The concerned parties are expected to keep their promises and to remind each other about their responsibilities.

Expected outputs of this step are:

- Appropriate land management measures have been adopted as identified and prioritised by the various socio-economic groups in the village for the different land uses.
- Capacity has been built through the recruitment and training of village technicians who are able to assist fellow villagers in planning and implementing the identified measures.
- The adopted measures are technically sound and have resulted in improved resource use and higher living standards for all village groups and sub-groups.

5.5 Monitoring and evaluation (M & E)

For the activities of this step, the following proposals for M & B are made (see also the last two columns of table 5.4):

- A. The PLUM team ensures the preparation and follow-up of the work-plans on a weekly or monthly basis, i.e. if work proceeds according to planning in terms of time, materials, budget, and leads to the desired results. This includes the activities of the PLUM team members, other experts involved in this step as well as of the VLUM committee members. This M & E activity is preferably carried out by the PLUM team, the VLUM committee and, at the later stage, Village Technicians;
- B. The PLUM team members and associated staff involved make notes during all activities which are used for discussion, evaluation and reporting purposes;
- C. The PLUM team monitors the co-operation among the district staff and with the villagers. The attendance and performance of the staff and villagers concerned during the various activities are important indicators;
- D. The PLUM team monitors, if decision making at the village level is carried out in a participatory manner, and if the implemented measures have the required quality;
- E. The 'steering committee' (see section 1.5 of step 1) follows 'the progress of the activities in this step, based on the work-plans and other documentation (minutes, field progress reports) prepared during this step.

Table 5.4: Indicative planning for implementation of appropriate land management measures (step 5)

Time, input, monitoring and evaluation requirements for each activity

Activity	Sub-activity	Number of days required to complete	Accumulative number of working days	Human resources (required from the involved parties)	Materials and equipment	Monitoring and evaluation	Results and comments
Preparations	<ul style="list-style-type: none"> Involvement required staff and preparation preliminary work-plan 	1	1	<ul style="list-style-type: none"> PLUM team, VLUM committee and involved staff 	<ul style="list-style-type: none"> Stationery, transport 	<ul style="list-style-type: none"> Work-plan 	<ul style="list-style-type: none"> Work-plan and agreements with the staff to be involved
Preparatory meeting with the Village Council and VLUM committee	<ul style="list-style-type: none"> Village Council meeting 	1	2	<ul style="list-style-type: none"> Village Council, VLUM committee, PLUM team 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances 	<ul style="list-style-type: none"> Follow-up work plan Minutes 	<ul style="list-style-type: none"> Arrangements made for the activities of this step
	<ul style="list-style-type: none"> Preparation of minutes 	1	-	<ul style="list-style-type: none"> Village Council 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Supplementary land management appraisal	<ul style="list-style-type: none"> Sub-village walks 	4	6	<ul style="list-style-type: none"> Elected villagers, Village Council, VLUM committee, PLUM team 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances 	<ul style="list-style-type: none"> Follow-up work plan Documentation of the findings 	<ul style="list-style-type: none"> Problems further analysed and opportunities identified for improved land management measures
	<ul style="list-style-type: none"> Preparation of minutes and elaboration on measures 	1	7	<ul style="list-style-type: none"> PLUM team 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Meeting with the Village Assembly	<ul style="list-style-type: none"> Village Assembly meeting 	1	8	<ul style="list-style-type: none"> Villagers, Village Council, VLUM comm., PLUM team 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances 	<ul style="list-style-type: none"> Follow-up work plan Minutes 	<ul style="list-style-type: none"> Village community mobilised for this step Arrangements made for sub-village meetings
	<ul style="list-style-type: none"> Preparation of minutes 	1	-	<ul style="list-style-type: none"> Village Council 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Sub-village meetings	<ul style="list-style-type: none"> Sub-village meetings 	4	12	<ul style="list-style-type: none"> Villagers, VLUM committee, PLUM team 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances 	<ul style="list-style-type: none"> Follow-up work plan Minutes 	<ul style="list-style-type: none"> A detailed action plan for each concerned planning area
	<ul style="list-style-type: none"> Preparation of minutes 	1	13	<ul style="list-style-type: none"> PLUM team, VLUM committee 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Commitments from both villagers and district staff
Implementation of the identified measures	<ul style="list-style-type: none"> Implementation 	20	33	<ul style="list-style-type: none"> Villagers, VLUM committee, PLUM team 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances, materials according to the selected measures 	<ul style="list-style-type: none"> Follow-up work plan Field progress reports 	<ul style="list-style-type: none"> Measures are implemented according to action and work-plan Farmers familiarised with the measures
Implementation and training Village Technicians	<ul style="list-style-type: none"> Implementation, as well as recruitment and training of village technicians 	40	83	<ul style="list-style-type: none"> Villagers, VLUM committee, PLUM team, Village Technicians 	<ul style="list-style-type: none"> Stationery, transport, accommodation, living allowances, materials according to the selected measures 	<ul style="list-style-type: none"> Follow-up work plan Field progress reports 	<ul style="list-style-type: none"> Measures further implemented according to work-plan Village Technicians recruited and trained to assist villagers on selected measures

Step 6: Consolidation



When important limitations for improved land-use management have been minimised and villagers are actually planning and implementing the practices which have been identified by themselves with assistance of the PLUM-team, VLUM committee and Village Technicians, it is time to focus on preparing them to continue the initiated land-use management activities on their own with low profile support from the District. It is very important to do this step properly. If not the achievements from the previous steps can be spoilt.

6.1 Objectives

- A. To assess the impact of the initiated PLUM process in the village.
- B. To assess the capacity of the villagers and their institutions to continue independently with the initiated PLUM activities.
- C. To prepare the villagers to continue with PLUM more independently, whereby it becomes clear which tasks can be accomplished by the village institutions on their own and which tasks require support from outsiders.
- D. To ensure good communication between the village and district level institutions concerning land use management *after* the regular presence of the PLUM team in the village.

6.2 Conditions to start

Important conditions which should be met before starting this step are:

- ⇒ Villagers and the institutions concerned are mobilised and aware of the benefits from village land-use management;
- ⇒ The process of planning and implementation is well established, leading to better resource use, improved production and higher living standards;
- ⇒ Most important village land-use management issues are dealt with.
- ⇒ The PLUM team, VLUM committee and Village Technicians are motivated and efficient;
- ⇒ The required resources for this step are made available.

This step can already start during the last activity of the previous step (section 5.3.7).

6.3 Activities

6.3.1 Assess the impact of the initiated PLUM process in the village and the capacity of villagers and their institutions to proceed

The PLUM-team, together with elected VLUM committee members, VTs, village council members and other villagers meet for discussions, a village walk and some household interviews. This exercise supplements the data gathered for monitoring purposes during the previous steps.

The assessment is directed to the extent to which the village land-use plan, selected land management measures and other elements of PLUM have been adopted and maintained, and have resulted in improved natural resource use and production. Special attention should be paid to see whether the position of women has been improved in terms of workload, access to and control over resources, and participation in decision making (see section 2.3 of part A).

The results of this exercise are compared with the results of the PRA in step 2 to provide an impression of the impact of the PLUM process in the village on land-use management. The results also serve as base-line data to enable a study on the long term impact of PLUM, when such an assessment is repeated in future.

It is important to make in advance a check-list with parameters which are most indicative of the degree which the objectives of PLUM are met. Helpful for preparing such a check-list is:

- The CAP (prepared in step 2);
- The village land-use plan (step 4);
- The plan for implementing identified land management measures (step 5);
- The list of targeted major outputs of the whole PLUM process (see section 6.4 of this step);
- The list with proposed indicators for base-line studies (see appendix F3).

This activity is also used to assess the capacity of villagers and their institutions to continue on their own with little support from the district office *after* the regular presence of the PLUM team in the village. For that purpose it is important to look into:

- The commitment of villagers to the different elements of PLUM.
 - a) Indicative are the percentage of villagers (men/women) involved in the various activities.
 - b) The required data is obtained from the monitoring reports.
- The understanding of PLUM by the villagers and their institutions, and their role to proceed with it.
 - a) Indicative are the topics discussed during the various meetings and the ability of villagers to explain PLUM issues to others.
 - b) The required data is obtained from the minutes and household interviews.

The efficiency of the village leadership and villagers to take initiatives and organise themselves to plan and implement PLUM. This refers to: individual, sub-village and village level activities; run meetings which arrive at agreements in a participatory way; enforcement of agreements; utilisation of networks to apply for support from outsiders, etc.

- a) Indicative are: the attendance and contribution of villagers during the various gatherings; the degree to which planned activities are implemented; communication between the stakeholders; adoption of (self-) monitoring and evaluation by VLUM committee, VTs and innovative farmers; and the progress of the activities during absence of supporting staff in the village.
- b) The required data is obtained from the minutes, other monitoring documents, discussions with those concerned and the village walk.

If the results of the assessment are not evaluated satisfactorily, it is advisable to delay with the subsequent activities in order to find out the reasons for it and to take corrective actions. For instance, it may be necessary to focus on strengthening the capacity of village institutions, mobilisation of villagers or on any important land-use planning and natural resource management issue not yet sufficiently dealt with.

6.3.2 Prepare drafts of the future role to be played by the involved parties

When the results of the assessments are known and, if necessary, corrective actions made, the PLUM team prepares drafts of the roles to be played by the Village Council, VLUM committee and VTs after the PLUM team ends its regular presence in the village. These drafts will be discussed with the parties involved during the following three activities (sections 6.3.3/4/5). These drafts should be based on the legal and administrative setting concerning PLUM (see section 2.5 of part A), the previous assessment and the experience obtained in the village so far, i.e. village land-use plan, difficulties faced during its adoption, local cultural values, etc. Appendices F6, F7 and F8 give examples of the roles agreed upon by major parties involved.

Major issues concerning the mandate of the Village Council to deal with village land management (as provided for in the Local Government Act, No 7 of 1982 and the bill of the Village Land Act) should be highlighted in the draft which can form the basis for discussions in the next activity and which should be used by the Village Council as reference material in future. A guidebook in Swahili for *village institutions* on participatory land-use planning and natural resource management is being prepared to serve as additional reference for this task.

For the VLUM committee members, the Terms of Reference (ToR) is worked out outlining their required qualifications, the composition of the committee, the tasks to be performed, the working conditions and recognition of the members by the village.

For VTs the ToR is worked out in a similar way as for the VLUM committee members.

The PLUM-team should also draft a proposal about the follow-up to be provided for by the district after its regular presence in the village, so as to maintain low-profile support and the required communication. This should be discussed with the district authorities involved and depends on the capacity of the district and the requirements of the village.

6.3.3 Arrange a meeting with the Village Council, VLUM committee and Village Technicians

Issues of this meeting are:

- A. To discuss briefly the achievements of PLUM so far and in particular step 5 (based on the previous assessment).
- B. To discuss how PLUM in the village can proceed in future after the regular presence of the PLUM team in the village.
- C. To discuss the role to be played by the Village Council, VLUM committee and VTs in order proceed with PLUM.
 - It is advisable to agree during the same meeting on the role of the council.
 - Arrangements made in step 2, to compensate the VLUM committee members for the time they use to carry out PLUM activities for the community, should be discussed and if necessary revisited.
 - Possible compensations or motivation for VTs to continue assisting their fellow villagers should be discussed and agreed upon as well.
- D. To make a plan on how to reduce the PLUM team's support and presence in the village gradually.
 - Separate follow-up meetings with the VLUM committee and with the VTs are proposed and dates fixed to work out in detail their tasks in future.
 - The council is asked to organise a village assembly meeting to inform the village community. A date and time is fixed and its programme briefly discussed.

6.3.4 Arrange a follow-up meeting with the VLUM committee

The objective of this meeting is to discuss and refine the ToR with the VLUM committee members. The members agree on their role: to identify and document significant changes in land allocation and uses; to assist in solving land related problems such as land conflicts and land degradation; to communicate with the Village Council and district authorities concerned; etc. (see section 2.5 of part A). The committee agrees to have regular meetings to address these issues and to send a copy of the minutes to the District. Use can be made of a special form for the minutes (see example in appendix F5).

6.3.5 Arrange a follow-up meeting with Village Technicians

The objective of this meeting is to discuss and to work out with the VTs their ToR. VTs agree on their role to continue with promoting and assisting fellow farmers to adopt the initiated land management measures and to communicate with the VLUM committee, Village Council and extensionists whenever necessary. For instance, the VTs can be grouped in 2 to 4 per sub-village planning area where they concentrate their activities. Each group has a chairperson who takes care of the working materials, monitoring, etc.

Additional remarks

- ⇒ These follow-up meetings (sections 6.3.4 & 6.3.5) are recommended to give VLUM committee members and VTs additional opportunities to discuss the details of the ToR.
- ⇒ The Village Council should see the final drafts of the ToRs for approval before forwarding them to the Village Assembly.

6.3.6 Arrange a village assembly meeting

After all facilitating parties have discussed and agreed about their future tasks, the arrangements can be submitted to the Village Assembly for approval.

Issues of this meeting are:

- A. To present and discuss briefly the achievements of the implemented land-use management activities so far, in particular step 5.
- This is a short review of the previous steps which can be done by a member of the PLUM team, VLUM committee or Village Council.
- B. To discuss the future of PLUM in the village.
- The villagers are informed that the support from the PLUM team will be reduced, so that the team is able to introduce PLUM in other villages. The Assembly is asked what they think about continuation of the PLUM activities in future with a low profile support from the district. This explanation can be given by the village chairperson, a PLUM team member or other district officer.
- C. To present and discuss the role of the Village Council, the VLUM committee and VTs to continue with PLUM.
- The roles of the parties involved, as agreed during the previous meetings (activities 6.3.3/4/5) are explained. A district officer also explains about the remaining commitments of the district in future.
- D. To re-introduce the VLUM committee members and to introduce the VTs formally to the village community.
- This part can be done by an authority from the district. Villagers are informed about the arrangements made to continue with PLUM and whom they can ask for assistance.
 - The VLUM committee members and VTs may be given certificates and provided with working tools to encourage and facilitate the continuation of their tasks. The ToR can be signed by them to confirm their commitment.

Additional remark

- ◆ This meeting needs to be well prepared. If certificates are issued, they should be prepared and preferably signed in advance by the village chairperson and a senior officer from the district council, e.g. the Chairperson or DED. Since a VLUM committee member can be a VT as well, it can be necessary to have three types of certificates: For villagers who are VLUM committee members only, for VLUM committee members who are also a VT, and for VTs only. An example of a certificate for VLUM members is given in appendix F7). It is suggested to prepare and sign the ToRs in three-fold. One remains in the village, the other one is kept by the VLUM committee member or VT while the last copy goes to the district.

6.3.7 Maintain a low profile follow-up

The remaining activity of PLUM is to maintain communication between the village and district level institutions concerned as agreed during the previous activities.

The follow-up activities the district should maintain after the village assembly meeting may be in the beginning more frequent than later on. This task can be carried out by one of the PLUM-team members or extension officers involved.

A village agricultural, forestry or other extension officer, who is residing in the village or nearby and being involved in the PLUM process, can conduct this task more cost effectively and frequently than a district officer who has to travel longer distances and possibly has to stay the night out.

In order to make follow-up visits more efficient it is important to inform the Village Council, VLUM committee and VTs well in advance. During such a visit, the officer discusses the spoken or written reports of the Village Council, VLUM committee (and VTs) about changes in land use and land rights, occurring land related problems, the initiated improved land management measures, etc. The officer can give advice and if necessary forward the issue to the district.

The district office proceeds providing services to the village on a low-profile basis, and vice-versa. This is done according to the capacity of the district office and the village, and when it is economically viable. The district office can, for instance, agree with individual Village Councillors, VLUM committee members, VTs and/or progressive villagers (farmers, pastoralists, etc.) to assist the PLUM team in introducing PLUM in neighbouring villages.

6.4 Required input and expected output

Table 6.1 gives for this step a general indication of the required input from the different parties (see also section 1.4 of step 1). During the whole process, the district, the Village Council, the VLUM committee, the

Village Technicians and the villagers commit themselves to reaching the agreed targets. The concerned parties are expected to keep their promises and to remind each other about their responsibilities.

Expected outputs of this step are:

- The impact of the introducing PLUM in the village is known in terms of;
 - * the change in natural resource use and management leading to better living conditions,
 - * the capacity of the village community to continue with PLUM more independently;
- Villagers and their institutions are mobilised and able to proceed with the initiated PLUM activities whereby the tasks of the parties involved are well understood and agreed up on.

Targeted major outputs of the whole PLUM process at the village level are:

1. Villagers and their institutions have improved their capacity to plan and manage their lands, whereby:
 - a) villagers are more able to run meetings at the village and sub-village levels, arriving at agreements in a more transparent and participatory way, than before. Minutes of the meetings are made and available for all stakeholders,
 - b) land conflicts are minimised and most new land disputes are resolved at the village level and according to recognised procedures,
 - c) a village land registry is established and maintained according to the required standards and with respect to changes in land use and rights, leading to an improved feeling of land security,
 - d) networks between the village institutions (Village Council, VLUM committee, Village Technicians, etc.) and higher levels (District Council, experts / extensionists from the ward and district level and the Commissioner of Lands) are improved and maintained, leading to a better utilisation of expertise at the villager level and recognition of land-use agreements;
2. A village land-use plan has been prepared, and if required, enforced with by-laws;
 - a) that reflects the capacity and interests of all stakeholders and their institutions in a balanced way,
 - b) which implications are known and respected by all stakeholders,
 - c) which meets the technical, administrative and legal requirements;
3. More efficient, equitable and sustainable use of land resources, leading to a higher production in agriculture and other land use, and improved living standards for all stakeholders, in particular for those whose positions are most at risk, such as pastoralists, women and youth.

6.5 Monitoring and evaluation (M & E)

Important aspects of M & E in this step are to find out:

- The impact of the PLUM activities carried out during the various steps;
- The right time to end the regular presence of the PLUM team in the village;
- The expected and required support from the district in future.

For the activities of this step, the following proposals for M & E are made (see also the last two columns of table 6.1):

- A. The PLUM team ensures the preparation and follow-up of the work-plans on a weekly or monthly basis, i.e. if work proceeds according to planning in terms of time, materials, budget, and leads to the desired results. This includes the activities of the PLUM team members, associated experts, the VLUM committee members, Village Technicians and villagers. This M & E activity is preferably carried out by the PLUM team, together with the VLUM committee and Village Technicians;
- B. The PLUM team members and associated staff make notes during all activities which will be used for discussion, evaluation and reporting purposes;
- C. The PLUM team monitors the co-operation with the villagers, whereby the attendance and performance of the parties involved during the various activities are important indicators;
- D. The PLUM team monitors if decision making at the village level is carried out in a participatory manner, and if the roles to be played by the village and district institutions in future '(as agreed upon during the various meetings) are realistic;
- E. The 'steering committee' (see section 1.5 of step 1) follows the progress of the activities in this step, based on the work-plans and other documentation (minutes, field progress reports) prepared during this step;

F. The 'steering committee' ensures that in future the PLUM team or other assigned staff keeps record of all communication between the village and district institutions concerning land issues, including the follow-up visits.

Table 6.1: Indicative planning for consolidation (step 6)

Time, input, monitoring and evaluation requirements for each activity (based on the assumptions as outlined in appendix D)

Activity	Sub-activity	Number of days required to complete	Accumulative number of working days	Human resources (required from the involved parties)	Materials and equipment	Monitoring and evaluation	Results and comments
Assessment impact PLUM and capacity to proceed	• Preparation check-list	1	1	• Village Council, VLUM committee, VTs, PLUM team and elected villagers	• Stationery, transport, accommodation, living allowances	• Work-plan • Report of the assessment	• Sufficient knowledge about the impact of PLUM, the capacity to proceed and the required actions for consolidation of PLUM in the village
	• Meetings with the involved parties	1	2				
	• Village walks	2	4				
	• Household interviews	3	7				
	• Final analysis and conclusions	2	9				
Drafting future roles of the involved parties	• Preparation of the drafts	1	10	• PLUM team, associated district staff	• Stationery	• Follow-up work plan • Quality of the draft	• Drafts well prepared
Meeting with Village Council, VLUM committee and VTs	• Discussion and improvement of the drafts • Minutes	1 1	11 -	• Village Council, VLUM committee, VTs, PLUM team • Village Council	• Stationery, transport, accommodation, living allowances	• Follow-up work plan • Contribution various parties to the drafts	• Drafts improved with input from the village institutions • Plan on how to proceed in the future
Follow-up meeting with VLUM committee	• VLUM committee meeting	1	12	• VLUM committee, PLUM team	• Stationery, transport, accommodation, living allowances	• Follow-up work plan • Contribution VLUM committee members to the final draft	• Final draft for VLUM committee worked out and submitted to the village government
Follow-up meeting with VTs	• VT meeting	1	13	• VTs, PLUM team	• Stationery, transport, accommodation, living allowances	• Follow-up work plan • Contribution VTs to the final draft	• Final draft for VTs worked out and submitted to the village government
Meeting with the village assembly	• Preparations • Village Assembly meeting • Minutes	1 1 1	14 15 -	• VLUM committee, PLUM team • Villagers, Village Council, VLUM com., VTs, PLUM team, district officer • Village Council	• Stationery, transport, accommodation, living allowances	• Follow-up work plan • Minutes	• Village community well informed about the future role of the village and district institutions concerning PLUM • Commitments to future roles are confirmed
Maintaining follow-up	• Monitoring visits and reporting • Action taken when required	24 (two mandays per month for a year) Depending on the need	39 -	• Villagers, Village Council, VLUM com., VTs, PLUM team, district officer, Technicians	• Stationery, transport, accommodation, living allowances	• Progress report from the plum team and village institutions	• Villagers and their institutions proceed with initiated PLUM activities & maintain contact with concerned district offices

Endnotes and references¹⁷

- 1 Soil mining is the process whereby the uptake and removal of nutrients by crops is higher than the replenishment of the nutrients by fertilisers, crop residues and/or other sources. Soil mining is a very common form of land degradation, whereby the productivity of land diminishes gradually due to the depletion of the nutrient reserves in the soil.
- 2 For instance, when the district supports too many villages at the same time, the available resources for each village will be too little to keep sufficient speed and momentum of the initiated PLUM process, leading to disappointment and villagers losing their interest
- 3 An example of a manual for conducting PRAs is: *PRA Field Handbook for Participatory Rural Appraisal Practitioners* (1995), available at: PRA Programme, Egerton University, P.O. Box 356, Njoro - Kenya. See also endnotes 14 and 15 in part A.
- 4 See for example: the referred manual in note 3; Slocum, R. et. al (eds) 1995, *Power, Process and Participation: Tools for Change*, ITP, London, UK., and: Bojanic, A. et. al, 1995, *Peasant demands: manual for participatory analysis*. Ministry of Foreign Affairs, The Hague, Netherlands.
- 5 The handbook of Slocum et al., referred to in note 4, provides some useful techniques to focus more on stakeholder identification and gender in relation to land issues, such as 'Gendered resource mapping' and 'Land use feltboard'.
- 6 See for instance chapter five of the referred handbook in endnote 3.
- 7 Major assumptions made for the indicative number of days required are presented in appendix D.
- 8 The three options for the general land survey are referred to in section 3.3.6 of part B.
- 9 It is important to formulate specific objectives which are within the scope of PLUM (see box 2.1 of step 2). Examples of such objectives are: to allocate land for market, cemetery, playground, etc; to settle land conflicts between crop producers and pastoralists in a way that is acceptable for both parties; to stop degradation of the village forest without depriving women from fuel wood; to settle land conflicts between farmers and improve security of land tenure; to allocate land to landless women; to stop land degradation and to improve crop production (the required activities for this objective are mainly identified and carried out in the next step).
- 10 These categories should not be confused with the land categories recognised by the bill of The Land Act (1998). This bill distinguishes: Public land; General land; Reserved land; and Village land (see for more information box 2.8 & figure 2.2 of part A).
- 11 Actually, a village land-use plan is not supposed to be final, since it should tune with the ever changing conditions. After the six steps of PLUM are completed, the village community, through the VLUM committee and the Village Council, is in a position to update the land-use plan whenever required and without expensive input from the district.
- 12 For that purpose, a village land-use plan may be split-up in a village forest plan, a village residential plan, village irrigation plan, a village wildlife plan, etc. according to the felt needs. However, these plans should compliment each other and be derived from the overall village land-use plan.
- 13 See endnote 7.
- 14 For the land survey, three options are considered as indicated in section 3.3.6 of part B. Taking into account the assumptions made in appendix D and the involvement of staff as indicated in table DI of appendix D, it is assumed that a full survey requires twice as much time than a semi-detailed survey. Pacing is assumed to be twice as fast than a semi-detailed survey.
- 15 See endnote 14.
- 16 Other examples and experiences of five village forest management plans (prepared with assistance of LAMP in Singida Rural District) are documented in: Wily, L; 1996. *Collaborative Forest Management (Villagers & Government) The Case of Mgori Forest, Tanzania*. Working Paper, Forests, Trees and People. FAO.
- 17 Most of the documents referred to in this section are available at the office of the National Land Use Planning Commission.

Glossary

Actor

Actors are those who play a direct role in a specific development process. In a participatory development approach, like PLUM, the aim is to involve, as much as possible, all stakeholders in the process, directly or through their institutions. For PLUM, actors should be those who have a direct interest in the land resources (individual resident and nomadic villagers, the Village Council, VLUM committee, Village Technicians, user groups, etc.), and those who have an indirect interest governmental and non-governmental institutions/staff at the ward, district and higher levels).

Beacon

A mark on the ground indicating a point of common interests, like a boundary between two parcels of land or between two villages. Surveyors use concrete structures or iron pins (on rocks or buildings) to indicate boundaries. Villagers often use natural features such as, shrubs, trees, rivers, valleys, ant hills, etc. as reference points for boundaries.

Certificate of Customary Land Rights (Hati ya Ardhi ya Mila)

A document which specifies rights to land conferred to a land occupier and user following tribal customs and traditions on land. Under the customary land tenure system, land belongs to the whole tribe, clan and family, while tribal leaders are the custodians on behalf of the members. The bill of The Village Land Act (1998) confers these custodian powers to Village Councils and Village Assemblies in registered villages.

Common (public or communal) village land

Land set aside by the Village Council or Village Assembly (or land which has habitually been set aside) for community or public occupation and use. According to section 12.1.a of the bill of The Village Land Act (1998), common village land shall not be made available for individual occupation or use by any person through grant of a communal or individual customary right of occupation.

Community action plan (CAP)

it indicates the flow of activities and use of resources as scheduled by a community pursuing certain goals. In general, an action plan includes objectives, strategies and activities to achieve the objectives, required input, who will provide the input, a time frame within which the objectives should be realised, and indicators for monitoring and evaluation.

Dual use of land

A situation where a given piece of land is put into two different uses. For example, a piece of land used by pastoralists in one season and crop cultivators in another season of the year, on the basis of agreement among the respective users.

Joint area planing committee

Is an institution comprised of councillors from villages whose interest is to make a joint land-use agreement for their planning area. This can be the whole area covered by the respective villages or an area which is of common interest to the villages making up the committee.

Joint land-use agreement

In situations where a given land resource, like a grazing area, wood land, water catchment, etc. is located within the boundaries of or of high importance for more than one village, the respective villages may decide to come together and jointly prepare a plan for the management of the common resource. Such a common agreement is then referred to as joint land-use agreement.

Land registration

It involves the entering into a land register, a memorial recording of rights held by individuals, groups of people, companies, etc. over a given piece of land. The process of registering land, involves agreeing on the boundaries of the land to be registered, technical determination of the extent of the land parcel (land surveying), mapping and entering the information together with information concerning the owner and user conditions, to the land register. In most cases the purpose of registering land in villages is to enhance tenure security and to reduce boundary conflicts.

Stakeholders

Individuals and groups of individuals having an interest (holding a stake) in a specific issue, i.e. development process. Within the PLUM context stakeholders include all who have an interest in the land resources

located within the village boundaries. These are mainly villagers who are the actual users of the concerned resources. The village community contains a variety of groups of stakeholders according to: land use (pastoralists, crop producers, etc.); sex (women, men); age (elders, adults, youth); wealth (ownership of land, cattle, etc.); political responsibility (village leaders and ordinary villagers); and otherwise. Institutions outside the immediate village community, at the ward, district and higher levels are also stakeholders, although in a less direct manner. Since future generations are stakeholders as well (although not actors), it is important that land resources are used in a sustainable manner (i.e. not leads to degradation of the resource base).

Traversing

A land survey technique of measuring successive angles and distances to establish new (boundary) positions.

User group

In the **PLUM** context, it refers to villagers who use land or a land resource in a similar way (i.e. pastoralists for grazing land, or water user groups for irrigated areas) and organise themselves as a group to regulate the use of the (common) resource among its members and to defend their communal interest. The degree in which user groups organise themselves may differ, from a very informal one to a registered CBO.

Village

A village registered as such under the Local Government Act, no.7 of 1982.

Village Assembly

Includes every person who is ordinarily resident in the village and who has attained the apparent age of eighteen years. The village chairperson is the chairperson of the Village Assembly and the village executive officer is the secretary. The Assembly is a supreme authority of all matters of general policy-making in the village and it is responsible for the election of the Village Council.

Village Council

Is a village government organ in which all executive power is vested in respect to all affairs and business of a village. It is made up of the councillors elected from among the members of the Village Assembly and by the Village

Assembly. In general, a Village Council is made of 25 councillors, in three standing committees: finance and planning, security, social and economic services, and a number of sub-committees, as may be established by the council from time to time.

Village land-use plan

Is an overall plan showing how land resources, located within the village boundaries, should be used in order to meet declared objectives. In PLUM, a village land-use plan is prepared through the full involvement of the various stakeholders and their institutions, so that it reflects their interest and capacities in a balanced manner. Staff at the ward and district levels provide technical knowledge and ensure that the plan does not contravene district and national level interests. A village land-use plan facilitates co-ordination of sectoral development efforts dealing with natural resource use, such as agriculture, livestock, settlements, water, forestry, wildlife and community development. A village land-use plan contains written statements concerning land use and tenure, and management practices for the different identified land use categories in the village. This is supported with maps at scale 1:20,000 or 1:10,000 or 1:5,000 showing the spatial component of the plan, i.e. the location and boundaries of the various land use categories and parcels.

Village level by-laws

These by-laws can be made by the Village Council for the purpose of bringing into effect some of its functions as conferred by the Local Government Act, no. 7 of 1982. For more information see section 4.3.7 of part B.

Water catchment area

A water catchment area or watershed is a topographically defined and delineated area (by hills, etc.), that is drained by the same stream or river. Catchment areas are important planning units because management practices in the upstream part of the catchment may influence the hydrology and land use downstream. Typical examples are: use of water for irrigation purposes; soil and water conservation practices in agricultural lands and afforestation. For PLUM, micro catchments can be important planning units covering part of a village or part of several villages.

Abbreviations

CAP	Community Action Plan
CBO	Community Based Organisation
DED	District Executive Director
DGIS	Directorate of International Co-operation, The Netherlands
DLAC	District Land Advisory Committee
DLDO	District Lands Development Office(r)
DLUMP	Dodoma Land Use Management Project
DMT	District Management Team
DPLO	District Planning Office(r)
FAO	Food and Agricultural Organisation
FRMP	Forestry Resources & Management Plan
GPS	Global Positioning System
GTZ	German Technical Cooperation
HADO	Hifadhi Ardni (soil conservation) project Dodoma
HIAP	Handeni Integrated Agro-forestry Project
HIMA	Hifadhi ya Mazingira (environmental conservation) Project - Iringa
IDS	Institute for Development Studies - UDSM
IIED	International Institute for Environment and Development
IRA	Institute of Resource Assessment - UDSM
IRDP	Institute of Rural Development Planning - Dodoma
JAP committee	Joint Area Planning committee
LAMP	Land Management Programme - Singida, Kiteto, Babati, Simanjiro
MDP	Monduli District Programme
MLHSD	Ministry of Lands and Human Settlements Development
MNRT	Ministry of Natural Resources and Tourism
MOA	Ministry of Agriculture and Cooperatives
NEMC	National Environment Management Council
NGO	Non Governmental Organisation
NLUPC	National Land Use Planning Commission
NRBZ	Natural Resources Management and Buffer Zone Development Programme
ODA	Overseas Development Administration
PLUM	Participatory Land Use Management
PMO	Prime Minister's Office
PRA	Participatory Rural Appraisal
SECAP	Soil Erosion Control & Agro-forestry Project - Lushoto
SNV	Netherlands Development Organisation
SSIPDO	Small Scale Irrigation Project Dodoma
TFAP-NP	Tanzania Forestry Action Plan - North Pare Project Mwanga District
TGNP	Tanzania Gender Network Programme
TIP	Traditional Irrigation Project – Arumeru, Lushoto, Mwanga, Same, Kilosa, Iringa
ToR	Terms of Reference
Tshs	Tanzanian Shillings
VLUM committee	Village Land Use Management committee
VT	Village Technician (para-technician)
UCLAS	University College of Lands & Architectural Studies -UDSM
UDSM	University of Dar Es Salaam
UNDP	United Nations Development Programme
URT	United Republic of Tanzania
VEO	Village Executive Officer
VPO	Vice President's Office
WEO	Ward Executive Officer

APPENDIX A: Guidelines to facilitate and evaluate participatory village land-use management meetings

Contents

- 1 Introduction
- 2 Types of meetings
- 3 How to facilitate participatory and gender sensitive decision making
- 4 How to evaluate the 'successfulness' of a meeting

1 Introduction

Participatory land-use management relies on well organised meetings. Meetings which are administratively recognised and lead to agreements which are reached in a participatory and gender sensitive way. This chapter gives some comments which can be helpful (for the PLUM team) to reach these objectives. Indicators to evaluate the 'success' of such meetings are included as well. These comments should be considered as complementary to basic extension skills and are based on the Local Government Act - District Authorities, (1982; appendix E6), the bill of The Village Land Act (1998), a book about village governments "Kiongozi cha Serikali ya Kijiji" (by B.R. Nchimbi, 1994) and field experience during implementation of PLUM in pilot villages and districts.

2 Types of meetings

The following village meetings are important to introduce and implement PLUM.

2.1 Village council meetings

A. Mandate

The Village Council has the executive power to make day-to-day decisions for the management of the village. Concerning PLUM, it can prepare village land-use plans, by-laws, joint village land-use agreements, form committees concerning land-use management and organise village assembly meetings which have the mandate to approve these issues.

These meetings are useful for the initiation of various PLUM processes, to forward proposals and to mobilise the village institutions. It is advisable that these meetings are attended by the VLUM committee, since their members have been given the mandate from the Village Council to facilitate the PLUM process in the village.

B. Notification

Members should be notified well in advance, in writing, indicating the agenda.

C. Frequency

The council meets whenever it feels necessary, but at least four times annually. Section 8.5 of the bill of the Village Land Act (1998) requires Village Councils to report to and take into account the views of the Village Assembly on the management of village land at least once two every months.

D. Attendance

At least half of the council members should be present during the whole period of the meeting. Otherwise, any decision made during that meeting is not (legally) recognised.

E. Procedure (agenda)

- The meeting should be opened and attended by a chairperson, who is responsible for the agenda and a secretary who is responsible for the minutes.
- Minutes of the previous meeting should be confirmed by the members and signal by the chairperson and secretary of the previous meeting.
- Matters arising from the previous meetings should be discussed.

- Other agenda points as mentioned in the invitation for the meeting, including reports from the standing committees and other committees which have been formed by the Village Council.
- Any other business (mengineyo).
- Closure of the meeting by the chairperson.

F. Notice of motion (Taarifa ya Hoja)

Any member can add an agenda point to the meeting through a written application at least four days before the meeting. Any motion should be presented and supported by at least one member before being discussed.

G. Minutes

The minutes should mention the time and location, the number and names of members (men & women) who have attended the whole meeting, the issues discussed, as well as the arrangements and agreements made.

H. Timing

Preferably at a time when every member is available. The duration of a meeting should not be too long, or participants will be too tired to contribute and to make important decisions.

I. General environment

Any environment which is conducive for a meeting, usually the village office.

J. Decision making (quorum)

Decisions can be made when at least half of the members attend and agree. This means when only half of the members attend, all of the members who are present should agree to meet the quorum.

K. Role of the PLUM team

The PLUM team can ask the village chairperson or secretary by letter to organise a meeting. The letter should indicate the aim of the meeting and the proposed agenda. It is advisable to send copies of such letters to the concerned institutions, including the ward secretary (see section 1.3.2 of part B). The request should reach the village government one or two weeks in advance in order to give them enough time to arrange the meeting. During the meeting the PLUM team can give explanations and proposals, but decisions are made by the Village Council. The PLUM team should facilitate the discussions and encourage a participatory and gender sensitive decision making whenever appropriate. The team makes notes like the minutes, but includes issues as indicated under evaluation (see section 4). The team asks the Village Council to send the minutes, signed, for their reference. The minutes and notes are used for further planning and for evaluation purposes.

2.2 Village assembly meetings

A. Mandate and General Procedure

The Village Assembly decides on issues which are of extraordinary importance for the community, such as village land-use plans, by-laws and the formation of committees. Every villager (men & women) of eighteen years or older residing in the village is a member of the Village Assembly.

These meetings are useful in informing the village community, to give explanations about PLUM and to receive their approval for the various PLUM activities. It is during these meetings that individual villagers, who are not VLUM committee or Village Council members, can directly participate, contribute and influence decisions at the village level.

Other items are mainly the same as indicated for the Village Council meetings, unless indicated differently above.

2.3 Hamlet meetings

A. Mandate and general procedure

A hamlet (Kitongoji) is a formal institution, recognised administratively and politically. Hamlet meetings are organised monthly by a chairperson (hamlet leader) who is elected by the residents of each hamlet. The chairperson (often a member of the Village Council) presents recommendations or other issues from the

Village Council for discussion by the hamlet residents and forward resolutions and other issues discussed during the hamlet meeting to the Village Council. The chairperson is empowered to appoint a hamlet secretary and to form an advisory committee of three people.

In traditional villages (little influenced by the villagisation process) hamlets may have the characteristics of village satellites or sub-villages. In such hamlets, the residents often occupy land of the same part of the village mainly and share therefore more interests than those of the whole village community. In such villages, hamlet meetings might be important opportunities to discuss land issues in smaller groups.

In typical Ujamaa villages, residents formerly living on their lands scattered over the different parts of the village live now in the same residential area, which is split-up in hamlets. As a result, residents of a hamlet have their fields in different parts of the village. In such cases, other type of meetings at the sub-village level (see section 2.4), which are attended by villagers who have their land in the same part of the village, may be more useful. Hamlet meetings may still be organised to discuss issues related to the residential area and community facilities found in the hamlet.

Other items are mainly the same as indicated for the village council meetings unless indicated differently above.

2.4 Sub-village area (village block, user group) meetings

For implementation of PLUM, the village can be split-up in sub-village planning areas (for reasons as indicated in section 2.7 of part A) and those having a stake in the concerned area may need to convene meetings for that purpose. These meetings are administratively *not* recognised, unless the concerned land users organise themselves into a registered organisation (for instance a 'water user group' which is a CBO with members using the same irrigated area). This means that agreements made in such meetings may not formally be binding. Despite this, sub-village area meetings can be very useful for the preparation of detailed work plans, boundary negotiations and improving land management practices (such as conservation of micro-catchments) which require that the users of the area concerned and neighbouring fields are present. The most appropriate location for such meetings is often within the respective sub-planning area (see example A1).

Example A1: Illustration of conducting village block meetings

Village block meetings were commonly held in the DLUMP pilot villages where the majority of the people lives in one big residential area due to the villagisation process. The VLUM committee used to organise these meetings by informing those having their farms in the same village block. These meetings always took place in a farmers field within the planning area concerned. During these meetings (with about 20 to 50 people) villagers were much more willing to give their views and to commit themselves than during village assembly meetings which were too crowded for that purpose.

User group meetings are sub-village meetings attended by those who use the land in the same manner. User groups can be formed by: dry land farmers; horticulturists using irrigation; pastoralists; those living in the same village sub-area; women exclusively, etc. Such user groups can register themselves as CBOs to improve their position, to sell their products and to apply for services from the district, NGOs and other development oriented institutions (see box 2.7 of part A).

Other items are mainly the same as indicated for the village council meetings unless indicated differently above.

2.5 Village land-use management committee meetings

It is proposed that the village land-use management committee meets at least once every month to discuss pending land management issues. These meetings are of high importance after the PLUM team has ended its work in the village. Minutes of these meetings should be forwarded to the Village Council and the District (Lands Office). The issues discussed are related to their tasks, such as solving land conflicts, keeping record of all land issues (such as land registration) and to seek assistance from the district authorities whenever required (see appendix F5).

2.6 Village Elders Council (Baraza la Wazee) meeting

Section 60 of the bill of The Village Land Act (1998), provides for this committee of five to seven nominated village elders which can meet to settle land disputes in the village. See for more information section 2.5/f and box 2.6 of part A.

2.7 Joint village area planning (JAP) meetings

These meetings, as provided for in the bill of The Village Land Act (1998), are organised when the need arises for a joint village land-use management agreement, i.e. when land resources in one village are also in use by those of the neighbouring villages. More information about these meetings is presented in box 4.1 of part B.

2.8 Miscellaneous meetings

This refers to meetings or gatherings with a small number of villagers, and if required, a few district staff like:

- Interviews and discussions with village groups or individuals for data gathering and analysis during the PRA (see step 2).
- Discussions to agree about village boundaries and boundaries of public areas and individual plots and to solve minor land conflicts (see steps 3 & 4).
- Separate meetings with any socio-economic group and sub-group (livestock keepers, crop producers, women, men, youth, etc.) whenever required to facilitate participatory decision making (see section 3).
- Meetings with small numbers of villagers for on-the-job planning and implementation of improved land management measures (see step 5).
- Follow-up meetings with the concerned parties, during consolidation (step 6) and after the regular presence of the PLUM team in the village ends.

3 How to facilitate participatory and gender sensitive decision making

Participatory decision making means that the interests of all stakeholders are taken into consideration (see sections 2.2. and 2.3 of part A). It is therefore important to be aware that a village community can not be considered as a homogenous group with common interests only. The village community can be split-up in socio-economic groups and sub-groups according to land use, wealth, gender, age, etc. For instance, livestock keepers have other interests in land than crop producers, and the female livestock keepers have different priorities than their husbands. It is also important to be aware of the power relations and the dependencies between the different groups and sub-groups. Decision making is traditionally vested to the elderly rather than young people, more to men than women, more to the wealthy than the poor, more to the articulate (talkative ones) than the silent.

As a result, participatory and gender sensitive decision making often will not take place in village council and assembly meetings only. These meetings do not give enough opportunity for all groups and sub-groups to forward their views.

It is important to have separate meetings for the different groups as well. In particular for those who are less articulate and powerful, it gives them the opportunity to express and discuss their views before forwarding them in a more public meeting, such as a village assembly meeting. One can think about meetings with one land user group only (crop producers), villagers occupying land in one part of the village (village block or hamlet meeting), women or female farmers only, youth only, etc. Experience shows that in small groups sensitive issues can be discussed more freely and that the participants are more willing to commit themselves.

In villages where, by tradition, women are not supposed to speak in public (for instance, in some areas along the east coast of Tanzania) it can be of help that a representative displays their view in bigger meetings, because, in public, it is often easier to present a group's opinion than a personal opinion.

This strategy helps to create awareness among the different socio-economic groups in the village about their interests, views, workload, problems and expectations. Although separate meetings with a small number of people require more inputs from the district during the establishment of PLUM in a village, it is expected that it will pay off in the long run since the decisions made in such a way will have a broader support.

The groups should determine the time and place of the meetings in order assure it fits with their other responsibilities. For village assembly meetings assure that the time and place fits for all socio-economic groups involved, are both men and women are explicitly invited.

In step 2 of the methodology PRA for land-use management) various techniques to gather and analyse data, priority setting and to come up with land-use management plans have been proposed in order to enhance participatory and gender sensitive decision making.

In case the conditions in a village make it very difficult to promote participatory and gender sensitive decision making, the PLUM team should consult a specialist in participatory or gender sensitive processes before proceeding.

4 How to evaluate the 'successfulness' of a meeting

In order to evaluate a meeting, the PLUM team should try to answer questions such as:

- How was the attendance of different socio-economic categories, men and women?
- To what extent did the different socio-economic categories, men and women contributed during the discussions? Were the subjects well understood? Was everybody or every land user category able to put forward their interests and proposals well? Was there a dialogue and a joint analysis which lead to action plans and mobilisation of the participants?
- Have the participants come to clear agreements and action plans?
- Do the agreements and plans reflect the priorities of the, different socio-economic categories, men and women in a equitable way?
- Are these agreements and plans expected to be effective?
- Are the minutes made properly, finalised and distributed in a reasonable time?

When a meeting has been less successful than expected and one or more of the above mentioned questions could not been answered positively, corrective measures should be taken to improve the performance in next meetings. The PLUM team should consult an extension specialist whenever required.

APPENDIX B: Procedures and additional information to allocate and register land

Contents

- 1 Village adjudication
- 2 Tasks of Village Councils for granting customary rights
- 3 Procedures to issue certificates of customary rights
- 4 Types of land use at the village level
- 5 Space standards to allocate land for community facilities and residential uses
- 6 Proposals for the establishment of a village land registry

1 Village adjudication

1.1 Introduction

Adjudication (in general) is the process whereby existing (customary) rights in a particular parcel of land are finally and authoritatively ascertained¹. It is a prerequisite to registration of title and to land consolidation and redistribution. There is a cardinal principle in land adjudication that the process does not alter existing rights or create new ones. It merely establishes what rights exist, by whom they are exercised and to what limitations, if any, they are subject². In areas of customary tenure, it implies that the land owners have to show their parcels and its boundaries in the presence of the owners of the neighbouring plots, village elders and village authorities to ascertain the above mentioned principle.

The bill of The Village Land Act (1998) vests the responsibility for village level adjudication to the Village Council after approval by the Village Assembly in accordance with the provisions of sections 51 to 54 of the bill.

1.2 Steps for securing approval from the Village Assembly

For this approval, the following steps are required:

1. A Village Council may on its own motion or on the application of not less than fifty villagers recommend to the Village Assembly that a process of village adjudication be applied to the whole or a defined portion of village land. In practice, it means that the Village Council can initiate the adjudication process on behalf of the PLUM team.
2. A recommendation for village adjudication to the Village Assembly should contain the following matters:
 - reasons for the recommended adjudication;
 - area of the land to be subjected to the adjudication;
 - summary of procedures to be followed in the adjudication (see section 1.3).

The PLUM team may assist Village Councils in preparing requests to the Village Assembly.

3. To post the recommendation in a public place within the village so that members of the Village Assembly may have notice of the recommendation fourteen days before the meeting of the Village Assembly which is to vote on the recommendation.
4. To copy the recommendation to the Commissioner for Lands.
5. The Village Council begins the process of adjudication after obtaining an approval from the Village Assembly. In carrying out this process the Village Council shall appoint a village adjudication adviser and constitute a village adjudication committee the members of which shall be elected by the Village Assembly (see sections 52 and 53 of the bill).

The Village Council may propose to the Village Assembly that the VLUM committee and some members of the PLUM team constitute the village adjudication committee and carry out village adjudication.

¹ Lawrence, J.C.D. 1985. *Land adjudication*. Paper presented at world bank seminar on land information Systems, Washington DC.

² Dale, P.F. & J.D. McLaughlin. 1988. *Land Information Management – An introduction with special reference to cadastral problems in third world countries*. Clarendon Press, Oxford

- 6 In case the Village Assembly refuses to approve an adjudication recommendation, it does not amount to a refusal for individual spot adjudication for a certificate of customary rights. It means that the process of registering *individual* farm boundaries can proceed without approval from the Village Assembly.

1.3 Procedures for carrying out village adjudication

For this purpose, section 54 of the bill of The Village Land Act (1998) outlines the following procedures:

1. The village adjudication committee publishes a notice in a prominent place in the village, and on the land which is to be adjudicated. The notice shall include the following:
 - The extent of the adjudication area;
 - The requirement that all persons who claim any interest in the land within the adjudication area attend a meeting of the village adjudication committee and put forward their claims;
 - Require any person who claims to occupy land within the adjudication area to mark or indicate the boundaries of the land in such a manner and before such date as may be specified by the notice.
2. On the specified date the village adjudication (or VLUM) committee shall hear, determine (through its best endeavours), mediate between and reconcile parties having conflicting claims to the land (see activities 4.3.2 and 4.3.3 of part B).
3. In case of adjournment, (say, because of disagreement) the village adjudication committee shall direct the village adjudication officer to conduct further investigations.
4. A provisional adjudication record with respect to the agreed property boundaries, shall be published and posted at a prominent place in the village. For instance, at the village office.
5. If there is no appeal made, the provisional adjudication record shall become final and included into the register of village land, thirty days after the provisional record was published.

Any person who is aggrieved by the results of the village adjudication (section 55 of the bill) may appeal to the Elders Council (see box 2.6 of part A) and, if the Council's decision is not accepted, appeal to the respective Court.

2 Tasks for Village Councils for granting customary rights

In granting certificates for customary rights, respective Village-Councils have to undertake the following tasks:

1. To adjudicate on the boundaries and rights in village land which is subject to granting customary rights (see appendix B1).
2. In case the applicant is a non-village organisation, the Village Council is supposed to take into consideration guidance from different institutions including: the Commissioner of Lands, District Councils and urban local authorities (section 23.2.b.&d of the bill of the 1998 Village Land Act). Village Councils or VLUM committees are expected to consult such institutions for guidance.
3. To consider whether the land applied for by the non-village organisation is so extensive or is located in such an area that it may affect the present and future occupation and use of village land by persons ordinarily residents in the village (section 23.2.d.iv). In other words, to be able to anticipate potential implications from the proposed land use changes.
4. To ensure that by granting the certificate it would not cause the applicant to exceed the prescribed amount of land a person or group of persons may occupy in that village (section 23.2.e.i). To be able to exercise this function the VLUM committee may consult the Commissioner of Lands (through the District Lands Development Office).
5. To consider if the applicant is likely to obtain the necessary skills and knowledge to use the land productively and in accordance with terms and conditions with respect to the land in question (section 23.2.e.iii). Section 29 which is included as appendix ES shows the conditions which may be considered.
6. To consider the purpose for which the applicant is intending to use the land and whether the purpose accords with any village development or land-use plan (section 23.2.f.ii). In most cases Village Council's decisions are expected to be supported by existing land development policies, village bylaws and plans. The detailed village land-use management plan prepared in step 4 of the guidelines becomes an important tool for evaluating applications for Certificates of Customary Rights over village land. It is therefore important for PLUM teams and VLUM committees to emphasise the preparation and use of such a plan.

7. To determine the amount of rent to be paid by a holder of a certificate of customary rights. The rent can be determined on the basis of the following factors (section 28.4, see appendix E4):
 - Directive from the Commissioner for lands;
 - Advice given by the Commissioner for Lands on the amount, or the method, or the factors to take into account in determining the rent;
 - The use of the land permitted by the certificate of customary rights which has been granted. For instance land which is to be used for religious worship or for burial shall not be subject for rent payment;
 - The value of land as evidenced by any disposition of land in the area (i.e. common value of recently sold land).
 - An assessment by a qualified and authorised valuer or other person with knowledge of the value of land;
 - The amount of any premium required to be paid on the grant of certificate of customary rights.
8. To revise rent at intervals of not less than five years.
9. To communicate with the Commissioner for Lands and with officers from the District Council for various reasons before decisions are made. The purpose of the communication is to:
 - Provide information;
 - Seek advice on certain decisions;
 - Seek consent in planning decisions, for instance in counter signing certificates of customary rights;
 - Seek approval of certain decisions.

3 Procedures to issue certificates of customary rights

(sections 22 to 25 of the bill of the 1998 Village Land Act)

A person, a family or a group of persons can make an application for certificates of customary rights in village land (section 22.1) Procedures by which such application can be made are as follows:

1. The application is made to the Village Council on a prescribed form (section 22.3). However, the bill makes provision by which Village Councils may require applicants to provide additional information before determining the application.
2. The Village Council shall determine the application within ninety days after receiving a well completed application form. Section 23 (see appendix E.3) shows the process and considerations on which the Village Council is supposed to base its decisions in determining applications.
3. Once an application is determined the applicant is issued with a letter of offer by the Village Council (section 24.1). The letter of offer should be signed by the Village Chairman and the Village Executive Officer. The offer sets out conditions under which a certificate of customary rights may be issued.
4. The applicant shall, within not more than ninety days, accept or refuse to accept the letter of offer and conditions. The applicants response shall be in writing and submitted to the Village Council or to an authorised officer. If one of the conditions of accepting the letter of offer includes payments, the bill requires that acceptance is considered only when that sum of money is paid in full.
5. A Village Council shall, within ninety days, grant a customary right of occupancy to the applicant who accepts the letter of offer. Section 25.2 requires that a certificate of customary rights is signed by the Village Chairman, the Village Executive Officer, signed or marked by the grantee (the person who applied for the certificate) and later signed, sealed and registered by the District Lands Officer.

4 Types of land use at the village level

During the process of village land-use planning, various types of land use are distinguished, whereby each type of land use requires its own set of management practices. Well defined land uses are required when: preparing an existing land-use map (section 3.3.8 of part B); drafting and finalising a village land-use plan (sections 4.3.1 and 4.3.4 of part B); and during the process of demarcating and registering areas for common and private uses (sections 4.3.1 and 4.3.3 of part B). For that purpose, the following list of possible land-use types (partly derived from the relevant policies and acts) is proposed for village lands. Additions and differentiation should be made according to the conditions in the village

A. Residential areas (built-up areas)

Area mainly used or designated for housing. In villages it usually goes together with farm homesteads and rearing of minor animal husbandry, like poultry pigs, zero-grazing cows, etc. Residential areas can include the following land uses:

- a) Individual plots for housing and homesteads;
- b) Areas for community facilities, such as nursery, primary and secondary schools, dispensary, governmental offices, water points play grounds, religious buildings, etc.;
- c) Areas for commercial activities, such as market, shops, mills, bars restaurants, hotels, etc.

B. Agricultural areas

Areas mainly used or designated for crop production. Agricultural use can be subdivided according to the type of crops and use of water as follows.

- a) Perennial or semi-perennial crops: Areas occupied by crops which have a life cycle of more than a year, such as: coffee, fruit trees bananas and vine.
- b) Annual crops: areas occupied for the cultivation of usually non irrigated crops with a life cycle of a year or less, such as: maize sorghum, beans, sweet potato, horticultural crops, etc. it may include areas being fallow for two years or less.
- c) Irrigated crops: areas which are irrigated during part of the whole year; often for the cultivation of paddy or horticultural crops such tomatoes, cabbage, cucumbers, etc.

Agricultural areas are often privately owned, but can harbour communal fan (village farms), which were established during the villagisation for communal use.

Agroforestry is a practice in which agricultural crops and forest trees intercropped on *one* farm land. it is suggested to categorise this practice agricultural areas as long as agricultural crops dominate.

C. Grazing areas

Areas used or designated for free grazing, e.g. pasture, bushland. Cattle tracks and water points of importance for free grazing cattle can be located in grazing areas as well as in one of the other land-use categories.

D. Forest areas

Areas covered with a natural vegetation dominated by trees. Forest areas in villages can be subdivided according to its management related to: production and use of timber, fuel wood, charcoal, honey, herbs, etc.; and the protection of natural vegetation, animals and water sources. The village government may set aside, own and manage 'Village Forest Reserves' in order to maintain the functions of the forest areas within the village boundaries (see example 5. part B).

E. Wildlife areas

Areas allocated for, and mainly used by, wild and indigenous animals and plants. Village governments may set aside community based 'Wildlife Management Areas' for: the purpose of biological natural conservation; the mutual benefit of villagers and wildlife; and managed by village communities under auspices of the wildlife authorities (see example 4.6 of part B).

F. Other land uses

These land uses can be located in one or more of the above mentioned land-use categories. Reference is made to, for instance:

- a) Water bodies / ways: rivers, lakes, swamps, fish ponds, etc.;
- b) Roads, access and foot paths;
- c) Cemetery (public grave yard);
- d) Areas of particular cultural value, such as historical and sacred sites.

Some of the above mentioned land-use categories may be subdivided according to the degree of fragility (due to slope, limited soil depth, etc.) or degradation (erosion), which requires (temporarily) particular management practices to protect or to enable regeneration of the concerned land.

5 Space standards to allocate land for community facilities and residential uses

These space standards are developed by the Ministry of Lands to reduce negative interference between different land uses in densely populated areas. These standards are in the first place developed for urban areas, but their importance increases when villages grow, become service centres and get urban qualities. Considering such standards, during planning in the centre of fast growing villages, will avoid unnecessary

inconveniences and costs of destroying houses, buildings and infrastructure in a later stage when the need arises. Provision of services in rural areas, such as a dispensary, may consider other factors than population, such as the distance and accessibility.

1. Standards for residential areas (housing)

Type	Plot size
High density	400 – 800 m ²
Medium density	801 – 1600 m ²
Low density	1601 – 4000 m ²

2. Minimum building lines and set backs (distance from plot boundaries)

Plot size	Front	Sides	Rear
High density	3.0 m	1.5 m	5.0 m
Medium density	3.0 m	3.0 m	5.0 m
Low density	5.0 m	4.0 m	10.0 m

3. Minimum plot coverage and plot ratio for detached houses

Plot size	Plot coverage by house	Plot ratio
High density	40 %	0.40
Medium density	25 %	0.25
Low density	15 %	0.15

4. Health facilities

Type (unit)	Beds / unit	Population / unit	Gross area / person	Plot size
Dispensary / clinic	---	7,000 – 10,000	0,5 m ²	3500 – 5000 m ²
Health centre / MCH	20 – 40	10,000 – 120,000	250 m ²	0.5 – 1.0 ha
Hospital	100 – 400	100,000 – 120,000	250 m ²	2.5 – 10.0 ha
Referral Hospital	400 – 1000	> 150,000	250 m ²	10.0 – 40.0 ha

5. Education facilities

Type	Planning unit	Number / unit	Gross area / person	Plot size
Nursery school	Neighbourhood	40 – 60 pupils	30 m ²	1200 – 1800 m ²
Primary school	Neighbourhood	280 – 1120 pupils	40 m ²	1.5 – 4.5 ha
Secondary school	District	320 – 640 students	40 m ²	2.5 – 5.0 ha

6. Recreational facilities

Type	Gross area / 1000 persons	neighbourhood level (hamlet)	Community level (village)	District level
Children play area	0.2 – 0.4 ha	1.0 – 2.0 ha	4.0 – 8.0 ha	> 20.0 ha
Play fields	0.5 – 1.0 ha	2.5 – 5.0 ha	10.0 – 20.0 ha	> 50.0 ha
Sport fields	1.0 – 1.5 ha	5.0 – 8.0 ha	20.0 – 30.0 ha	> 100.0 ha
Open spaces	0.5 – 1.0 ha	500 – 1500 m ²	--	--

7. Public facilities by planning levels

Type	Gross area / 1000 persons	neighbourhood level (hamlet)	Community level (village)	District level
Market	0.4 – 0.5 m ²	1200 – 2500 m ²	0.5 – 1.5 ha	> 4.0 ha
Shops	0.8 – 1.0 m ²	250 – 500 m ²	1.0 – 2.0 ha	> 8.0 ha
Public buildings	0.25 – 0.5 m ²	800 – 2500 m ²	0.32 – 1.5 ha	> 2.5 ha
Service trade	0.4 – 1.0 m ²	2000 – 5000 m ²	0.16 – 0.5 ha	> 3.0 ha
Religious sites	0.3 – 0.4 m ²	--	2000 – 4000 m ²	0.8 – 1.6 ha

Library	0.15 – 0.2 m ²	--	1500 – 2000 m ²	0.6 – 1.2 ha
Community hall	0.2 – 0.4 m ²	--	2000 – 8000 m ²	> 2.0 ha
Post / telecom.	0.1 m ²	--	2000 m ²	> 1.0 ha
Cemetery	--	0.5 – 1.2 ha	2.0 ha	> 12.0 ha

8.1 Parking requirements

Land use	Offices	Commercial	Hospital	Hotel
Parking spaces (units)	5 per 500 m ² gross floor area	5 per 500 m ² gross floor area	5 per 50 beds	5 per 50 beds

8.2 Parking lots

Type of vehicle	in line parking	45 degrees parking	90 degrees parking
Busses and coaches	40 – 50 m ²	--	--
Cars	25 – 40 m ²	20 – 30 m ²	20 – 25 m ²
Lorries	--	135 – 145 m ²	90 – 120 m ²

6 Proposals for the establishment of a Village Land Registry

A Village Land Registry may comprise the following documents (see also section 4.3.5):

1. Land registration form

This form gives information about the administrative location of the plot, the plot owner, agreed land use, plot area, registration date, witnesses (owners of the neighbouring plots) and signatories at the village level (see figure B1).

This form is filled in the field after the concerned parties have agreed about land use and tenure of the plot. According to the bill of The Village Land Act (1998), this agreement should later be approved by the chairperson and secretary of the Village Council.

2. Sketch map

This map is part of the agreement during plot registration and is sketched in the field (see figure B2). It shows the plot number, its location and boundaries in relation to other plots and if applicable some agreed measures for appropriate² land management (such as location of access paths, organisation of infrastructures on the residential plots). This map may be drawn on the backside of the registration form in order to make them inseparable.

3. Variation form

This form is used to record any changes in terms of ownership and encumbrances such as selling, heritage, mortgage, leases, licences etc. which may occur in future (see figure B3).

A set of a registration form, sketch map and variation form comprises all necessary information about a plot. The originals of these documents are kept by the Village Council, the land owner and the Lands Office at the District level. In case of variations as indicated above, the documents kept by the owner are surrendered to the Village Council for further processing.

These sets of documents are compiled in a box file for each sub-village area (village block) and filed according to their folio and plot numbers.

All this information can serve as an expressed form of agreed land use and tenure for issuing certificates of customary title (*hati ya ardhi ya mila*) as the bill provides for (see appendix B3).

4. Summary form

It is advisable to add in each box file a form which summarises the information about all plots (see figure B4). This form helps the user to manage the village land registry. It facilitates finding the information, it relates the plot number with other attributes which are not mentioned in the land registration form such as land office number, certificate of title number (see below), terms of right, land rent and any comments.

It is proposed that the village registry is managed by the village executive officer with assistance from the VLUM committee members and under the mandate of the Village Council, which has the authority to deal with village land.

The management of the village land registry entails the following issues:

- Keeping record of all changes in land tenure and use;
- Reporting major changes to the District Council in order to enable updating of the district land registry;
- To avail information on land use and tenure in case of land disputes, etc.

The information required for land registration (as expressed in the different documents) is given below:

Region, District, Village: Refers to the administrative location of the plot concerned.

Locality: Big villages sometimes are split-up in localities which are composed of more than one village block.

Village block (or sub-village): A part of the village area with boundaries which are often defined by physical features such as hills, gullies and roads. Also it can refer to hamlets or village satellites.

Plot number: Each plot is given a number which is required to link the registration form with the sketch map and other land registration documents.

First name and surnames: The full name of the land owner. Preferably a surname and two first names to avoid confusion.

Male/Female: Sex of the owner.

Residential address: Refers at least to the village of residence of the land owner.

Land use (user): Refers to the agreed land use. The agreement should reflect community and individual interests.

Area: Refers to the size of the plot and can be expressed in square meters. The area of a plot can be of importance for the level of authority to be consulted for approval of ownership, variations or any other change.

Date of registration: Refers to the date the plot was registered in the field.

Signature of the owner: The owner confirms the agreement by putting a signature or finger print (thumb).

Witnesses: Refers to the owners of the neighbouring plots and/or representatives of areas which have been allocated for communal uses. The witnesses should put their respective names, residence, plot number (if applicable) and signature. This should be done during registration in the field.

Approval: After registration in the field, when the procedures have been followed properly, the chairperson and secretary of the Village Council approve the document by giving their signature.

For land rights which require ministerial approval and conditions, the village land registry should indicate also the following items:

Land office number (L-O No): Numbers given by the Commissioner for Lands to identify the registered plots. The numbers are specific and are given on the basis of rural (villages and peri-urban) and urban areas all over the country.

Certificate of title number (C-T No): Specific numbers given by the Commissioner for Lands to show that the certificate of occupancy has been registered. A plot may have a L-O No and miss a C-T No if registration has not taken place.

Annual Rent: Payment to the Government according to the value of a plot and other factors as directed by the Commissioner for Lands (see appendix E4).

Term of right: Depending on the type of right, it can be long (5 years and above up to 99 years) or short term (1 to 5 years) or repeating year after year.

Folio number: Refers to a particular set of documents (land registration form, sketch map and variation form) which bear information about a specific plot in the box-file.

Remarks: Any issue of importance which could not be covered by the items mentioned above. After writing down a remark, a responsible person should sign.

APPENDIX C: History of village land-use planning in Tanzania - From layout plans to participatory land-use management³

1 Introduction

Optimal use of land and effective management of natural resources have always been priority issues for the Tanzanian community. Therefore, various approaches to facilitate community goals in land development have been attempted. During the last forty years, at least four different methods to village land-use planning can be distinguished. Currently, the participatory planning approach is about to be officially recognised and incorporated into the laws of land. Efforts to replace the top-down, centrally determined and sectoral village layout planning practice, with a method of stakeholders oriented land-use planning agreements, are increasingly appreciated by government institutions and decision makers. The national guidelines for participatory village land-use management are an important product of this appreciation.

The proposed participatory approach is a result of experience from the current and past village land-use planning practice, particularly its poor performance in realising declared goals. It has been correctly argued and emphasised by experts in the field that: While allowing the new approach to replace the current one there are some lessons from the conventional practice which may inform the new approach¹. The purpose of this paper is, therefore, to highlight main elements and steps of plan formulation within the conventional approach. This will simplify comparisons of the conventional approach with the steps of the proposed participatory method.

The first part traces the history of village land-use planning in Tanzania, pointing out the important stages which have led to the current practice. The second part focuses on the main steps under the conventional system. The overview concludes by listing the strengths and weaknesses of the conventional planning style.

2 The development of village land-use planning in Tanzania

The first central government intervention to rural land use probably started in the 1920s. Prior to this, it was the community that influenced individual practices in land use through tribal leaders, whereby approaches varied from one tribe or cultural group to another, mainly reflecting differences in ecology and social cultural contexts.

After changes in the national political, economic and administrative system, through colonisation, land use planning and resource management became a central government issue. Limited roles were assigned to local or tribal leaders.

2.1 The 1920s land-use schemes approach

After acquiring Tanzania (then Tanganyika) as a colony in 1889, the German Emperor declared all land in the territory, whether occupied or not, as crown land under the German Emperor. By that declaration, the German Government was empowered to acquire land and control land use, particularly in rural areas, where land for large scale farming was to be alienated. In addition to powers to resume possession of land rights under any right or interest, the Colonial Government was able to alienate any piece of land and control land use through prescription of conditions for land use.

A significant contribution towards the development of village land-use planning in Tanzania was made by the British, who took over Tanganyika from the Germans after the first world war in 1919. The German declaration became the 1923 Land Ordinance, which is to be replaced by a new land law based on the 1995 National Land Policy.

In addition to the Ordinance, the British introduced the centralised form of land-use planning, whereby government experts identified areas of land experiencing severe land degradation, and prescribed land-use conditions. Small holders occupying and using such lands were then required to follow land-use practices and carry out soil conservation measures, such- as bench terracing and tie ridging. Within that approach a number of rural land-use schemes were formulated and implemented in the Mbulu District in Arusha, the Kilosa District in Morogoro,- the Usambara in Tanga and in parts of Sukumaland in Shinyanga.

To ensure that instructions were observed by land users, by-laws were enacted and incorporated into the schemes. Basically, the approach was top-down and the planning system relied on the legal system, where agricultural extension workers carried out detailed inspections of farms and prosecuted-offenders. As a

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response, small holder farmers resisted the implementation of the schemes. For instance, some: did not attend to their crops effectively, while others delayed their planting. In a number of instances, like in the Uluguru settlements in Morogoro, farmers rioted.

Although offenders were fined and/or imprisoned, the achievements in terms of good agricultural practices, soil conservation and improved land productivity were discouraging. The land-use schemes approach was criticised by politicians who associated the harsh enforcement of the by-laws with bad colonial attitude towards natives. After independence, the land-use schemes idea was replaced with the transformation program under the Village Settlement Schemes.

2.2 The 1960s village settlement schemes

The first Five Year Development Plan, (1961 - 1964) under the independence government, and with support from the World Bank, proposed a rural development program. In this program, small holder cultivators facing land shortage would be assisted in shifting to new lands and helped to establish new settlements, i.e. village Settlement schemes. By encouraging villagers to move from high population areas to less dense land, it was believed that: it would reduce population pressure in the source areas and thus contribute towards land and natural resources management; when people move to new areas they would be more open and receptive to new ways of land use and conservation practices, and therefore adopt better ways of farming easily and faster than when they are left in their original lands.

The procedure for implementing the program was that, rural land-use planning experts in the Rural Settlements Commission of the Ministry of Agriculture identified suitable areas for the schemes and formulated detailed layout plans-for guiding land subdivision in the settlements. Later, potential settlers were recruited from villages with land shortage and shifted to the new sites. It was the responsibility of the government to clear the land in the new settlements (sometimes using militaries and TANU party youth) and to provide the necessary community facilities. The government, for a considerable period, supported the settlers with food supplies and salaries.

By 1965, twenty three out of the sixty nine schemes anticipated by the Five Year Plan were established. However, the program proved too expensive to the government. According to McCall³, the program consumed one third of the annual budget of the Ministry of Agriculture. Most of the already created schemes were not sustainable. Soils became unproductive because of continuous cultivation without adequate conservation measures to restore fertility. Villagers made marginal contributions to provision of community services in the scheme, expecting that the government would continue to meet the rest of the costs. Because of these factors the resettlement program was abolished in 1965. Subsequently, the function of making village layout plans was transferred from the Ministry of Agriculture to the Town Planning Division⁴ in the then Ministry of Lands, Housing and Urban Development. Thus, since 1965 the preparation and approval of village layout plans is carried out by the Ministry of Lands on the basis of the 1956 Town and Country Planning Ordinance, as revised in 1961.

It is worth noting that the program was abolished in a critical period with respect to agricultural production and rural development, and Tanzania received food imports for the first time in 1965.

Through the 1967 Arusha Declaration, the government re-emphasised its commitment to rural development. A year later, the belief that agricultural production and rural development could be improved through resettlement of small holder farmers was revived. A resettlement strategy, different from that of the village settlement schemes, was adopted. Instead of depending heavily on central government funds it was proposed to move small holder families with little or no financial support from the government.

2.3 Layout plans to facilitate voluntary rural resettlement

District and ward leaders were expected to identify suitable sites and persuade small holder families to move into such areas for resettlement. Planners in the Ministry of Lands produced layout plans which were used in guiding land subdivision in the new settlements. Although efforts were made through campaigns in public meetings, very few people shifted. Only a few settlements were created. In 1973 it was declared compulsory for families living in scattered homesteads to shift and settle in new settlements because of the strong belief by the government that resettlement was the way towards better land-use practices and improved agricultural production, and therefore- rural development. That was the beginning of the villagisation program which-was implemented in Tanzania as part of the Ujamaa policy.

2.4 Layout plans to facilitate compulsory rural resettlement

After the 1973 declaration, the Town Planning Division in the Ministry of Lands was responsible for providing layout planning expertise to -district councils and to the respective villages in implementing the program. Town planners were expected to advise on site selection and- preparation of village layout plans, plans indicating the proposed location and boundaries of common and private land parcels, and infrastructure.

The approach was that planners from the Ministry of Lands or the Regional Town Planning Office, would carry out a general land-use assessment at the district level and identify suitable sites for new villages. On the basis of the existing situation of the proposed sites, the planners would formulate detailed layout plans to guide the ward and village leaders in allocating land.

After the 1973 declaration, the rate at which villages were being created increased substantially. On the average, for the period from 1973 to 1976 a hundred villages were established every year. Because of limited manpower, the Ministry of Lands could not produce layout plans to match the rate at which villages were being formed. Consequently, a lot of villages were established without such plans. In realising the limited capacity of the Town Planning Division in plan production, the Director for Town Planning produced a Manual of Village Layout Planning Guidelines⁶.

The manual was distributed to the Regional Town Planning Offices and to district councils to enable them to observe the principles of layout planning in situations where resettlement had to take place without approved layout plans. The guidelines outlined the technical factors to be taken into account during site selection. Some of the considerations include: sufficient agricultural land, availability of water and accessibility to and from other settlements. In the process of evaluating a given site, the guidelines emphasised that villagers should as much as possible be involved.

A brief analysis of the layout planning guidelines suggest that the Director for Town Planning was keen to ensure that villages established under the Ujamaa resettlement program were located in suitable areas and guaranteed sufficient land for the existing families and for future requirements. Thus, village layout planning was a technical activity that proposed a subdivision pattern of plots. The emphasis was on the subdivision of land within the residential area of the village for private houses and for community facilities. Basically, the whole exercise of plan making was carried out by central government experts in the Ministry or in Regional Offices. The planners' duties ended after the plans were approved. Thereafter, it was the obligation of the District and Village Councils to use and implement the plans.

Although there was a requirement that villagers should be involved in the site selection process, there was neither a real attempt nor clear procedures on how to involve them. In general; the main actors in this approach were the central government experts and to a limited extent, decision makers at local levels. Villagers were, in most cases, considered recipients of the plans. That type of planning was practised until the early 1980s, when the government support to Ujamaa policy started to fade out.

Several factors lead to the change in government attitude towards the Ujamaa ideology: The Ujamaa program neither lead to improved agricultural production nor environmental conservation. Instead of reducing pressure on land, there was more intensive use of land, particularly in the areas where new settlements were established, resulting in increased erosion and overgrazing.

The planning experts are also responsible for the limited achievements made under the Ujamaa program. The village layout planning was based on spatial planning principles which emphasised the spatial arrangement of houses the residential area and subdivision of land for community facilities in the village centre. Land-use management issues⁷ were either ignored or left to the District and Village Council to deal with. As a consequence, Tanzania entered the 1980s with its rural areas facing economic as well as environmental crisis. The situation of low agricultural production, severe soil erosion and environmental degradation justified a change to a more pragmatic approach in managing land utilisation and natural resources.

2.5 From layout plans to land-use plans

Weaknesses of the village land-use planning approach through layout plans were also noted by the 1970s Regional Integrated Development Plans (RIDEPs). The Tabora Integrated Regional Development Plan prepared by British experts and financed through ODA is one of the RWEPS which had a strong rural land-use planning component. Instead of focusing on the layout planning of the residential area, the land-use planning component in the Tabora RIDEP focused on an overall organisation of the village land use. Soil suitability assessment and carrying capacity calculations were worked out. A team of experts using aerial photos and satellite images established crop suitability over a given piece of land. That data provided the basis on which land requirements for the present and future population was calculated⁸. Subsequently, a broad land-use plan was prepared.

The Tabora methodology was adopted by the 1983 National Agricultural Development Policy which reiterated the importance of village land-use planning in improving agricultural production. With minor reviews, the procedures were accepted by the Ministry of Lands and since then, have become the conventional approach in village land-use planning, as outlined in the Village Land Use Planning and Implementation Guidelines⁹, formulated by the National Land Use Planning Commission.

3 General characteristics of the conventional village land-use planning practice in Tanzania

3.1 The institutional set-up of planning

Since there is no specific legislation guiding village land-use planning in Tanzania, powers for preparation and approval of plans are drawn from the 1956. Town and Country Planning Ordinance¹⁰. The Director for Town Planning in the Ministry of Lands is responsible for village land-use planning and is represented in the regions and districts by town planners who work directly under Regional or District Lands Development Officers. These experts assist regional authorities and district councils in formulation of plans. Plans are approved by the Director for Town Planning.

By and large, the financing of village land-use plans is, like any other public service, done by the central government, with limited contribution from local authorities.

3.2 Plan formulation by a team of experts

According to the recommendations made by the Agricultural Development Policy¹¹, village land-use plans should be prepared by a team of experts drawn from the respective region or district. Following the policy recommendations, land-use planning teams were created in several districts and substantial amount of money allocated to finance the production of village land-use plans.

3.3 Contents of the plans

Compared to the 'villagisation layout plans,' the scope of the current village land-use plans is wider. Usually a village land-use plan under this approach is made up of a report and maps of different scales. Plans cover a period of between 10 to 20 years. Depending on the type of village, maps incorporated into such plans show, a detailed zoning of the whole village land into various uses, such as farming areas, grazing grounds, forest reserves, layout of individual plots in the residential area, road network, footpaths, cattle routes, water supply sources and distribution network etc. Normally, the report will consist of an analysis of existing land use and other resources and an outline of the problems and opportunities for land development.

The report would also include an analysis of the village population on the basis of which projections are made. By applying the carrying capacity model; land requirements for individual families are worked out and form input to the land use planning proposals. The report includes an implementation program made up of short and long term projects and activities.

3.4 The making process

A. Entry point for preparation of village land-use plans

In most cases, decisions to prepare plans are made by the Ministry of Lands or any other central government ministry. There are also instances where regional authorities and district councils identify priority villages for which land-use plans should be made. The most commonly used reasons for initiating a plan making process are:

To address conflicts in land;

- To resettle flood victims or refugees;
- To improve soil and water conservation practices in order to enhance agricultural production;
- To improve resource management (for instance wildlife);
- To secure land for large scale agricultural ventures, and thus attract investors.

B. Data collection in the planning area

The actual plan making process starts when a team of planners visits the relevant village for purposes of data collection. It is common for a team of six planners to spend two weeks in a village for field work to accomplish the following activities:

- a) If the village boundary is not yet well defined, agreed upon and mapped, it is the responsibility of the team to define and map it. Aerial photos and topographic maps of scale 1:50000 are used to support field checks. In case of disagreements between neighbouring villages, the team initiates negotiations and facilitates agreements.
- b) After boundaries have been defined and mapped, the team carries out soil surveys and registers existing land uses and other natural resources. By the help of aerial photos and satellite images where they are available, a general resource assessment is carried out to establish the quantity and quality of land and other natural resources available within the village. The different types of land may be evaluated for its suitability to cultivate different crops.

- c) To compliment the data on natural resources, a social and economic survey is carried out through interviewing a sample of households and by conducting meetings with village leaders, say village council members and elders.

C. Analysis plan formulation and approval

The data collected is analysed by the team in the office at the district, regional or national level. Planning standards specified by the Ministry are some of the tools used for the analysis. Amongst the outcome of the analysis is a village viability check that establishes the carrying capacity of the existing village resources. Land-use proposals are therefore made on the basis of findings regarding the carrying capacity. Proposals once formulated, are translated into maps and plans. There are only rare cases where preliminary findings and proposals are presented to the respective Village Council for comments before the plan is finalised. Otherwise, plans are in most cases accomplished by the planners in the office.

Village land-use plans prepared by planners in the Ministry of Lands are hardly sent back to respective districts and Village Councils for comments or approval. Such plans are therefore finalised and approved by the Central Government only. Experience suggest that the planning process under the conventional approach ends once the plan is approved.

3.5 An overview of the performance of the land-use planning approach

By 1993 it was reported by the Director for Town Planning² that, for the period from 1985 to 1993 the government spent at least 80 million Tshs, in financing preparation of village land-use plans. Within the same period, about 303 village land-use plans were approved,¹³ while the total number of registered villages is estimated at 8174.¹³

A study conducted by the author in 1993¹⁴, shows that most of the approved plans were not available in the respective districts and villages. The plans could not be used by the local councils. Neither did the study note significant efforts by the Ministry of Lands to ensure that the plans were used. In the absence of (available) plans, land use and land development decisions are made by villagers and village leaders on the basis of their own perception and local knowledge. There is therefore little or no influence from the government in ensuring proper use of land and effective management of natural resources.

The poor performance of the conventional village land-use planning practice is one of the reasons for the current changes. The ongoing reforms advocate for a participatory land-use planning and management approach which combines both plan making and implementation.

4 Strengths and weaknesses of the conventional village land-use planning practice

4.1 Strengths

The fact that the conventional approach is expert-dominated may be a strength and a weakness at the same time. On one side, experts who have been practising within that approach have acquired technical skills such as, mapping, land-use registration, data collection and assessment of land suitabilities. These skills may be applied in various steps within the participatory approach. The experts style of planning may be a constraint to the participatory method. This is because in the conventional approach planners are used to 'prescribing' as opposed to 'facilitating' and 'negotiating' which is the main technique for participation.

4.2 Weaknesses

The following weaknesses can be identified:

- a) The rate at which central government experts can produce village land-use plans is very low, mainly because they rely on central government funds and experts. As a consequence, very few registered villages have approved land-use plans.
- b) The planning process is mainly top-down with the Ministry of Lands setting priorities and budgets, which in most cases ignore other sources of funding and manpower. As a result, issues of local significance as well as other potential sources of funding and manpower are not recognised.
- c) The approach is based on the assumption that the state has sufficient powers, resources and capacity to make plans, as well as to guide and control land-use changes in all villages of Tanzania. The government is not able to carry out such tasks.
- d) The conventional approach does not appreciate, nor does it utilise villagers resources which include their local knowledge, resources and other capacities in land-use planning and management.

- e) The approach pays very little attention to plan implementation. Because of poor involvement of both District and Village Councils in the plan formulation process, implementation has to rely on resources from the central government. Since such resources are decreasing, plan implementation is hardly financed.

Among the key reasons for producing the guidelines presented in this document is the lack of implementation of approved village land-use plans.

Notes and references

- 1 See for example: Bundala, L., "Participatory Land Use Management and Land Security Improvement" In the *Proceedings of the National Workshop on the Institutionalization of Participatory Village Land Use Management in Tanzania*. Held in Dodoma, from 31 - 31st October 1997.
- 2 The United Republic of Tanzania, Ministry of Lands, Housing and Urban Development, *National Land Policy*. 1995.
- 3 For further discussion on the Village Settlement Schemes, see for example, McCall M., and Skutch, M, *Which Road for the Peasantry?* Unpublished paper, Dar Es Salaam University, 1981.
- 4 After June 1997 the Town Planning Division changed its name to Human Settlement Development Division.
- 5 Stein H., "Theories of State in Tanzania. A Critical Assessment" in the *Journal of Modern African Studies*, vol.23, no.1 pp.105 -123, 1985.
- 6 Ministry of Lands Housing and Urban Development, *Model Village Layout Planning Handbook*, 1975
- 7 For instance land-use planning and management in the farming areas, grazing grounds, water catchment areas and in the areas where villagers obtained firewood and other products, were not covered by the layout plans.
- 8 For more information on the Tabora approach see, Wheeler, J. RI, White, R. J., and Wickstead, M. R., *Land Use Planning Project Tabora Region Tanzania Final Report P217*, Overseas Development Natural Resources Institute, Chatham. 1989.
- 9 The United Republic of Tanzania, *Village Land Use Planning and Implementation Guidelines for Tanzania*. National land Use Planning Commission. 1993.
- 10 The Ordinance was revised in 1961, after Independence, and again in 1993. However the main contents are the same and its focus is on the layout planning of urban settlements. It does not address issues of rural land uses such as agriculture; management of common resources and conservation.
- 11 Jamhuri ya Muungano wa Tanzania, *Programu ya kutekeleza Sera ya Taifa ya Kijimo na Mifugo*, 1985.
- 12 Hayuma, A. M., *The Experience of village Land Use Planning in Tanzania*, a paper presented in the Evaluation Workshop for the Dodoma Land Use Management Project, September 1993.
- 13 Okoth-Ogendo, H., W., O., *Final Report on Reforms of Land Tenure and Land Use Legislation in Tanzania*. FAO and UNDP Technical Report, 1995. pp.17.
- 14 Lerise, F. , *Planning at the End of the River: Land and Water Use Management in Chekereni - Moshi Disfrict Tanzania*. An unpublished Ph.D.Dissertation, Copenhagen 1996.

APPENDIX D: Example of calculations for human and financial resource requirements to apply PLUM

1. Introduction

Part of the planning procedure is budgeting for human, material and financial resources. It enables planners and decision makers to assess whether: the required input can be made available; the proposed activities are expected to be cost effective; the plan is competitive compared to other development plans in the district, etc. Also, proper budgeting allows more transparency on the use of resources, and a comparison of the estimated requirements with the actual use of input during application of PLUM. A budget should be part of the action plan and the plan of operation as proposed in sections 1.3.2 and 1.3.4 of part B.

The following example of making estimates for human and financial resource requirements to apply PLUM is based on limited experience and various assumptions. Those involved in the budgeting exercise (PLUM team and DPLO) may find this example useful, but should adapt it to the local context. During budgeting, one should also be aware that the PLUM process involves negotiations, which affect predictability of the progress and influences the selection of activities.

2. Assumptions

This example is based on many assumptions. Some important ones are:

- i. PLUM is applied as proposed in part B and introduced in a medium size village of 3,000 inhabitants, dominated by a sedentary setting. The village land can be split-up into 4 sub-planning units (village blocks) and contains 2000 individual plots;
- ii. The concerned institutions at the district level have approved the plan of operation to apply PLUM. This leads to the allocation and release of funds, human resources and materials throughout the whole process as budgeted. For expensive items, such as cars and land survey equipment, their depreciation costs (costs of losing value through wearing-out, etc.) have been taken into account rather than the cost of purchasing them.
- iii. At the village level, the Village Council and the village community accept the idea of PLUM. During the proposed PLUM steps, arrangements for compensating villagers, who are heavily involved, are made at the village level. The required human resources and materials from the village level are not included in the example.
- iv. No excessive problems and calamities occur that would hamper the process seriously.

3. Calculations

Table D1. illustrates how input requirements can be estimated through a number of calculations and assumptions. This is done separately for most activities and options as proposed in part B of the guidelines. Together with the table, a brief explanation on the meaning of the columns and rows is given.

Important factors which determine the cost of applying PLUM in a village are:

- a) The distance between the district offices and the village (in this example set at 50 km);
- b) Transport costs (in this example set at a rate of 250 Tshs per km for depreciation, running and maintenance cost of a 4WD car);
- c) Night allowances to cover the cost for accommodation and meals when staying overnight in a village (set at 7.500 Tshs per night per person);
- d) Lunch allowances to cover the cost for food and drinks when staying for a day in the field without staying overnight (set at 3.000 Tshs per day per person);
- e) Staff costs, for salaries, emoluments and overhead, like costs for administration and use of office space, furniture, electricity, etc. (set at 4000 Tshs per employee per day).

Calculations for each activity are made through multiplying the number of required staff with the number of days to carry out the activity and with the costs of involving them (staff costs). This is added with the costs for materials, transport and/or night/lunch allowances, which results in the estimated amount for each activity and option as presented in the last column of table D1. For instance, the cost for activity 2.3 (introductory visits) is calculated as: staff costs, 7×4.000 Tshs = 56.000 Tshs; night allowances, 7×7.500 Tshs = 105.000 Tshs; lunch allowances, none; travel costs $(2 \times 50 + 40)$ km * 250 Tshs = 35.000 Tshs; materials, 2.000 Tshs; Total, $56.000 + 105.000 + 35.000 + 2.000 = 198.000$ Tshs (about 300 U S\$).

Table D1: Example of calculations to estimate input requirements for applying PLUM

Activity per step (Abbreviated) (1)	No. of Days (2)	Human resources										Allowances			Transport		Materials (TSHS) (18)	Total per Activity (TSHS) (19)
		PLUM Team (3)	Com Dev (4)	Agr Ext (5)	For Ext (6)	Lands (7)	Sur- veyor (8)	Car- togr. (9)	Drive- r (10)	Admi- nistr. (11)	Other (12)	No. of Staff (13)	Lunch (14)	Night (15)	Dist.- Vill. (16)	Other (17)		
STEP 1: PREPARATION																		
1.1 Formation PLUM team	4	3	0	0	0	0	0	0	1	1	2	0	0	0	0	30	2,000	121,500
1.2 Preparation action plan	8	3	0	0	0	0	0	0	1	0	1	0	0	0	0	60	8,000	183,000
1.3 Analysis district data	14	3	0	0	0	0	0	0	1	0	1	4	1	0	0	200	15,000	357,000
1.4 Selection villages	6	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	20,000	116,000
1.5 Other activities	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	5,000	17,000
STEP 2: PRA FOR PLUM																		
2.1 Formation PRA team	3	2	1	1	1	1	0	0	1	0	0	0	0	0	0	30	2,000	93,500
2.2 Village council meeting	1	2	1	1	1	1	0	0	1	0	0	7	1	0	0	0	2,000	51,000
2.3 Introductory visits	2	2	1	1	1	1	0	0	1	0	0	7	0	2	1	40	2,000	198,000
2.4 Village assembly meeting	1	2	1	1	1	1	0	0	1	0	0	7	0	1	0	20	4,000	89,500
2.5 Preparation VLUM com.	1	2	1	1	1	1	0	0	1	0	0	7	0	1	0	20	2,000	87,500
2.6 Data gathering	10	2	1	1	1	1	0	0	1	0	0	7	0	10	2	200	10,000	915,000
2.7 Problems & Opportunities	2	2	1	1	1	1	0	0	1	0	0	7	0	2	0	40	5,000	176,000
2.8 Community Action Plan	5	2	1	1	1	1	0	0	1	0	1	7	1	2	1	40	20,000	341,000
2.9 Other activities	2	0	0	0	0	0	0	0	0	1	0	0	0	0	30	5,000	20,500	
STEP 3: SUPPL. SURVEYS																		
3.1 Village Council meeting	1	2	0	1	1	0	0	0	1	0	0	5	1	0	1	0	2,000	62,000
3.2 Preparation surveys	2	2	0	1	1	1	4	0	0	0	0	0	0	0	0	30	3,000	82,500
3.3 Village Boundaries	10	1	0	0	0	2	4	0	1	0	0	8	0	10	2	300	200,000	1,245,000
3.4 Reference Points	9	1	0	0	0	2	4	0	1	0	0	8	0	10	2	250	200,000	1,200,500
3.5 Village Boundary Map	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0	30	50,000	93,500
3.6 General land survey																		
a) Full survey	40	2	0	0	0	1	6	0	1	0	0	10	0	40	8	1,200	300,000	5,400,000
b) Semi-detailed	20	2	0	0	0	1	3	0	1	0	0	7	0	20	4	600	100,000	1,960,000
c) Sketched	5	2	0	0	0	1	1	0	1	0	0	5	0	5	1	150	50,000	400,000
3.7 Village base map	4	0	0	0	0	0	1	1	0	0	0	0	0	0	0	30	50,000	89,500
3.8 Existing land use map	5	2	0	1	1	2	2	1	1	0	0	10	0	4	1	110	100,000	652,500
3.9 Other activities	5	0	0	0	0	0	0	0	0	1	0	0	0	0	30	50,000	77,500	
STEP 4: LAND-USE PLAN																		
4.1 Draft village land-use plan	5	2	1	1	1	1	0	0	1	0	0	7	1	0	1	0	8,000	194,000
4.2 Demarc. public areas																		
a) Full survey	40	2	0	0	0	1	6	0	1	0	0	10	0	40	8	1,200	300,000	5,400,000
b) Semi-detailed	20	2	0	0	0	1	3	0	1	0	0	7	0	20	4	600	100,000	1,960,000
c) Pacing	10	2	0	0	0	1	1	0	1	0	0	5	0	10	2	300	50,000	750,000
4.3 Demarcate private plots																		
a) Full survey	200	2	0	0	0	1	6	2	1	0	0	10	0	200	40	6,000	1,500,000	28,600,000
b) Semi-detailed	100	2	0	0	0	1	3	2	1	0	0	7	0	100	20	3,000	500,000	10,600,000
c) Pacing	50	2	0	0	0	0	1	0	1	0	0	4	0	50	10	1,500	100,000	3,025,000
4.4 Finalisation plan	5	2	1	1	1	1	0	1	1	0	0	8	0	4	1	120	50,000	505,000
4.5 Village land registry	4	1	0	0	0	1	0	0	1	0	0	3	0	2	1	60	200,000	333,000
4.6 Certificates of rights	12	1	0	0	0	1	0	0	1	0	1	0	0	3	0	360	200,000	482,000
4.7 By-laws	7	2	0	0	0	0	0	0	1	0	2	0	0	3	0	90	20,000	182,000
4.8 Other activities	6	0	0	0	0	1	1	1	0	1	1	0	0	0	30	20,000	147,500	
STEP 5: IMPLEMENTATION																		
5.1 Preparations	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	30	2,000	29,500
5.2 Village Council Meetings	1	2	1	1	1	0	0	0	1	0	0	6	0	1	1	0	2,000	96,000
5.3 Supplementary appraisal	5	2	1	1	1	0	0	0	1	0	0	6	0	4	1	150	5,000	367,500
5.4 Village Assembly meeting	1	2	1	1	1	0	0	0	1	0	0	8	1	0	1	30	2,000	90,500
5.5 Sub-village meetings	4	2	1	1	1	0	0	0	1	0	0	6	0	4	0	120	20,000	326,000
5.6 Implementation	20	2	0	1	1	0	0	0	1	0	0	3	0	20	4	600	150,000	1,250,000
5.7 Impl. & Training VTs	40	2	0	1	1	0	0	0	1	0	0	3	0	40	8	1,200	300,000	2,500,000
5.8 Other activities	5	0	0	0	0	0	0	0	0	1	0	0	0	0	100	15,000	60,000	
STEP 6: CONSOLIDATION																		
6.1 Assessment impact	9	2	0	1	1	0	0	0	1	0	0	3	0	6	2	240	20,000	445,000
6.2 Draft roles actors	1	2	0	1	1	0	0	0	1	0	0	0	0	0	0	30	2,000	29,500
6.3 Meeting VC, VLUM, VTs	1	2	1	1	1	0	0	0	1	0	0	4	0	1	1	30	2,000	88,500
6.4 Meeting with VLUM com.	1	2	1	1	1	0	0	0	1	0	0	4	0	1	0	30	2,000	63,500
6.5 Meeting with VTs	1	2	1	1	1	0	0	0	1	0	0	4	0	1	0	30	2,000	63,500
6.6 Village Assembly meeting	2	2	1	1	1	1	0	0	1	0	3	10	1	0	1	0	4,000	139,000
6.7 Follow up	24	1	0	1	1	0	0	0	1	0	0	2	24	0	24	0	48,000	1,176,000
6.8 Other activities	5	0	0	0	0	0	0	0	0	1	0	0	0	0	30	5,000	32,500	

Explanation per column (see also section 3.)

- PLUM activities as proposed in part B of the guidebook
- Estimated number of days required to carry out the activity
- Columns 2 - 12: Estimated number of staff required to carry out the activity
- PLUM team
- Community development worker and/or gender specialist
- Agricultural and/or livestock extension worker
- Extension staff from the forestry and/or wildlife department
- Physical planner from the lands department
- Surveyor and/or survey assistant
- Cartographer
- Driver
- Secretary and/or other administrative support
- Other staff, such as DPLO, DED, from other departments, etc.
- Number of staff going to the field
- Number of lunch allowances (days) per staff member
- Number of night allowances per staff member
- Number of travels to the village by car (from the district town and back)
- Other transport by car in kilometres
- Estimated cost for the use of materials. Value of materials such as stationery which are used only once, and depreciation costs of tools, such as theodolites, which lose their value gradually by use.
- Total estimated cost per activity, based on assumptions as outlined in section C and below.

Rows:

- Grand total costs are not presented since they will depend on the choice of activities and options.
- During the surveys in activities 3.6, 4.2 and 4.3, it is assumed that the district team splits-up in three groups, each group assisted by one or two villagers (VLUM committee members). The survey methods refer to those suggested in part B.
- During steps 5 and 6 it is assumed that the two involved extension workers (columns 5 and 6) are stationed in the village or a nearby village, and therefore are not entitled for night allowances.
- The cost for activity 6.7 (follow-up) is estimated for a PLUM team member visiting the village twice a month during a full year.

4. Scenarios

Table D1 is an extract from a computerised spreadsheet database. It enables automatic calculations and an easy comparison of estimates on expected input requirements under different conditions.

Situation A

In the selected village: the concept of PLUM is not yet known, but accepted; a PRA has not been carried out yet; village boundaries have not been established yet; and no other activities have been carried out, or conditions exist which would make some activities or steps unnecessary. As a result, all six steps and all activities, as suggested for each step in the guidelines, are carried out. All public areas and private plots are registered whereby the locations of boundaries are recorded and estimated through pacing with assistance of district staff (activities 4.2 and 4.3 of table D1). The same applies for surveying the major physical features and boundaries of general land uses (activity 3.6).

Table D2 summarises the cost estimates for this situation, taking into account the assumptions of section 2 and the set rates of section 3.

Table D2: Example of cost estimates for applying PLUM under specified conditions

STAGE	NIGHT ALLOWANCES	LUNCH ALLOWANCES	STAFF COSTS	TRANSPORT -	MATERIALS -	TOTAL COSTS (TSHS)	% OF TOTAL COSTS
STEP 1	0	12,000	660,000	72,500	50,000	794,500	5%
STEP 2	945,000	42,000	728,000	205,000	52,000	1,972,000	11%
STEP 3	1,087,500	15,000	800,000	295,000	505,000	2,702,500	15%
STEP 4	2,160,000	21,000	1,800,000	990,000	648,000	5,619,000	31%
STEP 5	1,750,000	24,000	1,512,000	932,500	496,000	4,719,500	27%
STEP 6	225,000	174,000	756,000	797,500	85,000	2,037,500	11%
TOTAL	6,172,500	288,000	6,256,000	3,292,500	1,836,000	17,845,000	100%
%TOTAL	35%	2%	35%	18%	10%	100%	

In this case, the most expensive steps are 4 and 5 (detailed land-use planning and administration resp. implementation of improved land management measures). Most funds are needed to cover staff costs (1564 mandays) and night allowances, with each 35% of the total cost. Since staff costs remain the same, whether the staff concerned is occupied or staying idle (see item d of section 3), it may be omitted in the calculations for budgeting the application of PLUM when staff is available. When staff costs are omitted, the total costs for applying the full package of activities as outlined in the guidelines is under the above set conditions estimated at about 11.5 million Tshs. In a village of 3000 inhabitants, it amounts to an investment of about 3.800 Tshs. per person

Situation B

The situation is the same as indicated above, but village boundaries are already established, while registering of private plots, issuing of certificates of rights and the establishment of a village registry is not seen as a priority. In that case, the total costs is estimated at 7.2 million Tshs (without staff costs)

Situation C

If in situation A it was decided to conduct a full survey of all land parcels in the village, total costs are estimated at 36 million Tshs (without staff costs). In many cases, the investment for a full survey of land parcels in a village is not expected to give economic returns (on the short and medium term) and is therefore not justifiable.

5. Final comments

If desirable, cost estimates for numerous scenarios can be calculated, as illustrated above. Financial analysis supports the planning exercise at the district and village levels and facilitates decision making on the choice of activities and options during application of PLUM. Such analysis also helps to seek for modes of reducing costs without compromising on quality, etc. For instance, by involving extension staff living in or in a nearby village, costs for night allowances and transport can be reduced considerably. Where possible,

transport costs can be reduced through the use of motorbikes, bicycles or public means. In remote villages, a camp can be established and a cook hired to reduce costs of accommodation and transport.

As indicated in section 2.8 of part A, development efforts should give economic returns in order to be sustainable. The investments made by the district offices for assisting villagers to improve the use of natural resources should therefore lead to an improved revenue collection (directly or indirectly), whereby the additional amount collected should exceed the invested sum within a few years.

APPENDIX E: Most relevant sections of the bill of The Village Land Act and the Local Government Act (no. 7)

Contents

1. Main characteristics of Customary Right of Occupancy (bill of The Village Land Act of 1998, section 18)
2. Law Applicable to Customary Right of Occupancy (bill of The Village Land Act of 1998, section 20)
3. How to determine an application for a certificate in customary right of occupancy (bill of The Village Land Act of 1998, section 23)
4. How to determine rent for holders of customary rights (bill of The Village Land Act of 1998, section 28)
5. Conditions for granting a Certificate of Customary Right of Occupancy (bill of The Village Land Act of 1998, section 29)
6. Procedures to organise village meetings (Local Government Act no 7 of 1982, sections 103 - 110)
7. The mandate of Village Councils to prepare and apply by-laws (Local Government Act no 7 of 1982, sections 164 - 167)

- 1 Main characteristics of Customary Right of Occupancy** (bill of The Village Land Act of 1998, section 18)

Incidents of customary right of occupancy

18.-(1) A customary right of occupancy is in every respect of equal status and effect to a granted right of occupancy and shall, subject to the provision of this Act, be:-

- (a) capable of being allocated by a village council to a citizen, a family of citizens, a group of two or more citizens whether associated together under any law or not, a partnership or a corporate body the majority of whose members or shareholders are citizens
- (b) in village land, general land or reserved land;
- (c) capable of being of indefinite duration;
- (d) governed by customary law in respect of any dealings, including intestate succession between persons residing in or occupying and using land:
- (e) within the village having jurisdiction over that land; or
- (f) where the customary right of occupancy has been granted in land other than village land contiguous to or surrounding the land which has been granted for a customary right of occupancy;
- (g) subject to any conditions which are set out in section 29 or as may be prescribed and to any other conditions which the village council having jurisdiction over that land shall determine;
- (h) may be granted subject to a premium and an annual rent, which may be varied from time to time;
- (i) capable of being assigned to a citizen or a group of citizens, having a residence or place of business in the village where the land is situate, or a body corporate the majority of whose shareholders or members are citizens having a place of business in that village;
- (j) inheritable and transmissible by will;
- (k) liable, subject to the prompt payment of full and fair compensation, to acquisition by the state for public purposes in accordance with any law making provision for that action.

(2) The minister shall make regulations providing for an area of land which a person can hold under a single right occupancy or derivative right of occupancy or in any way otherwise disposed of to any person or body of persons.

- 2 Law applicable to Customary Right of Occupancy** (bill of The Village Land Act of 1998, section 20)

Law applicable to Customary Right of Occupancy

20.- (1) (not included in this text)

- (2) Any rule of customary law which denies a woman the right to acquire, hold, deal with, transmit or receive by will or by gift or by any other means any interest in land for the reason only that she is a

woman, shall be void and inoperative and shall not be given effect to by any village council or village assembly or any person or body exercising any authority over village land or in respect of any dispute over village land or in any court or other body before which a matter concerning village land is brought for adjudication or determination.

- (3) (not included in this text)
- (4) The customary law which shall be applied to determine any matters referred to in subsections (1), (2) and (3) shall be:-
 - (a) and (b) (Not included in this text);
 - (c) in the case of general land held for a customary right of occupancy, the customary law recognised as such by the persons occupying that land;
 - (d) in the case of any land customarily used by pastoralists, the customary law recognised as such by those pastoralists.
- (5) (not included in this text)

3 How to determine an application for a certificate in customary right of occupancy (bill of The Village Land Act of 1998 section 23)

Determination of application for customary right of occupancy

23.-(1) A village council shall, *within* ninety days of the submission of *an* application or *within* ninety days of the submission of further information or a satisfactory explanation for its non-availability, determine that application.

- (2) In determining whether to grant a customary right of occupancy, the village council shall:-
 - (a) comply with the decisions that have been reached by any committee or other body on the adjudication of the boundaries to and rights in the land which is the subject of the application for a customary right of occupancy;
 - (b) have regard to any guidance from the Commissioner concerning an application from a non-village organisation;
 - (c) have special regards in respect of the equality of all persons, such as:
 - (i) treat an application from a woman, or a group of women no less favourably than an equivalent application from a man, a group of men or a mixed group of men and women; and
 - (ii) adopt or apply no adverse discriminatory practices or attitudes towards any woman who has applied for a customary right of occupancy;
 - (d) where the application is from a non-village organisation in respect of which no guidance under paragraph (b) has been received, have regard to:
 - (i) any advice which has been given to the application by the district council or as the case may be the urban authority having jurisdiction in the area where the village is situated;
 - (ii) the contribution that the non-village organisation has made or has undertaken to make to the community and public facilities of the village;
 - (iii) the contribution to the national economy and well-being that the development for which the customary right of occupancy is being applied for is likely to make;
 - (iv) whether the amount of land in respect of which the non-village organisation is seeking a customary right of occupancy is so extensive or is located in such an area that it will or is likely to impede the present and future occupation and use of village land by persons ordinarily resident in the village;
 - (v) any other matters which may be prescribed;
 - (e) where the application is from a person or group of persons ordinarily resident in the village, have regard to:-
 - (i) where the applicant already occupies village land under a customary right of occupancy whether the allocation of additional land under a customary right of occupancy would cause that applicant to exceed the prescribed amount of land which a person or group of persons may occupy in that village;

- (ii) where the applicant already occupies land under a customary right of occupancy, whether all the terms and conditions subject to which that right of occupancy is held and all other regulations relating to the use of that land have been strictly complied with and if they have not, the reasons for any non-compliance;
 - (iii) whether the applicant has or is likely to be able to obtain access to the necessary skills and knowledge to be able to use the land applied for productively and in accordance with the terms and conditions subject to which the customary right of occupancy will be granted and all other regulations applying to the use of the land for which the right of occupancy is being applied for;
 - (iv) the extent and manner in which the applicant, if an individual, intends to make provision for any dependants that the applicant may have or will, if the applicant dies, have, out of the land;
 - (v) any other matters which may be prescribed;
- (f) where the applicant is a person or group of persons referred to in subsection (2) of section 21:-
- (i) the amount and location of the land the applicant is applying for;
 - (ii) the purpose for which the applicant is intending to use the land and whether that purpose accords with any village development or land use plan;
 - (iii) the matters referred to in subparagraphs (i) and (iii) of paragraph (d); and subparagraphs (iii) and (iv) of paragraph (e);
 - (iv) any other matters which may be prescribed.
- (3) A village council shall, after considering an application in accordance with subsection (2):-
- (a) grant in respect of all or a part of the land applied for subject to any conditions which:
 - (i) are set out in section 29 or which may be prescribed;
 - (ii) the village council is directed by the Commissioner to impose in respect of a grant to a non-village organisation; and
 - (iii) may be prescribed; or
 - (b) refuse to grant, a customary right of occupancy to the applicant.
- (4) Where an application is refused, the village council shall, at the request of the applicant, furnish that applicant with a statement of reasons for the refusal.

4 How to determine rent for holders of customary rights (bill of The Village Land Act of 1998, section 28)

Rent

- 28.-(1) The village council may, require the payment of an annual rent for a customary right of occupancy from a non-village organisation or a person or group of persons referred to in subsection (2) of section 23.
- (2) The rent shall be paid in any instalments and at any intervals of time during the year which shall be provided in the certificate of customary title.
 - (3) The rent shall be paid to the village council or an authorised officer of that council or an authorised officer of that council and a signed receipt in respect of each payment of rent that is made shall be given to the payer of that rent.
 - (4) In determining the amount of any rent, the village council shall:
 - (a) comply with any directives from the Commissioner on the amount of or the method of, or the factors to take into account in determining the amount of any rent which is to be paid;
 - (b) where no such directives have been issued, take account of:
 - (i) any advice given by the Commissioner on the amount or the method of or the factors to take into account in determining any rent which is to be paid;
 - (ii) the use of land permitted by the customary right of occupancy which has been granted;

- (iii) the value of land as evidenced by any dispositions of land in the area where the customary right of occupancy has been granted, whether those dispositions were made in accordance with customary law or not;
 - (iv) an assessment by a qualified and authorised value or other person with knowledge of the value of land of the appropriate amount of rent which should be paid for land;
 - (v) the amount of any premium required to be paid on the grant of a customary right of occupancy.
- (5) Notwithstanding anything to the contrary contained in any certificate of customary right of occupancy or in any of the provisions of any conditions of a customary right of occupancy, in every case in which the village council requires the payment of a rent, that council shall, subject to the approval of the Commissioner, have the power to revise that rent at intervals of not less than five years and in any exercise of that power, the determination of any revised rent shall be in accordance with subsection (4).
- (6) Where the village council determines to grant a customary right of occupancy to any person or organisation of land which is to be used exclusively for religious worship or for burial or exclusively both for religious worship and for burial, that council shall not require the payment of any rent in respect of that customary right of occupancy.
- (7) The village council may grant a customary right of occupancy at a nominal rent if the land is to be used exclusively for a charitable purpose by a non-village organisation and is empowered to review and increase that rent if the land ceases to be used exclusively for a charitable purpose.
- (8) Where any rent or instalment of any rent payable in respect of a customary right of occupancy or any part of that rent or instalment remains unpaid for a period of six months after the date on which the same is required to be paid, interest at a rate of two percent a month or part of it, or at any other rate which the Minister may by order prescribe, shall be payable on the amount of the arrears as it is from time to time until payment of the whole amount is made from the date from which the rent or instalment first fell into arrears and shall be collected and recoverable in the same manner as rent.
- (9) The acceptance by or on behalf of the village council of any rent shall not be held to operate as a waiver by that council of any right to revoke the customary right of occupancy accruing by reason of the breach of any covenant or condition, express or implied in any contract for a customary right of occupancy or in any certificate of customary title granted under this Act.
- (10) The provisions of section 50 of the Land Act, 1998 in relation to the summary proceedings for recovery of rent shall apply to rent due and owing under this Part as they apply to rent due and owing under Part VI of the Land Act, 1998.

5 Conditions for granting a Certificate of Customary Right of Occupancy (bill of The Village Land Act of 1998, section 29)

Conditions

- 29.(1) Every customary right of occupancy shall be granted subject to the conditions set out in this section and any other conditions which may be prescribed.
- (2) Every grant of a customary right of occupancy shall contain the implied conditions that:-
- (a) the occupier will use and will take steps to ensure that those persons occupying and working the land with him or occupying and working the land with his permission will:-
 - (i) keep and maintain the land in good state; and
 - (ii) in the case of land to be used for farming, farm the land in accordance with the practise of good husbandry customarily used in the area; and
 - (iii) in case of land to be used for pastoral purposes, use the land in a sustainable manner in accordance with the highest and best customary principles of pastoralism practised in the area;
 - (b) any permissions that are required to be obtained before any buildings are erected will be obtained and no building will be erected until those permissions have been so obtained;
 - (c) the occupier will pay any rent, fees, charges, taxes and other required payments due in respect of his occupation of the land as when such imposts fall due;
 - (d) the occupier will comply with all rules, including all rules of customary law and all by-laws applicable to the land and all lawful orders and directions given to him by the village council or

any person acting with the authority of the village council relating to his use and occupation of the land or any orders of any local or other authority having jurisdiction over land in the area where the land is situate or any orders of any officer exercising powers any Act;

- (e) the occupied will retain and keep safe all boundary marks, whether natural or otherwise on or at the boundaries to the land;
 - (f) the occupier will remain residing in the village but where he is to be temporarily absent, will make all proper arrangements for the land to be managed and used in accordance with the conditions set out in this subsection.
- (3) A person who signs a certificate of customary right of occupancy in accordance with the provisions of section 24 shall, where he signs on his own behalf, be deemed to have bound himself and, be deemed to have bound that group of village organisation, be deemed to have bound that group of persons or that non-village organisation as the case may be, to the village council to observe and comply strictly with each and every condition contained in that certificate of customary right of occupancy.
- (4) The Commissioner and any authorised officer of the village council or other department of government may, subject to the provisions of section 171 of the Land Act, 1998 relating to the right of entry enter on land the subject of customary right of occupancy and to inspect whether the conditions under which the customary right has been granted are being complied with.

6 Procedures to organise village meetings (Local Government Act no 7 of 1982, sections 103-110)

Meetings of Village Government Organs

Meetings of village assembly	<p>103. (1) There shall be convened a meeting of the village assembly whenever it is necessary to hold elections to constitute a village council or to elect any member of it.</p> <p>(2) There shall be held an ordinary meeting of the village assembly at least once in very three months.</p> <p>(3) The village council may, if it considers it necessary or desirable for any reason so to do, convene an extraordinary meeting of the village assembly to discuss and decide upon any matter of extraordinary public importance.</p>
Meetings of village council	<p>104. The village council shall meet at such times and places as it may determine, and at such intervals as is necessary or expedient for, or conducive to the effective and efficient management of the affairs and business of the council and the maintenance of good order and government in the village.</p>
Quorum at meetings of village councils	<p>105. The quorum at any meeting of a village council shall be not less than half of all the members of the council.</p>
Village council may regulate its own proceedings	<p>106. Subject to this Part, a village council shall regulate its own proceedings and may, for that purpose make by-laws governing its procedure.</p>
Committees of village council	<p>107. A village council may establish such permanent committees, and appoint such special committees, as it may deem necessary or expedient for the efficient and effective discharge of its functions.</p>
Delegation of power to committees	<p>108. (1) Where a village council establishes any permanent committee it shall provide for the exercise by that committee of any of the functions of the council.</p> <p>(2) A village council may delegate any of its functions and powers to any of its committees subject, however, to the council reviewing from time to time, at regular intervals, the performance and exercise by the committee or committees of the functions and powers delegated pursuant to this Section</p>
Vacancies, etc. not to invalidate proceedings	<p>109. It shall be lawful for a village council to act notwithstanding any vacancy in its membership or that of a committee of the council, and no act or of a village council shall be invalid by reason only of some defect in the election or appointment of a person who purports to be its member</p>

- Rules directions and delegations 110. (1) The Minister may, after consultation with district councils, make rules for the better carrying out of the purpose and provisions of this Act in relation to local government in villages.
- (2) Rules made under this section may be made generally in relation to all village councils or may be made in relation to any category of village councils or to any particular village council.
- (3) Where rules are made in relation to any particular village council or any category of village councils it shall not be necessary for the rules to be published in the *Gazette* if copies of those rules are made available to the village council or village councils in respect of which they are made.
- (4) The Minister may, if he considers it necessary in the public interest so to do, give to any village council a direction of a general nature and the council shall give effect to every such direction.
- (5) The Minister may, by order under his hand and published in the *Gazette*, delegate any of his functions under this Part to any public officer.

7 The mandate of village Councils to prepare and apply by-laws (Local Government Act no 7 of 1982, sections 164 - 167)

Legislative powers of and in respect of village councils

Power of village council to make village by-laws 163. Subject to section 164, and to the provisions of any regulations, directions and delegations made by the Minister pursuant to section 110, a village council may make by-laws for carrying into effect or for the purposes of any functions conferred by this Act.

Procedure for making by-laws 164. (1) Where a village council proposes to make by-laws it shall convene a meeting of the village assembly and cause the proposals to be considered, and it shall then, at a meeting of its own; consider the proposed by-laws and pass them with or without amendments, account being taken of the view taken by the inhabitants of the village of the proposals at the meeting of the village assembly; and shall then submit the by-laws, together with the minutes of the meeting of the village assembly which considered the proposals, to the district council in whose area of jurisdiction the village is situated for its approval of them.

(2/3) Where a district council to which village by-laws are submitted for approval approves them, the by-laws shall thereby be made and shall come into operation on a date agreed upon by the district council upon the recommendation of the village council concerned.

Power of minister in respect of village legislation 165 The Minister shall exercise in respect of legislation for villages the same powers he has under this Act to make uniform by-laws in respect of district councils and township authorities, and he shall comply with the same procedure in respect of uniform village by-laws as he is required to do in the case of the other local government authorities, save that, in the case of proposals by the Minister to make any uniform by-laws in respect of villages or a category of villages, the notice of his intention shall be given to a district council and it shall be the district council which may lodge objections or representations to the Minister on behalf of the village or category of villages concerned.

Evidence of by-laws made by village council

166. Whenever it becomes necessary to prove the authenticity and validity of any by-law made by a village council, a certificate by the village secretary under his hand and official seal of the village council to the effect that the by-law was passed and approved by the appropriate authority as required by the provisions of this Part, shall be conclusive evidence of the authenticity and validity of the by-law or by-Laws in question.

Penalties for breach of village bylaws

167 (1) Any by-law, made by or in respect of a village council for any village, may annex to the breach of the by-law such fine not exceeding two thousand shillings as the authority making the by-laws may determine.

(2) No penalty of imprisonment for any term shall be annexed to any breach of any by-law made by or in respect of a village.

(3) Penalties to be affixed to a breach of village by-laws may, apart from a fine, include such measures as may be deemed to be most fitting to be exemplary or deterrent to potential wrong-doers, to ensure the actual redress of the wrong done by the person concerned and to restore balance in the social equilibrium previously disturbed as a result of die offensive act concerned.

APPENDIX F: Examples of planning, role village institutions and monitoring

Contents

1. Example of a drafted action plan and preliminary list with priority villages for PLUM in Songea Rural District
2. Example of selected reports for data gathering at the district level in Ngara
3. Indicators for PLUM baseline studies
4. Agreed role of the Village Council on PLUM in Mzula village
5. Agreed role of the VLUM committee in Mzula village
6. Agreed role of Village Technicians in Mzula village
7. Example of a certificate for VLUM committee members
8. Example of a document issued by a village government to plot holders in a designated village forest

1 Example of a drafted action plan and preliminary list with priority villages for PLUM in Songea Rural District

During a three day workshop organised by the NLUPC in Songea Rural District (28-31/7/98) The PLUM team drafted and submitted to the District Council an action plan for application of PLUM in two villages in 1998 together with a long term vision how to involve more and finally all villages in future (see tables F1 and F2)

Table F1: Detail of the draft action plan for application of PLUM in Songea Rural District

Activity	How it is done	Days needed	Resources	Responsible	Expected Results
1. Formation and approval PLUM team and plan to apply PLUM in the district	Selection members	1	-	-DED	- PLUM team formed and approved
	Approval by:				
	• DMT	1	-	-DPLO	
	• Economic Com.	1	-	-Chairman of the Committee	- Members informed about their tasks
	• Full Council	2	-Allowances for councillors & fare	-PLUM team and DPLO	
• Familiarisation with PLUM tasks	5	-Stationery	-	-DPLO	
• Approval of plum	1	-			
2. Preparation and agreement of action plan	1. Drafting plan	3	- Paper, pens, pencils, note books and transport	PLUM team	- Action plan finalised
	2. Involving Institutions	3			- Relevant institutions mobilised
	3. Meeting with staff institutions	4			
Etc. for other activities of step 1 and following steps.					

Table F2: Proposed villages to apply PLUM in Songea Rural District for 1999 - 2001

Division	Ward	Village	Period
Hanga	Gumbiro	Luhimba	1999
	Kitanda	Mputa	2000
Udendeule	Luegu	Litola	1999
	Namtumbo	Suluti	2000
Muhukuru	Magagura	Lipokela	2001
	Mpitimbi	Namatuhi	2001

Major selection criteria: degree of Soil degradation, water resource depletion and deforestation, poor farming practices, accessibility and availability extension staff. Nearby villages were selected in each of the 3 chosen divisions out of 6, to reduce cost of transport.

Long term vision: application in 6 villages in 1999-2001, 30 villages in 2002-2004 and all 80 villages in 2005-2010, whereby cost effectiveness will gradually increase through experience.

2 Example of selected reports for data gathering at the district level in Ngara

A similar workshop, as indicated in the previous section, was conducted in Ngara District on 9-12/9/98 to familiarise the concerned staff with the principles, approach and tools of PLUM. The participants came up

with a preliminary list of documents for the collection of the required data to prepare a plan of operation with priority villages (as proposed in sections 1.3.3 and 1.3.4 of part B: see table F3).

TABLE F3: Preliminary list of documents for data collection in Ngara District

1.	Annual development plans and reports from the Ngara District offices
2.	Agro-ecological zoning in Ngara
3.	Various reports from PRAs carried out (in villages by Ngara Rural Dev. Programme)
4.	Various reports from PRAs carried out in sample villages (CARE - UNDP)
5.	Baseline surveys (CARE - UNDP)
6.	Land resource assessments
7.	Water resource assessments (DHV consultancy firm)
8.	Various soil surveys
9.	Diagnosis survey on farming systems in Ngara
10.	Socio-economic study of the district carried out by the Swiss Disaster Support
11.	Report of gender analysis in Ngara
12.	Post refugee assessment
13.	Environmental Impact Assessment (NEMC)
14.	Coffee marketing study

3 Indicators for PLITM baseline studies

This section proposes some useful indicators as baseline data to enable an evaluation of the short and long-term impact of introducing PLUM in a village. In other words, the degree in which the objectives of PLUM are met. Suitable moments to collect these data are:

- When the idea of PLUM is introduced in the village (during the PRA of step 2);
- After most PLUM elements have been applied (during consolidation in step 6);
- Some years later.

For that purpose, indicators should be:

- Well defined (for instance, yields expressed in number of bags of a certain size filled with dried grains per household or per acre);
- Consistent (the response should not depend on the interviewer, and if expressed in monetary terms be corrected for inflation);
- Specific (in case of PLUM, strongly related to natural resource use and its effect on the quality of life);
- Sensitive to change (for instance, the application rate of soil and water conservation measures may change fast after introducing PLUM, but its effect on yields takes more time, while its effect on the quality of life and the availability of water in wells may appear only after some years). For that purpose, some of the indicators proposed below will not be very useful for the proposed assessment in step 6, when the six steps of PLUM are completed in a short period, i.e. within a year;
- Easy to collect (for instance, it requires less time and expertise to find out the number of trees planted or number of households with zero-grazing cattle than measurements on income and employment). Many indicators proposed below are therefore expressed as percentage or average per household, so that they can be easily obtained through meetings and household interviews of at-random selected households.

When evaluating these data, it is important to take into account the influence of many exogenous factors such as fluctuations in weather, prices and off-farm employment opportunities (see also section 2.9/B,C of part A).

The use of photographs is a strongly recommended method to record the condition of forest, grazing, settlement and fanning areas *before* and *after* land-use agreements have been made and management measures have been adopted. When making photos, it is important to record the position and the date, in order to take into account the seasonal differences. Such photos are also useful for extension purposes. On a macro scale, air photos are also useful, however, often not easily available.

A selection can be made from the following list of indicators for assessing the impact of PLUM. Some indicators should be adapted and worked out according to the local conditions and the above

considerations. Other indicators can be further split-up for men, women and youth, as well as for crop producers, pastoralists and other socio-economic categories (see also section 2.3 of part A).

A. Land productivity

- A1 Average yields of major subsistence crops, expressed in number of bags per household
- A2 Average yields of major cash crops, expressed in number of bags per household
- A3 Average amount of money used for fertilisers annually per household
- A4 Average gross return (value yield minus money spend for inputs) of the crops per household
- A5 Average number of chicken, pigs, goats, zero-grazing cows, etc. per household
- A6 Average number of free grazing cattle per household or clan
- A7 Average number of bags of charcoal produced per household per year
- A8 Average number of hours needed to collect fuel wood per day by men/women/youth
- A9 Average number of hours needed to collect water per day by men/women/youth

B. Access and ownership of land resources

- B1 Average number of acres or hectares used for agriculture, etc. per household
- B2 Average number of acres or hectares 'owned' per household
- B3 Percentage of land less households B4. Percentage of women 'owning' land

C Land conflicts

- C1 Presence, type and severeness of conflicts with neighbouring villages
- C2 Presence, type and severeness of conflicts between land user groups (crop producers, pastoralists, village government)
- C3 Presence, type and severeness of conflicts between individuals or clans
- C4 Land occupied by outsiders (individuals or companies) without the full approval of the Village Council and/or Assembly

This may be based on interviews, minutes of village meetings, the occurrence of fights or other violations, and court cases.

D. Degradation and misuse of the natural resource base

- D1 Percentage of households with farms in forest and other protected areas
- D2 Percentage of households with cattle grazing in forest and other protected areas
- D3 Frequency and extent of fires in forest and other protected areas
- D4 Percentage of households with farms affected by sheet, rill and/or gully erosion
- D5 Percentage of grazing land and forest affected by gully erosion

E. Institutions and participatory decision making (see also appendix A4)

- E1 Number of meetings of the Village Council per year, the average attendance by men and women, and the availability of minutes to villagers
- E2 Number of meetings of the Village Assembly per year, the average attendance by men and women, and the availability of minutes to villagers
- E3 Number of meetings of the village committee dealing with land issues (VLUM committee) per year, the average attendance by men and women, and availability of the minutes to villagers
- E4 Presence of extensionists and other experts from the district or NGOs in the village, estimated in average number of days per month or year
- E5 Number of CBOs in the village dealing with natural resource use E6. Number of men and women in the village acting as 'technicians' or 'para-professionals' to assist fellow villagers in applying improved land management measures

F. Presence and recognition of land-use agreements (has to be worked out according to the conditions in the concerned village)

- F1 Existence of a village land-use plan, by-laws, 'land registry', and any other type of documented agreement in the village office aimed at regulating the use of natural resources

- F2 The degree to which the agreements have been made through involvement of the various socio-economic groups in the village and reflect the interests of the various groups in a balanced manner
- F3 The degree to which the agreements meet the technical, administrative and legal requirements
- F4 Frequency of revision of the land-use agreements according to changing conditions
- F5 Percentage of men, women, youth, pastoralists, crop producers, etc. who know about the existing land use agreements, are aware of its implications and find them useful
- F6 The degree to which the land-use agreements are in accordance with field observations (for instance number of farms in the forest while it is agreed differently)
- F7 The degree by-laws are executed by the Village Council and other persons in charge (documented number of fines per year)
- F8 Number of individuals (man/women) who have registered their land on their name
- F9 Number of parcels and total area for community facilities

G. Adoption of improved land management measures

- G1 Average number and type of soil and water conservation practices applied per household
- G2 Average number of trees planted per household per year and owned per household
- G3 Percentage of households with tree nurseries
- G4 Percentage of households with fuel wood saving stoves (indirectly related)
- G5 Average number of other improved land management practices applied per household
- G6 Number of improved land management practices applied at community level

H. Quality of life

- H1 Percentage of households with radio, bicycle, motorbike, house with iron sheets, bricks and/or cement floor
- H2 Percentage of youth seeking or having (temporal) employment outside the village for additional income
- H3 Percentage of households having insufficient food during part of the year
- H4 Percentage of households consuming meat, eggs, milk weekly/monthly, etc.
- H5 Percentage of children attending primary and secondary school
- H6 Presence and quality of social services (school, dispensary, water, etc.)

Since most indicators are expressed per household (or clan) it is important to know the average composition of a household.

4 Agreed role of the Village Council on PLUM in Mzula Village

Role of the Village Council in Participatory Village Land-Use Management

1. To facilitate the mobilisation of villagers and the VLUM committee through organising meetings of the Village Assembly, the VLUM committee and PLUM team.
2. To facilitate the identification and formulation of targets for communal activities (at the village and sub-village level), and to make follow up.
3. To ensure that the VLUM committee and VTs remain active, and to ensure the composition of the committee and the number of VTs remain sufficient.
4. To facilitate the formation of land user groups, e.g. women groups.
5. To facilitate the preparation of bylaws in a participatory manner, so that common interests in land management are safeguarded, and to forward the bylaws to the responsible institutions for approval.
6. To assist in solving communication and logistic problems whenever required.
7. The village chairperson and secretary have the final responsibility for these tasks and appoint for each village block (sub-village area) one member of the Village Council to take care of the above mentioned activities.

5 Agreed role of the VLUM committee in Mzula village

Terms of reference for members of the Village Land Use Management committee

Introduction

The Village Land Use Management (VLUM) committee members were proposed by the Village Council (VC) and elected during a village assembly meeting in step 2 (Participatory Rural Appraisal) of Participatory Village Land-Use Management (PLUM). The committee has subsequently worked closely with the Participatory Land Use Management (PLUM) team throughout the various steps of planning and implementation. This experience enables them to perform the tasks as proposed below when the PLUM team starts assisting other villages.

Qualifications of VLUM committee members

- Living in the village as a farmer
- Be energetic and motivated
- Having a good relation with the village community
- Knowledge of the villagers' residences and farms in the different village areas
- Able to speak Kiswahili and the local language fluently
- Able to understand and accept innovations rapidly
- Able to explain, plan and negotiate with fellow farmers and the Village Council
- Ability to read, write and make simple calculations is an advantage

Composition of the VLUM committee

- a) The VLUM committee should have members representing the different socio-economic groups in the village. It is therefore essential to have a balanced committee in terms of gender (males and females), age (young, middle age and old ones), sub-village areas and land use (such as crop producers and pastoralists).
- b) A VLUM member can be a village technician (VT) as well
- c) To facilitate good co-ordination, it is recommended that about two VLUM members are belonging to the VC.
- d) The VLUM committee should have a chairperson and a secretary to organise their tasks efficiently.

Tasks of VLUM committee members

1. To identify and report to the District Lands Office (through a PLUM team member or the village extension officer) all significant changes in land use, land rights (due to selling, heritage, etc.), plot boundaries and requests for improvement of land security.
2. To identify and assist in solving occurring land related problems (such as land conflicts and land degradation) through communication and negotiation with the villagers involved and the Village Council, Ward, Division and District concerned authorities.
3. To ensure that the land allocated for communal use is *not* encroached by individual farmers.
4. To ensure that women's rights and interests are respected in land-use management, particularly land rights.
5. To request assistance from the concerned authorities for land-use management issues, whenever required.
6. To assist the concerned authorities in any additional surveys related to land use management.
7. To keep record of all major land management issues, such as changes in user rights and application of land-use management measures.
8. The committee should meet once a month with all of its members. If necessary, the village chairperson and village secretary, a PLUM-team member and/or the village extension worker can be invited. The meeting aims at discussing issues concerning the above mentioned land management tasks. Minutes should be prepared on the attached "Minutes form for meetings of the VLUM committee" (figure F1). One copy should be forwarded to the district land office.

Working conditions of VLUM committee members

- a) The VLUM committee members can receive stationery from the district up to step 6 of PLUM (consolidation) in order to facilitate their work. Replenishment of the stationery will then be the responsibility of the VLUM committee and the Village Council.
- b) The VLUM committee will receive assistance from the district whenever required.
- c) The VLUM committee receives these terms of reference as guidelines to facilitate continuity of their activities.

Recognition of VLUM committee members

- a) VLUM members have been introduced to the Village Assembly during a meeting just after their election in step 2 (Participatory Rural Appraisal). Herewith they became officially recognised to perform the tasks in co-operation with the PLUM team as required during the different steps of PLUM.
- b) VLUM committee members can become also VTs during step 5 (implementation of improved land management measures) of PLUM. The tasks and conditions for VT's are outlined separately.
- c) When the district ends its day-to-day support in the village (step 6), the VLUM members can receive a certificate from the district office (see appendix F7) during a Village Assembly meeting in order to confirm their role in the future.

6 Agreed role of Village Technicians in Mzula Village**Terms of Reference for Village Technicians**

Village technicians (VTs) have been recruited and trained during step 5 (implementation of appropriate land management measures) of Participatory Village Land Use Management (PLUM), and proceed assisting fellow villagers in future:

- Qualifications of VTs:
- Living in the village as a farmer
- Be energetic and motivated
- Having a good relation with the village community
- Able to read, write and make simple calculations
- Able to understand and accept new ideas rapidly
- Able to plan with and explain to fellow farmers

Preferably each village block (area) should have at least one VT. A VT can be a VLUM committee member as well. Both men and women should be among the selected VTs.

Recruitment of VTs

Farmers who attended the activities in step 5 regularly, understand and implement the innovations rapidly, became candidate VTs. They received additional training and responsibilities, and were asked by the PLUM team to become VT if they performed well.

Training of the VTs

VTs received on-the-job training from the PLUM team (including a temporary land husbandry specialists) during implementation of step 5. They were trained to understand the most important and needed land husbandry innovations identified in their village or village block. They were also trained on how to assist their fellow farmers and how to report, monitor and assist in the evaluation of the activities.

Tasks of the VTs

- Assist individual farmers and farmers groups to plan and implement properly the identified land husbandry innovations
- To mobilise individual farmers and farmers groups by explaining about the advantages of the innovations and to motivate them to adopt them
- Assist in the formation of farmers groups
- Report on the assistance given to farmers and farmers groups and fill in the monitoring field book at the end of the day, together with the farmers involved.
- Follow-up and report, to the PLUM team, on the progress of the communal and individual activities carried out by the involved farmers.
- Assist interested farmers and farmers group in self-monitoring and evaluation.
- Communicate with the VLUM committee and village authorities when necessary.
- Report to the PLUM team when they visit the village or when there is a need.
- Take good care of the hand-tools to implement the identified land husbandry measures which are provided by the district.
- Follow the guidelines for the identified land husbandry innovations which have been prepared by the land husbandry specialists.

Working Conditions of VTs

- The district has provided the required tools to the VTs initially, which have been handled over to the VTs during consolidation (step 6). One set of tools is given to each group of 2 to 4 VTs active in one of the village blocks. Such a set comprises a line level set (1 shovel, 1 pick axe & 1 hammer) and some stationery for calculations and reporting. The district is not expected to supply new tools when the provided ones are worn out, broken or lost. VTs have to purchase themselves with assistance of the farmers involved.
- The VT can make arrangement with farmers and / or the Village Council in the order to compensate the time and effort he/she spends to assist them. These arrangements can be in money, goods and labour, and is an issue

between the VT, the applying farmer and/or the Village Council. The VT can also be exempted by the village council for communal work (such as for road maintenance) or local tax (such as for local brew making).

- The VT should have a small reference book with his terms of reference as well as a detailed description of the land husbandry innovations identified in the village. Additionally he/she should have a monitoring field book and some other necessary stationery for reporting.

Recognition of VTs

- During a village assembly meeting (step 6), the VTs are officially introduced to the village as VTs and can receive a certificate from the district. This means that they are recognised as skilled persons, being able to assist fellow farmers in planning and implementation of a given set of improved land-use management practices.
- Since the district, through the PLUM team, has invested time and money to identify and train VTs, they are supposed to use their skills to assist their fellow villagers when they ask for it.

The village technicians whose signatures and names appear below agree with the above indicated conditions in (name village) on(date).

Village block

1*.....(name VT).....(signature)

2.

3. Etc.

*Group leader and caretaker of the working tools

Village block

4*.....(name VT).....(signature)

7 Example of a certificate for VLUM committee members

This part of the document is not included in this document.

8 Example of a document issued by a village government to plot holders in a designated village forest

(source TFAP - North Pare project, Mwanga District)

Agreement between the Ndorwe (Chomvu) Village Government and villagers having tree plots in the Chomvu Village Forest Plan (1994)

1. The village government has the mandate of subdividing plots for tree planting in the Chomvu Village Forest; and
2. To allocate the plots to individual villagers, groups or institutions (indicated as plot holder).
3. The plot holder (shown by the number in the forestry management plan) shall plant trees in that plot as advised by the divisional forest officer or any other appointed officer.
4. The exercise of tree planting should be completed by 30 December 1994.
5. Replanting seedlings to replace dead trees will be done immediately after the next rain season has started, as advised by the divisional forest officer.
6. The plot holders will be the beneficiaries of products from their plots when the trees are ripe for harvest (firewood, polls, timber, leaves, etc.).
7. The plot holders will take care of the planted trees by weeding the first two years, as advised by the divisional forest officer or any other appointed officer.
8. The mode of harvesting should be specified and inspected by the divisional forest officer in accordance with the management plan for the plots.
9. After harvesting, the plot holders will maintain the environment in the plot by planting new trees or otherwise, as recommended by the divisional forest officer or any other appointed officer.
10. The plot holder is not allowed to build a house, or allowed livestock to graze in the plot.
11. In case the plot holder does not agree to or contravenes these agreements, the Ndorwe Village Government is mandated to dispose the present plot holder and allocate the plot to another person. The divisional forest officer may give advice in such matters.
12. The village government will appoint one or two youth to look after and guard the village forest, while each plot holder is required to look after his/her own plot.
13. Any problems concerning the management of the plots should be reported to the village government through the village land use planning (tree planting) committee, in order to seek solutions.

.....
Chairperson
Village Government

.....
Chairperson
Village Tree
Planting Committee

.....
Plot holder
Plot number

Time table for planting and taking care of the trees

<u>ACTIVITY</u>	<u>TIMING</u>
Digging holes (1 foot x 1 foot)	First week of November
Planting trees	Third week of November (depending on the rains)
Weeding one meter around the trees and replanting trees	Second week of March and second weeding in June for the first two years
Evaluation	Evaluation for dead and living trees every year

Comments

This document goes together with a village forest management plan (see box 5.1 of part A). This management plan is prepared in agreement with the village community through the concerned institutions. The plan indicates additional management issues and shows in a cadastral map the boundaries and names of the holders of the different plots.

APPENDIX G: Development of the guidelines

Once aware of the poor results of the conventional, top-down and sectoral oriented village land-use planning approaches in Tanzania, the need arose to look for alternative methods to address the needs of the rural people (see also appendix C).

In 1992, the Lands Development Office in Dodoma Region took the initiative to start the Dodoma Land Use Management Project (DLUMP) with support of SNV and NLUPC. The project aimed to develop a methodology for preparing and implementing village land-use plans by involving the stakeholders. It is believed that such an approach improves the capacity of villagers and their institutions to manage their land, and other natural resources, in a sustainable manner, leading to improved agricultural production and living conditions.

For the development of the guidelines, four sources of information were used:

- A Findings of action oriented research that was conducted by DLUMP in Maula & Iloilo villages of Dodoma Rural District for five years from 1992 onwards. The concerned villages are typical Ujamaa villages, located in a semi-arid zone with originally agro-pastoral farming systems. The area was destocked in 1986 by the government due to severe land degradation as a result of overgrazing and other destructive land management practices. The project has developed and tested the methodology first in Mzula village and subsequently further improved in Iloilo village.
- B To improve and widen the applicability of the methodology for other parts of Tanzania, experiences from other projects and institutions dealing with land management were used. Major projects and institutions consulted are:
- HiAP in Handeni, HIMA in Iringa, agro-forestry programmes in Songea and Mbinga District, LAMP in Babati, TFAP North Pare Project in Mwanga, TIP in Lushoto, Arumeru & Mwanga, SSIPDO in Mpwapwa, SECAP in Lushoto, FRMP; NRBZ around Selous, Ruaha and Serengeti; and integrated rural development programmes in Monduli, Kilosa, Kondoa and Songea Rural Districts.
- Experiences from NLUPC and UCLAS - UDSM were intensively utilised as well as those from IRA - UDSM, IDS - UDSM, TGNP. In addition, this applies to the concerned departments of various ministries dealing with land management: Land Use Planning and Soil Conservation Department (MOA); Livestock Division (MOA); Forestry Division (MNRT); Wildlife Division (MNRT); Local Governments (PMO); NEMC (VPO); Land Commissioners Office (MLHSD); and Department of Human Settlements (MLHSD).
- C. In order to assure that all procedures of the proposed methodology fit well within the legal and administrative framework, various relevant legislation have been used as source for the methodology as well. The most important ones are: The bills of the Land Act (1998) and Village Land Act (1998); The Local Government Act no 7 and 8 (1982); The National Land Use Planning Commission Act (1984); Town and Country Planning Ordinance (1956); The Land Survey Ordinance (1956; as revised in 1961, 1964 & 1991); The Land Registration Act (1969) and the Regional Administration Act, no. 2 (1997).
- To anticipate ongoing governmental reforms and changing views on natural resource utilisation the following recent policies were taken into consideration: Agricultural Policy of 1997; National Land Policy of 1995; Tanzania Forest Policy of 1998; Wildlife Policy of Tanzania of 1998; National Environmental Policy of 1997; and The National Policy on NGOs in Tanzania, 2nd draft of 1998. Other important sources are: The Local Governmental Reform Agenda 1996 - 2000; The Development Vision 2025 for Tanzania; and the Report of the Presidential Commission of Inquiry into Land Matters (1994).
- D. International literature on land-use planning and natural resource management was another source for the guidelines Reference is made to Burkina Faso & Niger, with local level institutions and integrated natural resource management. Experiences, in particular with land tenure issues, were taken into account from Kenya, Uganda; Botswana and Zimbabwe. Experiences and research findings in these countries confirm the value of major components of the guidelines, such as the use of participatory techniques, strengthening of local institutions, and the way of adapting land tenure systems to the changing environment.

The process of developing these guidelines has gone through a number of stages, where drafts have been presented to practitioners, research workers and politicians involved in natural resource management, for further improvement. In October 1997, a draft of this guidebook was presented in the National Workshop on the Institutionalisation of PLUM in Tanzania (organised by DLUMP and NLUPC in Dodoma). Participants

from the various concerned sectors and levels resolved that the guidelines provide a sound basis for implementing PLUM in rural Tanzania. A National and multi-sectoral task force on PLUM was formed, with its secretariat at the MLUPC and mainly composed of representatives from ministerial departments dealing with natural resource management (see item C). The task force was given the assignment to improve the guidelines further by incorporating the workshop recommendations to facilitate nation wide dissemination and implementation of the guidelines. This work has resulted into the first editions in Kiswahili and English.

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