# Final Evaluation of the UNEP/ UNDP/ GEF Project:

"Botswana, Kenya and Mali: Management of Indigenous Vegetation for the Rehabilitation of Degraded Lands in Arid Zones of Africa"

# **GEF Project Number GF/2740-03-4618** GF/1030-03-71

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### Acronyms

ADB: African Development Bank ALLPRO: ASAL Livestock and Livelihood Project ALRMP: Arid Lands Resource Management Project ASAL: Arid and Semi-Arid Land AVHRR: Advanced Very High Resolution Radiometer BOCOBONET: Botswana Community based Organizations Network CAP: Community Action Plan CBNRM: Community-based Natural Resource Management **CBO:** Community Based Organization CBRM: Community-based range management CJPC: Catholic Justice and Peace Commission **DEAP:** District Environment Action Plan **DEC: District Environment Committee** DENR: (former) Department of Environment and Natural Resources (MEWT, Botswana) DFO: District Forest Officer DFRR: Department of Forestry and Range Resources (MEWT, Botswana) DWNP: Department of Wildlife & National Parks (MEWT, Botswana) DRSRS: Department of Resource Surveys and Remote Sensing **EMC: Environment Management Committee** EMCA: Environmental Management and Coordination Act **EVI:** Enhanced Vegetation Index FE: Final Evaluation FHI: Food for the Hungry International **GEF:** Global Environment Management Facility **GIS:** Geographic Information System GoK: Government of Kenya GTZ: Gesselschaft Fur Technische Zusammanarbeit GTZ-IS: Gesselschaft Fur Technische Zusammanarbeit-International Services IGA: Income-generating activity IK: Indigenous knowledge **IPAL:** Integrated Project on Arid Lands ISRA: ITDG: Intermediate Technology Development Group (now Practical Action) IV: Indigenous vegetation **IVP: Indigenous Vegetation Project** KARI: Kenya Agricultural Research Institute KARLS: Kenya Arid Lands Research Station **KEFRI: Kenya Forestry Research Institute** KFS: Kenya Forest Service MADEMA: Marsabit District Environmental Management Association MCSS: Ministry of Culture and Social Services (Kenya) MDP: Marsabit Development Programme MENR: Ministry of Environment and Natural Resources (Kenya) MEWT: Ministry of Environment, Wildlife & Tourism (Botswana)

MLFD: Ministry of Livestock & Fisheries Development (Kenya) MoA: Ministry of Agriculture (Kenya) MODIS: Moderate Resolution Image Spectrometer M.Sc.: Master of Science MTE: Mid-term Evaluation MWI: Ministry of Water & Irrigation (Kenya) NDVI: Normalized Difference Vegetation Index NEMA: National Environment Management Authority NGO: Non-Governmental Organization NORAD: Norwegian Agency for Development NPSC: National Project Steering Committee NPU: National Project Unit NRM: Natural Resource Management PD: IVP Project Document PTMC: Project Technical Management Committee **RCU: Regional Coordination Unit RPSC: Regional Policy Steering Committee RSC:** Regional Steering Committee RTA: Regional Technical Advisor SWOT: Strengths, Weaknesses, Opportunities and Threats TAC: Technical Advisory Committee ToR: Terms of Reference TREMU: Turkana Resource Evaluation and Monitoring Unit (UNESCO) UNDP: United Nations Development Programme **UNEP: United Nations Environment Programme** UNESCO: United Nations Educations, Scientific and Cultural Organization **UNOPS: United Nations Office for Project Services** UoO: University of Oslo VSF-Belgium: Veterinaires sans Frontieres WFP: World Food Programme

#### **Executive Summary**

1. The Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid Zone of Africa Project (known as the Indigenous Vegetation Project (IVP)) was developed to conserve biodiversity and reverse land degradation, both major environmental problems in the arid lands that cover about 60% of Africa. Most of these areas are moderately to severely degraded owing to overgrazing and unsustainable use of range products (especially wood for timber and charcoal). IVP's objective was to develop sustainable systems of range/vegetation management and to integrate indigenous knowledge into new community-based range management systems. Research was to play a key part in this.

2. The terminal or final evaluation (FE) (see ToRs, Annex IV) was asked to address specific questions about project achievements. The final evaluation (FE) has concluded that although the project was well intentioned, the objective and the components were generally unrealistic, insufficiently considered, and far more challenging that originally thought. IVP has largely been unable to achieve its objective for numerous reasons. The main reason is insufficient time: effective range management by private entrepreneurs with the resources both of capital and decades of experience is difficult. When it is attempted by communities, hidebound by traditional practices and with few resources, limited education, different agenda, and poorly understood concepts such as biodiversity and environmental conservation, effective range management would take decades to become a way of life. The project is unlikely to be sustainable or replicable without significant further inputs of time and funding. If these inputs are not forthcoming, many of the positive steps in community development are likely to falter and disappear. However, it is easy to be wise after the fact. Many useful lessons are there to be learned. The FE questions whether a regional project was justified and concludes that it was not. The successes achieved in each country had limited relevance to the other countries where traditions, culture and language were different. If there were any justification for a regional approach, a transboundary project (e.g. in the Sahel: Mali, Burkina Faso, Mauritania and Niger, or in Southern Africa: Botswana, Namibia and South Africa) would have been more applicable. Essentially, the project was expected to run before it could walk. A regional project would have been justified once a more modest-sized project had something of value to show to other comparable, or even slightly comparable, ecosystems.

3. The Mid-term evaluation (MTE) stated that the design of the project was seriously flawed. The project attempted to change course after the MTE but the time was insufficient; nevertheless, clear efforts were made to implement the recommendations of the MTE. Progress towards achievement of the project objective has improved slightly; but despite some successful initiatives on the ground at different project sites, IVP is still rated as moderately unsatisfactory. First, the project had insufficient time both *in toto* and following the MTE. Only two years separated the MTE from the FE: winding down and closure mode had been reached a while ago. Indigenous vegetation (IV) played a more minor role than it should have done. The project was designed to concentrate on indigenous vegetation *per se*; instead, it veered off at tangents, such as income-generating activities, which had little to do with IV. While these could be justified for socio-economic reasons, the project (in Kenya

particularly) should have done something innovative with IV, for example by concentrating on production and marketing of non-livestock related IV with commercial potential, or by demonstrating increases in primary production on a large area as a result of deferred grazing. IV played a more significant role in the Kenya sites because traditional pastoralists need, use and to some extent respect IV as dry season refuges. In Botswana, the situation was totally different: traditional pastoralism has disappeared; there are major threats from land privatization and communities have only the weakest traditional cohesion. In Mali, the problem is largely one of raising awareness in the transhumant pastoralists and sedentary agro-pastoralists to the threats from livestock on degradation of rangelands. These observations corroborate the finding of the FE that the national units were faced with sitespecific problems that needed to be addressed at local level. The regional nature of the project was difficult to justify. A further reason for the rating includes poor, irrelevant or non-existent concomitant research in support of project execution.

4. The project appeared more of a rural development project sponsoring a multitude of alternative livelihood/ income-generating activities (IGAs) or 'micro-projects' in order to achieve buy-in from communities for whom IV and range rehabilitation are not of major interest. These might have been more acceptable if the project title and objective had been different. The project has transferred technology and information to the primary target audiences through training, but the FE regarded some as having tenuous relevance to indigenous vegetation conservation. The project initially enjoyed good levels of participation of local communities, which was compromised in some places (e.g. Botswana) by loss of site managers and subsequent disillusionment. In all the sites, it is evident that communities wish to control and to manage their resources. But wishing is not necessarily the same as ability to manage. The project also under-estimated the rate of change among pastoralists: there are many reports that show that dry land crop husbandry (especially under irrigation) is more profitable than pastoralism. The latter will not go on forever if alternative livelihoods offer more profit. The challenge for IVP was to have elevated pastoralism into a more profitable enterprise through increasing primary productivity.

5. There were differences in the progress of community-based natural resource management (CBNRM): Botswana was slow because it took a long time to get communities sensitized and registered as legal entities: their management plans are only just ready as the project closes. Mali concentrated, after the MTE, on one site but the project there took a long time to get started and it has in fact only done just over three years' work rather than five. In Kenya, the Marsabit project was able take over from a successful and pre-existing GTZ project, which gave it many advantages. The more complex Turkana sites had to deal with conflicts between pastoralists and agriculturalists especially in the site-specific riverine forests. In all three countries, the critical issue of preventing overgrazing was not made a priority. This is only possible where the issue of livestock numbers is tackled. Deferred grazing (an obvious traditional management system of value) works well where the grazing is allowed to recover but only adds to the pressure and land degradation elsewhere. The reality of too many animals is one of the main causes of land degradation on open range; unless the cause (too many animals) is addressed rather than the symptom (too little grass cover), the situation will only deteriorate. The IVP did not address this issue.

6. While the development of the Master's degree (M.Sc.) programme was satisfactory (concluded before the MTE), the findings of the theses appeared not to influence or feed into project implementation. For example, one of the theses showed quite clearly that plant species composition increased with distance from water. So water development in a biodiversity project could be seen as counter-productive. Site-specific or "targeted" research by the University of Oslo never really started. The type(s) of indigenous vegetation management "model(s)" to be developed remain undefined although deferred grazing is an obvious candidate. A Regional Technical Coordinator was never appointed for budgetary reasons; UoO offered to take over this role but the relationship with this contracted Research Agency proved a difficult one. Little relevant research was undertaken beyond data gathering for the M.Sc. theses. Local universities (University of Botswana, Egerton University and ISRA) were contracted after the MTE and this may help in ensuring sustainability while enhancing capacity of national institutions. However, this research was on-going and not finalized at project completion. Since no site-specific baseline was ever developed it has been difficult to judge whether the project had any impact on the key objective(s) of range rehabilitation, biodiversity conservation and the incorporation of indigenous knowledge into range management systems. This could have been done for all project sites to show tree and grass cover and tree age structure at the start and end of the project. Some data were collected by some of the other research institutions but these are mostly surveys. Few community members expressed the view to the FE that the research had any interest or relevance to them.

7. To answer the questions posed in the ToR: indigenous vegetation in degraded rangelands has not been widely rehabilitated through reducing pressure on the vegetation resources except in small pockets of deferred grazing (in Marsabit and Turkana) or where explicit enclosures (or exclosures) have been made (e.g. Village Biodiversity Conservation Areas) or on soil conservation structures at Nara where trees have been planted and grasses come back. On a large scale, rangeland rehabilitation will take years (or decades) to achieve and it is difficult to demonstrate because of large inter-seasonal and inter-annual variations. The project has not achieved increases in livestock feed resources (i.e. IV on rangelands) in surrounding areas nor has it widely "established appropriate indigenous management systems". The phrase is ambiguous anyway: it was unclear if it meant new management systems operated by indigenous people or indigenous management that was somehow to be reintroduced. The need is to introduce appropriate range management on communal land where traditional pastoralism has broken down. The outcomes of this should have been quantified increases in wet season biomass production, higher plant diversity, greater dry season plant cover, and increased percentage of perennial grasses, herbs and forbs on the rangeland. The re-establishment of traditional management was relevant to Kenya and Mali but probably not to Botswana. Traditional knowledge can have much to offer, but traditional range management systems may be inappropriate because they are under threat from so many internal and external sources, so the phrase could be seen as an oxymoron in the 21<sup>st</sup> century. Regional and national data availability on indigenous production and management systems has not been significantly enhanced over their pre-project levels.

8. The IVP should have distinguished between plant biodiversity directly related to pastoralism (e.g. mainly grasses, forbs and shrubs) and that not related to pastoralism that could lead to alternative livelihoods (quality timber, medicines, gums, fruits, charcoal, etc).

IVP should also have decided whether to concentrate on rangelands or the higher potential ecosystems such as the riverine forests in Turkana. The MTE thought there was too much concentration on the riverine system and insufficient attention to rangelands while the FE, to an extent, thought the opposite. It should have been spelt out clearly in the PD because the impression was that IVP was given *carte blanche* to tackle anything it wanted: introducing exotic fruit trees, dam construction, water development, mobile phones, tomato growing, hides & skins to mention a few. All of these may be justifiable in themselves but not for an indigenous vegetation project. IVP was well placed to do something which other government departments, NGOs and development agencies were unable to: concentrate on indigenous vegetation and find out ways to make it profitable to the beneficiaries. The project did not take enough advantage of this opportunity. IVP also failed to tackle the issues of invasive plants or charcoal sufficiently. In Kenya particularly, charcoal is one of the major threats to arid land plant biodiversity. It is uncontrolled, inefficient and getting worse. It should have been integrated into a programme for Prosopis eradication. What was needed was a survey to determine the effects of charcoal on tree coverage and land degradation, introduction of improved kilns and establishment of a district-based charcoal production and marketing strategy.

9. On a positive note, the IVP has created goodwill at all the project sites. Engagement with the community is a positive and essential step, provided steps are taken to ensure long-term support once the project closes. Some communities were abandoned after the MTE (e.g. some Environment Management Committees (EMCs) in Turkana and at Bamba in Mali). Such 'deselection' always leads to disillusionment. The project raised awareness both at the grassroots and at Government level of the importance and difficulties of CBNRM. In Mali, the Nara project has potential as a decentralized community-led development project if given more time and provided the transhumant pastoralists are included as well as the sedentary agropastoralists. In Botswana, the communities have finally got themselves registered as legally recognized Trusts and their Management plans are just about ready. Whether anything comes of these plans is another question: only if the Government of Botswana takes them seriously enough to seek alternative funding or invests considerably more time, effort and resources. There are signs of community capacity building in all places and the fact that four nationals of each country achieved postgraduate training is always a positive development in capacitybuilding. The Marsabit site in Kenya will continue under other funding and it was inherited from other donors; its successes have been partly the result of years, decades even, of donor funding.

10. A major design flaw was a failure to recognize the incompatibility between traditional and modern systems of range management. Traditional and communal attitudes still value high livestock numbers and largely uncontrolled grazing where livestock feed is a communal resource. Modern systems of range management embrace the concepts of high productivity per animal, premium quality meat, strategic destocking and controlled grazing. The IVP project was designed with the aim of marrying two largely contradictory, even mutually exclusive, aims. Traditional management systems have ideas to contribute to modern range management but the reverse is also true. Arguably, science has more to offer traditional systems than the other way round. Yet the emphasis in the IVP was on traditional knowledge and this appeared to the FE to be misguided. The challenge was to capture those aspects of

indigenous knowledge that contribute to better range management under the changed conditions of modern land use, and test and support them with hard science.

11. valuable output of the Regional component was to recognize and admit the shortcomings of the project. Annex V describes the factors that influence the management of "common pool resources" and the problems of working with communities in arid lands. It posits that it may be incorrect or risky to delegate the management of natural resources to communities and shows why the objective of the IVP was so difficult to meet. While the national programmes in their terminal reports concentrated on the achievements at the site level of the IVP, the regional unit was able to take a broader view and assess the conceptual limitations of the project. It is also well worth scrutinizing the terminal report of the Regional Coordination Unit for corroboration of the FE. It serves as a candid, non-defensive and honest internal evaluation that will help the donors substantially towards a more considered approach to designing similar community-driven arid zone rangeland projects.

12. Since the MTE, progress towards achievement of the project objective has deteriorated in Botswana (owing to staff changes and delays in filling vacancies) and only improved slightly in the other countries; overall, despite some successful initiatives on the ground at different project sites, IVP is still rated as moderately unsatisfactory. Further reasons for the moderately unsatisfactory rating include poor, irrelevant or non-existent concomitant research in support of project execution.

13. The FE considered that the initial design of IVP had been molded into something that was acceptable for GEF funding. What should have been a range management and livestock production project became a biodiversity and land degradation project in order to satisfy the donors regarding eligibility and compliance with the focal areas. So, in effect, the project was driven by the donors rather than by the beneficiaries. When speaking to the beneficiaries, the FE tried to determine what the problems were from the beneficiary perspective. The answers were almost always the same: scarcity of water, food insecurity, seasonal shortage of grazing, and lack of income for basic necessities. Loss of biodiversity, loss of indigenous knowledge and land degradation were never once mentioned. A project where the objectives did not directly address even one of the perceived needs of the community does not have great potential for success.

#### **Brief overview of recommendations for future GEF projects**

Duration of project

14. CBNRM cannot be achieved in five years. GEF should consider 10 years for environmental projects with the first 5 years dedicated to community awareness-raising and empowerment.

Baseline

15. A good site-specific, socio-economic and biophysical baseline is essential to measure impact. A vegetation project should assess initial tree cover, species composition & age structure, or annual biomass production from range under heavily grazed and lightly grazed conditions). More intense work on fewer sites would be better than spreading resources too thinly, in order to ensure quantifiable impact.

### Feasibility of objective

16. The FE considered that the initial design of IVP had been moulded into something that was acceptable for GEF funding. What should have been a range management and livestock production project became a biodiversity and land degradation project in order to satisfy the donors regarding eligibility and compliance with the focal areas. When speaking to the beneficiaries, the FE tried to determine what the problems were from the beneficiary perspective. The answers were almost always the same: scarcity of water, food insecurity, seasonal shortage of grazing, and lack of income for basic necessities. Loss of biodiversity, loss of indigenous knowledge and land degradation were never once mentioned. A project where the objectives did not directly address even one of the perceived needs of the community does not have great potential for success.

Community-based Natural Resources Management (CBNRM)

17. CBNRM is fashionable but is it achievable? If it is, we are a long way from achieving it. Considerable more intellectual effort should be invested in how it can be addressed. Likewise, biodiversity and land degradation are often difficult terms for communities to accept, especially in the vernacular. Such projects will not be successful in isolation without trying to link modern concepts of environment with community perceptions of their environs. First, one must address the problems and needs of communities but it is clear that the integration of local and scientific knowledge using degradation indicators and remedial options can empower land users (Reed, undated).

18. One idea for future projects might be for GEF funding to cover the environmental aspects and seek co-funding from other financiers to address the socio-economic needs of the beneficiaries. That way, the GEF component can remain focused on environmental issues.

Simplification of objective, outcomes and activities

19. The logframe of IVP was too complex and unfocussed. There should have been one achievable objective with a limited number of outcomes, outputs and activities directly related to plant biodiversity and land degradation.

Justification of regional projects

20. A transboundary project would be more relevant than a regional project. The three countries in IVP had very little in common. Where a regional project is justified, it is important than the regional component is strengthened *a priori* before national components go their own way with regard to implementation.

### Simplifying partnerships

21. GEF should consider simplifying partnerships in their projects. The FE poses questions about the realistic functioning of a partnership including UNEP/ UNDP/ UNOPS/ University of Oslo/ Government and other Institutional partners, which in most cases was difficult. It was classic scenario of "too many Chiefs and not enough Indians". The project was top heavy, with too many decision-makers, and bureaucracy having a negative impact on project implementation.

### Community-based projects

22. IVP was implemented by ministries within the three Governments. Governments are inclined to pay lip service to development of the poor in arid lands but in reality the populations are low priority and marginalized. GEF should consider truly bottom-up projects whereby the beneficiaries are encouraged to take full responsibility for the management of their lands and their projects. Government input should be restricted to the process of giving communities legal access to their land and ensuring that boundaries are legally defined. Sustainability is more likely to be achieved if communities feel ownership. Governments are unlikely to be able to sustain projects like IVP without external funding.

23. The future of pastoralism is arguably largely in the hands of the pastoralists themselves not of Governments which must take a lead in land tenure, legislation and enforcement, and policies in formally recognizing community rights of access. The communities themselves control land use and hence loss of biodiversity or land degradation. Projects should recognize that the only way to achieve sustainable and non-destructive use of arid lands is bottom-up planning and complete involvement of the beneficiaries at all stages. Some might proffer that the prognosis for uncontrolled communal grazing of rangelands is doomed and that privatization (albeit by defined community groups such as trusts) is the only way forward. The project closed before there was any demonstration of whether this prediction can be refuted. What is certain is that communally managed arid lands are under ever-increasing threat, that communal lands are being privatized, and that it is very difficult to know what the answers are. Hundreds of projects in Africa's arid lands have faced the same quandary. The broad objective of IVP remains relevant: conserving biodiversity from the effects of land degradation and ensuring that the beneficiaries involved see that doing so makes economic sense. It is therefore essential that each country project seek further funding so that the expectations of the beneficiaries are met.

### Introduction & Background

24. The Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid Zone of Africa Project (more commonly called the Indigenous Vegetation Project {IVP}) was conceived to address the problems of biodiversity loss and land degradation, two of the greatest environmental problems of the arid and semi-arid lands (ASALs) that cover about 60% of Africa. Most of these areas are moderately to severely degraded. The main causes of land degradation on Africa's ASALs are overgrazing, unsustainable use of range products (charcoal etc), and conversion to agriculture (rain-fed or irrigated, much of which is also unsustainable). The Indigenous Vegetation Project was developed between 1998 and 2000. Countries and sites representative of conditions in Africa's ASALs in southern, western and eastern Africa were selected. IVP was to develop community-based indigenous vegetation management systems building strongly on indigenous knowledge. Biodiversity conservation and rehabilitation of degraded rangelands were to be the results of the development of these new management systems. There was to be a strong comparative research and comparative learning component to IVP cutting across the three countries/regions.

### Scope, objective & methods

25. The basic reference point of the FE is the Project Objective in the project document (PD). Both the design and the implementation of the project are evaluated in respect to the Project Objective, which is as follows: To develop models for the conservation of biodiversity and rehabilitation of degraded rangelands, and to develop sustainable management systems using indigenous knowledge.

26. The FE of IVP concentrates on findings and lessons learned at the end of the project rather than recommendations. The ToR requested the FE team to answer the following questions:

1. Has the project established appropriate indigenous management systems? Where? Over what land area?

2. Has the project provided regional and national data on indigenous production and management systems been significantly enhanced over their pre-project levels?

3. Has the project rehabilitated indigenous vegetation in degraded rangelands, through reducing pressure on the vegetation resources? If so, where and over what land area?

4. Has the project assisted in the provision of alternative livelihoods, improved livestock markets and feed resources in other arid areas?

5. Has the project transferred technology and information to the primary target audiences?

27. The Terms of Reference (ToR) also ask "what happened?" and "what would have happened anyway? The FE also focused primarily on what the project achieved in the field with communities. It rapidly became clear that most of the work revolved around community development rather than sustainable community-driven reversal of land degradation. One of the main results of IVP was the creation and empowerment of community management structures that must precede community-based management systems. These are scarcely

mentioned in the PD but it soon became clear that they were fundamental pre-conditions. This improved since the MTE but whereas the creation of such community structures is manifest, the empowerment is not so obvious and this will impact sustainability.

## National consultants

28. The UNDP Country Offices visit recruited national consultants to provide local insight and to visit the IVP field sites to support the international consultant who visited Botswana first, then Mali, before returning to Kenya for a later visit to Turkana. In all three countries and the RCU, the FE was organized efficiently, most documents were made available and the project hosts did their utmost to reschedule well-planned itineraries to fit with missed flights due to overbooking, lost baggage, and other last minute changes in plans. All the consultants extend their gratitude to the friendliness, courtesy and time provided by their IVP hosts. In Botswana, a national consultant was hired but his work did not coincide with the international consultant. One had been selected to coincide with the team leader's visit to Botswana but it was too late. This was a clear demonstration of the rather 'hands off' approach of UNDP in Botswana as there had been plenty of time for the timely recruitment of a national consultant. In Mali, a national consultant was available and both consultants visited Nara together with the National Coordinator. Their reports are appended (Annexes I-III).

29. The methodology of the FE consisted of an analysis of the PD, review of key documents (Annex VII), and interviews with as many of the key actors as was possible during the time allotted. When a field visit was not feasible, the communities in question came for interviews and workshops with the consultant. Key questions were noted before each meeting. The Team leader would seek to compare impressions with the national consultant's reports. At the end of each country visit, the Team Leader would review findings and recommendations of the national consultants.

# Project Design, Performance & Impact

30. The Project Title is "The Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid Zone of Africa". The first part of the title is unnecessary: not only did "Indigenous Vegetation" have little meaning to many of the beneficiaries, but also range rehabilitation means restoring the range to what it was viz. an area where the standing biomass of grass and other plants is sufficient for the available livestock on a year-round basis. That is to say, indigenous vegetation management is implicit in rehabilitating rangelands: one cannot rehabilitate rangelands without restoring range vegetation. There was however a role for conservation of indigenous vegetation of commercial importance (e.g. fruit, medicines, timber, gums, resins etc) that is not necessarily central to range management. The IVP should have either been a rangeland project (involving many more animal production specialists) or a IV project that stated clearly that IV (and IV alone) was going to be used improve the lives of the beneficiaries.

31. The project was designed with the objective of developing models for the conservation of biodiversity and rehabilitation of degraded rangelands, and to develop sustainable

management systems using indigenous knowledge. The objective should have been broken down as three distinctly different objectives:

1. To develop practical methods for the conservation of indigenous plants with potential for economic development.

2. To support community-led rehabilitation of degraded rangelands related to pastoralism.

3. To develop sustainable management systems where indigenous knowledge is supported by modern concepts of range management.

32. The achievement of localized project-funded successes on the ground is not of major importance. The key to success at the end of the project is whether other communities in similar ecosystems could adopt and replicate these methods without similar large injections of cash. The answer is no. If USD15 million failed to have a major impact on localized community management of rangelands, the chances of other communities being able to manage their range sustainably are low. The assessment of project results suggests that the objective above was not achieved and is unlikely to be achieved without more time and more funding. The project has of course led to some positive consequences, the most important being community awareness raising, a modest degree of community empowerment particularly concerning NRM, and limited range rehabilitation activities. Overall, the FE echoes the MTE but elaborates with the following observations:

33. The word "model" is academic and essentially meaningless to most people or at least has connotations of mathematical or computer models. 'Methods', 'systems' or even 'methodologies' might have been preferable. It is unrealistic to expect pastoralists and communities in ASALs to be interested in biodiversity conservation *per se* unless they can derive added value from that biodiversity (e.g. Hoodia, marula or Gum Arabic). The type of biodiversity should be specified *viz.* indigenous plants or, more specifically, range vegetation of use to communities. In degraded rangelands, invasive plants (including indigenous ones) can take hold, for example when bush invasion follows the banning of controlled burning, or when overgrazing causes unpalatable species to thrive. No clear distinction was made in the PD between indigenous plant species that should be encouraged (e.g. the highly-prized Umbrella Thorn, [*Acacia tortilis*]) and invasive native species of low palatability and low digestibility that can reduce rangeland productivity (e.g. *Acacia reficiens*)1.

34. The key objective should have been to develop community-driven methods for the rehabilitation of degraded rangelands and to link these explicitly with improved animal

<sup>&</sup>lt;sup>1</sup> The African acacias are no longer in the Australian genus Acacia and have been re-classified into other genera such as Faidherbia, Vachellia, Senegalia etc. For simplicity, the old generic name will be used.

production. But even then the "development" of methods was probably unnecessary. The crucial objective is achieving community adoption of existing and sustainable range management practices. These practices have been around for decades and would have to include rotational or deferred grazing. IVP has not developed any new methods. Many traditional societies practiced deferred grazing through transhumance, seasonal migration and control of water resources. The key is to demonstrate that these practices lead to increased livestock production (and ultimately, wealth) or modify these practices so they can become acceptable to pastoralists of the 21<sup>st</sup> Century.

35. The development of sustainable management systems using indigenous knowledge was probably overplayed. Pastoralists (especially in Kenya and Botswana) have a long tradition of indigenous knowledge for the management of their livestock (especially cattle) and the range. The essence of the problem is that these traditional systems have broken down in the face of growing human and animal populations; this in turn has led to a reduction in the areas and feed resources available for their herds. This is the global "tragedy of the commons". Indigenous knowledge arguably has a limited role in managing range on a sustainable basis given the pressures on the system. If communal range management has any future in the 21<sup>st</sup> Century, it has to embrace non-traditional concepts such as drought destocking, increases in productivity per animal as well as deferred grazing by arrangement with other animal owners who may no longer be under the control of traditional tribal mores.

36. The project did not establish an adequate baseline of initial conditions. Without this, it is difficult to establish the achievements and results. Since most GEF projects can be expected to achieve the anticipated outcomes by project closing, assessment of project outcomes should have been be a priority. Outcomes are the likely or achieved short-term and medium-term effects of an intervention's outputs. Examples of outcomes could include stronger institutional capacities, improved awareness amongst pastoralists leading to changes of behaviour or management, and transformed policy frameworks or better access to markets. The FE assessed the extent to which the project's outputs were effectively and efficiently achieved, and their relevance.

37. In the logical framework, the project objective should have been achieved through the realization of the six Outcomes (also called components). By the time of the MTE, some measures had been taken to address the basic weaknesses of the project design. Botswana had developed a strategy for achieving community-based management of indigenous vegetation. Kenya had just completed a revised country-level logframe. In Kenya, the logframe was retrofitted by Muthui (2005) and tried to address some of the basic weaknesses of the regional logframe. The result was a somewhat verbose national objective: "Pilot arid lands in Marsabit and Turkana under models of sustainable indigenous systems strengthened by appropriate scientific knowledge to support national arid lands policy". This comprised five outcomes (listed below) and seventy-five activities:

1. A bio-socio-economic knowledge base created to support integration of indigenous and scientific approaches for improved resource management.

2. Appropriate indigenous management systems strengthened that integrate biodiversity conservation

3. Livelihood means that reduce pressure on the ecosystem adopted (sic; {adapted?}) to diversity (sic; {diversify?}) economic base, increase socio-economic benefits and promote biodiversity conservation.

4. Key stakeholders have knowledge (skills and awareness) to facilitate and/or manage arid lands resources to meet, socio, economic and biodiversity conservation needs.

5. Project effectively managed.

38. This was supposed to have been an improvement though the FE fails to see this. Outcome five is not an outcome: it is an expected sine qua non. Since the language in the Kenya retrofitting was even more complex than in the original PD, comments and findings are restricted to the original outcomes. The Kenya retro-fitting just did some juggling: Outcomes 1 (management systems) & 3 (rehabilitation) were combined, and so were Outcomes 2 (regional database) and 6 (targeted research). Botswana redid the indicators in their logframe and they were strengthened. Unfortunately, since the MTE there was still little evidence that the improved strategic logic of the logframe had as yet been demonstrably translated into improved strategic interventions in the field. The regional outcomes were as follows:

O-1 Establishment and strengthening of appropriate indigenous management systems.

39. This outcome "is nearly identical to the Project Objective so achieving it would have been the same as achieving the objective, making the other outcomes superfluous. In a good logframe, each outcome is necessary for achievement of the project objective" (MTE, 2005). The ambiguity of this outcome is clear. Were these to be new management systems developed by indigenous groups, or traditional systems to be established and strengthened? If the latter, then they needed to be re-established, promoted and disseminated. But if they needed to be reestablished, then the question remains as to why they fell into disuse in the first place. The answer is probably that they were inappropriate to modern pressures. In any case, the FE saw no signs of (re) introduced 'appropriate indigenous management systems'.

**O-2** Establishment of a regional arid zone database (RD)

40. In order to achieve the project objective and outcomes, data collection was seen as a prerequisite to assist with development of CBRM systems, to capture and record indigenous knowledge (IK), and to meet GEF ecological impact assessment requirements. This work should have been completed by the University of Oslo but, at the time of this evaluation, has not been The specificity of the database should have been spelled out. Was it a database for each site? What parameters were to be measured? Were the indicators to socio-economic, biophysical, geographical, ecological or somehow supporting a global information system?

41. Other organizations such as local universities were recruited later on to help national databases. This includes research that was to be undertaken within each country to develop a regional arid zone database on vegetation that could be used for comparative research and modeling (Research Plan section 3). Oslo foresaw that this information would have immediate practical use in that the existence of specific types of vegetation could provide valuable clues to appropriate management methods. In the medium term it might have assisted the community in taking decisions on range management. Again, this might have been optimistic in view of the limited access to Internet, language difficulties, educational gaps etc.

42. The FE saw no regional database which would "contribute significantly to the integrated management of land, water and biodiversity". The logframe indicated that the database would consist of up to 40 years of historical data, while the M & E section indicated there will be repeated surveys after 5 and 10 years. It was not explicitly stated that the RD would be used for model development, but this is implied. Nothing is said as to how the national and regional databases would be sustained beyond the end of the project, where they will be located institutionally, and how this will be financed.

O-3 Rehabilitation of indigenous vegetation and degraded lands

43. This outcome should have been combined with O-1 as rangeland rehabilitation is logically the result of a sound management system. Listing it as a separate outcome has led country teams to address land degradation within small, often fenced, perimeters e.g. Khalaghadi where there has been some protection and stabilization of sand dunes and on a very local scale elsewhere. IVP has failed to achieve widespread rehabilitation. The key question is whether any beneficiaries would continue to do this without funding and support from the project. The answer at present is no.

O-4 Improved livestock production and marketing, & provision of alternative livelihoods;

44. This outcome comprises three important but disparate themes: livestock production; livestock marketing; and alternative livelihoods. Livestock production figures are notoriously difficult to collate in arid regions where livestock migrate seasonally. Livestock production is the key indicator of rangeland condition and the one of most interest to the beneficiaries, yet the FE thought animal science played a very minor role in the project. The FE was shown no site specific data on calving percentage, calving intervals, growth rates, offtake rates etc. which might have provide a baseline. A livestock marketing survey was done in Kenya (Njanja. & Obunga, 2005) but it was very general. Livestock marketing is also important, but not as important as increases in animal production. If quality livestock is for sale, there will always be a market even if the traders take advantage of the owners, and even if poor infrastructure, lack of motorized transport and the long distance to markets all mean that weight losses occur whilst walking to markets. Again, the project's performance as regards improving livestock marketing appeared weak except in Marsabit.

45. The promotion of alternative livelihoods was seen essential for communities to buy in to the IVP. The difficulty was to limit the number of alternative livelihoods or at least ensure that the livelihoods were directly related to the project objectives. The successful hides and skins operation for women in Marsabit was an example of a useful IGA but it was difficult to relate it to IV or land rehabilitation. Pastoralists maintain large herds as a strategy for better surviving catastrophes like droughts or epidemics. With increased incomes, pastoralists commonly invest in more livestock. Therefore, the development of alternative livelihoods, in the absence of effective range management systems, could lead to increased land degradation

and loss of biodiversity. The project includes alternative livelihoods without any criteria for strategically linking this with the Project Objective. This is quite simplistic.

# O-5 Technology transfer, training and regional comparative learning

46. Regional training (study tours) are always popular. They broaden the mind but they are expensive. But did they increase the likelihood of achieving the project objective? The answer is probably not, especially when the FE did not see the justification of a regional component. Moreover, training is an output not an outcome. The outcome should have been land rehabilitation or increased wealth as a result of training e.g. better tree protection because of solar cooker introduction or higher incomes as a result of training on hides and skins. Numerous other training courses were organized for beneficiaries. These are much more relevant to local problems but the results of the training should have been quantified in the form of outcomes.

# O-6 Targeted research

47. It was not clear to the FE what targeted research meant. Country teams implementing the project started working on the six outcomes without any clear overall vision of how all the pieces were supposed to fit together or how these outcomes would be achieved better if supported by research, targeted or otherwise. This fragmented vision and approach still existed at the time of the MTE and even the FE.

48. The justification, objective and the linkages of the improved livestock production and marketing and provision for alternative livelihoods of O-4 is not clear and remains so. More importantly, livestock production is central to range management and should not have been confused or mixed with alternative livelihoods.

49. The justification, objective and the linkages of the regional database in O-2 with the project objective are weak and remained largely undefined at the end of the project. It was also not clear if the database was intended to be a key part of targeted research (O-6).

50. Although the PD is full of references to research, the justification and objectives of this research and the ways in which the research was to be used in O-6 has always remained unclear. The term "targeted research" has never been defined and is a source of confusion; targeted where or at whom?

51. The MTE put the problem well: "There is no sense of recognition in the PD of the enormity of the challenge of developing viable range management systems. Africa has known decades of failed range management projects. In the 60s, 70s and 80s, donors spent hundreds of millions of dollars in universally failed attempts to develop range or ranch management systems (the approaches at that time were almost universally "top-down" and were based on an outdated paradigm ecological equilibrium that has since been largely rejected). Results were so universally negative, by the late 80s and 90s, there were few donors left who would invest in the sector. Yet in the analysis of risk section, one finds the incredible statement that,

"The Project does not face any major risk". The MTE Team Leader considers the development of range management systems of communal lands to be one of the most difficult challenges of all in the natural resource management arena." The FE would echo these sentiments as did the RCU's Terminal Report and Annex V. The challenge was not to promote indigenous management systems but to teach practical range management to pastoralists whose principal criterion for wealth and status remains in 2007, livestock numbers.

52. Most experienced natural resource specialists would recommend 10-20 years for the development of new management systems but few donors take such a perspective. Five years was clearly insufficient for development of sustainable CBNRM systems and only just long enough to organize communities into legal entities especially in Botswana. For the difficult challenge of range management on communal lands, a longer period would have been essential. Management systems must necessarily take a strong "adaptive management" approach. Establishing a community management structure alone took five years in Botswana and in all the countries, it is high debatable whether any are fully functioning. Initiating the development of management systems can easily take a further five years. Then a project should work with the community managers for a further number of years to test the systems in both wet and dry years.

53. The pilot sites were chosen during project development. The PD states that the criteria for site selection included the "presence of viable, indigenous management structures..." and that "A key factor (was)... the ability to use indigenous institutions in order to maintain...full resource access rights" In Kenya, there are vestiges of the indigenous institutions where pastoralist clans continue to maintain some control over access to their traditional lands but there is little left for functioning management systems. The traditional council of elders when supported by government-appointed "chiefs" can sometimes (even without the project) have the authority to enforce rainy season deferred grazing to regenerate degraded lands. But in Botswana and Mali, there is no evidence of indigenous management structures. Indeed, all of the Botswana sites and the Nara site in Mali allow open access grazing. The Nara site is still characterized by the traditional transhumance on a very large scale but there is no management authority and no control of access. Furthermore, it is not clear that there ever were traditional management systems there that enforced specific measures to ensure the continued productivity of rangelands or to regenerate degraded rangelands.

Community-based natural resource management

54. The MTE noted that one of the most serious weaknesses of the project design is that the PD gave no indication that those who developed this project had any experience with community-based management of natural resources. The design foresaw that traditional knowledge would be complemented by practical experience in rehabilitation techniques, databases and research, participatory approaches etc. But there is no recognition that the development of a management system requires first that there be a resource manager. For any type of natural resource management, a management authority is needed that is empowered to control access to range resources and that can establish and impose rules governing the use of the resource. For community-based management a *sine qua non* is an empowered community-

based institutional structure. In Botswana especially, this was not in place and took several years to set up.

# Performance of IVP

## **Regional Coordination Unit (RCU)**

55. The RCU was based in Gaborone, which is as far from Mali as possible. It would have been much more cost-effective to have based it in Nairobi which was equidistant between Bamako and Gaborone. The Regional Coordinator was hired one and a half years late. No regional technical coordinator was ever engaged for budgetary reasons so UoO volunteered to take over that role which it never fulfilled. The FE considers that IVP should never have been a regional project which would have made the RCU redundant. The RCU also had a very difficult job trying to knit all the components together, particularly the research component. The outstanding strength of the Regional Unit was to be able to see the broader picture regarding the constraints to achieving the project objectives. With no axe to grind in defending the somewhat unfocused and often irrelevant activities on the ground, the RCU was able to sum up why IVP was in effect doomed to fail from the outset. The complex reasons are well documented in the RCU terminal report and the literature review of the Regional Coordinator.

56. There were consistent, timely and satisfactory technical linkages and assistance from the Regional coordination Units to the National project units. The Regional Coordinator visited all the project areas (though Mali was rather sidelined for budgetary reasons) and he maintained constant contact with the NPUs. Rating: **Satisfactory**.

# **Regional Policy Steering Committee (RPSC)**

57. The RPSC met annually to discuss and agree on regional reports and work plans and to give technical advice and harmonize the three countries' work plans. However, one major limitation at the regional level was the time lag in the decision-making process. This was because of the phasing out period especially where the RPSC made recommendations regarding the downsizing of some of the project activities at the national level. In addition, the lack of a Regional Technical Expert meant that the technical guidance initially planned for the project did not materialize. The gap was supposed to be filled through a separate contractual arrangement with the University of Oslo, which did not happen due to administrative and logistical problems. The RPSC was a committee of governance not a technical one, with the responsibility of ensuring that the Project Objective and the Outcomes were realized and that the work in the three countries was well coordinated. In reality, each country had its own set of unique problems and paid scant attention to the problems of others on the other side of Africa.

58. The RPSC instructed UNOPS, in consultation with UNEP, to establish MOUs and contracts with national institutions to conduct research needed by the project. The minutes of

RPSC meetings show that many good decisions and promises were made but were subsequently either not carried out or unduly delayed. Despite the intellectual power of the RPSC, the FE thought that personality conflict, arguments, maneuvering and frustration all got in the way of effective policy implementation.

59. The implementation mechanisms were not effective either in keeping the project focused on the Project Objective or on the lack of any progress on site-based research. The RPSC is the highest-level decision making body on the project. The RPSC decided in 2005 that targeted research should be done through national institutions and instructed UNEP and UNOPS to make the necessary changes in the UNOPS contract with Oslo. This contract amendment was only completed after the intervention of the MTE team. The main constraint seemed to be the interminable delays on the part of Oslo and the unwillingness of UNEP/UNDP and UNOPS to upset NORAD by taking appropriate action against Oslo for their lack of performance. UNEP, UNDP and UNOPS kept NORAD informed, but this did not lead to a resolution of the problems. The Regional Coordination Unit spent much time trying to coordinate with Oslo but without any decision-making authority. The RCU did not play a badly needed technical advisory role but rather a coordination role with the Oslo research component. The RCU was unsuccessful in establishing a working relationship with Oslo. Rating of RPSC: **Moderately Unsatisfactory.** 

#### **Progress after MTE**

60. One of the constraints encountered in this project is the design itself. The ToR for the MTE included an assessment of the project design, so it is unnecessary to repeat the comments on the design itself. Some efforts were made to refocus and redesign but it has been too little and too late. Moreover, there was insufficient time between MTE and FE for redirection to take effect. The Kenya project was provided with a revised logframe, some activities were stopped but FE considered that most of the changes following the MTE needed more time to take effect. The exception was the new contracts handed to local institutions and Universities which took over work which was initially to be done by the University of Oslo.

#### Botswana

61. Botswana has no recent history of pastoralism. On many of the communal lands, grazing is a free for all. A large portion of the communal lands in Botswana has been divided into privately leased "ranches" over the past 30 years: government policies and programmes has encouraged this *de facto* privatisation of communal lands. Botswana ranchers, however, have dual grazing rights. They can pasture their livestock on communal lands until the pasture is depleted, then move their livestock back onto their ranch for the duration of the dry season. It is not known how important this factor of dual grazing rights is as a cause of land degradation but it is a barrier to the development of CBRM. Breakdown in traditional land/pasture rights is a major cause of degradation. Like the Nara and Kenya sites, the communities in Botswana once had traditionally defined community land rights with boundaries recognized by all. These *dithota* are no longer operational because they are not legally recognized. A further constraint is that the government has subsidized private ranches for the drilling of boreholes, and for supplementary feed of livestock during droughts, which results in larger numbers of

livestock being carried through a drought, with consequently higher pressures on the range. These subsidies provide disincentives for sustainable range management on communal lands.

62. In Botswana, Land Boards grant individuals the right to drill and control boreholes on communal lands. Most borehole owners are not from the local village but generally wealthy urban dwellers using a family relative with little education to manage the borehole. In the dry season, control of water gives the borehole owner *de facto* control of the range resource provided the distance to other water points is sufficiently long. A recent court decision reconfirmed that borehole owners do not have legal control over the range. Livestock are prevented from access to water by a fence around the borehole (controlled by an employee). This all serves to complicate the development of CBRM systems.

63. Project management differs in Botswana from the other countries. The National Coordinator is a Government officer in the DFRR (formerly DENR) and the perception seems to have been that the Project Manager was regarded as a consultant to the Government. This made project management difficult as the project was not truly autonomous but neither was it directly within Government. Suggestions that the National Coordinator micro-managed the project were heard more than once. This came to a head with misunderstandings between the previous Project Manager and the National Coordinator; a situation that could have been better handled by UNDP had it been more decisive. Similar problems were encountered over the recruitment of the new Project Manager on the departure of the previous Project Manager (whose performance was described as above average yet he was never offered a new contract by UNDP). Instead, UNDP seemed to distance itself from the project owing to the numerous issues that had arisen and which needed strong decision-making skills. A more recent example of this was the impasse over payment of a local consultancy firm who were helping communities with Management plans. The Regional and National Coordinators agreed that the local consultants should not be paid for sub-standard work. UNDP disagreed but failed to resolve the issue; instead the subject was swept under the carpet where it was allowed to fester. An easy and rapid resolution could have been made whereby the consultants were paid a compromise settlement at 60 percent of the agreed consultancy fee.

64. The three IVP pilot sites were selected: Khalagadi, Matsheng and Mokopi. Four trusts have been established, Mokopi Conservation Trust, Lenao la ga Kwalabe Conservation Trusts (Hima Ranch & Kedia Rangeland Resources Management plan), BORAVAST Community Resource Management Trust and Matsheng Community Development Trust.

The objectives of the trusts are fourfold:

- 1. Environmental education
- 2. Conservation and protection of natural resources
- 3. Employment creation
- 4. Equitable sharing of the benefits from natural resources

65. The setting up of these trusts and the completion of the development plans (by consultants such as the Centre for Applied research) is a significant achievement in Botswana in view of the hurdles overcome and despite the time it is has taken. It is an essential first step towards

the goal of CBNRM. Nevertheless, a first step it is and one might have hoped that after 5 years, a second step might have been made, *viz*. the implementation of the plans. However, the plans themselves are rather ambitious and not always related to indigenous vegetation. For example, the Lenao la ga Kwalabe Conservation Trust envisages many activities such as crossbow hunting, campsites, water development, abattoir construction, ecotourism, harvesting and marketing of veldt products, fodder production, land conservation and beekeeping. The total cost is estimated at one million Pula: there was no indication as to the source of funding. There is a real danger of these substantial management plans being shelved to gather dust unless there is a firm commitment from the Botswana Government to help source funding and move the project into a second phase. A consultant was recruited to evaluate the chances of these trusts being sustainable after IVP closed. For example, on Lenao la ga Kwalabe Conservation Trust, he concludes: "In contrast to the Trust members themselves, the consultant is not very optimistic with regard to the implementation of the projects put forward by the community and its representatives" (Leutlwetse, 2007).

66. There are a number of conditions that pose an especially difficult challenge to the development of CBRM in Botswana. Livestock owners gave up herding their livestock around Independence. Livestock roam free all day (and frequently at night). Livestock from private ranches use the communal resources first before retreating to the dry season reserves of their own ranches. This arrangement is not of course reciprocal. Sustainable management is not feasible under these conditions because there is no control of grazing. In the dry season, the pastures grasses are depleted well before the beginning of the next rainy season because of overgrazing and over-exploitation of other resources (tree products etc). There is no functional (community-based or otherwise) management authority at any of the sites, which is why Development Plans have been drawn up.

67. Range management requires control over the timing and movement of livestock. This is generally done with either fences and/or traditionally, herders. Fencing of range is not financially viable whereas fencing for cropping is, even if it reduces plant biodiversity as land is cleared. To get people to invest in herding their animals will require a quite radical change in current practices. IVP recognized early on that users of communal land would not be able to manage or protect "their" resources unless the government transferred control and management rights to them. All of them clearly wished to be so empowered. The biggest potential constraint to the achievement of the Project Objective in Botswana was that the legal framework was not developed for the empowerment of community managers and that there are no clearly defined, easily applicable legal mechanisms for doing this. Only the government could empower community managers, and the Government of Botswana has only recently identified the specific legal instruments that will be used to empower community managers at each pilot site. Maps of the pilot communities' lands have been produced by local government services.

68. IVP dedicated much time and resources to the development of Community Action Plans (CAPs) and to the identification, funding and development of small projects identified by the communities. IVP Botswana views the micro-projects as a buy-in to obtain the communities trust and support but the revenues/benefits to be generated are generally not based on the sustainable management of range resources. There has been little analysis of the

financial/economic viability of the activities funded. The strategic linkages between microprojects and the Project Objective appeared weak. Community "structures" recognize that they can do nothing unless they are empowered by the State to control access to "their" lands and resources. They want to have this control. The specific legal mechanisms for empowering each community management structure have not been clearly identified by government.

69. "Drift fences" were paid for by IVP around areas where rain-fed agriculture will be practiced. The areas fenced enclose about 400 ha. and are much larger than the area cultivated. The project did not assess the ecological sustainability of the rain-fed agriculture. Fencing these areas seems to have led an increase of deforestation (and loss of biodiversity) as a result of conversion to fields. On a more positive note, the uncultivated portions of the fenced areas present real opportunities for experimenting with Village Biodiversity Conservation Areas where there is potential in biodiversity conservation leading to incomegenerating activities such as ecotourism, game ranching and sale of bush medicines. The Government may even be handing over some game ranches to the community but a business partnership would seem the best way to do this.

70. UoO were expected to establish community-based ecological monitoring including a Biodiversity Information Management system to assist communities in setting up indicators and know what to look for but these were never delivered nor institutionalized at the community level. The Regional Coordinator drew up a plan in 2004; UoO did not find it acceptable and drew up their own plans in 2005, which were found by the RPSC to contain deficiencies that were not changed. Instead, DFRR does monitoring of transects with the communities twice a year. Transects for ecological monitoring have been set up around the pilot villages. The first set of measurements was taken by the Range Ecology Division of the Department of Crop Production and Forestry.

71. **Matsheng Conservation Trust**. The Trust was established in Kweneng District near Molepolole in 2006, independently of IVP. It took several years to go through the process of boundary demarcation, consultation with neighbouring villages, resolution of conflicts, and approval by the Land Board. Five villages are represented, comprising a "community", though this concept is very loose. Most of the land is range, heavily overgrazed, with obvious signs of bush encroachment. The evaluator was told that "anybody's" cattle could graze the communal area. The concept of deferred grazing does not exist in the community. There was widespread fencing of agricultural plots where IV has been largely or totally cleared. Maize was a principal crop despite its unsuitability and very low yield (averaging 240 kg per ha).

72. When the FE met with representatives, they showed a very limited understanding of the concept of the Trust. No bye-laws or regulations had been drawn up to control access to grazing land. The development Plan (prepared by BCA) is to be in English, a language very few of the Committee understood. The committee had asked for the plans to be translated but were told it would be too expensive. Consultation with the community was done but one got the feeling that the plans were imposed on them. The plans include ecotourism projects (campsite and/or lodge), (ongoing) "drift" fencing and development of the 192 ha. exclosure, and plans to take over and manage the 3777 ha. Dithopo ranch, currently under the

management of the Dept. of Wildlife & National Parks (Division of Management & Utilization). Options for the latter include a joint venture with private sector.

73. The concept of a Village Biodiversity Conservation Area exclosure for the protection of indigenous vegetation is a good one provided livestock are indeed excluded (or at least allowed very limited access whereby the area is kept as a dry season fodder bank) and provided the area is not turned into cropping land. The potential for fruit and medicinal trees (Marula, Ziziphus, Strychnos, "mologha" (Loganiaceae), *Grewia flava*, *Terfzii* truffles, bush melons {*Citrullus lanatus*} etc) is substantial even if the produce is restricted to local trade, subsistence or as nutritional supplement). Again there can be the problem of who will benefit from a communal exclosure.

74. A past project in the area is an indictment of the community-run concept. The Morerwane project was a vegetable garden run by a youth group of 12 persons from Lephepe village. IVP contributed over \$10,000 for shade netting. A further \$3000 had been contributed by a Canadian NGO. The simple technology was provided by Dr. Gus Nielsen who runs successful vegetable enterprises round Gaborone. It consists of "bench beds" which control moisture loss downwards as the beds are sealed by concrete. Water was reticulated from a borehole 2 km away. All the technical pre-requisites were in place for a profitable enterprise. The four remaining women in charge were dispirited. The shade net had collapsed and was torn. The group had dispersed; the remaining women said the others were lazy and uncommitted yet they still wanted to benefit from the produce.

75. Alternative livelihoods activities are generally not based on the resources to be managed (except Hoodia) but they have generally been successful in gaining the goodwill of the communities towards the project. The future for BORAVAST in Bokspits (Kgalaghadi) is similarly tenuous. Some dune stabilization has been done. *Hoodia gordonii* production is one activity in Khalagadi that is both income-generating (the dried fruit pods fetch around \$250-300/ kg) and related directly to biodiversity conservation, but this has only just started. Pilot communities have been organized into representative management structures and several IGAs started. Selling airtime was declared the most profitable though this is a service not a productive industry. Brick-making, sheep-raising/ wool production, weaving/ spinning, provisioning of shops etc had also been tried but all were variously unsuccessful. So despite the existence of management plans, the chances of successful implementation without continued donor support are slim in Botswana.

76. The IVP has resulted in greater awareness of the importance of CBNRM in Botswana. This has led to a Draft Government paper on CBNRM policy, which will be under the coordination and oversight of MEWT (which includes DFRR). Despite such moves, the perception in Botswana is that the Government is still top-down when it comes to CBNRM. The FE would agree with the Terminal Report of the Botswana component, which states that the project 'has not been very successful in achieving its objectives, but has so far been able to lay a foundation for future project interventions on rangeland management.' Botswana probably represented the most difficult challenge out of the three countries for the development of CBNRM and CBRM. Representative Interim Resource Management Committees have been created at all pilot sites. The Botswana IVP team supported the

development of community management institutions that must then be empowered to manage their rangelands. Boundaries have been determined and the groups are legally registered as trusts. Botswana had higher operating costs than the other two countries which gave a negative bias to activities in Botswana as each country started with a similar budget. Summary of Progress: Progress towards achievement of the Project Objective in Botswana is Moderately Unsatisfactory.

## Mali

77. IVP in Mali is now restricted to the Nara site which covers 26,400 ha., set up as a demonstration site with the aim of testing the potential of resources for rehabilitation and to address the indifference of communities towards resource conservation. Pasture grasses are usually grazed out by late January. Overgrazing, degradation and loss of perennial grass species ensues. The deep sandy soils are resistant to soil erosion and support a full cover of annual grasses when rains are adequate. Unsustainable harvesting of range products is another result of open access. Rainfed shifting agriculture is an increasing but high-risk activity on the sandy soils in the Nara Circle. In 2004 the harvest failed completely. Fallows on the deep sandy soils seem to recover well and during the FE the available standing biomass of grass was extensive. Both the FE and the MTE saw tented communities of transhumant pastoralists on Nara, who had never left during the entire rainy season. There is no management authority. The integration of transhumant communities with the sedentary agro-pastoralists makes sustainable range management difficult.

78. The MTE recommended that the other site in Mali at Bamba be dropped and the community there felt let down. The MTE also recommended the stopping of certain IGAs such as apiculture and honey production. Neither the Mali team nor the FE agreed with that recommendation as bee-keeping is directly related to plant biodiversity conservation. The FE team visited four villages including Ntiendgi, Ker-Al-Gagny, Tendie & Diewaye. The MTE noted that the IVP team had trouble working towards the development of CBRM systems owing to misunderstandings about the project objectives. The interviewees also had little understanding of the objectives of the IVP project. The project at Nara is clearly popular but is seen as a project to improve living standards and access to water. Yet social empowerment remains weak, gender inequality pronounced and the project has no chance of sustainability without more years of support. It still appears top-down even at village level: some community members complained that they had had no say in the appointment of contractors for the wells etc.

79. The Nara settlements have lands with relatively well-defined boundaries. These traditional rights can form a base upon which to build range management systems. The general situation in Mali is open access grazing with large numbers of transhumant pastoralists coming from Mauritania early in the dry season (October to mid-June). The national IVP project response to the MTE was that overgrazing was not necessarily seen as the main environmental problem in that communities know that the following rains all the grass will come back. As such, communities did not even list range management as a solution.

80. Development of range management systems has not begun. Strategies for integrating transhumants in range management systems have not been developed, nor has there been a dialogue with transhumants towards this end. The IVP Team said that they could use a legal tool called a "*convention locale*" to empower communities for range/resource management.

81. Mali seems to concentrate more institutional change and decentralization than on arid land policy formulation. This decentralization makes empowerment of communities for natural resource management easier but it also requires that the district authorities (*communes*) are also empowered and yet still possess the capacity to encourage and foster community development. Even at District level, development can remain Top-down. However, the Project enjoys good integration and support with local authorities and local technical services of the government. The highest government authority in Nara (the prefet) is supportive of the proposal to use *convention locale* to empower pilot communities.

#### Water development

82. Unlike in Botswana, boreholes are owned by communities and they are not as numerous. The deep pastoral wells (*puix pastoraux*) at Nara are well constructed: water is drawn using animal traction but these should be seasonally regulated to prevent local overgrazing. The FE did not sense that communities viewed these wells as a mixed blessing. Water provision opens up new areas of grazing but usually causes local overgrazing

### Micro-projects and IGAs.

83. Micro-projects were viewed as a buy-in to obtain community trust but the MTE made recommendations to stop some of them (apiculture, fish-farming, gully-stopping etc.) The revenues generated were considered by the MTE as not based on the sustainable management of range resources, and strategic linkages to the Project Objective were considered weak. The IVP project in Mali raised the issue of whether recommendations of a MTE were binding as they were not popular but the FE informed them that the MTE findings were ratified and endorsed by the Regional Steering Committee.

84. 13 Solar stoves had been distributed to women in each village. They are effective and useful. Yet when the FE asked whether anyone had bought them independently, the women said nobody had bought them, that they were too expensive (CFA 85000-125,000) and that they would sooner buy food with the money. The women wanted to start IGAs, and needed inputs for cattle, seed and peanuts but despite micro-finance being available locally for grinding machines etc., the FE met no one who had taken a loan. Social empowerment (especially for women) was weak. There were widespread complaints from the women that the project had not delivered promised inputs for vegetable gardens such as fencing, seeds and insecticides.

85. Several hectares of severely degraded land on heavy soils had been very intensively treated with 4m "half-moon" soil and water conservation structures that had been built by hand labour provided by the villagers. A tree had been planted in the large sunken bed upslope from each half-moon but no forage grasses or agricultural crops had been planted.

These labour intensive soil conservation and water conservation are impressive on a microscale and so reverse land degradation but they do not address the main cause of degradation, open access overgrazing. The FE agrees with the MTE that it is not a technique that can be applied and replicated over large areas of degraded lands.

## Potential for indigenous vegetation

86. Trees had been planted but there still remains great potential for active planting of *ber* (*Ziziphus mauritiana*) and *Balanites aegyptiaca*. The commercial fuelwood supply zone extends approximately 20 km out along roads radiating out from Nara and also presents the opportunity for integrating revenue earning and dryland forest management into range management systems within this area.

87. The project could have paid more attention to income-generation from the indigenous vegetable *salunka* (CFA 3500 per bag; women can produce 5 bags per week), and from indigo production (*jabee*) which sells at CFA 10000 per bag.

88. A GIS/database is available for the Nara site but without guidelines or technical advice from Oslo or the RCU, it was too general to be of use for range management at the community level of the *terroir*. The database was developed because the National IVP team saw it as an outcome in the PD. It has not been developed as a strategically important tool that will contribute towards achievement of the Project Objective.

#### Summary of Progress

89. Despite the goodwill created at Nara, achieving the Project Objective is unlikely and the community has yet to implement their plans. The project should continue and it is hoped that UNDP will continue to fund the Nara site as a stand-alone project to prevent loss of trust and confidence. The project can continue for some months with budget neutral funding and then seek an interim bridging period before continuing as a range management project. Ideas for funding agencies have been summarised by the National consultant (Annex B)

90. Summary of Progress: Despite creating goodwill, fostering the community empowerment and a process of decentralization, progress towards achievement of the Project Objective in Mali remains slow and is rated Moderately Unsatisfactory.

#### Kenya

91. Twenty-three years ago the UNESCO/ German funded Integrated Project in Arid Lands (IPAL) headquartered in Marsabit in Kenya (but also working in Turkana) was closed after seven years and an input of huge resources. Its three long-term objectives were:

1. To seek solutions for urgent environmental and sociological problems associated with ecological degradation and desert encroachment through research to understand management-

oriented interactions between man and his arid environments and through training and orientation in resource management techniques associated with the Project studies.

2. To investigate all aspects of human ecology and social organization which pertain to traditional land use of the arid rangelands and which may contribute to beneficial changes in their management.

3. To investigate alternative forms of economy and land use consistent with the sustained health of the human environment.

92. IPAL's components included vegetation ecology (with range and woodland being split); livestock studies (animal ecology and production); and education, training & extension. IPAL created a 'well-prepared and comprehensive management plan covering every aspect of development in this area'. It also recommended a permanent research institution called the Kenya Arid Lands Research Station (KARLS), which was never created, but the work was taken over by KARI in Marsabit. The objectives of IPAL in Kenva and the objectives of the IVP are essentially identical. To quote from the IPAL final report "Part of the problem of the development of range areas has been that of gaining acceptance of the chosen development strategies and activities by the local population of the range areas. Many plans have been ill suited to their way of life, and therefore rejected. Planning of development projects in the range areas must be based on an appraisal of the cultural, political, ecological and socioeconomic factors. Above all, the strategies adopted must be acceptable to the local population". One of the most important outputs should have been a demonstration that project activities were acceptable to beneficiaries who could then sustain them at project closure. Even in Marsabit in Kenya (where IVP took over from earlier projects), the chances of the communities being able to sustain any meaningful progress on biodiversity conservation or range management are remote unless the project continues under other funding arrangements.

93. At the time of the final IPAL report (Jan 1984), there was a drought in N. Kenya. The pastoralists lost most of their livestock and by the end of the drought most were fully dependent on famine relief. Since that time, WFP and GoK have been providing famine relief in Turkana for 24 years in a row and the number of NGOs and relief organizations working in the arid districts of N. Kenya has quintupled. The FE concludes that in Kenya at least, we have been here before but such is the brevity of institutional memory: IVP was essentially a resurrection of IPAL only with many more threats and constraints than faced by IPAL. The districts rely heavily on food relief and Government Extension services are very weak. There is a long history of rangeland projects and NGO involvement in these districts, including IPAL, TREMU, NORAD, ITDG, ALRMP, VSF-Belgium, World Vision, Food for the Hungry International, and the most recent GTZ Marsabit Development Programme (MDP). Kenya's new National Land Policy has still not been enacted. The Marsabit sub-project took over from MDP, which also provided some funding to IVP including the salary of the Project Site Manager.

94. The IVP sites in Turkana and Marsabit are very degraded. Overgrazing is the main cause of this degradation and unsustainable use of range products/species is a contributing factor. Both sites have two highly variable, unreliable rainy seasons per year: pasture grasses are

eaten well before the end of each dry season. Traditional range management systems are still operating in places but under threat from irrigated cropping near the rivers. Pasture rights between clans are still relatively well respected. The traditional local council of elders of the Turkana, with the support of Administrative (government appointed) chiefs is occasionally able to organize deferred grazing (locally called *epaka*) during the rainy season to give degraded areas a chance to regenerate.

Attainment of objectives, outputs and planned results at the national level

95. The progress in Kenya cannot really be compared with the other two countries as IVP in Kenya took over from projects that have been running for decades. There is much more to assess in Kenya as a result. Performance is judged per outcome and based on the retrofitted outputs and activities as outlined in the retrofitted logframe (Muthui, 2005) done in conjunction with Marsabit and Turkana teams. The new logframe was not very satisfactory: there are five outcomes not six (the fifth is redundant and the others are very like the first batch) plus 18 outputs and 75 activities, which is far too unwieldy. The aim was to achieve a better national logframe that was more directed to the sites (and sub-sites) in Kenya but the FE does not view the logframe as significantly improved. The national goal was changed to "Biodiversity, ecosystem functions and socio-economic benefits (livelihoods) enhanced in Kenyan arid lands".

<u>Outcome 1</u>: A Bio-socio-economic knowledge base created to support integration of indigenous and scientific approaches for improved resource management.

96. If a bio-socio-economic base means a baseline, it wasn't done at the outset. The ecological monitoring baseline that should have been done in the first year of the project was delayed for nearly three years mainly due to failure to agree on methodological issues. Baseline data for use within the lifetime of the project were not clear from the outset. Outcome 1 should have been the establishment of a baseline against which impact could be measured at project closure. But as the logframe in Kenya was retrofitted anyway, outcome one was not achievable. Much data has been collected: the socio-economic data report (Aboud, 2007) is huge (over 100 pages) but based on district data, not site specific and therefore not a baseline and of questionable relevance. IVP organized collection of data on land use, natural resources and socio-economy and these provided some information. In 2005, after the MTE, the Department of Resource Surveys and Remote Sensing (DRSRS) delineated vegetation types and status of natural resources on 70 sample plots on Hurri hills, activities discontinued due to increased tribal conflicts. In 2004, DRSRS also vegetation and land use maps were made of the *ngikwarin* along Turkwel River for the management of natural resources and to integrate indigenous and scientific approaches for improved resource management in the project sites.

97. IVP in Kenya continued the work of earlier projects especially IPAL & MDP. MDP had earlier digitized information for Marsabit District in collaboration with the Arid Lands Resource Management Project (Office of the President). The Ministry of Water & Irrigation attempted to develop a database through acquisition of GIS computers and by training of two of its officers but these were later transferred so the work was not finalized. However, at the

national level, IVP support to DRSRS was worthwhile as the latter has the institutional and technical capacity to manage a GIS database. A regional training workshop on inventory and monitoring of biodiversity was organized in Turkana during which a range monitoring data capture sheet was tried out but found to be rather complex. Nonetheless, there were some efforts to ensure ecological monitoring of rangeland status: links were established with KARI and Egerton University for research to support project activities but no report from Egerton was seen. KARI's National Arid Lands Research centre at Marsabit established eight transects and 80 sample plots at Korr and Ilaut area for long-term monitoring of vegetation changes. Information was analyzed and presented to community members. KARI-Marsabit has shown interest in continuing with these activities after the end of IVP and there is a realistic chance of achieving useful results but not within the lifetime of the project. Nonetheless, IVP has made significant contribution in initiating the establishment of necessary benchmarks and indicators for environmental resources monitoring in Marsabit and Turkana districts.

98. Ecological monitoring transects were been located at the Turkana and the Marsabit sites and first measurements have been made. Transects at Turkana were located by the IVP National Liaison officer after receiving the training given by Oslo/Noragric. The Turkana transects are located exclusively in the *ekwar* in the riverine forests along the Turkwel, the least degraded component of the rangelands. In Turkana, a baseline was established but again not a very site specific one. The IVP Situation Analysis Report for Turkana (undated) provided a lot of general data on climate, vegetation, the value of riverine forest, land use and socio-economic patterns, threats etc. The report quoted Katilu et al (1985, but unreferenced in the References) who apparently showed net primary production in S. Turkana as 1640 kg ha<sup>-1</sup> yr<sup>-1</sup>, two-thirds of which came from grasses and forbs. The report also quoted Oba (1995, but also missing in the references) who apparently showed the effects of rainfall: 500 and 1900 kg ha<sup>-1</sup> yr<sup>-1</sup> under 100 and 300 mm rainfall respectively. It went on to quote Charlotte (1992, but again missing in the references) who apparently showed that moderate grazing of dwarf shrubs increased their productivity. All these data needed to have been, but were not, conveyed to the beneficiaries in a form that could have been understood.

99. The KEFRI fenced exclosures at Kaitese etc were for measuring ungrazed primary production and regeneration. The essential (and missing) data are comparisons between deferred and continuous grazing sites, but KEFRI is a forestry institute, not a livestock one so probably beyond their remit. So the FE considers that the KEFRI research on fenced plots is superfluous, duplicative and unnecessary. There are decades of data on biomass production and regeneration from fenced and non-grazed plots in ASALs. Fenced plots are not a good idea anyway: fencing causes conflict and even beacons are often pulled out. Besides, there are abandoned KEFRI plots in other parts of Turkana so one doubts the continuation of KEFRI in the IVP supported plots once IVP funding has stopped. What is urgently needed are data comparing annual biomass production from overgrazed sites and epaka in order to demonstrate that the epaka system produces more vegetation. It would have been useful if the project had compared primary production on heavily overgrazed sites with that on sites grazed for 30 or 60 days per year. This would have shown that primary production is a function of photosynthesising leaf area i.e. the more leaf area on plants during the growing season, the higher the annual biomass production. This may sound self-evident but it is clearly not evident to pastoralists or they would surely take steps to ensure that controlled and deferred

grazing was common. These are the sort of studies that could have been carried out by KARI or ILRI (or both in a combined study) but not KEFRI. Likewise, the report on range ecology (Kinymario & Mworia, 2007) tries to establish a vegetation baseline (too late as it came out as the project was being closed but apart from generating more data and more paper, it is qualitative and neither site specific nor quantitative.

<u>Outcome 2</u>: Appropriate indigenous management systems strengthened that integrate biodiversity conservation.

IVP needed to do achieve two targets:

1. To raise community awareness of environmental problems associated with uncontrolled overuse of communal resources

2. To promote community-led land rehabilitation and biodiversity conservation through income-generating activities directly related to indigenous vegetation.

100. The FE did not find that either of these targets were sufficiently specified or achieved. In Turkana the traditional deferred grazing systems (*epaka*) and private ownership of trees (*ekwar*) in the riverine forests was successfully re-incorporated in the newly EMC concept for the rehabilitation of degraded lands. *Ekwar* are also referred to as "trees beside the river" are used as a dry season fodder for livestock but these two systems were not actively scaled up to a level where impact could have been high. If research was needed for this outcome, it could have been done by local institutions but only with direct involvement of local members. Research is too often carried out by researchers for the benefit of researchers and the positive lessons learned rarely get down to the grassroots level.

101. Community awareness on environmental problems was done through CAPs which were developed in collaboration with implementation partners and stakeholders. These facilitated participatory natural resources management and planning in the project sites. The CAPs formed the basis of implementation of the prioritized community projects. These were followed by Environmental Management committees (EMCs) registered with MCSS to support planning and implementation of community management plans. In 2004, Community based range resources By-Laws for Korr and Ngurnit pilot areas were elaborated by EMCs and facilitated by IVP, NEMA and MLFD. The By-Laws cover numerous issues such as water and grazing management, conflict resolution, range rehabilitation, wildlife conservation and protection, waste management and disposal, enforcement and sanctions, and networking. In the Turkana project site, the concept of EMCs was introduced by IVP and three EMCs established in Katilu, Turkwel and Central Division. The membership of EMCs in the Turkana site also include some of the Council of Elders (also referred to as the "Tree of Men") who are responsible for traditional decision-making but still at the early stages of incorporating modern management systems. EMCs in the Turkana site underwent an induction training workshop in 2006 to empower the representatives to conserve biodiversity especially range resources. For more details refer to the national consultant report.

102. Water development in Korr-Ngurnit and Hurri Hills were implemented by the project despite the conflicts in the latter project sub-sites but has little to do with project objective,

however popular it may be. The local community provided labour and food for the Ilmonti rock catchment improvement, MWI provided the technical capacity and IVP provided the materials that were used to construct the 50 m<sup>3</sup> tank which serves about 70 nomadic households. The Ilmonti community has a water management plan, and each household gets about 151 of water a day. One problem is pipe maintenance as the local community lacks technical capacity. In Hurri hills, Bori water catchment dam was enlarged by IVP from 750m<sup>3</sup> to 1750m<sup>3</sup> in collaboration with ALRMP and MWI. Water development has extended wet season grazing in Korr and improved dry season grazing in Ilimonti–Ngurmit areas. The extension of grazing areas was also made easier by conflict resolution supported by GTZ.

103. Rehabilitation of indigenous vegetation and degraded lands is based on the principle of reducing grazing pressure in currently overgrazed areas around settlements in Marsabit. Biodiversity conservation groups were established in Hurri hills with members trained on tree planting, nursery management, indigenous seed collection & storage. This conservation initiative was however derailed in 2005 and IVP was advised to phase out due to conflict in the Hurri hills. Food for the Hungry International (FHI) has expressed keen interest to continue with this IVP initiated biodiversity restoration in Hurri hills.

104. In the Turkana project site, several community biodiversity conservation sub-sites were established and promoted. For instance, at Juluk sub-site, human population increase led to increased settlement and cultivation that became a major threat to the riverine vegetation through increased fragmentation. IVP in conjunction with the Juluk community have promoted sustainable biodiversity conservation through the development of integrated land use plans that includes multipurpose forests (agroforestry and sylvo-pastoralism) on the remaining forest. An inventory of the plant species in the Juluk forest was completed through a Ph.D study facilitated by IVP with the goal of setting up the conservation area to promote ecotourism activities around Juluk. This is expected to help conserve the riverine ecosystem that is threatened by irrigated agriculture.

105. In Marsabit, trees or stones were marked with red paint within demarcated areas aimed at enhancing tree regeneration. Woodland management protocols have been established by EMCs in agreement with user communities in all management areas. This has led to a significant increase in tree cover around Korr compared to 1988 when the film "the Last tree of Korr" was produced. The EMC around Korr has also enhanced the use of livestock *bomas* (houses) in tree regeneration especially of *Acacia senegal*, also protected with red stones. The identification of sites for rehabilitation was based on proximity to the settlement, the level of degradation and speed of regeneration. EMCs encourage sustainable use of vegetation and community members are shown which tree parts can be cut for fencing material and where they can graze. In the Turkana site, the combined use of EMCs, Chief's Act (formal legislative authority) and the traditional deferred grazing systems coupled with climatic changes may have enhanced vegetation regeneration especially *Acacia tortilis* tree cover in Lorugum, Tiya, Kaitese, and Juluk project sub-sites but quantitative data were not collected.

106. The importance of IV cannot be overstated in Turkana. The riverine forests (dominated by *A. tortilis* and Doum palm {*Hyphaene compressa*}) are a vital nutritional source for livestock: *Acacia tortilis* pods form an essential protein supplement in the dry season. Their

importance to the community is known but not the scientific basis: the nutritional constraint in the dry season is lack of protein for the rumen flora to digest dry season cellulose. Pods and fruit of *A. tortilis* are a rich supply of digestible crude protein without which livestock mortality in the dry season would soar. If the communities understood the science behind the tradition, the riverine forest would be more likely to be protected.

107. Doum Palm leaves are the source of the basket and mat weaving industry in the Kenyan arid lands. Both IVP and KFS have played a role in promoting Doum Palm conservation by training communities not to destroy them in when irrigation schemes are created. Marketing of doum palm products could have been significantly enhanced and prices elevated for the producers. The FE passed numerous empty trucks going from Lodwar to Kitale and south and yet IVP did not take advantage and arrange cheap transport of this relatively light commodity.

108. The project made significant efforts to promote indigenous range management systems in Marsabit and Turkana although mobilizing communities to manage the resources was more successful in Marsabit than Turkana owing to the long history of EMCs in Marsabit as a result of the MDP. The concept of EMCs was only introduced in Turkana by IVP and this will therefore require a longer time to have a significant impact.

<u>Outcome 3:</u> Livelihood means that reduce pressure on the ecosystem adopted to diversify economic base, increase socio-economic benefits and promote biodiversity conservation

109. In both districts the marketing of livestock and livestock products improved. In addition, about 180 women group members in Marsabit and 24 community members in Turkana were trained on goat and sheep skin improvement (wet salting) for value addition. This has increased the value of the skins for example for Korr Tidadakhan women group in Marsabit from Ksh. 20 to between Ksh. 60 and 70 in the local market and to over Ksh. 134 in the Nairobi markets. Three groups in Korr (Umoja, Korrtidakhan and Ersin) have been trained on microfinance, entrepreneurship skills and business management plans. According to the chairlady of Kortidakhan group, this has increased group capacity and allowed them to diversify into other business enterprises. Their group is registered and it has a bank account for better financial management. The group has been invited in exchange visits to Kalacha and North Horr. Currently, through the technical support of the District Cooperative office, there are attempts to link the three groups in Korr to form a cooperative to achieve economy of scale. Other non-livestock based alternative livelihoods were identified:

110. Bee-keeping in Hurri Hills and Juluk community in upper Turkwel. Groups were trained and equipped with modern honey harvesting kit and for the project site. *Aloe turkanensis* domestication was started in Ilaut and upper Turkwel. These two activities were however phased out based on the recommendations of the MTE, recommendations with which the FE did not agree. Nonetheless aloe domestication in Marsabit has received support from both the MLFD and the ADB-funded ASAL livestock and Livelihood Project (ALLPRO).

111. In Marsabit more than 100 parabolic solar cookers were introduced in Korr and Maikona. Over 50 women (25 for Korr and 25 for Maikona) were trained on their use and

maintenance. This has contributed to reduction of fuel wood consumption: beneficiaries now fetch fuel wood once instead of three times per week. Other women are buying solar cookers (Ksh. 4000) so this is an appropriate and sustainable intervention by the community.

112. In the Turkana, gums, resins and oils were identified by the communities as an alternative livelihood during the preparation of CAPs. IVP collaborated with the KFS, KEFRI, and the NGO SALTLICK, to organize capacity building activities to create awareness on the potential value of gums, resins and oils. Collectors have been organised into gum collector groups such as the Maridadi Women CBO who benefited from IGA training from CAPACITY 21. In Turkana, IVP facilitated improved marketing of gum Arabic. The operation was run by Arid Land Resources Co. (formerly SALTLICK) which had godowns in Lodwar and other centres. Nevertheless more could have been done in marketing and helping the producer. The price attained by the collectors was Ksh 30-50 kg; in Lodwar, Ksh 50 and then sold to more middle men in Nairobi or Mombasa for Ksh. 90. SALTLICK Ltd provided beneficiaries with a gum-tapping tool (sunki) adapted from Sudan for the sustainable collection of gum. The major threats to sustainable gums and resins collection in Kenya are as low yields in arid lands compared to semi-arid areas, low prices for producers (price could go up three times even before it left Lodwar), local consumption by humans and livestock feed, lack of market information, competition from new brokers, and insecurity. However, this activity was also scaled down after the MTE and delegated to Practical Action, an NGO, and KEFRI although on a reduced and less coordinated scale.

<u>Outcome 4:</u> Key stakeholders have increased knowledge (skills and awareness) to facilitate implementation and sustainable management of natural resources.

113. IVP has facilitated numerous partnerships with other ministries and parastatal organizations such as MLFD, KFS, KEFRI, NEMA etc. KFS has taken over the community tree nurseries but these are very run down owing to redundancy of KFS casual staff. However, the DFO (Lodwar) has noted a trend towards community wish for indigenous trees. KFS must have a role in the protection of the Juluk Community Biodiversity Conservation Area as a "provisional forest" under the Forest Act whereby Community Forest Associations will be allowed to use the forests. KFS is also involved in training on the use and management of Prosopis. However, one has to realistic. While the knowledge of key stakeholders within ministries has undoubtedly increased owing to the IVP, it is unlikely that the ministries or parastatals will continue to support the beneficiaries in such a way that the activities will be sustainable. Whatever the level of donor support to arid lands is in Kenya, and it is currently very high, *realpolitik* will ensure that the central government will continue to view ASALs as low priority areas owing to their low populations, so they are likely to continue to be marginalized. NEMA itself has neither the funds nor the capacity to keep staff in all districts and this situation is unlikely to change.

114. The three CAPs in Turkana were compiled in 2003. They are site specific, participatory and comprehensive and included SWOT analyses and Logframes for community action. Nine EMCs were then created along the Turkwel river but after the MTE, this was reduced to two in the upper and central Turkwel. These were followed by two Management Plans (2005) for the Lokapek and Turkwel sites. As in Botswana, the chances of the management plans being
implemented and sustained are low. Several stakeholders involved in the joint planning and implementation of the project activities are assumed to have benefited from technology transfer, training and regional comparative learning through workshops, short course trainings, farmer field schools. There were exchange visits to Mali IVP (2), Botswana (1) and 3 MSc students from Marsabit were trained in Norway. This should have increased the technical capacity of the relevant national and district level stakeholders and fostered linkages with different training institutions. But these are outputs not outcomes. The outcomes should have been higher productivity from arid lands and this has not been demonstrated.

115. Numerous community trainings were held. The chairman of Korr-Ngurnit EMC participated in the IVP Regional Policy steering meeting held in Lokichogio, so it was expected that the capacity of EMC to plan, manage and monitor implementation of activities would be enhanced. The chairman of Central Turkwel project site visited Mali on an exchange visit but it is always difficult to demonstrate impact of such an expense. These visits enabled the sharing of information despite the ecological differences and uniqueness of the three project countries. In the opinion of the FE, this project outcome is rated moderately unsatisfactory.

Outcome 5: Project effectively managed.

This should not have been an outcome. Effective management is a *sine qua non* not an outcome.

116. The National Coordinator is based in Lodwar and visited Marsabit about thrice a year. He also met with the whole team for quarterly workplans. Four of the officers were seconded from various Ministries (& NEMA) while the Marsabit Project Manager was an employee of GTZ-IS. The other support staff consisted of 2 drivers directly paid by the project (one each in Nairobi and Turkana). For the Turkana project site, there was an additional driver from Forestry department (now KFS) to work with the project but paid for by the Government, which also provided office facilities for the two project sites. The National Liaison Office was housed by the KFS while the Turkana Project was housed by the Ministry of Water and Irrigation. These arrangements were part of the GoK's contribution to the project. All the vehicles and stores (i.e. non-expendables-equipment such as photocopies, printers) were bought by UNDP through the project and were all in place at the time of the launch. The Memorandum of Agreement (MoA) between GTZ-IS, MENR and UNDP was later translated to a contractual agreement at the launching the project. The project management team at the national level was involved in the whole contractual negotiation process.

117. The control of technical implementation of the Project was achieved through two committees i) Project Technical Management Committee (PTMC) and ii) National Project Steering Committee (NPSC) that played a regulatory role at national level. The PTMC consisted of UNDP, MENR, NEMA, and GEF and was chaired by NEMA as the coordinating institution while the NPSC was chaired by the Permanent Secretary, MENR and its role was to examine the progress report and approve the work plan for project implementation. This project outcome is thus rated satisfactory. The NPSC comprised representatives from government whose participation and contribution in providing guidance and policy advice

was satisfactory. The key question is whether the line ministries in Kenya will be able to continue the IVP without donor assistance. The answer is probably not. This will not affect Marsabit which will hopefully secure funding from GTZ-IS. Summary of Progress: Progress towards achievement of the Project Objective in Kenya is **Moderately unsatisfactory**.

Comments on IVP outcomes across three countries

The ToR for the FE asked the following questions to which a summary of answers is provided:

1. Has the project established appropriate indigenous management systems? Where? Over what land area?

118. The project has tried to promote and/ or to reintroduce appropriate indigenous management systems in Kenya (EMCs in Turkana and Marsabit). This covers the deferred grazing systems and the riverine or range tree protection but the area is modest. The protection of certain areas (such as upper Turkwel Village Biodiversity Conservation Area) is a new idea that may work given time. In Botswana and Mali IVP did not achieve this establishment as communities were not ready.

2. Has the project provided regional and national data on indigenous production and management systems been significantly enhanced over their pre-project levels?

119. To a certain extent but much more could have been done on vegetation and land degradation status with satellite data.

3. Has the project rehabilitated indigenous vegetation in degraded rangelands, through reducing pressure on the vegetation resources? If so, where and over what land area?

120. In deferred grazing areas, vegetation has come back in Kenya but with no baseline and no quantitative biomass data it is difficult to answer with data.

4. Has the project assisted in the provision of alternative livelihoods, improved livestock markets and feed resources in other arid areas?

121. Alternative livelihoods have been promoted in all three countries but often unrelated to IV. It was difficult to draw the line between relevant and irrelevant alternative livelihoods. Little has been done on improved livestock markets. Feed resources have been increased a few selected areas of Kenya where grazing had been deferred and also in Mali where access to more feed will be helped by water provision but this may well have negative long term effects on feed resources.

5. Has the project Transferred technology and information to the primary target audiences?

122. To an extent yes, but it is difficult to see the outcomes of training except in a few key areas (hides and skins, gum Arabic, solar stoves). Commercial exploitation of marula, *Hoodia* and *Aloe turkanensis* etc will take years to show a profit and will depend on good marketing.

The terminal report of the regional unit summarized the progress of each component as follows:

Component 1: Establishment of appropriate indigenous management systems

123. Guided by the recommendations of the project's MTE in 2005, all three projects have concentrated their activities in the final two years on the development of management plans for sites. As all projects had disregarded to some extent the need for or had underestimated the task of consolidating ecological, socio-economic and cultural information pertaining to these sites, the assistance of consultants to assist them in developing these management plans became necessary in varying degrees. All three countries have reported that management plans have been developed (1 in Mali, 4 in Botswana, 2 in Kenya). In Botswana two of these plans have been endorsed by the relevant authorities without being explicit, though, to what extent management authority has been transferred to the communities and their respective management committees, which the project have set up. A matter of concern remains the capacity of the various communal institutions to implement these management plans. While Marsabit and Mali are of the opinion that these institutions are up to this task, it is generally acknowledged by all partners that local capacities to plan and initiate concrete activities are still limited. It is unfortunate that the projects have failed to recognize the necessity of sufficiently enhancing these capacities until very late in the project cycle. It would therefore be too optimistic to claim that these committees have been empowered (although much progress has been made in this respect) and that they are fully operational.

124. The establishment of a proper ecological baseline (biodiversity inventories) was held back by the long delays experienced in the contracting by UNOPS of the UoO, the disappointing level of commitment demonstrated by UoO in the execution of its contractual obligations, one of which was the development of a rangeland monitoring system, and the generally low priority given to this essential activity by the various projects until the UoO had submitted its proposal for rangeland monitoring in April 2005, nearly three years after the start of the project. Similarly disappointing was the fact that the national projects expended little effort on systematically collecting local or indigenous knowledge (IK) as it relates to plant and animal species and their use to natural resource conservation practices. Those who designed the project assumed that this IK would become a major constituent of the management systems that the project was to develop. Only the Turkana site in Kenya produced a report that catalogued this information. In all other cases, the collection of such information was primarily seen as a task for the project's research component. Mali, however, commissioned a number of studies to describe IK in the Nara project region, though fairly late in the project cycle. A synthesis of the information on IK which the RCU requested was never carried out. As a result there still exists at both the national and the regional level a need to consolidate and synthesize the volume of local knowledge and experiences that can be found in numerous reports produced by project staff, consultants and researchers, and to verify the value of this information for present day range resource management.

125. Because of the difficulties encountered in the development of an appropriate monitoring methodology and the late start of the actual monitoring activities, it is too early for an assessment of whether or not the interactions between the various communities and the project have had a detectable positive impact on various parameters of vegetation condition and resource health. Even if these difficulties had not emerged, it would still be very unlikely that any clear trend could have been detected considering the project's short lifespan. The

case of Marsabit, where interventions in natural resources management have been on-going for several decades, clearly demonstrates that visible impact is necessary to convince communities in arid regions that simple and localized - but sustained - interventions can have positive environmental effects in the long run.

Component 2: Establishment of arid zones database and GIS

126. Under the previous component reference was made to the deficiencies in the collection of information on local knowledge and to the lack of a concerted effort to synthesize that information. Such a synthesis should have resulted in an inventory and regional overview of local perceptions of the degradation processes found in arid regions and in an assessment of the relevance of this (historical) local knowledge for resource management under present day conditions. Considering its regional character, such a synthesis would have been a useful contribution and a valuable output of this project. A scientific conference, which is currently being organized by UNEP and the University of Oslo, will address this issue more in detail.

127. One of the project's aims was to develop a database that would contain all relevant information from the three participating countries on arid land degradation and biodiversity conservation issues. Of particular interests were topics such as agro-pastoralism, rangeland management, land tenure, and indigenous knowledge. This database was to be used by the project and its partners to pool resources and exchange information for the purpose of formulating effective approaches to the development of appropriate management models for the rangeland resources in the participating three countries. With such a data system the project intended to promote the sustainable use of dry land ecosystems, primarily by providing up-to-date information and guidance for the formulation of appropriate dry land policies and management strategies.

128. In 2006 the project engaged a firm to design and create such a database in collaboration with project staff and partner organizations in all three countries. In collaboration with the three National Project Units and their respective partners workshops have been organized to define the contents and structure of the database, and to form the national networks necessary to maintain and update the database once it is completed. This is expected by the end of September 2007.

Component 3: Rehabilitation of indigenous vegetation

129. Rangeland rehabilitation is the main objective of the management plans that have been developed; as a communal activity, soil conservation and restoration constitute important elements of each of these plans. All three projects have tested different rehabilitation techniques. In Kenya two conservation sites have been created, totaling 115 ha, and deferred grazing management has been introduced on an area of approx. 245 ha. In Mali several enclosures have been established that excluded grazing and browsing from heavily degraded rangeland areas near settlements. These enclosures have unequivocally demonstrated to the communities that their over-used rangelands have a strong regenerative capacity and thus still possess the potential to respond to proper management. Unfortunately, attempts to scientifically capture the effects of these enclosures had to be dropped due to the late start of

the research programme, which shortened the time available for observations and measurements. Also in Mali, a number of soil rehabilitation techniques were demonstrated to selected communities in collaboration with the Service de la Conservation de la Nature. These demonstrations have been much appreciated by the local population principally because of their water conservation effects rather than their beneficial impact on the re-vegetation of denuded areas. In Botswana, the project has established a number of small demonstration objects, showing the potential for sand dune stabilization by both active and passive revegetation of mobile dunes.

130. The projects in Kenya and later in Mali and Botswana introduced community members to technologies aimed at reducing the local consumption of fuel wood. All three projects report appreciation by community members for these technologies, but unfortunately, no systematic collection of data was carried out that support these claims and that could provide accurate estimates of the true ecological and socio-economic impact of these conservation technologies. Only the project in Mali incorporated fire control measures in the management plan that it developed. Although the project promoted the formation of fire-fighting teams in the communal management area, implementation of these and other measures depends on the approval by the regional authorities charged with fighting wildfires.

Component 4 Improvement of livestock production and marketing, and provision of alternative livelihoods

131. One-and-a-half years into this project, the three national project managers agreed that at livestock marketing and livelihood improvements were important to ensure active community participation. Small livelihood projects were seen as a way not only to reduce communities' dependency on livestock, to improve economic diversification and to contribute to their food security during droughts. Livestock marketing was seen as having the potential to increase household income and to reduce pressure on the resources at the same time. Based on these views, an international consultant was contracted to collaborate with local livestock-marketing specialists in Mali, Kenya, and Botswana in inventorying policy frameworks and strategies governing livestock-marketing in these countries. The study concluded that there were clear opportunities to improve peoples' wellbeing through livestock and livestock product marketing in each country. The most promising interventions were listed for each site separately but only some of them were implemented by the projects It was only IVP-Kenya that, in collaboration with that country's MoLF and other development organizations, made a effort to improve the conditions that allowed collaborating communities to take better advantage of existing livestock and livestock by-product marketing opportunities.

132. Several income-generating activities proposed by the communities in the community action plans (CAP) that were developed during the first year of the project, have been implemented, albeit in some cases with considerable delays. While some of these have been successful (horticulture and fish farming in Mali, hide and skin processing and marketing in Kenya), other similar attempts have failed, most notably in Botswana. It is believed that the extremely long delays between the planning of such activities and their eventual implementation, insufficient attention to marketing aspects, the generally low level of support given to the communities - especially following the recommendations of the MTE to de-

emphasize these activities, but also a dependency syndrome created by government handouts in the latter country, have all contributed to these disappointing results.

133. In support of attempts to broaden the economic base of communities, revolving funds have been operational from an early stage onwards in Mali and later in Botswana where the start-up of a scheme in the Kgalagadi South site was delayed by administrative hurdles and a number of requirements imposed by Botswana's Central Bank. The Marsabit site in Kenya set aside some project funds as a grant to assist communities in establishing their own revolving fund. The approach used by the three projects was almost similar in that functioning of the scheme relied heavily on peer pressure and social support to enforce repayment by individual members. In Mali, the project contracted a specialized NGO, Kondo Jigima, to run the scheme on its behalf. Kondo Jigima is an experienced micro-finance institution that has been operating in Mali for more than 16 years. This experience has undoubtedly contributed to the success of the scheme in that country.

Component 5 Technology transfer, training and regional comparative learning

134. Several field and exchange visits were organized by the RCU following the annual of the RPSC, allowing members and invited community representatives to observe project implementation in the country that hosted the meeting. One such visit was followed by a tour in 2004 by the project managers of IVP Mali and Kenya to the different communities collaborating with the project in Botswana.

135. The main strategic objective of the project was to develop in collaboration with the various communities' management plans that would allow these communities to manage their communal natural resources in a more sustainable manner. Of the seven sites within IVP, Marsabit was by far the most advanced in terms of using participatory approaches to natural resource management and rural development. The IVP project in Marsabit benefited from many years of project implementation by various donors and agencies seeking to improve the livelihoods of the largely pastoral societies in Marsabit District. An excursion by project staff from Mali and Botswana to Marsabit took place in early 2005 giving them the opportunity to study the development process in that particular district and more specifically the design and implementation of rangeland management plans. The purpose of this exchange visit was to help the project teams in Botswana and Mali appreciate the importance of wide institutional backing for the success of community development interventions and to give them suggestions and advice in support of their own process of designing strategies for the development of community-based range resource management plans.

136. In 2006 a study visit was organized to Senegal and Mauritania for senior staff from the three projects together with the UNEP/GEF task manager to examine approaches used in Senegal and Mauritania to promote sustainable resource management by pastoral communities (sedentary and transhumant) in the project area of the Senegal-Mauritania Biodiversity Project. The delegation was asked to concentrate on those aspects that were considered relevant for the implementation of IVP at that time. Of special interest were the changes that had been made at the technical and institutional level by the Mauritania-Senegal project to attain a greater focus on the development of management plans that were accepted

and actively supported by the resource user communities. This was to be accompanied by an appraisal of the impact that the implementation of these plans was having on biodiversity conservation and the livelihoods of these resource users. As was the case with the visit to Marsabit, the objective of this visit was first and foremost to support the project teams in Botswana, Kenya and Mali in their attempts to develop community-based resource management plans in their own project sites.

137. Although such visits may not have resulted in the immediate use by one country of technology developed in another country, they undoubtedly broadened the view of project staff on issues related to land degradation and biodiversity loss in arid regions. Use of existing expertise would certainly have sped up and improved the quality of project implementation. In collaboration with IVP-Kenya the RCU organized the training programme of the University of Oslo for staff and associates from the three countries in participatory rangeland monitoring. This one-week course was held in Turkana in April 2005.

138. In a reaction to the slow progress made in the development of training programmes for staff and community members, the RCU asked the national project leaders (NPL) in 2005 to propose a comprehensive capacity-building programme. In the original budgets few funds had been set aside for this element of project implementation and IVP-Mali had no budget line at all for training activities. The expected two-year training programme was to include both capacity-building of communities and the training needs of staff and project partners who were expected to support the communities after termination of IVP. As the funds needed to execute the proposed plans greatly surpassed the sums set aside in the countries' budgets, the RCU decided to allocate some of its own funds to support the national projects in the execution of these plans. It also asked UNEP/UNOPS and the RPSC to review the regional budget in light of the established needs for much more community capacity-building. Providing communities with the necessary tools to actively participate in planning processes and to equip them with the skills to manage natural resources in a sustainable and participatory manner was the main objective of these programmes. Unfortunately the responses from the projects to these new funding opportunities were much delayed and full implementation of the capacity-building plans has not taken place. Regional funds for capacity-building have only partially been claimed and that, with the exception of the Kenyan sites, only at the last minute.

## Component 6 Targeted research and regional training

139. The expected output of the research and regional training component was the development of rational, scientifically documented management tools for natural resource management with general applicability in arid regions of Africa. A research framework, requested from the institution responsible for implementing this component, the University of Oslo, as early as December 2002 was produced in February 2005. By that time, project partners had lost patience with this institution and demanded the immediate involvement of national research institutes in the execution of site-specific research activities.

140. The FE also concluded that the research component was clearly the weakest of many weak links in the project. One-third of the MTE covers the shortcomings of the research

component, which included language problems, the inadequate research plan, the relevance or otherwise of indigenous knowledge (IK), lack of environmental assessment, ecological monitoring data collection and collation etc. There is little point in repeating this. From the start there was communication failure and mistrust between partners, especially between Oslo on the one side and most of the other members of the RSC on the other. Relationships deteriorated almost to the point of complete breakdown. This was compounded by significant administrative delays (e.g. in signing the revised Oslo/UN contract), inadequate administrative capacity and misunderstandings between partners. The worst communication was between Oslo and Mali, which was made worse the infrequent visits by Oslo research leaders to Mali. Apart from the M.Sc. and data collection training, Mali had been almost completely ignored by Oslo.

141. It is difficult to pinpoint blame since accounts of the problems varied depending on perspective. From the outset, there were significant differences in the interpretation of the role and nature of research between participants. There was no common understanding or agreement about the meaning of the word "model", despite its importance in the project document. Although members of the RSC were fully aware of the lack of common definition, nothing was done to resolve this. Another critical factor was the time-scale for the application of research findings in the field. National offices expected research findings to be implemented within the lifetime of the project. The term "targeted research" was also not defined. The University of Oslo team leaders considered this to be field research, while in the national offices targeted research was assumed to be site-specific, problem-solving research, such as short-term field trials of alternative species, work on invasive species, effects of fire, storage of seeds, or literature studies to provide advice on immediate technical problems and concerns at the sites.

142. There was no agreement on the value, need for, and importance of research on this project. In Oslo it was a major component (as suggested by the project summary), while in the field it played a minor role (e.g. as in the Project Objective). In particular there was a mismatch in the expectations and understanding of the role and nature of research between the Oslo researchers and the staff appointed to lead the country and regional teams. So while Oslo research plans focused almost entirely on the collection of data and comparative regional studies undertaken by the 12 Masters projects, national leaders wanted more focused practical projects to be undertaken.

## Implementation Approach

143. An understanding of the role and needs of various stakeholders was essential particularly for those who were to be engaged in the execution and implementation of the project activities (UNDP, 2003). It was clear from the outset that the role of executing /implementing agency started immediately after the project was conceptualized and was consistent with the national policy objectives. The participation of MENR in Kenya through the design and planning stages before taking the execution or implementing role was notable. The project design allowed for an implementation arrangement that included a Regional Policy Steering Committee (RPSC) for providing policy guidance to both the Regional Coordination Unit (RCU) and the Technical Advisory Committee (TAC), based in Botswana.

The RCU was responsible for ensuring coordination in the activities of the three National Project Units (NPU's) and other project partners, provision of technical backstopping, dissemination of relevant experiences, and monitoring of overall project progress. The RCU also acted as the project's liaison office with the United Nations Environment Programme (UNEP), United Nations Office for Project Services (UNOPS), and the University of Oslo. However, the TAC was never created at the regional level. The Regional Technical Expert post was never filled and the Regional Coordinator did not have this function in his TOR so only limited technical advice was available to the national field teams.

144. In Kenya, the project was implemented by the MENR with the National Environmental Management Authority (NEMA) as technical coordinating institution. At the Marsabit site, implementation was undertaken by GTZ International Services (GTZ-IS) under contract with GoK and UNDP and a second field officer was responsible for day to day management. In the opinion of the FE, locating the NPU in Lodwar within one of the project sites and establishment of an efficient liaison office in Nairobi constituted a satisfactory implementation arrangement. The Government of Kenya continued with its support to the IVP in terms of timely and effective execution and implementation of all aspects of the project while UNDP was accountable for all resources provided to the national project sites. The participation of local communities in the decision-making, planning, implementation and appraisal of project activities was most beneficial in the eradication of their poverty. This also ensured that capacity building continued to be an integral part of the project. These roles and responsibilities, organizational linkages and administrative procedures and implementation of project activities were well streamlined.

## **Relevance of the Project Objective**

145. The Project Objective was Highly Relevant. The weaknesses of project design and implementation in no way detract from the importance of the Project Objective, although the project objective(s) could have been better formulated. The fundamental objectives of rehabilitating rangelands, conserving biodiversity, and working out ways for sustainable rangeland management by communities cannot be questioned. Overall progress towards achievement of the Project Objective is Moderately Unsatisfactory, irrespective of the well-intentioned activities in all three countries.

## General comments by FE on Outcomes

146. O-1 & O-3 Overall progress towards achievement of Outcomes 1 (establishment of appropriate indigenous management systems) and O-3 (rehabilitation of indigenous vegetation) overall is unsatisfactory. It is more satisfactory in Kenya but that is owing to IVP taking over from previous projects of long duration (particularly in Marsabit).

147. O-2 Regional Database: Even the purpose of the database remains undefined. (see details under ratings for Oslo below). In June 2006, it was agreed by the RCU that UNEP (using NORAD funds) would give a contract for a regional database. In January 2007, UNOPS concluded a USD 300,000 contract with Kimetrica. The database would contain all relevant information on dry land degradation and biodiversity conservation from the three

participating countries. The themes covered include agro-pastoralism, rangeland management, land tenure, indigenous knowledge, etc. The database was meant to allow the project, its associates and its contractors at project sites in Mali, Kenya and Botswana to store, manage, and retrieve project information for the purpose of formulating effective strategies in the development of appropriate management models for the rangeland resources. As the project will close as the database is ready, this will not happen. The database was expected to contribute to one of the aims of the project, namely the emergence of a network of policy makers, government staff, NGOs and extension personnel in the three countries who can communicate and collaborate on issues pertaining to the management and sustainable use of dry land resources. It is hoped that other projects will increase their ability to promote the sustainable use of ASAL ecosystems by being able to access up-to-date information and guidance for the formulation of appropriate ASAL policies to make accessible (in both English and French) pertinent data from other sources to fill information gaps.

148. Kimetrica was also expected to train key staff of the three Government departments that supervise the implementation of the IVP, in the use, maintenance and regular updating of the information management system. This was to include manuals in French and English that will enable trained staff to operate the system once it has been handed over to the project. The FE could not find information about the IVP on its website but was able to see information on numerous other projects in Eastern Africa.

149. The most useful database on vegetation monitoring at the sites throughout the project that would have been cheaply available from NOAA was never requested.

150. O-4 Alternative livelihoods Progress towards the achievement of and improvement of the major focus alternative livelihoods, livestock marketing and fodder resources is Moderately Satisfactory. The level of community participation is Satisfactory. Local communities appreciated the activities; goodwill has been achieved, although there were cases of frustrations and accusations of unfulfilled promises. The quality of the livelihood interventions is mixed, but is generally Satisfactory. The strategic linkage between alternative livelihoods and the Project Objective is weak and is rated as Unsatisfactory. In promoting alternative livelihoods, IVP lost sight of the project objective. In general, the project seemed to be a Rural Development Project rather than an Indigenous Vegetation Project.

151. O-5 Technology transfer, training and regional comparative learning. Technology transfer was Moderately Satisfactory but the linkage to the Project Objective, as in the design, has often been weak. Training of communities was Satisfactory. Training for skills needed for alternative livelihoods is Satisfactory. Training in the skills needed for community-based management of rangelands is Unsatisfactory. This essential type of training is not clearly defined in the logframe. Progress on regional comparative learning is Unsatisfactory. There have been little or no results to disseminate

## Ranking of Oslo's performance on research.

152. MTE's tentative ratings for Oslo's performance are as follows:

153. Regional Training of 12 MSc students: Satisfactory but it would have been much better to have linked the students to local (national) universities in their home countries.

154. Appropriateness: Moderately Satisfactory (no courses on range management)

155. Timeliness: Moderately Satisfactory (should have been organized to give Mali students time for language training).

156. Establishment of the regional arid zone bio-database

157. Appropriateness: Unsatisfactory. There is inadequate documentation defining objectives, purpose and methodologies for how the database will be used.

158. Quality: Moderately Unsatisfactory. There were no clear protocols given for the data gathering exercise.

159. Timing : Unsatisfactory (Started three years into project)

## Site-specific research

160. Oslo did not provide technical advice, nor did they facilitate the proposed research in 2005 by fast-tracking the revised contract. The site-specific research carried out by local institutions is moderately unsatisfactory because of the failure to make it bottom-up and understandable and relevant to communities. Rating: Unsatisfactory

Ability to follow GEF BD2 Guidelines.

161. These guidelines were only made known to the project at the RPSC meeting in February 2005. The integration of Project activities into the programmes of various government technical services in the field was Satisfactory. However, the involvement of government services and other actors has primarily been around alternative livelihoods and has not focused on the development of community-based range management systems. There has been little private sector involvement in project activities to date (Kenya/Turkana is an exception). CBRM should have been viewed as a productive sector initiative resulting in increased livestock product. Mainstreaming of CBRM into government policies and programmes is still a major challenge. Rating of measures taken to conform to BD2 Guidelines: Moderately Unsatisfactory.

## Stakeholder involvement

162. The project involved the relevant stakeholders in all countries through information sharing, consultation and by seeking their participation in project's design, implementation, and M&E. Rating: **Satisfactory** 

163. The project implemented appropriate outreach and public awareness campaigns. Rating: Satisfactory

164. IVP project consulted and made use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the design, implementation and evaluation of project activities. Rating: **Satisfactory** 

165. The perspectives of the beneficiaries and those who would be affected by decisions, those that could affect the outcomes and those that could contribute information or other resources to the process were not sufficiently taken into account while taking decisions. The project was still rather Top-Down and despite the goodwill generated at community level, so this will negatively affect sustainability. Community empowerment was an objective but not truly achieved. If communities are left to their own devices, not much will change after the project closes. Rating: **Moderately unsatisfactory** 

166. Involvement of relevant vulnerable groups and the powerful, the supporters and the opponents, of the processes properly involved. This was very difficult to assess owing to the wide differences in all the project sites and countries. Rating: **Moderately satisfactory** 

167. Assess the mechanisms put in place by the project for identification and engagement of stakeholders in each participating country and establish, in consultation with the stakeholders, whether this mechanism was successful, and identify its strengths and weaknesses. Rating: **Moderately unsatisfactory** 

168. The degree and effectiveness of collaboration/interactions between the various project partners and institutions during the course of implementation of the project was poor at the higher level (UNDP/UoO/RSC etc). It was much better at field level between project and ministries, NGOs etc. Rating: **Variable; Satisfactory to unsatisfactory** 

169. The degree and effectiveness of any various public awareness activities that were undertaken during the course of implementation of the project was better in some places than others. IVP did not have wide recognition except at project sites. Rating: Moderately unsatisfactory

## Financial planning

Strength and utility of financial control

170. IVP had appropriate financial controls, including reporting and planning, that resulted in management taking informed decisions regarding the budget. Timely flow of funds was a major problem after the introduction of ATLAS, the new financial accounting software at UNDP in early 2004. This was blamed on major delays in funding. In fact, ATALS is a highly efficient system but was perceived by many UNDP staff as user-unfriendly. It is clear that UNDP failed to provide adequate training programmes for its staff and this led to reluctance to adopt and learn a new financial package. As a result of the subsequent delays in funding and procurement in Botswana by both UNDP and Government, communities became frustrated with the project, partially offsetting the purpose of the micro-projects. Rating: Moderately unsatisfactory.

Planned budgets for project components and participating countries

171. Budgets are seldom realistic. For example, once the CAPs were formulated there was little money left for implementation. The budgets should have been adjusted according to the

differences in costs between the three countries. More money might have led to faster implementation. Rating: Moderately unsatisfactory

Supervision and administrative and financial support provided by UNEP/DGEF. Rating: Satisfactory.

Administrative and financial support provided by UNDP/GEF and UNDP's country offices

Financial support was moderately unsatisfactory as a result of slow disbursement from UNDP; **unsatisfactory** in Botswana. In Mali and Kenya, it was **Satisfactory**.

## Co-funding

172. The promised co-financing materialized from NORAD. NORAD donated US\$ 680,200 for the University of Oslo, and the governments of the three participating countries contributed US\$ 2,650,300. After the MTE, three local universities each received US\$90,000 from the funds allocated to UoO. The FE also recognizes the contribution of in-kind co-financing to project implementation from Governments. The project received no leveraged resources. GTZ-IS contributed to the Marsabit component through GoK. Rating: **Satisfactory** 

## Financial audit

173. The project has applied appropriate standards of due diligence in the management of funds and financial audits. National audits were conducted and they noticed slow disbursement. Regional Unit had its own account, which made it much easier than relying on the UNDP system. Rating: **Satisfactory** 

174. In general, the financial management of the project was adequate but slow. There was clearly a problem in early 2004, as UNDP and UNOPS were switching over to the new Atlas financial accounting software but that was the fault of insufficient training by UNDP in using the software. The problems were especially acute in Botswana. Another problem with financial planning is the fact that the total budget for the three country programmes was divided equally among the three countries without regard to relative costs in each country. Botswana was the highest cost country and the most financially constrained. The overall ranking of financial management was **Moderately Satisfactory**.

## **UNEP Supervision and backstopping**

175. UNEP staff identified problems in a timely fashion and accurately estimated their seriousness. Rating: **Satisfactory.** Effectiveness of UNEP & UNOPS oversight to maintain project focus on Project Objective and effectiveness of project structures to resolve major problems was moderately satisfactory.

176. UNEP staff tried to provide quality support and advice to the project. Modifications were approved in time and the project was restructured where possible and when needed.

Unfortunately, many of the modifications had to be implemented by other agencies (UNDP, UoO) so it was difficult for UNEP to do this alone. Rating: **Moderately satisfactory** 

**177.** UNEP and the Executing Agencies did not provide the right staffing levels, continuity, skill mix, frequency of field visits. IVP needed a Technical Coordinator and the project suffered as a result. UNDP could have been much more proactive in firm decision-making over renewal of staff contracts and hiring new staff. The project suffered greatly in Botswana as a result. National units started before Regional Unit: Regional Coordinator should have been hired at project launch. Rating: **Highly unsatisfactory.** 

## Cost effectiveness

**178.** The FE concluded that IVP was not cost-effective, in view of lack of real outcomes and the fact that a regional project was not justified. The project was not the least cost option. The most effective option would have been five site-specific projects. In addition, project implementation was delayed considerably and this affected cost-effectiveness. The cost-effectiveness of the project towards achievement of the Project Objective is **Unsatisfactory** 

## Impact

**179.** The impact on biodiversity conservation and rangeland rehabilitation in the three countries is low. Local impact is likely in the deferred grazing sites in northwestern Kenya and tree conservation in Marsabit, but the effects of this on a district, national or regional level would take decades to disseminate. The reality is that in spite of IVP, loss of biodiversity in all areas is increasing. In the absence of any baseline or monitoring system at the sites, little can be said about IVP's impact on biodiversity. The damming of the Turkwel in Kenya and the fencing of blocks for rainfed agriculture in Botswana may actually be causing some increase in the loss of biodiversity through conversion/ clearing. The only successful and replicable technologies to date are the traditional systems promoted in Kenya. Exclosures are not replicable except possibly the biodiversity conservation areas in Botswana. Rating: **Unsatisfactory** 

## **Indigenous Knowledge**

180. Indigenous knowledge has been promoted for the management of rangeland but not backed up by hard science. For example, a major knowledge gap is that pastoralists do not know how much extra biomass is produced in deferred grazing systems against continuous grazing systems. Initiatives for capturing indigenous knowledge had been taken by Kenya in particular. Integration of IK into management systems has not really taken place. Rating: **Moderately Unsatisfactory**. The supplementation of indigenous knowledge with scientific knowledge and practical experience for CBRM was not done. Rating: **Unsatisfactory**.

## Alternative livelihoods

181. The PD gave little strategic guidance as to what type of alternatives livelihoods should be developed or how they were to be linked to the Project Objective. The logframe mentioned

improved market outlets for range-based products but the written description in the PD was less specific. The IVP field teams see micro-projects primarily as a "buy-in" to gain community support or even as an end in themselves. The Regional Coordinator's perspective is that alternative livelihoods are necessary rural development alternatives for populations who are outgrowing the ability of their resource base to sustain them. Alternative livelihoods have grown to become the main project focus. These activities are highly demanding for a wide range of expertise/resources.

182. Alternative livelihoods can have perverse impacts. Pastoralists who benefit from increased revenues commonly invest in more livestock: in the absence of range management systems, that would only increase overgrazing. All of the alternative livelihood activities developed by IVP have been done without much reference to range management. Furthermore, the alternative livelihood activities have not even been focused on the pilot communities for CBRM development. In most cases, IVP field teams did not select specific communities for CBRM. The alternative livelihoods interventions have been characterized by a lack of strategic thinking and strategic linkages with the Project Objective.

# Timeliness, usefulness and relevance of the technologies generated for reversing land degradation & for management of indigenous vegetation.

183. The successful techniques tested by the project are mostly unsuitable for replication or scaling up because they are not economically viable. This includes the fenced exclosures in Mali and the intensive rehabilitation using fences and labour intensive half-moon water catchments. The deferred grazing scheme at Kaitese is the one relevant technology that can be replicated and integrated into grazing systems. On the other hand, one can't really say that the project has "generated" any new technologies. Rating: **Moderately Unsatisfactory** 

184. The project has mobilized and organized communities to implement initiatives that the communities themselves have identified. In Mali, communities that were initially skeptical are now much more open to participating in project supported activities. Communities in all countries provided labour and local materials for alternative livelihoods. The strength of alternative livelihoods is that it allowed buy-in from the community. The weakness is that not many of the livelihoods could be related directly to IV. Rating: **Moderately satisfactory** 

## Involvement of rural populations in the development of management systems.

185. In Kenya, it was the local communities that took the initiative to ask IVP to help them reinvigorate their traditional technique of deferred grazing but the scale of these deferred grazing sites is small. In Mali and Botswana, no evidence of community involvement in the development of range management systems was seen (although there was clear evidence in Botswana that communities strongly wish to manage "their" rangelands). Rating: **Moderately unsatisfactory** 

## Effectiveness of delivery of technical expertise

186. The PD called for two professional level positions at the RCU, a Regional Coordinator and a Regional Technical Advisor (RTA). The need for range management & CBNRM expertise was high. The RTA post was not filled for budgetary reasons. The RC's TORs were not modified to include a technical advisory function; this was primarily UNEP's responsibility. The RCU had no formal role in providing technical support to the country teams and the pilot sites. The Technical Advisory Group (TAG) was not created and Oslo did not play a technical advisory role as they were rarely at the field sites. The effectiveness of the delivery of technical expertise to the pilot communities is rated as **Unsatisfactory**.

## **Country Ownership**

187. The project was designed by UNEP working with the three governments and with a national consultant in each country. Governments were clearly involved in project development, but they also did not have a full understanding of some key aspects of project design. None of the three governments understood that CBRM can only be done if the target communities are empowered to control access and to manage their resources. Mali had no understanding of why Oslo was brought in as an executing agency for the research component. None of the countries understood why UNDP was brought in at the end as a co-implementing agency with UNEP.

188. The empowerment of communities for range/resource management is in general agreement with the policy frameworks for Mali and Kenya and government representatives at all levels are generally supportive of the need to empower the pilot communities in those two countries. This is not the case in Botswana where the legal and policy framework is not supportive of community empowerment and where the IVP National Coordinator representing government has expressed his desire that IVP should develop a "technical model" for range management without empowerment of the pilot communities. A theoretical model that is not tested in the field with an empowered community management institution would serve little purpose.

## Replicability

189. IVP has little to replicate in terms of community-based range management systems. The deferred grazing technique developed in Turkana is definitely a technique to be integrated into management systems in other rangelands. Rating: **Unsatisfactory** 

## Monitoring and evaluation

190. Although delays were obvious at all stages of the project (e.g. from site mangers to project managers, and thereon upwards, timeliness of reporting was considered moderately satisfactory. What was less satisfactory was the quality of reporting. As the project objective was to develop models for biodiversity conservation and restoration of degraded rangelands, it was critical to monitor these two objectives. This required that appropriate indicators and baseline values be established at the beginning of the project. The development of an ecological monitoring system was the responsibility of Oslo. The first RPSC meeting was

held in November 2002 at the start-up of the project. The ecological monitoring system and the first ecological monitoring transects were not established until the beginning of 2005 in Botswana. Kenya has since been done and the baseline is not fully established in Mali. Even so, the available documentation on this monitoring system did not allow the research evaluator to determine its adequacy. Ecological monitoring on the project has been **Unsatisfactory**.

191. The principal M&E tool for the project is the Annual Project Review (APR) or Project Implementation Review (PIR). Most of the ratings were generous: mainly Satisfactory with some Moderately Unsatisfactory ratings. Only targeted research was rated Unsatisfactory. When compared with the ratings given by this document, this suggests the APR has not been an effective M&E tool for reflecting the project status. The RC reports that the project lacks an effective internal M&E system. The overall rating for M&E on the project is **Moderately Unsatisfactory**.

| Criterion  | Evaluator's summary comments  | Rating |
|--|---|--------|
| Attainment of project objectives   | The project did not attain objective  | MU     |
| Sub criteria (below)   | Except perhaps at very local level  |        |
| Effectiveness Project's effectiveness weak                                     |   | U      |
| Relevance  | Some of the project objectives & results relevant to land degradation   |        |
| Efficiency   | Delays compounded implementation  | MU     |
| Sustainability of Project<br>outcomes (overall rating)<br>Sub criteria (below) | Project too short for sustainability  | MU     |
| Financial  | Funding problems seen as ma<br>constraints<br>during IVP life. Outcomes of the proje<br>dependent on continued finant<br>support. | U      |
| Socio Political  | Land degradation awareness created<br>both<br>government and community level  | MS     |
| Institutional framework a governance   | Botswana not fully incorporated into Govt. structure  | MS     |
| Ecological   | Site specific interventions too small   | U      |
| Achievement of outputs a activities  |   | MU     |

## **Overall Ratings Table**

| Monitoring&Evaluation<br>(overall rating)<br>Sub criteria (below) |  | MS |
|---|--|----|
| M&E Design  | Far too complex; Kenya retrofitting<br>Worse             | MU |
| M&E Plan Implementation (use for<br>adaptive management)          | All national projects tried to implemen<br>Effectively   | MS |
| Budgeting and Funding for M&E<br>Activities                       | Adequate   | MS |
| Catalytic Role  | Modest   | MU |
| Preparation and readiness   | Delays in starting                                       | HU |
| Country ownership / drivenness                                    | Adequate but ownership should be<br>community level      | MS |
| Stakeholders involvement  | IVP tried hard but sustainability highly<br>Questionable | MS |
| Financial planning  | Adequate   | S  |
| UNEP Supervision a backstopping                                   | Good but UNEP over-generous in PIF<br>Ratings            | S  |
| Overall rating  | Far too difficult to implement in 5 year                 | MU |

## Sustainability

192. Sustainability of IVP will be very low without further support. In none of the countries will Government support continue at a high level so sustainability has be at the community level and communities are insufficiently empowered politically, socially or technically. There are few community-based range management systems to sustain as they have not yet been developed except at very local level (e.g. local *epaka*). Positive working relationships with government technical services and local authorities have been achieved but CBRM systems are still to be developed. No commitments of ongoing funding for continued support of CBRM have been identified except perhaps in Marsabit. Another key hurdle involves policy/legal/regulatory reforms to sustain CBRM. Although the general policy environment is supportive in Mali and Kenya, the clear definition of legal tools for CBRM remains a challenge in all countries. It presents an especially difficult challenge in Botswana. Rating: Unsatisfactory

## **Research benefits to communities**

**193.** The FE has not seen any benefits from any of these sources nor was it aware of any recommendations from Oslo/Noragric on how to develop community-based range

management systems or on techniques that would be appropriate for specific sites. The FE considers that the research aspects of IVP were greatly over-emphasised. Rating: **Unsatisfactory** 

| Factor                            | Comment   | Ratin |
|-----------------------------------|---|-------|
| Stronger institutional capacities | Yes but Governments may lack                        | ML    |
|                                   | funds & commitment to continue                      |       |
| Legal frameworks                  | Some trusts created and some local                  | MU    |
|                                   | autonomy has resulted                               |       |
| Socio-economic incentives         | Several esp. in Kenya but not many                  | ML    |
|                                   | were related to indigenous vegetation               |       |
| Public awareness                  | Minor; many had never heard of IVP                  | U     |
| Community awareness               | Good but project too short to ensure sustainability | U     |
| Scientific research               | Very little evidence of usefulness to communities   | U     |
| Overall                           |   | MU    |

## **Ratings on Sustainability**

## **Ratings of Project M&E**

|                            | Comment                | Rating |
|----------------------------|------------------------|--------|
| M&E Design                 | Complex & unachievable | U      |
| M&E Plan Implementation    | Late implementation    | MU     |
| Budgeting                  | Slow flow of funds     | MU     |
| Funding for M&E activities | Adequate               | S      |
| Overall                    |                        | MU     |

## Lessons Learned

194. When developing projects for the sustainable management of natural resources, it is critical to involve people with experience in natural resource management in project development. It is important to recognize that there are relatively few examples of sustainable management of natural resources in most African countries. Most of the civil servants working in the NR sectors have experience with natural resource administration but relatively few have experience in NR management in the field.

195. There is an emerging body of lessons learned and best practices on CBNRM. These need to be captured and integrated into project design. The most critical condition that must be fulfilled before one can begin to develop a CB management system is to have a representative community management authority that is empowered to control access to the resource that they are to manage. Government commitment to empowering communities should be very clearly defined and documented in the PD. Governments always pay lip service to this vision but in practice top-down decision-making remains the norm

196. When designing a project that is to tackle one of the most difficult challenges in natural resource management, it is critical to focus on the outcomes. The IVP logframe is full of

elements whose strategic linkage to the project objective was not clear. For the development of community-based range/vegetation management systems, the field teams recruited or appointed should include sociologists, community development experts and animal scientists, not just foresters. What were needed were specialists with field experience. Researchers do research often for the own ends and career enhancement. It is only exceptionally that researchers can serve as effective technical advisors for the community in the development of community-based resource management systems.

### **Community attitudes to range management**

197. A major lesson learned was that IVP grossly over-estimated the levels of awareness and education of the communities. CBNRM projects in Africa suggest that the following are essential in the development of empowered community management structures:

198. A single village (or a group of villages) may come together voluntarily to form a management structure or institution, representative of the entire community and expected to manage community lands and resources.. Before the group can be empowered to control access rights, they need to negotiate and agree with their neighbours on the boundaries of the lands that they are to manage. This often takes a considerable time (in Botswana, it took several years). Most importantly, the community management structure must be empowered by government to control access and to manage "their" lands/resources. This requires strong government commitment. This was seen in Mali but less so in Botswana, where the Government commitment to communal land appeared not as whole-hearted as it could have been. Control of access is vital for CBNRM: community managers must be able to enforce rules governing the use of resources on their own members. People from outside the community wishing to access the community's resources must negotiate conditions of access with the empowered community management structure. Some object to the idea of the need for defined limits to the lands/resources to be managed.

199. Successful CBNRM requires effective institutional capacity development for community. This includes good governance, accounting and business management skills (communities need to manage their lands as a profit-making business), NRM capacities, equitable sharing of the costs and benefits of resource management, revenue generation to cover management costs and generate benefits for community members, and oversight and support from government/authorities. IVP PD paid scarce attention to these critical elements of community-based natural resource management. The FE considered the word "community" in this and related projects a loose term, overused and usually ill-defined. A community is a group of people living in a specified or defined area, which may or may not have something in common. What the project should have aimed to do was to help "vested-interest groups" of livestock keepers to improve their production system and provide some safety nets during prolonged droughts. Since overgrazing exacerbates the effects of drought by shortening the duration when adequate grazing is available, these groups have to be taught that overgrazing is the result of too many animals. None of the communities the evaluator spoke to seemed to understand this concept clearly. Likewise, none of the community members understood simple range/livestock concepts such as the correlation between leaf area, photosynthetic activity and annual plant biomass production. This was more of a problem in the Botswana and Kenya sites where livestock grazing is more or less constant year round. In Mali, the problem is intense seasonal overgrazing from transhumant pastoralists but the result remains the same, land degradation and loss of plant (and other) biodiversity. These concepts may be simple but they are not traditional. Sound range management depends on an understanding that grazing during the rains and immediate aftermath should be avoided in dry season grazing areas in order to maximize primary production. Likewise, pastoralists need to know when to cease grazing to avoid removing the root systems of perennial grasses. In practice, this is rarely seen. In a 'free for all', overgrazing is seen as the maximum use of available resources.

## **Recommendations for the design of future GEF projects**

200. A FE has the mandate of recommending a few actionable proposals regarding improvements of similar projects in the future. The most essential recommendations are as follows.

## Feasibility of objective

201. The design flaws in the PD have been exhaustively discussed by the MTE and subsequent Steering Committees. The objective of the IVP was in fact three objectives: to conserve indigenous vegetation, to improve communal range management, and to develop sustainable management systems using indigenous knowledge. As the project was carried out on communal land, all three objectives were reasonable, essential and valid. But they were also not feasible in the time allocated. The third objective may overplayed the importance of indigenous knowledge in modern range management and would have been better stated as improving range management by drawing on indigenous knowledge where relevant.

202. There was a major disconnect between the project objective as required to attract GEF funding and the wishes and expectations of the beneficiaries. The focal areas were biodiversity and land degradation but very little consideration seem to have been given to the time needed to build the capacity of the beneficiaries sufficiently to get them to engage strongly in the focal areas. The challenge of communal natural resource management is immense in all countries and in all ecosystems. Communal range ecosystems in Africa are the home of, and are used by, the poorest of the poor. These people are often the most disenfranchised, the most neglected, and the least educated of all communities, in part because they are often nomadic or transhumant pastoralists.

203. The lesson for future related projects would be to consider implementation in a minimum of two phases *viz*. capacity-building for communities and establishment of Land Trusts and Phase II, implementation of appropriate community-based range management. As GEF does not fund phased projects, a minimum of ten years would be required to show any impact.

## Simplification of objective, outcomes and activities

204. The IVP objective was too complex and too wide-ranging. Projects like IVP should have one clear objective with a limited number of simple outcomes resulting from achievable outputs. The project outputs are necessary for achieving the objective but it was often difficult to see which activities related to which outputs. For example, was Gum Arabic production biodiversity conservation or an alternative livelihood? The outcomes are the likely or achieved short- to medium-term term effects of a project's outputs that have an effect on the wider community or ecosystem. The activities should also be succinct and relevant: the retrofitted Kenya logframe had 75 activities specified.

205. All of the GEF implementation agencies need to develop more effective methods of capitalizing on lessons learned and best practices from other GEF-funded projects before designing new projects. None of the IVP country field teams or RCU staff were aware of the recent, relevant experiences from the UNDP/UNEP/GEF Senegal Mauritania Biodiversity Project or of the UNDP/GEF Integrated Ecosystem Management Project in Senegal. Both of these projects are also developing community-based range management systems. Where were the lessons learned in the IVP PD?

## Justification of regional projects

206. UNEP-GEF projects are often regional in context. The regional nature of the IVP project was easy to justify at the outset because it was hoped that ideas and experiences from CBNRM in one part of Africa would assist the projects in other parts of the continent. In fact this never happened because of the long time needed for community development. Moreover, the similarities of the ecosystems in Kenya, Mali and Botswana are deceptive. The dissimilarities (especially between the pastoral communities in the three countries) are far greater.

207. Language differences also played a part in the functioning of the regional project. First, there was the French-English divide. The FE team sensed that the Francophone part of the project occasionally felt sidelined and this was often exacerbated by the standard of technical translation (e.g. the English version of Rapport Final of IVP Mali, August 2007). A further linguistic barrier was obvious in Botswana where communities were expected to implement a management plan in English, a language that many communities did not understand well.

208. In future, a similar project should ensure that the learning curve start modestly at district level. When success is achieved with a working and innovative methodology it could be upscaled to national level, and then eventually spill over into a transboundary project. The IVP started exactly the wrong way: it started regionally with blurred vision and no defined goal.

209. Three transboundary projects could usefully develop from the IVP. For example:

- 1. Kenya-Ethiopia-Somalia
- 2. Mali-Mauritania-Niger
- 3. Botswana-South Africa-Namibia

210. UNEP GEF was executing a difficult project under difficult circumstances. Such is the workload of UNEP GEF that they would probably have been better off delegating the whole project to UNDP country offices.

## Simplifying partnerships

211. UNEP GEF executed the project. The partners included UNOPS, UNDP, University of Oslo (with sub-contractors, and later national universities and institutions such as KARI, KEFRI etc) plus the Ministries in Mali, Botswana and Kenya. The effect of this multiplicity of actors and complexity of partnership led to long delays in implementation, and eventual falling out of some the partners. The result was that partners were quick to blame deficiencies on the shortcomings of others. It would be wise to consider whether multiple partners add value.

212. On partnerships with research organizations, the way forward might be to make more use local research institutions, where necessary backed up by backstopping contracts with institutions that have easier access to funding. But the research must be relevant and understandable to communities, more sociologically biased and ensuring full community participation.

## **CBNRM** in arid lands

213. Community based NRM is more of a sociological problem than a scientific one. The IVP project mistakenly considered that CBNRM would be significantly enhanced by research. Certainly very little experimental research was done; the research carried out being much more data gathering by young, inexperienced graduates. The project gives the impression of having been designed and reviewed by academics for academics. It would have had considerably more impact if experienced community development workers and practical range managers had assisted in designing and implementing it.

214. GEF must recognize that CBNRM is not primarily an academic and natural scientific issue. It is a sociological problem centered on poverty, lack of education and lack of opportunities. It must also grasp the nettle that arid lands have innately low carrying capacity for both humans and livestock. Once this carrying capacity is exceeded (and populations have doubled over the last 25 years) the result will inevitably be more poverty, land degradation, loss of biodiversity, increased conflicts over resources, and dependency of social safety nets (food and cash). To get out of this vicious cycle may require new thinking such as encouraging migration to higher potential areas. In Africa, this is often not feasible. IVP showed few signs of creative thinking where novel ideas were necessary.

## Annex I: National consultant report (Mali)





# **Rapport provisoire**

Ministère de l'Environnement et de l'Assainissement (MEA) Direction Nationale de la Conservation de la Nature (DNCN) Projet Végétation Autochtone (PVA)

**Evaluation Finale du Projet Végétation Autochtone (PVA)** 

Septembre 2007

Dr Hallassy SIDIBE,

Géographe des ressources, consultant en décentralisation et développement local

| AG<br>BEAGGES :<br>au Sahel | Assemblée Générale<br>Bureau d'Experts en Auto Gouvernance et Gestion de l'Environnement |
|-----------------------------|--|
| CAC                         | Comité d'Appui aux communautés   |
| CCL                         | Comité Consultatif Local   |
| CCN                         | Comité Consultatif National  |
| CIV                         | Comité Inter -Villageois   |
| CVG                         | Comité de Gestion Villageoise  |
| DAF/ME :<br>l'Environnement | Direction Administrative et Financière du Ministère de                                   |
| DNCN :                      | Direction Nationale de la Conservation de la Nature                                      |
| DNCT                        | Direction Nationale des Collectivités Territoriales                                      |
| FEM                         | Fonds Environnemental Mondial  |
| IER                         | : Institut d'Economie Rurale   |
| ISFRA                       | Institut Supérieur de Formation et de Recherche Appliquée                                |
| MEA                         | : Ministère de l'Environnement et de l'Assainissement                                    |
| OSC                         | Organisation de la Société Civile  |
| P. A                        | : Plan d'Aménagement   |
| PENRAF :<br>Femmes          | Promotion Energies Nouvelles Renouvelables pour l'Avancement des                         |
| PGVA                        | : Projet Gestion Végétation Autochtone   |
| PNUD                        | : Programme des Nations Unies pour le Développement                                      |
| PNUE                        | : Programme des Nations Unies pour l'Environnement                                       |
| P P                         | Périmètre Pastoral   |
| SADI                        | : Société d'Aménagement et de Développement en   |
| SARCO :<br>des              | Service d'Accompagnement et de Renforcement des Capacités                                |
| S C                         | Société Civile   |
| SCN                         | : Service de Conservation de la Nature   |
| SIG                         | : Système d'Information Géographique   |
| S COOP                      | Société Coopérative  |
| TDR                         | : Termes de Références   |
| UAC                         | : Unité d'Appui Communautaire  |
| UCR                         | : Unité de Coordination Régionale Ingénierie   |

# Sigles et Abréviations

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## Introduction

Le Projet Végétation Autochtone (PVA) du Mali s'inscrit dans un double contexte marqué par la mise en œuvre de la Politique de Décentralisation et du Cadre Stratégique de Lutte contre la Pauvreté (CSLP), à

travers le Plan d'Action Nationale de Lutte contre la Désertification (PANLD) et la Stratégie Nationale de Biodiversité (SNB). Financé par le Gouvernement du Mali en collaboration avec le Fonds Mondial pour l'Environnement (FEM) et la Coopération Norvégienne (NORAD) pour une période de 5 ans, le PVA est un projet régional de démonstration de la conservation de la biodiversité et de la restauration des écosystèmes dégradés dans les zone arides et semi arides de l'Afrique (Botswana, Kénya, Mali). Dans cette perspective, il s'est assigné les objectifs spécifiques et/ou résultas suivants : l'établissement et/ou le renforcement de systèmes appropriés de gestion de la végétation autochtone, l'établissement d'une Base de Données Biologiques des zones arides et semi arides, la réhabilitation de la végétation autochtone et des terres dégradées, l'amélioration de la production animale, de la commercialisation du bétail et d'alternatives de moyens d'existence, le transfert de technologies et l'apprentissage comparatif, la recherche ciblée et la formation.

Couvrant initialement les sites de Bamba et de Nara, à la suite des recommandations de l'évaluation à mi parcours réalisée en 2005, le PVA a été redimensionné et concentré sur le seul site de Nara.

La présente évaluation finale s'insère intégralement de ce contexte. Le rapport est structuré autour de 5 grands paragraphes ou chapitres :

- Les objectifs et la portée de l'évaluation ;
- La méthodologie utilisée ;
- Les performances et/ou résultats de l'évaluation ;
- Les leçons apprises et la pérennité du processus ;
- Les recommandations.

## Objectifs et portée de l'évaluation

## • Objectifs et portée de l'évaluation

#### 1.2.1 Les objectifs de l'évaluation

L'évaluation finale du PVA vise deux objectifs essentiels, notamment :

*En premier lieu* : établir le bilan global du projet sur la base de 3 axes : (1) la pertinence de la stratégie mise en oeuvre, les résultats, la répartition des rôles et des responsabilités, le processus décisionnel, l'équilibre entre le projet et l'enveloppe financière ; (2) les apports du PVA en termes d'appui à la décentralisation (promotion d'une démocratie de proximité), de lutte contre la désertification et de lutte contre la pauvreté, (3) l'appropriation de la démarche (pérennisation et réplication) par les principaux acteurs concernés (Collectivités, Services techniques de l'Etat, Société civile et les structures communautaires des mécanismes de gestion).

*En second lieu* : les perspectives et les orientations, en termes de stratégie d'intervention, de mise en œuvre et de contrôle. Des propositions seront faites concernant le montage institutionnel dans une perspective de pérennisation, les mécanismes décisionnels, les opérateurs, le contenu, en sachant que l'objectif est la réplication du projet. Les TDR de l'évaluation se trouvent en annexe 1

#### 1.2.2 La portée de l'évaluation

Financé pour une période de 5 ans, mais malgré un démarrage tardif de 18 mois, le Projet Végétation Autochtone du Mali, doit prendre fin en décembre 2007. Dès lors la nécessité pour le Gouvernement du Mali et ses partenaires techniques et financiers, de procéder à une évaluation finale, s'impose. Il s'agira pour le consultant d'une part, d'établir le bilan des actions réalisées, de capitaliser les acquis, d'en tirer les leçons apprises et, d'autre part de définir des orientations pertinentes dans une perspective de continuation et de réplication de cette expérience à d'autres communes ou régions du Mali.

## 2. La méthodologie utilisée<sup>2</sup>

La méthode d'évaluation utilisée est présentée à travers la grille d'analyse et les supports méthodologiques y afférents. Le calendrier de la mission et la liste des personnes rencontrées à Bamako, à Nara et dans les villages tests sont présentés en annexes. Enfin, les contraintes et limites de l'évaluation sont également évoquées.

## 2.1 L'approche

## 2.1.1 La grille d'analyse

La grille d'analyse de cette évaluation finale du PVA s'appuie sur les critères définis dans les TdR pour évaluer les politiques publiques et les projets/programmes. Elle comporte les éléments d'appréciation suivants :

- la pertinence ;
- la cohérence ;
- l'effectivité ;
- l'efficacité ;
- l'efficience ;
- l'impact/l'effet.

Le Tableau détaillé de la grille se trouve en annexe.

### 2.1.2 Les supports méthodologiques

La démarche méthodologique utilisée est de type participatif comme le suggèrent d'ailleurs les termes de référence. Elle est agencée autour de cinq étapes itératives :

- La préparation de la mission d'évaluation ;
- Les opérations d'évaluation sur le terrain ;
- Une séance de restitution des principaux constats et résultats préliminaires ;
- Une réunion d'échanges et de réflexion sur les propositions et orientations issues de l'analyse des résultats préliminaires ;
- La rédaction du rapport d'évaluation.

La description détaillée des supports méthodologiques se trouve en annexe.

## 2.2 Les contraintes et limites de l'évaluation

La mission d'évaluation a été confrontée à des contraintes de temps qu'il convient de souligner ici :

<sup>&</sup>lt;sup>2</sup> La réalisation de cette évaluation s'est inspirée d'un canevas méthodologique d'évaluation des projets et programmes selon les normes IRAM, élaboré par Agnes LAMBERT et Hallassy SIDIBE dans le cadre de l'évaluation du PDSU, 2007.

- Un temps de visite de terrain trop court, limité à 2 jours dont : 1 jour a été consacré à la visite des sites et des réalisations, 1/2 jour d'entretiens avec les partenaires stratégiques au niveau de Nara, et 1/2 jour de restitution et d'échanges avec les partenaires stratégiques niveau national à Bamako ;
- Les enquêtes de terrain n'ont porté que sur le site de Nara. Celui de Bamba n'est donc pas concerné par les présentes observations de terrain ;
- L'absence d'un dispositif de suivi-évaluation des activités avec des indicateurs chiffrés ;
- L'absence de choix de « *villages témoins* » pour recouper la pertinence des informations collectées auprès des villages tests.

Malgré toutes ces difficultés, les consultants tiennent à rappeler la grande disponibilité de l'équipe du PVA, des communautés bénéficiaires et des partenaires stratégiques tant au niveau national que local IIs se sont tous mobilisés pour faciliter le travail sur un temps très court.

## 3. Performances des résultats du projet national

Les performances et/ou résultats du projet national sont appréciés à travers l'examen critique de la pertinence du projet, l'effectivité, l'efficacité et l'efficience des réalisations et les différents apports par rapport à la décentralisation, la lutte contre la désertification et la pauvreté.

## 3.1 La pertinence du Projet

La pertinence du projet est appréciée à travers l'analyse de l'objectif général et de chaque objectif spécifique dénommé ici résultat ou composante, la pertinence de la répartition du budget entre les composantes, la pertinence de la stratégie mise en œuvre, enfin la pertinence et la cohérence du montage par rapport à l'objectif du projet.

## 3.1.1 La pertinence des objectifs

### 3.1.1.1 L'objectif général

L'objectif général du PVA visant "*la conservation de la biodiversité et la restauration des écosystèmes des terres sèches dans les zones arides et semi arides de l'Afrique*" est pertinent par rapport aux missions du Ministère de l'Environnement et de l'Assainissement (MEA) en matière lutte contre la désertification et par rapport aux politiques nationales en matière de décentralisation et de lutte contre la pauvreté au Mali. Cette dernière politique ou CSLP est le cadre unique de référence de toutes les politiques de développement.

### 3.1.1.2 Les objectifs spécifiques à travers les 6 résultats et/ou composantes

La pertinence des objectifs spécifiques et/ou des résultats est appréciée dans leur formulation et leur contenu en rapport avec la décentralisation, la lutte contre la désertification et les orientations du cadre stratégique de lutte contre la pauvreté (CSCRP) au Mali.

<u>Résultat 1</u>: Des systèmes de gestion autochtones appropriés sont crées et renforcés. Un tel résultat est pertinent par rapport à la mise en œuvre et à la consolidation des acquis de la décentralisation au Mali. Celle-ci prévoit l'organisation des populations autour de projets/programmes fédérateurs et leur participation active au processus de prise de décisions ainsi qu'au processus de planification du développement local. Ainsi, la création de Comités Villageois de Gestion (CVG) à base communautaire, de Sociétés Coopératives (SCOOP) et d'un Comité Intervillageois (CIV) de gestion des équipements, des aménagements et des infrastructures communautaires, est également cohérente avec les principes directeurs de cette politique.

<u>Résultat 2</u>: Une base de données biologique sur les zones semi arides et arides est disponible et opérationnelle. Ce résultat est pertinent pour un projet qui se veut novateur et expérimental. Ainsi, les activités liées au processus participatif de recueil, d'analyse, d'utilisation, de capitalisation et de diffusion de l'information sur les systèmes de gestion autochtones (prise en compte des savoirs et savoir-faire communautaires) encore inexploités, à partir d'une base de données biologique constituée et alimentée par un SIG, sont pertinentes et cohérentes par rapport à l'objectif général du projet.

<u>Résultat 3</u>: Les terres dégradées et la végétation autochtone sont restaurées et réhabilitées. Les activités réalisées au titre de ce résultat, comme la circonscription d'un périmètre pastoral assorti de plans d'aménagement et de gestion et d'une convention locale intervillageoise, la restauration et réhabilitation de zones dégradées, la plantation d'espèces autochtones, l'organisation de voyages d'études, etc., sont pertinentes et cohérentes avec l'objectif général et surtout avec la Politique Nationale de Lutte contre la Désertification à travers la mise en œuvre du Plan National d'Action Environnemental (PNAE) et la Stratégie Nationale de Biodiversité (SNB).

<u>Résultat 4</u>: La production animale et la commercialisation du bétail sont améliorées et des alternatives de moyens d'existence sont développées. La formulation d'un tel résultat est pertinente par rapport à la mise en œuvre des orientations du Cadre Stratégique de Lutte contre la Pauvreté (CSLP), notamment en ce qui concerne la diversification des sources de revenus et d'alternatives économiques pour les communautés pastorales et agropastorales : « l'amélioration de l'accès aux ressources alimentaires pour le troupeau (banques de fourrage, résidus des récoltes, points d'eau, y compris les produits laitiers), de l'accès aux services sociaux de base (information, infrastructures de commercialisation du bétail, puits pastoraux et maraîchers), et enfin de l'accès aux moyens de production (activités génératrices de revenus, micro-crédits, équipements, etc.) ».

<u>Résultat 5</u>: Le transfert des technologies, la formation et l'apprentissage comparatif sont assurés. Les activités initiées par ce résultat sont pertinentes et complémentaires de celles des résultats 1, 2, 3 et 4, par rapport aux politiques et/ou stratégies de lutte contre la désertification et la pauvreté qui, toutes deux, comportent également la notion « d'empowerment » ou de renforcement des capacités, visant à donner aux instances et/ou structures communautaires bénéficiaires, les formations techniques de base nécessaires et indispensables à l'accomplissement de leurs rôles et responsabilités dans le cadre de la mise en œuvre des activités prévues.

<u>Résultat 6</u>: La recherche-action est opérationnelle et la formation est assurée. En interaction avec le résultat 2, les activités de cette composante sont transversales ; elles sont pertinentes et cohérentes par rapport à l'objectif général. Il s'agit d'une relation dialectique entre « Recherche et Action » et, où les deux s'enrichissent mutuellement. Les informations ainsi collectées, analysés et capitalisées pourront servir de base d'analyses comparatives au niveau tant régional que national et local.

## 3.1.2 La pertinence de la stratégie du PVA

La pertinence de la stratégie de pilotage et de coordination du PVA est appréciée à travers : l'approche participative à la base et les méthodes qui l'accompagnent, le fait de mettre ensemble toutes les grandes catégories d'acteurs (Etats, collectivités locales, société civile, prestataires privés de services et communautés), le mode de ciblage des sites et des villages tests, le "faire-faire" par les Bureaux d'étude, les ONG et les entreprises plutôt que l'exécution directe par l'UNP, les communes ou l'administration. La pertinence de la stratégie est également appréciée à travers les problèmes de synergie avec d'autres acteurs et intervenants à l'échelle de chaque site (Nara et Bamba), et enfin, le dispositif de suivi et de contrôle des activités réalisées.

### **3.1.2.1** Pertinence de l'approche participative

## **D** Points forts :

- L'adoption d'une démarche participative, impliquant les populations villageoises des sites choisis, dans leurs différentes composantes (hommes, femmes, jeunes), est pertinente par rapport à l'objectif général et cohérente avec le résultat 1.
- Les méthodes d'animation utilisées pour mobiliser les populations des villages, l'organisation des AG villageoises de sensibilisation et d'information, les concertations intervillageoises de décision et de restitution, enfin la constitution de sous groupes d'intérêt (ou groupes solidaires) à travers les comités villageois de gestion et les sociétés coopératives pour l'identification de leurs problèmes et besoins prioritaires respectifs et leur mise en oeuvre, sont des méthodes cohérentes avec l'approche participative et avec l'objectif du projet.
- La mobilisation des outils MARP et/ou du Diagnostic Participatif (DP) pour réaliser les études socioéconomiques de référence et les monographies de sites, est cohérente par rapport à une démarche participative.
- Le mode de sélection des villages avec une forte implication du coordinateur national, des chefs des sites, des chefs de villages et de fractions, des élus, des comités consultatifs, des représentants des services techniques et des ONG, est pertinent et cohérent avec la démarche participative qui prévaut.

- La conception d'actions identifiées à la base est pertinente par rapport à l'objectif du projet et cohérente par rapport à une démarche participative dans un contexte de décentralisation et de lutte contre la désertification et la pauvreté.
- L'institutionnalisation de la participation des communautés villageoises de gestion à travers la mise en place des CVG, des SCOOP et du CIG, leur composition (femmes, hommes et jeunes) et de leur règlement intérieur, est pertinent par rapport à l'objectif du projet et cohérent par rapport à une démarche participative.
- L'implication des CVG, des SCOOP et du CIG à chaque étape du processus est pertinent par rapport à l'objectif du projet et cohérent par rapport à une démarche de gouvernance locale.
- La formation des membres des CVG et des SCOOP, en montage participatif des projets et en planification ascendante, est cohérente par rapport à leur implication à chaque étape du processus et par rapport à une démarche participative.

### □ Les points faibles

La mise en oeuvre d'une stratégie réellement participative n'est pas aisée. Les types de problèmes rencontrés sont : le caractère régional du projet, la lourdeur dans les procédures de recrutement et de décaissement, l'énormité des distances entre les deux sites (Bamba se trouve à 1250 km de Bamako et Nara à 400 km), l'analphabétisme des communautés et la durée très courtes pour obtenir les effets et résultats escomptés s'agissant d'un projet environnemental.

**3.1.2.2** Pertinence de l'approche multiacteur visant à mettre toutes les catégories d'acteurs ensemble Dans le souci d'obtenir une forte participation de l'ensemble des acteurs du projet, la stratégie utilisée par le PVA a consisté à mettre toutes les grandes catégories d'acteurs autour de la table de concertation. Au niveau de chacune de ces instances, les acteurs opérant sont représentés selon le niveau d'échelle les concernant. Les instances mises en places ont permis aux différents acteurs de prendre l'habitude de se rencontrer, de travailler ensemble et de trouver des solutions au fur et à mesure. Cependant, on peut faire observer que le niveau régional, notamment la DRCN, n'est pas actif dans ce schéma multiacteur.

#### 3.1.2.3 Pertinence du mode de ciblage des sites et des villages tests

La pertinence du mode de ciblage est appréhendée à travers le choix des sites de démonstration et celui des villages tests retenus.

#### **Le Ciblage des sites**

Les sites identifiés (Communes de Nara et de Bamba) pour la mise en œuvre du PVA sont situés dans des régions très pauvres et vulnérables perpétuellement aux prises avec la régression de la diversité biologique et la dégradation des écosystèmes, mais en même temps, dans des zones stratégiques du pays s'agissant des modes de vies des communautés (pasteurs et agropasteurs). Un tel ciblage est pertinent par rapport à la politique de nationale de lutte contre la désertification (à travers le PNAE, les Lois pastorale et agricole et la stratégie nationale de la biodiversité), le CSLP (ou CSCRP) et la décentralisation au Mali.

### Encadré 1 : Caractéristiques des sites d'intervention

Le site de Bamba en zone aride appartient aux écosystèmes les plus dégradés et pauvres du pays (1 100 mm). Il constitue un trait d'union entre la zone sahélienne et la zone désertique. Il est la pla tournante de la distribution des troupeaux de l'Azawad et du Haut Gourma Central. Au ni organisationnel, les communautés sont organisées en mode de vie nomade, semi nomade et séden suivant l'axe Azawad-Fleuve-Azawad.

Le site de Nara représentatif de la zone semi aride est situé dans la bande trans-sahélienn l'intersection des axes transfrontaliers Mali-Mauritanie (400mm). Le site est caractérisé par une grande pauvreté en dépit des grandes potentialités pastorales et agropastorales dont il recèle.

## **Le Ciblage des villages/fractions tests**

Comme cela a déjà été évoqué plus haut, le choix des villages/fractions tests a été réalisé avec la collaboration des principaux acteurs concernés par le projet sur la base de critères biophysiques, de vulnérabilité, de pauvreté, mais également de cohésion sociale et d'accessibilité.

#### 3.1.2.4 Pertinence du "faire-faire" par des privés et la contractualisation

Le choix des ONG, des Bureaux d'Etudes et des Entreprises pour la maîtrise d'œuvre sociale des infrastructures et équipements, est pertinent dans une approche qui consiste à « faire faire » plutôt que d'exécuter. Le choix de ces prestataires a obéi aux procédures de l'attribution des marchés publiques en vigueur pour des raisons de transparence et de bonne gouvernance.

### 3.1.2.5 Bilan financier (cf tableau en annexe)

Le coût total du projet pour les trois pays (Botswana, Kenya, Mali) s'élève à 13.384 millions de dollars \$US.

Le PVA a bénéficier de diverses contributions :•

Gouvernement du Mali : 500 000 \$US ;

Gouvernements du Botswana et du Kenya : information non disponible ;

• FEM : 2 633 247 \$US.

NORAD : 1 680 000 \$US (pour les 3 pays + la Coordination régionale ;

Pour l'utilisation de la contribution du gouvernement malien à travers le Budget Spécial d'Investissement (BSI), voir tableau détaillé en annexe.

En raison de la non disponibilité de certaines informations au niveau de l'UNP, dans cette analyse, nous ne sommes pas à mesure ni d'apprécier l'équilibre entre l'enveloppe financière et le projet encore mois la pertinence de la répartition du budget par composante.

### 3.1.2.6 Synergie avec d'autres projets/programmes et interventions

Le fait de travailler avec des intervenants dans les mêmes domaines est pertinent. Dans cette optique, le PAV a travaillé avec les ONG et structures suivantes : SCEEPDA (food for work, maraîchage), STOP-SAHEL (gestion des conflits et reboisement), AFAD (assainissement), le CCC (élaboration des PDSEC), le SCN (renforcement des capacités techniques en GRN, en techniques de restauration des terres dégradées, promotion des activités piscicoles et apicoles, constitution de la flore locale, etc.), le PENRAF (cuisinières solaires, séchoirs solaires, équipement des puits et des périmètres maraîchers). On peut cependant regretter l'insuffisance de synergie avec le PRODESO qui, depuis les années 80, continue de développer une approche similaire dans le Cercle de Nara.

#### 3.1.2.7 Un pilotage concerté à différents niveaux d'échelle nationale et locale

Dans le cadre de ses activités de pilotage et de coordination, le PVA a mis en place des organes de concertation. A l'échelle nationale, le Comité Consultatif National (CCN) est chargé de la validation/adoption des documents techniques et scientifiques produits dans le cadre de la mise en du projet, de l'élaboration des budgets /programmes trimestriels, semestriels et annuels, de la rédactions des rapports d'activités trimestriels et annuels. (A l'échelle locale, le Comité Consultatif Local (CCL) est chargé d'accompagner la mise en œuvre du projet à travers les prises de décisions, le choix des activités à mener, les bilans trimestriels et annuels. taires).

# 3.1.2 Mais inexistence d' dispositif de suivi évaluation pouvant aider à un pilotage cohérent du projet

Le système de suivi - évaluation mis en place par le PVA n'est pas pertinent pour mesurer les progrès du projet (effets/impacts). Il relève beaucoup plus d'un système de suivi et de contrôle des activités que d'un vrai dispositif de suivi-évaluation qui, lui, relève d'un cadre logique avec ses indicateurs de performance chiffrés.

### 3.1.3 La pertinence/cohérence du montage

La pertinence du montage du PVA est appréhendée à différents niveaux : son ancrage institutionnel, son organigramme, ses instances aux échelles nationale, régionale et communale.

# 3.1.3.1 Cohérence entre l'ancrage institutionnel et la Maîtrise d'Ouvrage par rapport à la finalité du PVA

Le PVA, comme nous l'avons déjà dit plus haut, est un projet de démonstration expérimental pour la conservation de la biodiversité et la restauration des écosystèmes dégradés dans les zones arides et semi arides de l'Afrique. A ce titre, au Mali, il intervient dans deux Communes ou sites sélectionnées de Nara et

de Bamba, avec une maîtrise d'ouvrage assurée par l'UNP à travers la DNCN (exécution nationale). Mais si l'ancrage institutionnel du PVA à la DNCN est pertinent, le fait d'assurer directement la MO au détriment des communes, par rapport à la finalité du projet et à la pérennité du dispositif de renforcement des capacités des acteurs à cette échelle au terme du projet, n'est pas cohérent avec la loi de la décentralisation.

#### Encadré 2 : Point de vue d'un élu de Nara :

Il faut constater une trop faible implication des communes dans la maîtrise d'ouvrage, alors qu'il s'ag réalisations à l'échelle des communes, dont elles ont la personnalité juridique...

## 3.1.3.2 Organigramme général du PVA

Le schéma qui suit (Cf annexe) présente de manière synthétique l'organigramme général du PVA. tel que le préconise le PRODC. A la lecture de ce schéma, l'organigramme du PVA est cohérent par rapport à la mise en place d'un dispositif expérimental de démonstration pour la conservation de la biodiversité et la restauration des écosystèmes dégradés dans les zones arides et semi arides de l'Afrique.

# 3.1.3.3 Organisation du PVA à travers ses instances de décision, de concertation et de gestion à différents niveaux d'échelles nationale, régionale, communale et communautaire

Au niveau national : La tutelle du projet est assurée par le Ministère de l'Environnement et de l'Assainissement (MEA). Le Comité Consultatif National (CCN), chargé des orientations du projet, est présidé par le Directeur National de la Conservation de la Nature, qui est en même temps le Directeur National du projet. Le CCN se réunit de façon périodique pour approuver les études techniques et présider aux destinées des programmes successifs. L'Unité Nationale du Projet (L'UNP) rattachée à la DNCN est chargée du pilotage et de la coordination du projet. Elle est composée d'un chef de projet, d'un assistant administratif et financier, d'un chauffeur et d'un planton.

Au niveau régional : la Division Aménagement de la DNCN est chargées des missions périodiques de suivi et de contrôle dans le cadre de la mise en œuvre du projet.

Au niveau communal : L'Unité d'Appui Communautaire (UAC) est chargée de la mise en œuvre du projet dans sa zone d'intervention ; elle est composée d'un forestier (chef de site), d'un agronome et d'un pastoraliste, d'un guide interprète et d'un personnel d'appui et est présidée par le chef de site ; il se réunit 1 fois par trimestre. Un Comité Consultatif Local (CCL) est chargé d'accompagner l'UAC dans la mise en œuvre du Projet. Il est composé de personnes ressources et est présidé par le Chef de village. Un Comité Communal de gestion (CCG) est chargé de la mise en œuvre de la convention locale.

Au niveau communautaire : l'Assemblée Générale Villageoise est l'organe d'information et de sensibilisation, elle est présidée par les chefs de villages et se réunit en fonction des évènements. Les concertations intervillageoises sont assurées par le Comité Inter Villageois (CIV) ;, il est chargé des prises de décision concernant la gestion du PP. Les Comités Villageois de Gestion (CVG), les Sociétés Coopératives (SCOOP) et les groupes solidaires sont chargés de la surveillance/contrôle et de la mise en œuvre des programmes, ils constituent également de petites entreprises locales pour la promotion des filières dans le cadre de la lutte contre la pauvreté.

L'appropriation de la démarche du PVA et la pérennisation des acquis passent forcement par un bon fonctionnement de l'ensemble de ces instances. Malheureusement, à ce jour, la plupart d'entre elles sont confrontées à des difficultés d'ordre matériel, techniques et financier. En particulier, celles qui ont été mises en place dans une perspective de désengagement du projet n'ont pas encore commencé à fonctionner, c'est le cas par exemple du CCG, du CIV et des CVG.

## 3.2 L'effectivité, l'efficacité et l'efficience du projet

L'effectivité, l'efficacité et l'efficience du PVA sont appréciées à travers sa mise en oeuvre, ses procédures en adéquation avec ses objectifs, le degré de mobilisation financière et enfin ses résultats en termes de réalisations (ou performances).
#### 3.2.1 Un démarrage très difficile

#### 3.2.1.1 Repères historiques du projet

Le tableau qui suit dresse quelques repères historiques du projet à partir des différentes étapes, les difficultés rencontrées et les modifications survenues par rapport au projet initial. (Cf Tableau en annexe)

#### 3.2.1.2 Des procédures administratives et financières lourdes

Le projet a enregistré un retard considérable dans son démarrage. En effet, le démarrage officiel prévu pour avril 2001, n'a finalement pu être effectif qu'en novembre 2002, soit un retard de 18 mois. Aux dires des sources, ce retard serait essentiellement dû à la lourdeur des procédures administratives et financières du PNUD, surtout avec l'application du Système Atlas. Ce retard a 'influé négativement sur les délais de mise en œuvre de certaines activités.

#### 3.2.1.3 Les principales contraintes

Dans son processus de mise en œuvre, le PVA a également été confronté à un certain nombre de contraintes majeures, notamment : le déficit de communication entre les sites et la Coordination Nationale et entre l'Unité Nationale du projet et la Coordination Régionale, déficit dû au dysfonctionnement du système Internet ; le retard du démarrage de la composante recherche ciblée avec comme conséquence la non vulgarisation des résultats obtenus ; le retard survenu dans la mise en place du fonds micro-crédit, et enfin, le retard lié au décaissement des fonds PNUD, avec l'introduction du système Atlas.

#### 3.2.1.4 Mais des réalisations importantes

Le bilan détaillé des réalisations par composante est synthétisé dans un tableau en annexe.

## 3.3 Apports du PVA par rapport à la décentralisation, à la lutte contre la désertification et la pauvreté

Il est encore trop tôt pour apprécier les effets du PVA par rapport à la décentralisation, à la lutte contre la désertification et la pauvreté. En outre, il n'existe pas de dispositif de suivi-évaluation permettant de prendre en compte les effets escomptés du PVA. Nous nous appuierons donc sur les entretiens avec les différents acteurs impliqués et l'analyse des différents rapports d'activités et d'évaluations à mi parcours pour porter une appréciation sur les différents apports du PVA.

#### 3.3.1 Les apports du PVA par rapport à la décentralisation

Les apports du PVA en référence à la décentralisation sont appréciés en fonction des rôles et responsabilités des différentes catégories d'acteurs impliqués dans le projet. Les points forts et les points faibles seront évoqués pour chaque catégorie d'acteurs, notamment : les communes, les services déconcentrés, la société civile, y comprises les communautés villageoises.

#### Points forts

#### Pour les communes :

#### • La clarification du rôle de chaque acteur

Pour les communes, les avis sont divergents en ce qui concerne le montage du projet et son apport par rapport à la clarification du rôle chacun.

#### Encadré 3 : Des points de vue variés par rapport au montage du PVA:

Pour une personne ressource du projet basée à Bamako, avant le recadrage du projet en 2005, c'était le total, personne ne comprenait le but réel du PVA. Est-ce un projet forestier de biodiversité ? Un pastoral ? Un projet de lutte contre la pauvreté ? En tous cas on se posait beaucoup de questions sur les r

des acteurs.

Pour le Président du Conseil de Cercle de Nara, le montage du PVA en ne donnant pas d'emblée la maî d'ouvrage aux communes, a créé une certaine confusion au regard de la Loi de la décentralisation.

Pour le Maire de Nara, la maîtrise d'ouvrage des communes doit être renforcée dans le cadre de la mis œuvre du projet et surtout dans une perspective de transfert des compétences à la fin du projet.

En revanche, pour un représentant de l'administration du projet, le PVA devrait permet à chaque acteu jouer son rôle, cependant en ce qui concerne le transfert de la MO, les communes, notamment celle de l n'a pas joué sa partition de façon effective.

#### • La cohérence des projets avec les PDSEC

Le PVA a contribué à l'élaboration de 5 Plans de Développement Economique Social et Culturel (PDSEC) en y intégrant la programmation des projets prévus au niveau des communautés. Ce qui va favoriser une contractualisation entre la mairie et les villages en ce qui concerne l'élaboration de leurs plans d'aménagement.

## • Mais incohérence par rapport à un manque de contribution financière des communes et des populations bénéficiaires à la réalisation des aménagements, équipements et infrastructures de base

Le PVA n'a pas sollicité les communes comme co-financeurs des projets communautaires à travers leurs droits de tirage ANICT. Cette contribution aurait pu donner plus de poids et d'engagement par rapport au rôle que les communes seraient amener à jouer dans le suivi, le contrôle et la pérennisation des aménagements, équipements et infrastructures de base.

#### Encadré 4 : Point de vue d'une personne ressource de Nara

Même si les communes n'ont pas apporté une contribution financière, elles ont quand même forter participé à la campagne d'information et de sensibilisation des populations sur la présentation du proj l'expérimentation des espaces de travail, d'échanges réguliers de concertations, villageo intervillageoises et communales à travers la tenue de réunions statutaires.

#### • Les effets attendus du PVA sur la décentralisation

Des impacts à plus long terme pourront être escomptés du PVA, notamment : l'amélioration de la qualité des PDSEC, une meilleure pratique de la démocratie locale, mais également un meilleur civisme fiscal avec un meilleur recouvrement des impôts.

#### Encadré 5 : Pour un responsable du BEAGGES :

En s'impliquant dans l'appui à l'élaboration des PDESC, le PVA a facilité la prise en compte de interventions dans la planification des communes. C'est une bonne chose quand on sait que les budget ces communes ne suffisent pas pour financer tous les projets programmés. C'est aussi une opportunité po PVA de contribuer au renforcement des capacités des élus en matière de planification/programmé participative des projets.

#### Pour les services déconcentrés :

L'importance des formations reçues dans différents domaines ainsi que la mise en place du SIG et de la base de données comme éléments de collecte, de capitalisation et de valorisation des connaissances autochtones, ont permis aux services déconcentrés d'expérimenter un nouveau rôle de suivi et d'appuiconseil plus approprié en faveur des collectivités et de la société civile (y comprises les organisations communautaires).

#### Encadré 6 : Point de vue du Préfet de Nara :

En plus des espaces de consultation et de concertation entre acteurs, le PVA a quand même eu le gi mérite de susciter une prise de conscience des populations sur l'importance de la protection l'environnement. Pour preuve, le PVA a toujours organisé des manifestations populaires à Nara j célébrer les grands événements en faveur de l'environnement. (quinzaine de l'environnement, confére débats, reboisement, assainissement, concours éducation environnementale entre les écoles de la commun Nara).

#### Pour la société civile :

Le PVA a eu plusieurs effets à différents niveaux : le renforcement de la cohésion sociale dans les villages autour de réalisations prioritaires que les populations organisées ont librement choisies et qui sont en cohérence avec leur mode de vie et leur existence. Le constat est établi que les gens, maintenant, se parlent autour de projets communs. Les CVG, les SCOOP et le CIV jouent un rôle structurant dans les communautés en leur offrant un cadre de concertation afin qu'elles puisent jouer leur rôle dans la gouvernance locale. Enfin, le PVA a introduit des approches plus participatives et dynamiques dans la vie associative des villages.

#### Encadré 7 : Point de vue d'un notable de Tendié

Outre l'établissement des CVG, des SCOOP et du CIV, ce qui a été nouveau pour nous, c'est les nouv méthodes d'animation mises en place dans le cadre du PVA, qui consistent à réfléchir et à travailler par groupes, les femmes, les jeunes et les hommes, chacun de son côté pour identifier ses besoins prioritaires.

La prise de conscience qui consiste à considérer les CVG, les SCOOP, le CIV comme des acteurs à part entière de la société civile se développe. Ces OSC sont pratiquement devenues des acteurs incontournables pour la commune. A ce titre, avec le temps, elles pourront avoir la capacité de négocier avec elle, de faire pression, mais également de veiller à ce que les intérêts des populations, s'agissant des processus de prise de décisions, en rapport avec la gestion des ressources naturelles, soient préservés :

Encadré 8 : Points de vue des notables des villages partenaires ou tests du PP

A Tendié : L'arrivée du PVA nous a émancipé en nous organisant et en nous montrant la voie à suivre protéger nos ressources naturelles contre les aléas climatiques et les transhumants mauritaniens et malier

Celui qui ouvre les yeux d'un aveugle n'est pas un Dieu, mais un sauveur dans la mesure où il vous a de une ouverture sur la vie.

Le PVA est un symbole pour notre village. Il est comparable à une éléphante qui vient de mettre bat et do lait est généreusement utilisé pour nourrir les populations et entretenir l'espoir.

A Kel El Gagny : Ce qui a été nouveau avec l'arrivée du PVA, c'est la résolution d'un conflit sans fin au de la chefferie du village. Quand nous avons compris l'esprit et la portée du projet visant à préserve valoriser nos ressources naturelles en vue d'améliorer nos conditions de vie, nous avons commencé à c des espaces de dialogues pour nous parler et taire nos divergences sur la chefferie en faveur du pr Aujourd'hui, nous pensons que la cohésion sociale a été retrouvée grâce aux investigations du PVA. I pensons que les gens du PVA sont de vrais fils du pays à la différence des politiciens qui ne font qu « Yourgouyourgou ».

*A Diéwaye* : Le PVA est pour nous comparable à une botte de paille qui, à chaque fois que tu la dépose, laisse tomber quelques brindilles.

A Médina Coura : Le PVA est comme les pluies de l'hivernage que tout le monde attend avec impatience ce que quand elles arrivent tout le mode y trouve son intérêt.

La question de la confiance est centrale, et le PVA, en permettant à chaque acteur d'être conscient de son rôle, a contribué à apporter plus de transparence, donc plus de confiance entre les élus et les populations.

#### **D** Points faibles

#### Pour les communes

- Le document de projet initial ou PRODOC, tel qu'il a été conçu et validé ne prévoit pas le transfert de la MO du PVA aux collectivités.
- La non prise en compte de la participation financière des communes et des populations bénéficiaires dans la réalisation des projets, est incohérente par rapport aux principes de la participation et du développement local.
- Les formations techniques et les outils de gestion expérimentés par le PVA sont jugés pertinents, mais pour autant insuffisants au regard de la complexité des thèmes.

#### Encadré 9 : Points de vue des villages par rapport à la fin du PVA

**A Tendié** : Nous regrettons que le PVA prend fin au moment où le plan de gestion du PP et ses supp n'ont pas été ni validés ni appliqués. Il en est de même en ce qui concerne la convention locale of fonctionnement des instances de gestion et de concertation.

A Kel El Gagny : Le PVA nous a trouvés aveugles mais à peine il commence à nous ouvrir les yeu ramasse ses affaires. Nous attirons l'attention des responsables du projet sur le fait que nous avons be de consolider ce que nous avons appris mais aussi de nouvelles formations en vue d'une plus gre appropriation de la démarche du PVA.

A Diéwaye : Le PVA a fait ce qu'il a pu faire dans la mesure de ses moyens et de son temps, cependal doit pouvoir trouver une rallonge pour achever ce qui reste à faire, notamment en ce qui conc l'application des plans de gestion et de la convention locale.

A médina Coura : Le PVA est un projet fiable dans la mesure où il a respecté ses engagements par rap aux réalisations promises, cependant nous regrettons son départ précipité alors que les populat attendent impatiemment l'application des plans de gestion et de la convention locale.

#### Pour les services déconcentrés

Il faut d'abord se rassurer avant de fermer le projet que toutes les instances de gestion et de concertation communautaires puissent disposer d'une reconnaissance juridique (Statuts et Règlement Intérieur), qu'elles puissent disposer de moyens techniques, financiers et matériels nécessaires pour assurer leur fonctionnement, et ensuite qu'elles puissent bénéficier de formations pratiques sur l'application des outils de gestion de PP et de la convention locale, et consolider les acquis des formations déjà reçues.

#### 3.3.2 Par rapport à la lutte contre la désertification

#### Points forts

Les apports de ce résultat sont concrétisés par la mise en oeuvre des activités suivantes :

- la création d'enclos comme sites de biodiversité au niveau de six villages de la commune de Nara ;
- la mise en place de parcelles de démonstration de Défense et de Restauration des Sols (DRS) en vue de les réhabiliter et l'ensemencement de végétations autochtones (*Pennisetum pedicellatum*), soit un enclos de 4 ha au niveau de chaque village du PP (Nara) ;
- ensemencent de végétation de 1 hectare (Tableau 3) au niveau de chaque village du périmètre pastoral, dont 0.5 ha pour la réalisation des demi-lunes et 0.25 ha pour la réalisation des cordons pierreux et des fascines de branchage respectivement ;
- l'aménagement de sites de biodiversité d'une superficie de 4 ha concernant la régénération de palmier doum (*Hyphaene thebaica*) au niveau du village de Keybane, et de *Balanites aegyptiaca* au niveau de Kabila Bambara. (PM)

Aux dires des populations de Diewaye, avec l'abondance relative des pluies de cette année, les demi-lunes, les cordons pierreux et les fascines ont favorisé une régénération plus rapide de la végétation autochtone. Dans le même sens, à Médina coura, les populations déclarent avoir observé l'apparition de nouvelles espèces végétales.

Encadré 10 : Points de vue des populations des villages tests par rapport aux parcelles démonstration de restauration de la végétation autochtone

*A Diewaye* : le taux de réalisation des activités de démonstration de régénération de la biodiversité e restauration de la végétation autochtone est de 100%.

A Kel El Gagny, Tendié et Médina coura : la réalisation des cordons pierreux, des demi lunes et fascin été entravée par la pénurie de main d'œuvre.

#### Autres apports du PVA :

- le transfert d'équipements et de technologies d'économie d'énergie, avec la distribution de 52 cuiseurs solaires dont 12 paraboles et 40 boîtes dans les 4 villages riverains du périmètre à raison de 13 par village (3 paraboles et 10 caisses) ;
- l'organisation de séances de formation en faveur des femmes pour l'utilisation et l'entretien des économiseurs d'énergie.

#### Encadré 11 : Témoignages recueillis auprès des femmes des villages tests

L'utilisation des cuiseurs solaires a introduit un changement dans nos pratiques ménagères. El contribué à une réduction de la consommation du bois de feu au niveau de l'ensemble de nos villages. exemple, avant les cuiseurs, nous avons remarqué qu'il fallait en moyenne une charretée de bois j quatre jours. Mais depuis l'introduction des cuiseurs, l'utilisation est passée en moyenne à une sem voire même à dix jours selon les villages. Un autre avantage concerne le temps économisé avec les cuis solaires pour mener des activités génératrices de revenus (couture, filature du coton, jardinage, etc.)

#### Points faibles

Les faiblesses majeures évoquées par les populations résident surtout dans le déficit en formation technique, l'absence d'un dispositif de suivi de ces activités biophysiques et la courte durée du projet, s'agissant surtout d'un projet de démonstration environnemental.

#### 3.3.3 Par rapport à la lutte contre la pauvreté

#### Points forts

En matière de lutte contre la pauvreté, le PVA a permis le choix de projets pertinents, car prioritaires et fédérateurs au niveau de villages pauvres, démunis et vulnérables. Le mode d'identification a permis d'impliquer les différentes couches de la population : les hommes, les femmes et les jeunes. De l'avis des populations des villages, parmi les réalisations les plus pertinentes, on peut entre autres citer surtout l'établissement avec la coordination de la Caisse Associative d'Epargne et de Crédits Kondo Jigima, l'ouverture d'un crédit de vingt (20) millions de France CFA.

Cette ligne de crédit a favorisé la mise en place de groupes solidaires et le financement des activités suivantes : le commerce de céréales, la constitution de banques de céréales, l'embouche bovine et ovine et le maraîchage. A ce jour, 18 associations solidaires dont 4 associations féminines ont bénéficié de cette ligne de crédit. Le montant du crédit par groupe solidaire (5 à 6 personnes au maximum) varie de 500 000 à 2 000 000 FCF pour une durée de 1 à 12 mois. Au niveau des villages de Tendié et Diewaye, les populations ont bien apprécié la disponibilité de ce micro crédit, et il faut s'attendre d'ailleurs dans les mois à venir à une augmentation prochaine du nombre de groupes solidaires.

Le montant total des fonds alloués dans le cadre de ces activités de micro crédit s'élève à 27 365 000 FCFA, dont la totalité a été remboursée. (Berthé et Touré, 2007). Fort de ce succès, l'établissement de fonds d'autofinancement au niveau des communautés est également prévu par le PVA dans le cadre de la convention locale pour la mise en œuvre de la gestion du périmètre pastoral.

#### Encadré 12 : Etat par rapport au Micro-crédit

**A Tendjé** : il existe actuellement deux groupes solidaires dont un a bénéficié de 500 000 FCFA i l'embouche paysanne et l'autre a introduit une demande de crédit de 1 000 000 FCFA également i l'embouche paysanne..

A Diewaye : le village a bénéficié de 500 000 FCFA utilisés pour la mise en place d'une banqu céréales.

A Kel El Gagne et à Médina coura : l'adhésion des groupes solidaires aux activités de micro crédit es cours de négociation avec le comité de crédit de Kondo Jigima et l'Unité d'Appui aux Communautés (U du projet.

Diverses autres activités ont été menées en vue de diversifier les sources de revenus et du coup améliorer les conditions de vie des populations. Au nombre de ces activités, on peut citer, notamment :

- l'étude sur la commercialisation du bétail dans la zone d'intervention du projet ;
- l'étude de faisabilité sur la filière gomme arabique et son organisation au profit des femmes ;
- l'appui au développement de la pisciculture au niveau de la ville de Nara et de Kabida Bambara ;
- l'appui au développement de l'embouche bovine/ovine dans le cadre du micro crédit et du maraîchage au niveau des femmes ;
- la production de fourrages irrigués, de banques fourragères et de stocks fourragers ;
- la commercialisation de produits d'industries pastorales (plantes, miel, cuirs et peaux, etc.) ;
- l'accès à l'eau potable avec la réhabilitation de puits villageois, maraîchers et de puits pastoraux ;
- l'accès à l'éducation avec la construction de trois classes à Diagoya.

Comme on peut le constater, ces activités offrent des opportunités énormes en matière de lutte contre la pauvreté, notamment l'amélioration de la situation alimentaire, de la croissance économique, l'écotourisme et la conservation de la biodiversité, etc.

#### Points faibles

- Les populations pensent que le montant alloué par groupe solidaire n'est pas assez incitatif. Elles notent également que l'argent n'est pas disponible au moment approprié.
- Des difficultés d'ordre socioculturel ont été observées à Kel El Gagny et à Médina coura, en effet, certains groupes pourtant constitués hésitent à adhérer à la caisse, pour toutes raisons, ils pensent que l'octroi d'un crédit avec intérêt (ou *ariba*) est « *haram* » c'est-à-dire religieusement illégal.
- Enfin, l'absence de formation en alphabétisation fonctionnelle en vue d'une appropriation des outils de gestion financière.

# 4. Les leçons apprises et les défis de la pérennité du projet

Les leçons apprises et les défis de la pérennité du processus de mise en œuvre du projet sont appréhendées pour l'ensemble des acteurs et pour chacun d'entre eux, Société civile, Communes, Services techniques, opérateurs économiques.

### 4.1 Un engagement fort de l'ensemble des acteurs du projet

A Bamako, au niveau de l'UNP tout comme à Nara et dans les villages tests, la mission d'évaluation a été impressionnée par un engagement fort de tous les acteurs impliqués dans le projet. Ainsi, alors que nous venons annoncer la clôture du projet, dans les villages tests en particulier, c'est dans une ambiance festive que nous avons été accueillis (parades de chevaux, coups de fusils sans compter les chants et denses rythmés au son du tamtam. Cette forte mobilisation des acteurs s'est maintenue tout le long de la mission malgré la déception que l'on peut lire en filigrane dans les différentes interventions de certains leaders villageois. Ainsi que l'exprimait un de nos interlocuteurs à Médina coura :

#### Encadré 12 : Sentiment de regret et d'inquiétude par rapport à la clôture du PVA

Nous n'avons pas failli à notre engagement, c'est toujours avec la même détermination que nous a répondu chaque fois que le projet nous a sollicités. Mais nous ne comprenons pas pourquoi le projet i laisse tomber au moment où nous commençons à nous approprier l'approche qui vient d'être mise en place

## 4.2 Implication des OSC et des populations et appropriation de la démarche

L'implication des OSC et des populations dans une perspective d'appropriation de la démarche initiée par le PVA est appréciée à travers leur participation effective à toutes les étapes du processus ; l'identification,

les prises de décision et d'expérimentation des parcelles de démonstration, la circonscription du PP et l'élaboration de la convention locale.

#### **D** Points forts

- Implication des CVG, des SCOOP et du CIV en terme d'identification des sites et des projets, de mise en œuvre et de suivi des activités envisagées (restauration des terres dégradées, ensemencement des parcours, lutte contre les feux de brousse, formations techniques diverses, ouverture de pares feux, etc.), ainsi que celles liées à la gestion des aménagements, équipements et infrastructures du PP ;
- Implication des populations comme propriétaires des actions à travers les assemblées générales villageoises, les réunions d'information, de sensibilisation et des concertations intervillageoises.

#### Encadré 13 : Sentiment par rapport à la prise de conscience et de responsabilisation

Les membres des CVG, des SCOOP et du CIV affirment que leur implication dans le processus de mise en œ des actions a contribué à les renforcer et à les conforter dans la prise de conscience du rôle qu'ils sont appel jouer et la prise en charge de la durabilité des réalisations après le retrait du PVA. Ils reconnaissent donc cette forte implication leur confère désormais un droit de prise de décision dans la gestion de leurs ressou naturelles, ce qui n'était pas le cas avant l'arrivée du projet

#### Points faibles

Dans le cadre des réalisations au niveau des villages tests, le PVA n'a envisagé aucune contribution financière des populations et aucune réflexion et/ou expérimentation n'a été conduite sur les formes et niveaux de participation. Cette non implication des populations quelque soit la forme (participation financière, travail contre nourriture, fourniture de matériaux) peut être un facteur non propice à une responsabilisation citoyenne active par rapport aux aménagements, équipements et infrastructures réalisés dans le cadre de la gestion du PP.

Enfin, il faut également évoquer le faible niveau de maîtrise d'œuvre technique des OSC et des populations pour la pérennisation du projet.

### 4.3 Implication des Communes et appropriation de la démarche

#### **D** Points forts

En ce qui concerne l'engagement des communes, le PVA a permis :

- La mise en synergie de deux communes, notamment Nara et Guiré pour la gestion concertée des ressources naturelles ;
- L'implication du Conseil de Cercle et des Mairies en terme de mobilisation sociale ;
- L'existence d'une convention locale et de contractualisations entre les Mairies, les communautés villageoises, le PVA et l'Etat autour de la gestion du PP ;
- La cohérence entre les projets identifiés et les PDESC.

#### Points faibles

Les difficultés évoquées :

- La faible capacité des Communes en matière de montage de projets et en mobilisation des ressources financières ;
- La faible capacité technique des élus.

## 4.4 Implication des services déconcentrés et appropriation de la démarche

#### **D** Points forts

- L'engagement des administrations et des services déconcentrés dans le processus de mise en œuvre du PVA à travers l'appui conseil et la participation aux instances, notamment le Commuté Consultatif Local et le Réseau des intervenants du Cercle ;
- La participation aux visites techniques de suivi-évaluation des réalisations ;
- La participation aux programmations/planifications conjointes ;
- La participation à la restitution des bilans trimestriels et annuels ;
- La participation aux évaluations internes et externes du projet ;
- L'utilisation de certains résultats du projet dans la consolidation de leur programme.

#### Points faibles

La difficulté évoquée:

• Absence d'un cadre formel de collaboration entre acteurs ;

### 4.5 Capitalisation

La capitalisation concerne la démarche, les outils et les méthodes, elle est mise en oeuvre dans le cadre des Résultats 2 et 6.

#### □Points forts :

Des supports méthodologiques ont été développés au niveau de la cellule nationale parmi lesquels peuvent être mentionnés :

- Disponibilité d'une base de données et d'un Système d'Information Géographique (SIG) pour assurer le suivi des réalisations, la capitalisation de l'expérience, la diffusion des résultats et la republication des acquis du projet
- Réalisation de nombreuses études thématiques opérationnelles sur la connaissances des ressources naturelles (sols, occupation des sols, couvert végétal, les pâturages, les ressources en eau et la faune) et leur utilisation rationnelle ;
- Réalisation d'enquêtes socioéconomiques de base sur les systèmes de production et les savoirs et savoir-faire des communautés ;
- Réalisation en collaboration avec l'ISFRA de 5 études de recherche assorties de propositions d'utilisation des résultats.

#### □Points faibles

- Absence d'une étude de capitalisation des acquis du projet (méthodologie, valorisation des résultats) ;
- Démarche tardive du volet recherche pour accompagner le processus de mise en œuvre du projet ;
- Absence d'un plan de communication et de diffusion des résultats.

### 4.6 SIG/Base de données

#### □Points forts

Le PVA a mis en place un système d'observation scientifique et de suivi biophysique des réalisations.

- Au niveau national à l'UNP, disponibilité d'outils d'aide à la prise de décision et de mise en réseaux d'acteurs en charge de la gestion des ressources naturelles en zones arides et semi arides ;
- Au niveau des sites, disponibilité d'outils de planification/programmation, d'implémentation et d'analyses géographiques des phénomènes sociaux et physiques (cartes, graphiques, données statistiques, résultats des études, etc.);

#### □Points faibles

Absence d'un dispositif de suivi-évaluation des activités du projet ;

- Absence de formation des agents du projet en SIG ;
- Insuffisance de données statistiques pour alimenter la base de données.

## 5. Les recommandations

Le défi est de proposer des orientations pouvant faire consensus de la part des différentes parties prenantes au niveau des grandes familles d'acteurs, à savoir : les Services techniques de l'Etat, les collectivités, le réseau des prestataires de services, les organisations de la société civile au niveau communautaires.

Malgré des difficultés rencontrées dans la mise en œuvre des différentes composantes, le PVA est parvenu à initier un processus impliquant les grandes familles d'acteurs autour d'objectifs de renforcement de la démocratie de proximité à travers le renforcement de structures de gestion à base communautaire dans les sites de démonstration leur permettant de d'assumer pleinement leurs responsabilités. Le PVA a également permis de réaliser un certain nombre d'équipements sociaux de base dans tous les villages tests, notamment ceux de Nara (Tendié, Kel El Gagny, Diéwaye et Médina coura). En revanche, en ce qui concerne les villages et fractions de la Commune de Bamba, compte tenu du recadrage du projet survenu en 2005, aucun des projets sélectionnés et réalisés n'a été pris en compte dans la présente évaluation. Pour ce faire, la mission recommande donc non seulement l'achèvement des engagements en cours suite au retard survenu dans le délai d', mais également la poursuite des activités, d'abord dans une phase transitoire de 2 ans (24 mois), et ensuite dans une seconde phase de 5 ans en vue de consolider les acquis et de diffuser la replicabilité aux niveaux tant national que régional. Mais pour éviter que la mise en œuvre d'un futur projet ne soit confrontée aux mêmes difficultés, certains aspects sont à clarifier, en termes d'objectifs, de stratégies, de priorités, d'activités et de montage.

Les recommandations portent donc d'abord sur les modalités d'achèvement des activités en cours qui s'inscrivent dans une perspective transitoire de continuation du projet. Dans un second temps, les propositions vont concerner les nouvelles orientations stratégiques d'un futur projet dans une seconde phase.

## 5.1 Achever ce qui est prévu au terme de la phase actuelle dans une phase transitoire de deux (2ans)

#### 5.1.2 Réalisation, entretien, suivi des activités

En nous fondant sur les résultats de nos constats et analyses, mais surtout sur les attentes et préoccupations fondamentales exprimées par les communautés partenaires (bénéficiaires) du projet, la mission recommande que le PVA, dans sa phase actuelle, puisse bénéficier d'une rallonge de 2 ans (24 mois) ou phase transitoire nécessaire et suffisante pour achever les activités prévues, planifiées mais qui n'ont pas pu être réalisées dans les termes de la phase actuelle du projet. Cela signifie que tous les projets qui ont été identifiés et priorisés au niveau des communautés villageoises, sélectionnés avec l'appui du PVA et validés au niveau CCL seront réalisés par les Bureaux d'Etudes et les Entreprises sélectionnées sur appel d'offres. Cela suppose également que le suivi, l'entretien et la gestion des aménagements, des équipements, infrastructures et des formations y afférentes dans les villages, soient prévus et mis en place pour assurer leur viabilité et leur durabilité. Un dispositif technique de maintenance et de suivi réguliers dans le cahier des charges des CVG, des Sociétés Coopératives et du CIV serait à envisager .Il importe donc que ses structures en l'état actuel très frileuses et vulnérables soient, dés maintenant, renforcées dans leur capacité de suivi et de gestion. Les formations les concernant pourront prioritairement être axées sur cette dimension.

#### 5.1.2 Maîtrise d'Ouvrage aux communes

Les capacités de maîtrise d'ouvrage des communes sont très variables et limitées. Elles n'ont pas réellement bénéficié de formation concernant le renforcement de leurs capacités de maîtrise d'ouvrage. La phase transitoire du projet pourrait être mise à profit pour un diagnostic plus approfondi des besoins d'appui et de formation des différentes communes concernées, en matière de maîtrise d'ouvrage. La manière dont les communes ont été impliquées concrètement autour des réalisations de villages et l'analyse des difficultés qu'elles vont rencontrer serviront de base à ce diagnostic d'identification des besoins.

## 5.1.3 Bilan des actions de formation et des acquis des agents des services déconcentrés

Au regard des nombreuses formations dont ont bénéficié les agents du Service de la Conservation de la Nature (SCN) et du Service Local de Production Industrielle et Animale (SLPIA), notamment, il serait souhaitable, parallèlement à la poursuite du projet, de faire un bilan des acquis. En quoi les formations reçues et la participation au processus initié par le PVA ont modifié les pratiques professionnelles et la compréhension des nouvelles tâches qui incombent aux agents des services déconcentrés en termes, d'accompagnement, de suivi, de conseil, de mise en relation et de contrôle. Un tel bilan pourrait également préparer un futur plan de formation à concevoir et à mettre en œuvre dans une seconde phase.

#### 5.1.4 Capitalisation des acquis

Dans le cadre de l'accompagnement de la réalisation des diagnostics techniques participatifs (DTP), des monographies de sites (fonds de cartes, faits sociaux et environnementaux) et de la fourniture des outils méthodologiques de pérennisation, le PVA a mis en place un SIG au niveau national. A cette phase décisive de mise en pratique concrète des actions, il est essentiel de poursuivre la capitalisation régulière de la diversité des expériences qui ont été développées, jusqu'ici. Le processus dans son ensemble initié par le PVA à différentes échelles et avec l'implication de différentes catégories d'acteurs a permis d'expérimenter des savoirs faire sur le terrain et de résoudre des difficultés au fur et à mesure. Il serait donc souhaitable que le PVA puisse ainsi recenser et valoriser ces pratiques sociales, qu'elles soient ensuite capitalisées, partagées et fassent l'objet d'outils ou de démarches plus ou moins formalisées susceptibles d'être mobilisées dans un autre contexte.

#### 5.1.5 Pérennisation des activités génératrices de revenus par le miro-crédit

Dans cette phase transitoire, le volet AGR doit être revu et renforcé par la formation et une réorganisation de l'accès des groupes solidaires au micro-crédit. La promotion des AGR peut constituer un puissant levier de lutte contre la désertification et la pauvreté.

## 5.2 Consolider ce qui a été réalisé et préparer le transfert de la maîtrise d'ouvrage aux communes dans une seconde phase

Dans la mesure où un grand nombre d'activités ont été réalisées, où des dispositifs novateurs ont été mis en place, et où des acteurs ont été impliqués, la mission recommande de consolider les acquis avant de songer à les étendre de manière significative à d'autres communes et à d'autres villages du pays. En effet, une extension trop rapide entraînerait une déperdition de la qualité dans un processus complexe et participatif ; elle comporterait un risque par rapport à l'objectif d'appropriation. Cependant, au niveau des communes de Nara, l'extension pourrait concerner d'autres villages afin de renforcer les communes déjà impliquées dans le dispositif avant d'en toucher d'autres. Une telle option irait dans le sens de la pérennité du processus.

#### 5.2.1 Les stratégies à développer

Les stratégies à mettre en avant dans le cadre d'un futur projet pourraient être :

#### 5.2.1.1 Le maintien d'une démarche participative

Le choix de maintenir une démarche participative est cohérent par rapport à un objectif général de promotion d'une démocratie de proximité, d'appropriation et de durabilité. Même si l'approche participative est exigeante en temps, en ressources humaines et en termes d'innovation méthodologique, il est recommandé qu'elle soit maintenue pour toutes les étapes du processus. Il serait également souhaitable,

pour une meilleure appropriation, que l'approche participative soit étendue au niveau de la participation des populations à la réalisation des aménagements, des infrastructures et équipements, quelque soient les formes de cette participation financière, en travail ou en matériaux.

#### 5.2.1.2 La quadripartite à tous les niveaux

La rencontre des quatre grandes catégories d'acteurs (Société civile, Etat et collectivités, Secteur privé) aux différentes échelles locale, communale, régionale et nationale, constitue l'originalité du PVA ; elle est à maintenir car elle permet la concertation, les collaborations, les échanges et les constructions en commun. Elle est aussi un espace potentiellement riche d'innovation sociale et institutionnelle.

#### 5.2.1.3 La synergie entre acteurs et intervenants à l'échelle des communes

Il est important que le nouveau projet intervienne en synergie et favorise les collaborations entre intervenants et acteurs des communes. Les compétences et les énergies doivent converger pour le développement des villages pauvres des communes à différents niveaux.

#### 5.2.2 Les objectifs à préciser

L'objectif du nouveau projet pourrait être de « Renforcer les capacités de chaque grande catégorie d'acteurs pour lui permettre de remplir son rôle dans des processus visant l'établissement de structures communautaires de proximité et d'une citoyenneté active fondées sur la responsabilisation et la concertation autour de projets fédérateurs ».

Les objectifs spécifiques seraient déclinés par grande catégorie d'acteur avec des résultats à atteindre et des activités.

### 5.3 Le montage envisagé

#### 5.3.1 Les instances

Il est souhaitable que les instances avec la participation de 3 grandes catégories d'acteurs soient maintenues aux échelles nationale, régionale, communale et local (ou communautaire).

- *Au niveau national* : une Cellule d'appui nationale avec la fonction de SIG, de capitalisation, de suivi/évaluation et d'appui-conseil.
- *Au niveau régional* : une Division technique chargée de l'aménagement assurera le suiviévaluation de la mise en œuvre des activités
- *Au niveau communal* : un organe (UAC) sera chargé de la maîtrise d'œuvre sociale des activités à travers les organisations de la société civile au niveau communautaire ;
- *Au niveau local* : les communautés seront chargées de l'implémentation de différents projets, de la surveillance et du contrôle du PP et de la gestion des aménagements, infrastructures et équipements communautaires

#### 5.3.2 La coordination du projet

Le mode de coordination du projet doit parvenir à traduire un renforcement de la maîtrise d'ouvrage communale et une implication de la DNCT dans le CCN.

## 5.4 Les pistes de financement

Il s'agira d'identifier toutes les formes d'opportunités susceptibles d'accompagner financièrement le processus de continuation du PVA sous sa forme actuelle et future.

- Dans le domaine des opportunités liées au PNUD/PNUE, il faut formuler un plaidoyer sur la base des recommandations de l'évaluation finale ;
- Dans le domaine du BSI, il fau élaborer un document de projet sur 5 ans à soumettre au Ministère du Plan pour financement ;
- Dans le domaine de l'appui à la décentralisation, il s'agira de traduire les activités des PDESC en projets à soumettre au fonds FICT à travers l'ANICT et au Fonds National d'Appui aux CT ;
- Dans le domaine de l'appui à la déconcentration, il conviendra de scruter les opportunités financières liées au PARAD (UE) ;
- Dans le domaine de l'appui à la lutte contre la désertification, il faut exploiter les opportunités offertes par les Fonds PPTE et Fonds GTZ pour l'environnement ;
- Dans le domaine de l'appui à la lutte contre la pauvreté, il sera question d'envisager l'utilisation de certains Fonds sectoriels dans le cadre de la mise en œuvre du CSCRP ;
- Dans le domaine de l'appui à la Société Civile, les aspects de Jumelage Coopération et autres fonds décentralisés pourront être également mobilisés pour le financement de certains projets.

#### **BEFERENCES BIBLIOGRAPHIQUES DES DOCUMENTS CONSLTES**

PRODOC PVA, 2001, version française Procès verbal de l'évaluation à mi parcours du PVA, 2005 Apport de réflexion sur le désengagement et la consolidation des acquis,2007 Rapport d'Auto –évaluation du PVA, 2007 Rapport final du PVA, 2007 Etude monographique des sites ;

Rapport de l'Atelier de lancement du PGVA, 2002

Rapports des études thématiques réalisées par l'ISFRA (2007) :

- <u>Thème1</u>: Analyse détaillée des procédures de gestion traditionnelle des ressources naturelles, des changements intervenus dans le temps, des impacts des changements et des contraintes réelles ou potentiel à valeur viabilité dans différents systèmes de production.
- <u>Thème2</u> : Étude de l'impact des espèces végétales consommées par les communautés en cas de disette/famine Commercialisation, détermination des menaces et examens de leurs capacités de régénération, dans le Cercle de Nara.
- <u>Thème3</u> : Rapport d'analyse des différents modes de vie des sociétés agro-pastorales et transhumantes de la façon dont celle-ci exploitent et affectent les ressources naturelles.
- <u>Thème4</u> : Le rôle réel des sites sacrés dans la conservation de la biodiversité dans le Cercle de Nara.
- <u>Thème5</u> : Description et analyse des perceptions locales sur l'état actuel des ressources naturelles avec une attention particulière aux tendances observées et les causes alléguées à celles-là dans le site de Nara du Projet de Gestion de la Végétation Autochtone.

#### AUTRES DOCUMENTS DES REFERENCES CONSULTEES

Agnes LAMBERT et Hallassy SIDIBE, 2007 : Canevas méthodologique d'évaluation selon les normes IRAM (France).

CRESA, 2006 : Evaluation de la flore et de la végétation dans certains sites traités des régions de Tahoua, Maradi et Tilbéri –Nier

GDRN : Etude sur la problématique de transfert des compétences et des ressources en gestionlocale des ressources naturelles.

USAID, 2006 : Lutte contre la désertification et la réduction de l pauvreté. Etude de cas du Mali USAID, 2006 : Etude de la régénération assistée dans la région de Zinder au Niger

USAID, 2006 : Processus diagnostic et d'amendement de la Loi d'Orientation Agricole au Mali

USAID/SILSS, 2006 : Vers un programme d'Action pour la revitalisation de la Foresterie en Afrique de l'Ouest.

## Annexes

- A1 : TdR de l'évaluation finale du PVA
- A2 : Calendrier de la mission
- A3 : Grille d'évaluation et outils de l'évaluation
- A4 : Organigramme général du PVA
- A5 : Instances du PVA : missions et composition
- A6 : Bilan financier du PVA : Utilisation du BSI
- A7 : Historique du PVA
- A8 : Niveau de réalisation des activités
- A9: Listes des personnes rencontrées à Bamako, à Nara et dans les villages

#### Annexe 1 : TERMES DE REFERENCE DE L'EVALUATION FINALE DU PVA

#### Termes de référence des consultants nationaux

Les consultants nationaux (un au Kenya au Botswana et un au Mali) fourniront l'appui spécifique au pays à l'évaluateur International. Cet appui consiste en fournir l'historique, la compréhension de l'environnement du projet au niveau national et local, l'assistance dans l'interprétation, et les discussions de fond, etc.

L'objectif du rapport National est (1) d'examiner les progrès accomplis au niveau national dans l'atteinte des objectifs et des résultats du projet,(2) identifier les forces et les faiblesses dans la mise en œuvre ,(3) identifier et distiller les leçons apprises (5) fournir des recommandations pour améliorer l'exécution de projets semblables dans l'avenir.

Le Rapport National couvre les activités mise en œuvre dans le pays

Comme la partie intégrante du projet UNEP/UNDP/GEF la Gestion du Végétation autochtone pour la réhabilitation des terres Dégradées des Zones Arides de l'Afrique.

Plus spécifiquement, le consultant national évaluera l'exécution du projet au niveau national et le taux d'avancement après des aspects de démarrage:

#### 1. Accomplissement des objectifs, produits et résultats attendus

- Evaluer le taux d'avancement dans la réalisation des objectifs environnementaux du projet, les résultats et les produits au niveau national. Cela doit inclure la mesure à laquelle le projet au niveau national a contribué : (a) développer et renforcer les systèmes des gestions indigènes appropriés pour les ressources naturelles (b) réhabilités de végétation indigène, des terres dégradées / et des écosystèmes par l'utilisation des savoir-faire des, communautés locales, et la recherche scientifique; (5) développer des systèmes de données bio-socio-économiques et approches pour conserver la diversité biologique; et développer de nouvelles options de substance dans la zone du nouvelles option de subsistance projet.
- Préparer une vue d'ensemble détaillée de l'état d'avancement de la mise en œuvre des activités du projet et des produits au regard des produits et attendues, avec des commentaires expliquant les écarts par rapport au établi

#### 2. Approche de la mise en oeuvre

- Examiner la clarté des rôles et des responsabilités du personnel du projet de agences et des institutions et le niveau de la coordination.
- Evaluer l'opportunité et l'efficacité de l'assistance technique fournie par les bureaux nationaux aux Structures d'appui Communautaire.
- Déterminer la convenance et l'utilité des méthodes et les outils qui ont été employés au niveau national pour mesurer/contrôler l'exécution du projet.
- Evaluer les partenariats établis dans le cadre de la mise en œuvre du projet avec des parties prenantes concernées dans le pays.
- Evaluer l'efficacité des mécanismes régionaux employés par ce projet afin que les résultats de la recherche soient communiqués aux parties prenantes et aux décideurs.
- Décrire et évaluer les efforts de l'UNEP, l'UNOPS et de l'UNDP dans l'appui fourni aux agences d'exécution nationales et des institutions nationales.
- Décrire et évaluer les efforts de coordination en matière de recherche et de formation fournis par l'université d'Oslo, avec comme référence particulière : (a) la valeur du programme et (c) l'appui à la recherche dans l'ensemble.

#### **3.** Appropriation / conduite du projet par le Pays

• Évaluent la mesure à laquelle les représentants de pays (incluant des fonctionnaires gouvernementaux, la société civile, etc) ont été activement

impliqués dans la mise en oeuvre de projet.

- Identifier les leçons apprises en termes de consolidation de l'appropriation et de la conduite du projet par le pays.
- Fournir des recommandation si s'avère approprié.

#### 4. La participation des parties prenantes et les Avantages acquis

- Evaluer le niveau de participation publique au projet et déterminer si la participation publique était appropriée avec les buts du projet..
- Examiner et évaluer la mesure à laquelle les impacts du projet ont atteint les bénéficiaires ciblés.
- Identifier les leçons apprises en termes de participation des parties prenantes.
- Formuler des recommandations si cela s'avère approprié.

#### 5. Durabilité

- Evaluer la probabilité de continuation des produits /avantages du projet à la fin du financement de GEF; et décrire les facteurs clefs qui exigeront de l'attention pour améliorer des possibilités de continuité des produits/ avantages du projet. Les facteurs relatifs à la durabilité qui doivent être pris en compte comprennent : la capacité institutionnelle (systèmes, structures, personnel, expertise, etc), la durabilité sociale, les politiques et les structures réglementaires qui favorisent les objectifs du projet, la durabilité financière ;
- Identifier les leçons apprises en termes des mesures à prendre pour assurer la durabilité .
- Formuler des recommandations sur la façon de soutenir les résultats du projet en termes de renforcement des capacités

#### .6. Planification Financière

- Déterminer l'efficacité des systèmes de contrôles financiers, y compris les reportages et la planification permettant à la direction du projet de prendre des décisions avisées
- Évaluer la mesure à laquelle le flux de fonds était approprié et opportun, et d'UNEP et UNDP et de l'unité de gestion de projet au champ(domaine).
- Formuler des recommandations si cela est jugé approprié.

#### 7. Suivi et Evaluation

- Examiner les systèmes de rapportage du projet y compris les comptes rendus de Projet, les enquêtes de zone et leur efficacité.
- Examiner les plans de mise en œuvres du suivi et de l'évaluation du projet y compris les adaptations nécessitées par des changements de situation (adoption circonstanciée)
- Identifier les leçons apprises quant au rôle du S & E dans la mise en œuvre du projet.
- Formuler des recommandations si cela est jugé approprié

#### 8. Logistique

Les consultants nationaux doivent être recrutés par le canal du Bureau du PNUD dans le pays et le Bureau du Projet dans le pays. et l'évaluateur International fournira un pro forma plus détaillé en ce qui concerne l'exécution des termes de Référence.

#### 9. Format de rapport national

Ce rapport national sera un rapport détaillé écrit en anglais dans le cas du Botswana et du Kenya et en français dans le cas du Mali. Le rapport ne doit pas avoir plus que <u>15</u> pages (sans les annexes) et comprendre :

- 1. Un Sommaire exécutif (pas plus d'une (1) page)
- 2. Les Objectifs, la portée et les méthodologies de l'étude (pas plus d'une (1) page)
- 3. La performance du projet national
- 4. Les leçons apprises

- 5. 6.
- Les Recommandations Les Annexes, y compris la liste des personnes interviewées.

| Date               | Horaires           | Activités   |  |
|--------------------|--------------------|---|--|
| Etane 1 · A Bamako |                    |   |  |
| <u></u>            |                    |   |  |
| Dimanche 16/09     |                    | Arrivée du consultant international                             |  |
| Lundi 17/09/07     | 8h 00 - 12h 00     | - Entretien avec le Chef du PVA Mr KALLE                        |  |
|                    |                    | - Visite de courtoisie : MEA, DNCN, PNUD                        |  |
|                    | 13h 00 - 14h 00    | Départ pour Nara  |  |
|                    |                    |   |  |
| Etape $2: A$       | Nara               |   |  |
|                    | Γ                  |   |  |
| Mardi              | $8h\ 00 - 12h\ 00$ | Visite de courtoisie aux autorités locales : Préfet, Présie     |  |
| 18/09/07           |                    | Conseil de Cercle, Maire, Chef de village de Nara, SLCN, et     |  |
|                    | 12h 00 – 17h 00    | Visite des réalisations dans les villages de Médina-Co          |  |
|                    |                    | Diéwaye, Tiendé et Ker el Gagny                                 |  |
| Mercredi           | 8h 00 – 12h 00     | Séance de travail avec le Chef du Site Mr DOUMBIA               |  |
| 19/09/07           | 14h00 - 15h 00     | Séance de restitution   |  |
|                    | 15h/16h 00         | Départ pour Bamako  |  |
|                    |                    |   |  |
| <u>Etape 3</u> : A | Bamako             |   |  |
|                    |                    |   |  |
| Jeudi              | 9h 00 – 12h 00     | Séance de travail avec l'équipe du PVA                          |  |
| 20/09/07           |                    |   |  |
|                    | 14h 00 - 16h 00    | Séance de travail avec l'équipe PVA (suite et fin)              |  |
| Vendredi           | $9h\ 00 - 12h\ 00$ | Préparation de la séance de restitution des résultats prélimina |  |
| 21/09/07           | 14h 00 – 16 h 00   | - Séance de restitution   |  |
|                    |                    | - Fin de la mission du consultant international                 |  |

### **Annexe 2** : CALENDRIER DE L'EVALUATION FINALE DU PVA

#### Annexe 3 : GRILLE D'EVALUATION ET SUPPORTS METHODOLIQUES

#### 1. La grille d'analyse

La grille d'analyse de cette évaluation finale du PVA s'appuie sur les critères définis dans les TdR pour évaluer les politiques publiques et les projets/programmes. Elle comporte les éléments suivants :

• *la pertinence* du projet par rapport aux politiques nationales en matière d'appui à la mise en œuvre de la décentralisation, à la lutte contre la désertification et à la lutte contre la pauvreté ;

• *la cohérence* au niveau du projet entre les résultats et/ou actions, et entre les types d'actions financés et les procédures prévues ;

• *l'effectivité* du projet par rapport aux résultats ou composantes et par action ;

• *l'efficacité* : dans quelle mesure, les objectifs du projet ont été atteints, en tenant compte "des indicateurs de réalisation" définis dans le document de projet et le cadre logique ;

• *l'efficience* : relations coûts/avantages entre les ressources financières, humaines, organisationnelles et techniques mobilisées et les résultats effectifs obtenus ;

• *l'impact/les effets* (surtout) du PVA par rapport à la lutte contre la désertisation, la lutte contre la pauvreté et l'appui à politique de décentralisation au Mali. Les effets positifs ou négatifs prévus ou non prévus sur les populations des sites et les acteurs stratégiques, notamment ;

• *La Recherche-Action (ou Recherche ciblée)* : dans quelle mesure la mise en oeuvre du projet a bénéficié des acquis et des leçons apprises des résultats des recherches antérieures et/ou en cours et des activités opérationnelles de la communauté scientifique, notamment le GEF, l'UNEP, l'UNDP et l'Université d'Oslo ;

• *La durabilité* concernant *l'appropriation* des mécanismes de continuation par les différents acteurs : les communautés villageoises, la société civile, les Collectivités locales, les services déconcentrés de l'Etat. Les budgets de la DNCN et des communes permettent-ils de poursuivre l'action ?

#### 2. Les supports méthodologiques

La démarche méthodologique utilisée est de type participatif comme le suggèrent d'ailleurs les termes de référence. Elle est agencée autour de quatre phases principales itératives suivantes :

• *La préparation de la mission d'évaluation* : les échanges avec les responsables du PVA pour proposer une démarche d'évaluation, la liste des personnes à rencontrer, un calendrier de mission et la collecte des documents pertinents sur le projet (voir annexe).

• Les opérations d'évaluation sur le terrain : des entretiens avec des personnes ressources impliquées dans le PVA au niveau local à Nara (tutelle, services techniques déconcentrés, opérateurs privés et organisations de la société civile, y comprises les organisations des femmes et des jeunes), mais également avec des acteurs stratégiques au niveau national à Bamako (PNUD, DNCN et UNP). Des réunions de groupes triangulées (Hommes, femmes, Jeunes) ont eu lieu au niveau des villages cibles (Tendié, Kel El Gagny, Diéwaye et Médina coura). Auprès de l'ensemble de ces groupes, le travail s'est appuyé sur l'analyse des points forts et des points faibles, des opportunités, des contraintes, les perspectives et les recommandations. (voir outil SEPO et liste des personnes rencontrées en annexe 5).

• *Une séance de restitution des principaux constats et résultats préliminaires* : elle a eu lieu au MEA et a regroupé : le SG et un Conseiller technique, le représentant du PNUD, le Directeur de la DNCN, le Coordinateur national du PVA et les deux consultants (international et national). (voir liste des présences en annexe 6).

• Une réunion d'échanges et de réflexion sur les propositions et orientations issues de l'analyse des résultats préliminaires : elle s'est tenue à l'UNP et a regroupé, le représentant du PNUD, le Directeur de la DNCN, le Coordinateur national du PVA et les deux consultants.

• La rédaction du rapport d'évaluation.

Annexe 4 : Organigramme général du PVA



#### <u>Annexe 5</u> : INSTANCES DU PVA : missions et composition

Au niveau national : La tutelle du projet est assurée par le Ministère de l'Environnement et de l'Assainissement (MEA). Le Comité Consultatif National (CCN), chargé des orientations du projet, est présidé par le Directeur National de la Conservation de la Nature, qui est en même temps le Directeur National du projet. Le CCN se réunit de façon périodique pour approuver les études techniques et présider aux destinées des programmes successifs. L'Unité Nationale du Projet (L'UNP) rattachée à la DNCN est chargée du pilotage et de la coordination du projet. Elle est composée d'un chef de projet, d'un assistant administratif et financier, d'un chauffeur et d'un planton.

Au niveau régional : la Division Aménagement de la DNCN est chargées des missions périodiques de suivi et de contrôle dans le cadre de la mise en œuvre du projet.

**Au niveau communal** : L'Unité d'Appui Communautaire (UAC) est chargée de la mise en œuvre du projet dans sa zone d'intervention ; elle est composée d'un forestier (chef de site), d'un agronome et d'un pastoraliste, d'un guide interprète et d'un personnel d'appui et est présidée par le chef de site ; il se réunit 1 fois par trimestre. Un Comité Consultatif Local (CCL) est chargé d'accompagner l'UAC dans la mise en œuvre du Projet. Il est composé de personnes ressources et est présidé par le Chef de village. Un Comité Communal de gestion (CCG) est chargé de la mise en œuvre de la convention locale.

Au niveau communautaire : l'Assemblée Générale Villageoise est l'organe d'information et de sensibilisation, elle est présidée par les chefs de villages et se réunit en fonction des évènements. Les concertations intervillageoises sont assurées par le Comité Inter Villageois (CIV) ;, il est chargé des prises de décision concernant la gestion du PP. Les Comités Villageois de Gestion (CVG), les Sociétés Coopératives (SCOOP) et les groupes solidaires sont chargés de la surveillance/contrôle et de la mise en œuvre des programmes, ils constituent également de petites entreprises locales pour la promotion des filières dans le cadre de la lutte contre la pauvreté.

L'appropriation de la démarche du PVA et la pérennisation des acquis passent forcement par un bon fonctionnement de l'ensemble de ces instances. Malheureusement, à ce jour, la plupart d'entre elles sont confrontées à des difficultés d'ordre matériel, techniques et financier. En particulier, celles qui ont été mises en place dans une perspective de désengagement du projet n'ont pas encore commencé à fonctionner, c'est le cas par exemple du CCG, du CIV et des CVG.

#### <u>Annexe 6</u>: Bilan financier du PVA (Fonds BSI) UTILISATION FONDS BSI (GOUVERNEMENT)

| ANNEES | MONTANT ALLOUE<br>(FCFA) | UTILISATIONS   |  |
|--------|--------------------------|--|--|
| 2003   | 65 000 000               | Construction bureaux Nara et Bamba<br>Achat mobiliers bureaux<br>Achat moto de liaison   |  |
| 2004   | 65 000 000               | Construction logements Nara et Bamba<br>Rénovation bureaux de la Coordination Nationale  |  |
| 2005   | 65 000 000               | Construction bureaux SIG<br>Achat véhicule liaison PVA<br>Achat équipements bureaux<br>Réalisation 2 puits à grand diamètre à Nara |  |
| 2006   | 64 000 000               | Equipements bureaux SIG<br>Achat véhicule liaison DNCD<br>Clôture locaux Nara<br>Connexion Internet Nara                           |  |
| 2007   | 60 000 000               | Achat 2 véhicules pour la Cellule<br>Atelier préparation fin de projet   |  |
| TOTAL  | 319 000 000              |  |  |

#### <u>Annexe 7</u> : NIVEAU DE REALISATION DES ACTIVITES PAR RESULTATS <u>RESULTAT 1</u> : Des Systèmes de Gestion Autochtones Appropriés sont établis

| ACTIVITÉS PRÉVUES<br>PLANIFIÉES  | ACTIVITÉS RÉALISÉES  | TAUX<br>REALISATION | OB                                     |
|--|--|---------------------|--|
| 1. Mise en place de Comités Villag<br>opérationnels de gestion<br>ressources naturelles  | <ul> <li>Appui à la mise en place de quatre (4) Soc<br/>Coopératives Villageoises ;</li> <li>Appui à la mise en place d'un (1) Comité Intervillag<br/>de gestion du périmètre pastoral (CIVGPP) dans les qu<br/>villages concernés à raison de cinq (5) membres<br/>village, excepté à Kel El Gargny où c'est 9 membres</li> <li>Appui à la création et à l'organisation de trois<br/>communautés pastorales, avec reconnaissance juridi<br/>au niveau des Communes de Guiré (CHETEBE, 1<br/>(CAFO-Nara) et Ouagadou ().</li> <li>Appui au développement de la filière de la gon<br/>arabique : réalisation d'une étude diagnostique su<br/>filière et organisation de la filière avec appui structu<br/>un (1) groupement féminin de Nara.</li> </ul> | 100%<br>90%<br>100% | - L<br>du                              |
| 2. Elaboration de plans direct<br>pour la réhabilitation des parcou<br>le développement durable dans<br>zones du projet  | <ul> <li>Identification et circonscription d'un périmètre pastora</li> <li>26 400 hectares sur les terroirs des villages de Tendié,</li> <li>El Gagny, Diewaye et Madina Coura.</li> </ul>   | 90%                 | Dis<br>pas<br>ins<br>act<br>Ser<br>Cer |
| <ol> <li>Elaboration de conventions<br/>partenariat entre les communauté<br/>projet et le Gouvernement.</li> <li>Facilitation de la planification<br/>l'utilisation des terres et la résolution</li> </ol> | <ul> <li>Elaboration et validation d'une Convention Locale</li> <li>Gestion des Ressources Naturelles du Périmètre Pastoral<br/>la commune de Nara</li> <li>Réalisation d'études socioéconomiques intégrant<br/>stratégies communautaires de résolution des conflits li</li> </ul>   | 80%                 | - C<br>ver                             |
| des conflits relatifs à l'utilisation<br>terres et du régime foncier.5. Identification, documenta<br>systématisation et renforcement<br>méthodes de conserva<br>autochtones.                               | <ul> <li>l'utilisation des terres et du régime foncier.</li> <li>Réalisation de deux (2) études de référence sur la dive biologique et la consolidation/actualisation monographies des sites de Nara et de Bamba.</li> </ul>   | 100%                |  |
| 6. Etablissement de registres d<br>biodiversité communautaire  | <ul> <li>Elaboration de Six (6) Plan de Développer<br/>Economique Social et Culturel (PDESC), Nara 5 et Ba<br/>1.</li> <li>Constitution d'herbiers dans les zones d'interventior<br/>projet (Nara et Bamba).</li> </ul>  | 100%                | Un<br>d'iv<br>alb                      |

<sup>- &</sup>lt;u>RESULTAT 2</u> : Une Base de Données Biologiques et un SIG sur les zones arides sont disponibles et opérationnels

| ACTIVITÉS PRÉVUES<br>PLANIFIÉES   | ACTIVITÉS RÉALISÉES   | TAUX<br>REALISATION | OB                 |
|---|---|---------------------|--------------------|
| 1. Inventaire et interprétation d<br>situation sur les 40 dernières anné            | <ul> <li>Réalisation d'une étude diagnostique sur les expérie<br/>de création de bases de données et de mise en place de<br/>au Mali ;</li> <li>Conception d'un modèle conceptuel de base de donnée</li> <li>Interprétation des images Landsat TM et établissemen<br/>cartes thématiques.</li> </ul>  | 90%                 | Pas<br>per<br>la b |
| 2. Evaluation<br>participative des besoins socie<br>économique.                     | <ul> <li>Indentification des besoins socioéconomiques ;</li> <li>Réalisation des études thématiques de base et valida<br/>par le Comité Consultatif National. (CCN).</li> </ul>   | a 100%              |                    |
| 3. Compilation de données<br>référence avec la participation<br>communautés locales | <ul> <li>Etablissement d'un mémorandum de collaboration of<br/>l'Université d'Oslo et l'Institut Supérieur de Formation<br/>de Recherche Appliquée du Mali (ISFRA);</li> <li>Réalisation de l'Inventaire de la diversité biologique<br/>sites;</li> <li>Opérationnalisation de la base de données et intégra<br/>des données biophysiques de terrain;</li> <li>Une Cellule SIG est opérationnelle au niveau de l'UNI</li> <li>Production de cartes thématiques;</li> <li>Création d'une page Web interne au PVA.</li> </ul> | a 100%              | - E                |
| 4. Relevés photographiques aéri<br>cartographie des sols et du cou<br>végétal       | <ul> <li>Elaboration de cartes sur les sols, le couvert végétal e<br/>ressources hydrauliques des zones de Nara et de Bamb</li> <li>Identification des informations de base et définition de<br/>mode d'ordonnancement.</li> </ul>  | 100%                |                    |
| 5. Etablissement de l'équipement et appui au Mali                                   | <ul> <li>Achat de sept images satellitaires Landsat TM dont</li> <li>(2) sur Bamba et sept (7) sur Nara et exploitation du St</li> </ul>  | 100%                |                    |

| Principales étapes du pro  | Activités   | Difficultés rencontrées et modificat    |
|----------------------------|---|---|
|                            |   | par rapport au projet mitiar            |
|                            |   |   |
|                            |   |   |
| 2002 démarrage officiel    | - Recrutement du Chef de projet natio               | Lenteur dans les procédures de recruter |
| projet                     | de l'Assistante technique et financier              | du chef de projet national              |
|                            | du personnel d'appui.                               | T 4 1 1 / 1                             |
| 2003 Installation du proje | - Recrutement des Chefs de sites (Nai               | - Lenteur dans les procedures           |
|                            | Bamba);   | recrutement des chefs de sites          |
| 2004 Implantation dos sit  | Actiats Equipements et logistiques                  | Invesion paridianna avec                |
| 2004 Implantation des sit  | - Recrutement du personnel d'appui                  | - Invasion acridienne avec con          |
|                            | Démarrage effectif des activités                    | Renouvellement des municipales          |
|                            | terrain au niveau des sites et                      | changement d'interlocuteurs :           |
|                            | communes:   | - Difficultés dans la mobilisation      |
|                            | - Tenue de la 2 <sup>ème</sup> session du co        | fonds :                                 |
|                            | directeur régional chargé des politiques            | - Absence d'un plan stratégique         |
|                            | - Elaboration du manuel de procédure                | communication avec comme conséque       |
|                            | projet;   | entrave à la régionalité                |
|                            | - Installation du SIG et de la base donn            | -                                       |
| 2005 Evaluation à          | - Révision du plan d'opération sous fo              | - Changement d'objectifs du projet, av  |
| parcours                   | Atlas ;   | fermeture du site de Bamba ;            |
| et recentrage du projet su | <ul> <li>Démarrage du volet micro crédit</li> </ul> | - Retard lié au décaissement des fe     |
| développement d'un mo      |   | suite à l'introduction du Système Atlas |
| de gestion communaut       |   |   |
| de périmètre pastoral ;    |   |   |
| 2006 Identification        | - Desengagement et transfert                        |   |
| Villages tests du Perim    | Moîtrico, technique, du neuvieu                     |   |
| 1 astor ar                 | - Maturise technique du nouveau<br>d'intervention : |   |
|                            | - Développement du mo                               |   |
|                            | d'aménagement et de gestion du PP :                 |   |
|                            | - Démarrage de la compos                            |   |
|                            | recherche ciblée ;                                  |   |
|                            | Elaboration de la convention lo                     |   |
|                            | intervillageoise                                    |   |
| 2007 Poursuite des trav    | - Renforcement des capacités                        | - Fin brusque du projet alors que certa |
| de développement du mo     | communautés et de voyages d'études ;                | activités prévues et planifiées ne sont |
| communautaire de périm     | - Auto évaluation du PVA ;                          | exécutées.;                             |
| pastoral et clôture du pro | - Evaluation finale et clôture du PVA               | - Elections présidentielles et          |
|                            |   | législatives                            |

#### Annexe 8 : QUELQUES REPERES HISTORIQUES DU PVA

#### Annexe 9 : LISTE DES DOCUMENTS REALISES PAR LE PGVA

- 2. Document de description du projet (PRODOC) version française ;
- 3. Rapport de l'Atelier de lancement du PGVA ;
- 4. Rapport d'études relatives à l'occupation et l'utilisation actuelle des terres du périmètre pastoral intervillageois compris entre Tendie, Kel El Gargny, Medina coura et Diewaye ;
- 5. Rapport d'étude sur les transhumants dans la zone de Nara ;
- 6. Proposition d'un modèle de gestion des ressources pastorales au sud de la commune rurale de Nara (Diassana et Norbert, 2006);
- 7. Etude socio-économique de la zone pastorale de Diéwaye Médina Coura Ker El Gargny et Tendjé (Norbert Dembélé, 2006) ;
- 8. Etude de la filière gomme arabique ;
- 9. Etude de la diversité biologique des sites ;
- 10. Etude pour la prise en compte des transhumants dans la gestion pastorale (Norbert Dembélé 2006) ;
- 11. Rapport Etude sur la biomasse (Diassana Dembélé, 2006) ;
- 12. Etude monographique des sites ;
- 13. Etude du potentiel du périmètre ;
- 14. Synthèse des activités de mise en place d'un système d'information géographique sur les zones arides du Mali (BEAGGES, 2005) ;
- 15. Analyse de la perception locale sur les causes de dégradation des ressources naturelles (Norbert et Diassana, 2006) ;
- 16. Elaboration du Plan d'Aménagement ;
- 17. Rapport d'étude sur l'élaboration d'une Convention Locale de Gestion du Périmètre pastoral dans la Commune rurale de Nara (Norbert, 2006) ;
- 18. Inventaire et Elaboration du Plan d'Aménagement de la Forêt de Diewaye ;
- 19. Rapport de la stratégie de désengagement (ou Atelier de Fana) ;
- 20. Outil d'analyse de désengagement ;
- 21. Rapport d'évaluation à mi-parcours (version anglaise) ;
- 22. Rapport de l'étude sur les conventions locales (version finale) ;
- 23. Compte rendu de l'atelier de Botswana ;
- 24. Plan d'action révisé (Work Plan) ;
- 25. Rapport du coordinateur régional (Guerit) ;
- 26. Rapport sur la restauration du périmètre ;
- 27. Rapport PNUD/PIRL (2006-é007);
- 28. Plan Opérationnel (2006-2007);
- 29. Rapport d'auto-évaluation du PVA (Abou Berté et Nana Touré) ;
- 30. Rapport final du PVA (version Kallé et Doumbia) ;
- 31. Rapports annuels (2003, 2004, 2005, 2006);
- 32. Rapports des études thématiques réalisées par l'ISFRA (2007) :
- <u>Thème1</u>: Analyse détaillée des procédures de gestion traditionnelle des ressources naturelles, des changements intervenus dans le temps, des impacts des changements et des contraintes réelles ou potentiel à valeur viabilité dans différents systèmes de production.
- <u>Thème2</u> : Étude de l'impact des espèces végétales consommées par les communautés en cas de disette/famine Commercialisation, détermination des menaces et examens de leurs capacités de régénération, dans le Cercle de Nara.
- <u>Thème3</u> : Rapport d'analyse des différents modes de vie des sociétés agro-pastorales et transhumantes de la façon dont celle-ci exploitent et affectent les ressources naturelles.
- <u>Thème4</u> : Le rôle réel des sites sacrés dans la conservation de la biodiversité dans le Cercle de Nara.
  - <u>Thème5</u> : Description et analyse des perceptions locales sur l'état actuel des ressources naturelles avec une attention particulière aux tendances observées et

les causes alléguées à celles-là dans le site de Nara du Projet de Gestion de la Végétation Autochtone.

| N° | Prénoms et Nom         | Qualité/Fonction |
|----|------------------------|------------------|
| 1  | Amed Lamine KEITA      | Cultivateur      |
| 2  | Amed KEITA             | Cultivateur      |
| 3  | Hamidi KOUREICHI       | Cultivateur      |
| 4  | Nama COULIBALY         | Cultivateur      |
| 5  | Chieck KEITA           | Cultivateur      |
| 6  | Cheick KEITA           | Cultivateur      |
| 7  | Bata COULIBALY         | Cultivateur      |
| 8  | Cheickina COULIBALY    | Cultivateur      |
| 9  | Baba DIKA              | Cultivateur      |
| 10 | Bakari KEITA           | Cultivateur      |
| 11 | Moulaye SAMAKE         | Cultivateur      |
| 12 | Amed O. COULIBALY      | Cultivateur      |
| 13 | Cheickine COULIBALY    | Cultivateur      |
| 14 | Tètè Samake            | Cultivateur      |
| 15 | Brahima SAMAKE         | Cultivateur      |
| 16 | Amed Habdala COULIBALY | Cultivateur      |
| 17 | Kalifa KEITA           | Cultivateur      |
| 18 | Hadrame COULIBALY      | Cultivateur      |
| 19 | Talili COULIBALY       | Cultivateur      |
| 20 | Tafè SAMKE             | Cultivateur      |
| 21 | Bakari KEITA           | Cultivateur      |
| 22 | Bechiri KEITA          | Cultivateur      |
| 23 | Nina SAMAKE            | Cultivateur      |
| 24 | Alina KEITA            | Cultivateur      |
| 25 | Thaïye KEITA           | Cultivateur      |
| 26 | Hamed COULIBALY        | Cultivateur      |
| 27 | Youba COULIBALY        | Cultivateur      |
| 28 | Hamed COULIBALY        | Cultivateur      |
| 29 | Idoune KEITA           | Cultivateur      |

Annexe 10 : LISTES DES PERSONNES RENCONTREES A NARA Village de TIENDIE Liste de présence des Hommes

#### Liste de présence des Femmes

| N° | Prénoms et nom     | Qualité/Fonction |
|----|--------------------|------------------|
| 1  | Lezize coulibaly   | Ménager          |
| 2  | Moulkaye MAKORGUYE | Ménager          |
| 3  | Fatouma DIARRA     | Ménager          |
| 4  | Harïe DIK0         | Ménager          |
| 5  | Alima SIBY         | Ménager          |
| 6  | Ziriki DIKO        | Ménager          |
| 7  | Fatouma SOUKO      | Ménager          |
| 8  | Fatouma DIALLO     | Ménager          |
| 9  | Havie DIARRA       | Ménager          |
| 10 | Awa SOUKO          | Ménager          |
| 11 | Haîne COULIBALY    | Ménager          |
| 12 | Lalle SOUKO        | Ménager          |
| 13 | Fatouma SOUKO      | Ménager          |
| 14 | Rounana SAMAKE     | Ménager          |
| 15 | Haîne SOUKO        | Ménager          |
| 16 | Lalle NAMA         | Ménager          |

| 17 | Maîne BABY          | Ménager |
|----|---------------------|---------|
| 18 | Moulala DIALLO      | Ménager |
| 19 | Fatouma COULIBALY   | Ménager |
| 20 | Fatouma ZAME        | Ménager |
| 21 | Boula SOUKO         | Ménager |
| 22 | Manba COULIBALY     | Ménager |
| 23 | Fatouma SAMAKE      | Ménager |
| 24 | Sirantou COULIBALY  | Ménager |
| 25 | Moidi DIAWARA       | Ménager |
| 26 | Fatouma DIKO        | Ménager |
| 27 | Mariame COULIBALY   | Ménager |
| 28 | Maman COULIBALY     | Ménager |
| 29 | Arieye SAMAKE       | Ménager |
| 30 | Kalaive DIKO        | Ménager |
| 31 | Kalaive COULIBALY   | Ménager |
| 32 | Rabia SOUKO         | Ménager |
| 33 | Zemala SOUKO        | Ménager |
| 34 | Fatouma DIARRA      | Ménager |
| 35 | Boubou SOUCKO       | Ménager |
| 36 | Madar SOUCKO        | Ménager |
| 37 | Fatouma COULIBALY   | Ménager |
| 38 | Fatouma COULIBALY   | Ménager |
| 39 | Seiye DIARRA        | Ménager |
| 40 | Mouloumou COULIBALY | Ménager |
| 41 | Fatouma COULIBALY   | Ménager |

#### <u>Village de KER- EL GAGNY</u> Liste de présence des Hommes

| NPrenous et nomQuante/Policition1Nafa DIARRAChef de village2Moulaye Adoul Karim HAIDARAMarabout3Talili Sahel DICKOMarabout4Boubacar MARGUIRIGIREConseiller5Brahima KONARAConseiller6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoyti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur | Nº | Drónoms of nom              | Qualitá/Fonation |
|--|----|-----------------------------|------------------|
| 1Nata DJARKAChef de village2Moulaye Adoul Karim HAIDARAMarabout3Talili Sahel DICKOMarabout4Boubacar MARGUIRIGIREConseiller5Brahima KONARAConseiller6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur                                | 1  |                             |                  |
| 2Moulaye Adoul Karım HAIDARAMarabout3Talili Sahel DICKOMarabout4Boubacar MARGUIRIGIREConseiller5Brahima KONARAConseiller6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 1  | Nata DIARRA                 | Chef de village  |
| 3Talili Sahel DICKOMarabout4Boubacar MARGUIRIGIREConseiller5Brahima KONARAConseiller6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 2  | Moulaye Adoul Karim HAIDARA | Marabout         |
| 4Boubacar MARGUIRIGIREConseiller5Brahima KONARAConseiller6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 3  | Talili Sahel DICKO          | Marabout         |
| 5Brahima KONARAConseiller6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 4  | Boubacar MARGUIRIGIRE       | Conseiller       |
| 6Madvadel KONAREConseiller7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 5  | Brahima KONARA              | Conseiller       |
| 7Aly COULIBALYConseiller8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 6  | Madvadel KONARE             | Conseiller       |
| 8Aly TAMBOURAAgro pasteur9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 7  | Aly COULIBALY               | Conseiller       |
| 9Taleti KONAREAgro pasteur10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoyti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 8  | Aly TAMBOURA                | Agro pasteur     |
| 10Cheichné COULIBALYAgro pasteur11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 9  | Taleti KONARE               | Agro pasteur     |
| 11Sidi DIARRAAgro pasteur12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 10 | Cheichné COULIBALY          | Agro pasteur     |
| 12Hamoytti COULIBALYAgro pasteur13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 11 | Sidi DIARRA                 | Agro pasteur     |
| 13Boudade AJOMAgro pasteur14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 12 | Hamoytti COULIBALY          | Agro pasteur     |
| 14Abde Jabar AJOMAgro pasteur15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 13 | Boudade AJOM                | Agro pasteur     |
| 15Mahmoud COULIBALYAgro pasteur16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 14 | Abde Jabar AJOM             | Agro pasteur     |
| 16Boubacar DIARRAAgro pasteur17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 15 | Mahmoud COULIBALY           | Agro pasteur     |
| 17Allali DIAWARAAgro pasteur18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 16 | Boubacar DIARRA             | Agro pasteur     |
| 18Elbou COULIBALYAgro pasteur19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 17 | Allali DIAWARA              | Agro pasteur     |
| 19Ousmane KONAREAgro pasteur20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 18 | Elbou COULIBALY             | Agro pasteur     |
| 20Addé KONAREAgro pasteur21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 19 | Ousmane KONARE              | Agro pasteur     |
| 21Talili Sahel NamaAgro pasteur22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 20 | Addé KONARE                 | Agro pasteur     |
| 22Bouh DIARRAAgro pasteur23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 21 | Talili Sahel Nama           | Agro pasteur     |
| 23Samy BABYAgro pasteur24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 22 | Bouh DIARRA                 | Agro pasteur     |
| 24Jafar DIAWARAAgro pasteur25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 23 | Samy BABY                   | Agro pasteur     |
| 25Bouli COULIBALYAgro pasteur26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur  | 24 | Jafar DIAWARA               | Agro pasteur     |
| 26Ahmed GOUNDOUROUAgro pasteur27Bousoura KONTAAgro pasteur   | 25 | Bouli COULIBALY             | Agro pasteur     |
| 27 Bousoura KONTA Agro pasteur   | 26 | Ahmed GOUNDOUROU            | Agro pasteur     |
|  | 27 | Bousoura KONTA              | Agro pasteur     |

| 28 | Mohamed KONARE        | Agro pasteur |
|----|-----------------------|--------------|
| 29 | Bouch HAIDARA         | Agro pasteur |
| 30 | Ely KONTA             | Agro pasteur |
| 31 | Moulaye Ely COULIBALY | Agro pasteur |
| 32 | Sidi MISSI            | Agro pasteur |
| 33 | Amie COULIBALY        | Agro pasteur |
| 34 | Ali COULIBALY         | Agro pasteur |
| 35 | Ahmed Zene DIARRA     | Agro pasteur |
| 36 | Moulaye HAIDARA       | Agro pasteur |
| 37 | Mohamed COULIBALY     | Agro pasteur |
| 38 | Moulaye HAIDARA       | Agro pasteur |
| 39 | Baba DIAWARA          | Agro pasteur |
| 40 | Salick COULIBALY      | Agro pasteur |
| 41 | Massaoud COULIBALY    | Agro pasteur |
| 42 | Mohamed MAGUIRIGUE    | Agro pasteur |
| 43 | Allahi COULIBALY      | Agro pasteur |
| 44 | Bechir COULIBALY      | Agro pasteur |
| 45 | Talili KONARE         | Agro pasteur |

#### Liste de présence des Femmes

| N° | Prénoms et nom        | Qualité/Fonction             |
|----|-----------------------|------------------------------|
| 1  | Lalliye DIARRA        | Travaille dans les marcherez |
| 2  | Simaou NAMA           | Travaille dans les marcherez |
| 3  | Fatouma KONARE        | Ménager                      |
| 4  | Lalle Fatouma AGADE   | Ménager                      |
| 5  | Assétou DIARRA        | Ménager                      |
| 6  | Aiye KEITA            | Ménager                      |
| 7  | Djénébou SIDIBE       | Ménager                      |
| 8  | Mounina COULIBALY     | Ménager                      |
| 9  | Mounina DIAWARA       | Ménager                      |
| 10 | Simaou NAMA           | Ménager                      |
| 11 | Ama Ayime             | Ménager                      |
| 12 | Guegue NAMA           | Ménager                      |
| 13 | Masoude SUBI          | Ménager                      |
| 14 | Salama DOUCOURE       | Ménager                      |
| 15 | Haine KONARE          | Ménager                      |
| 16 | Chenaie NAMA          | Ménager                      |
| 17 | Lalle Fatouma HAIDARA | Ménager                      |
| 18 | Mounina DIARRA        | Ménager                      |
| 19 | Haine DIARRA          | Ménager                      |
| 20 | Mati HAIDARA          | Ménager                      |
| 21 | Rakaie DIARRA         | Ménager                      |
| 22 | Harie AYE             | Ménager                      |
| 23 | Lalle Fatouma HAIDARA | Ménager                      |
| 24 | Kamou HAIDARA         | Ménager                      |
| 25 | Malale HAIDARA        | Ménager                      |
| 26 | Mati HAIDARA          | Ménager                      |
| 27 | Azati HAIDARA         | Ménager                      |
| 28 | Nana HAIDARA          | Ménager                      |
| 29 | Masaoude KEITA        | Ménager                      |
| 30 | Mani COULIBALY        | Ménager                      |
| 31 | Fatouma AYE           | Ménager                      |
| 32 | Fatouma COULIBALY     | Ménager                      |
| 33 | LALLIE diallo         | Ménager                      |
| 34 | Minétou DIKO          | Ménager                      |
| 35 | Rieminatou COULIBALY  | Ménager                      |

| 36      | Lakawere DOUMBIA             | Ménager |
|---------|------------------------------|---------|
| 37      | Fatouma Wale                 | Ménager |
| 38      | Fatouma Wale COULIBALY       | Ménager |
| 39      | Fatoumat TAMBOURA            | Ménager |
| 40      | Hamiti KONTA                 | Ménager |
| 41      | Seleme COULIBALY             | Ménager |
| 42      | Midasalama Nama              | Ménager |
| 43      | Fatouma Rabia Nama           | Ménager |
| 44      | Harie COULIBALY              | Ménager |
| 45      | Kamou HAIDARA                | Ménager |
| 46      | Souilme KONARE               | Ménager |
| 47      | Sakiye COULIBALY             | Ménager |
| 48      | Sara Mite COULIBALY          | Ménager |
| 49      | Harie COULIBALY              | Ménager |
| 50      | Mati COULIBALY               | Ménager |
| 51      | Kadidiatou Nam               | Ménager |
| 52      | Boide NAMA                   | Ménager |
| 53      | Fatouma KEITA                | Ménager |
| 54      | Fatouma DIARRA               | Ménager |
| 55      | Harie COULIBALY              |         |
| 56      | Harie COULIBALY              | Ménager |
| 57      | Mati COULIBALY               | Ménager |
| 58      | Mati COULIBALY               | Ménager |
| 59      | Biya KEITA                   | Ménager |
| 60      | Zeriki Nama                  | Ménager |
| 61      | Minata Mack                  | Ménager |
| 62      | Zouma Massarane              | Ménager |
| 63      | Haiché DILLY                 | Ménager |
| 64      | Lalle Mite memoune COULIBALY | Ménager |
| 65      | Zidati KEIA                  | Ménager |
| 66      | Dilaha COULIBALY             | Ménager |
| 67      | Zénabou HAIDARA              | Ménager |
| 68      | Fatouma MAKARGNE             | Ménager |
| 69      | Seiye KONTA                  | Ménager |
| 70      | Sahabé COULIBALY             | Ménager |
| 71      | Midata COULIBALY             | Ménager |
| 72      | Fatouma Salike Age           | Ménager |
| 73      | Haiye AGE                    | Ménager |
| 74      | Mariye KEITA                 | Ménager |
| 75      | Clïeye MAKARGUE              | Ménager |
| 76      | Mandane BABI                 | Ménager |
| 77      | Mariame COULIBALY            | Ménager |
| 78      | Lalle Mounati COULIBALY      | Ménager |
| 79      | Sirantou COULIBALY           | Ménager |
| 80      |                              | Menager |
| 81      |                              | Ménager |
| 82      | Souilimou MAKARGUE           | Menager |
| 83      | IItaha DICKO                 | Menager |
| 84      | FISHIM NAMA                  | Menager |
| 85      | Kaiye DIARRA                 | Menager |
| 86      | Fatouma MISI                 | Menager |
| · · · / |                              | Menager |

#### Village de MEDINA COURA Liste de présence des Hommes

| Liste de p | bresence des nommes |                  |
|------------|---------------------|------------------|
| N°         | Prénoms et nom      | Qualité/Fonction |

| 1  | Boubacar S. DICKO        | Chef de village                |
|----|--------------------------|--------------------------------|
| 2  | Hammè COULIBALY          | conseiller                     |
| 3  | Boubacar COULIBALY       | conseiller                     |
| 4  | Cheik Salah DICKO        | conseiller                     |
| 5  | Mohamed DICKO            | conseiller                     |
| 6  | Mogveswed DICKO          | conseiller                     |
| 7  | Nané ould MAMODY         | Cultivateur                    |
| 8  | Boubacar Ould AFMANE     | SLPIA/PGVA basé à Madina Coura |
| 9  | Mohamad Kade Dicko       | Cultivateur                    |
| 10 | Cheick DIARRA            | Cultivateur                    |
| 11 | Moctar KEITA             | Cultivateur                    |
| 12 | Hassane HAIDARA          | Cultivateur                    |
| 13 | Mohamed Lamine DIARRA    | Cultivateur                    |
| 14 | Cheickinè COULIBALY      | Cultivateur                    |
| 15 | Baba DICKO               | Cultivateur                    |
| 16 | Did COULIBALY            | Cultivateur                    |
| 17 | Cheick COULIBALY         | Cultivateur                    |
| 18 | Mohamed COULIBALY        | Cultivateur                    |
| 19 | Cheick COULIBALY         | Cultivateur                    |
| 20 | Youba COULIBALY          | Cultivateur                    |
| 21 | Handoul Moctar COULIBALY | Cultivateur                    |
| 22 | M'Bouyé KEITA            | Cultivateur                    |
| 23 | Mohamed Baby             | Cultivateur                    |
| 24 | Mohamed COULIBALY        | Cultivateur                    |
| 25 | Cheick Elkebir DIAWARA   | Cultivateur                    |
| 26 | Teté Coulibalay          | Cultivateur                    |
| 27 | Ali COULIBALY            | Cultivateur                    |
| 28 | Talih COULIBALY          | Cultivateur                    |
| 29 | Mohamed Lamine COULIBALY | Cultivateur                    |
| 30 | Adrami COULIBALY         | Cultivateur                    |
| 31 | Cheick COULIBALY         | Cultivateur                    |
| 32 | Zeizé DICKO              | Cultivateur                    |
| 33 | Mohamed Kabi COULIBALY   |                                |
| 34 | Boubacar COULIBALY       |                                |
| 35 | Sidi Abdalah COULIBALY   |                                |
| 36 | Cheickné COULIBALY       |                                |
| 37 | M'Baba COULIBALY         |                                |
| 38 | Mohamedould Morry        |                                |
| 39 | Hasni COULIBALY          |                                |
| 40 | Yarbé COULIBALY          |                                |
| 41 | Sidoumou COULIBALY       |                                |
| 42 | Namé COULIBALY           |                                |
| 43 | Boushiyé DIARRA          |                                |
| 44 | Nezih DIAWARA            |                                |
| 45 | Ali M'Boucar DICKO       |                                |
| 46 | Sidoumou BALY            |                                |
| 47 | Youbba COULIBALY         |                                |
| 48 | Aly KEITA                |                                |
| 49 | Cheick COULIBALY         |                                |
| 50 | Mohamed lamine COULIBALY |                                |
| 51 |                          |                                |

#### Village de Médina Coura Liste de présence des Femmes

| 1Lallia HAÏDARAMénagère2Lallé HAIDARAMénagère3Kayé HAIDARAMénagère4Nané KANEMénagère5Izété COULIBALYMénagère6Haudidia SOUCKOMénagère7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère | N° | Prénoms et Nom         | Qualité/Fonction |
|--|----|------------------------|------------------|
| 2Lallé HAIDARAMénagère3Kayé HAIDARAMénagère4Nané KANEMénagère5Izété COULIBALYMénagère6Haudidia SOUCKOMénagère7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulter COULIBALYMénagère16Mama KOUREICHMénagère17Moumite KOUREICHMénagère18Lémoyme DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère                        | 1  | Lallia HAÏDARA         | Ménagère         |
| 3Kayé HAIDARAMénagère4Nané KANEMénagère5Izété COULIBALYMénagère6Haudidia SOUCKOMénagère7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulter COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère  | 2  | Lallé HAIDARA          | Ménagère         |
| 4Nané KANEMénagère5Izété COULIBALYMénagère6Haudidia SOUCKOMénagère7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 3  | Kayé HAIDARA           | Ménagère         |
| 5Izété COULIBALYMénagère6Haudidia SOUCKOMénagère7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 4  | Nané KANE              | Ménagère         |
| 6Haudidia SOUCKOMénagère7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 5  | Izété COULIBALY        | Ménagère         |
| 7Alizé COULIBALYMénagère8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère  | 6  | Haudidia SOUCKO        | Ménagère         |
| 8Lezizé COULIBALYMénagère9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère  | 7  | Alizé COULIBALY        | Ménagère         |
| 9Kadidié COULIBALYMénagère10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 8  | Lezizé COULIBALY       | Ménagère         |
| 10Fatma Lezizé COULIBALYMénagère11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 9  | Kadidié COULIBALY      | Ménagère         |
| 11Messoude NAMEMénagère12Jzété COULIBALYMénagère13Koumaty COULIBALYMénagère14Fatma DIARRAMénagère15Moulker COULIBALYMénagère16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 10 | Fatma Lezizé COULIBALY | Ménagère         |
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| 16Mama KOUREICHMénagère17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 15 | Moulker COULIBALY      | Ménagère         |
| 17Moumine KOUREICHMénagère18Lémoyme DICKOMénagère19Lalle DICKOMénagère20Fatma COULIBALYMénagère21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère  | 16 | Mama KOUREICH          | Ménagère         |
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| 21Siandou COULIBALYMénagère22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère   | 20 | Fatma COULIBALY        | Ménagère         |
| 22Mamma DIARRAMénagère23Zidala COULIBALYMénagère24Lallé Fatma MAOUFERMénagère  | 21 | Siandou COULIBALY      | Ménagère         |
| 23     Zidala COULIBALY     Ménagère       24     Lallé Fatma MAOUFER     Ménagère   | 22 | Mamma DIARRA           | Ménagère         |
| 24   Lallé Fatma MAOUFER   Ménagère  | 23 | Zidala COULIBALY       | Ménagère         |
|  | 24 | Lallé Fatma MAOUFER    | Ménagère         |
| 25 Siandou DIARRA Ménagère   | 25 | Siandou DIARRA         | Ménagère         |
| 26 Moidié DIARRA Ménagère  | 26 | Moidié DIARRA          | Ménagère         |
| 27 Mamma COULIBALY Ménagère  | 27 | Mamma COULIBALY        | Ménagère         |
| 28   Souadou DIALLO   Ménagère   | 28 | Souadou DIALLO         | Ménagère         |
| 29 Koifé DICKO Ménagère  | 29 | Koifé DICKO            | Ménagère         |
| 30 Massonde COULIBALY Ménagère   | 30 | Massonde COULIBALY     | Ménagère         |
| 31 Kaoufa DIARRA Ménagère  | 31 | Kaoufa DIARRA          | Ménagère         |
| 32   Rablouha COULIBALY   Ménagère   | 32 | Rablouha COULIBALY     | Ménagère         |
| 33   Fatma COULIBALY   Ménagère  | 33 | Fatma COULIBALY        | Ménagère         |
| 34   Khére KHIBE   Ménagère  | 34 | Khére KHIBE            | Ménagère         |
| 35 Koufyé SACKO Ménagère   | 35 | Koufyé SACKO           | Ménagère         |
| 36 Koyfé COULIBALY Ménagère  | 36 | Koyfé COULIBALY        | Ménagère         |
| 37 Haïti COULIBALY Ménagère  | 37 | Haïti COULIBALY        | Ménagère         |
| 38 Fatma Kaoufa COULIBALY Ménagère   | 38 | Fatma Kaoufa COULIBALY | Ménagère         |
| 39 Moute COULIBALY Ménagère  | 39 | Moute COULIBALY        | Ménagère         |
| 40   Lemine DIARRA     Ménagère  | 40 | Lemine DIARRA          | Ménagère         |
| 41 Ayé DIAWARA Ménagère  | 41 | Ayé DIAWARA            | Ménagère         |
| 42 Lemine DIARRA Ménagère  | 42 | Lemine DIARRA          | Ménagère         |

| 43 | Fatma Mint SACKON   | Ménagère |
|----|---------------------|----------|
| 44 | Koufuje YAMA        | Ménagère |
| 45 | HAye KONTA          | Ménagère |
| 46 | Aïché KHIBE         | Ménagère |
| 47 | Aya COULIBALY       | Ménagère |
| 48 | Fatma BABY          | Ménagère |
| 49 | Lehdiyé KEITA       | Ménagère |
| 50 | Koudiadiata DIARRA  | Ménagère |
| 51 | Matty COULIBALY     | Ménagère |
| 52 | Kayé COULIBALY      | Ménagère |
| 53 | Mindassé CHIBE      | Ménagère |
| 54 | Mané COULIBALY      | Ménagère |
| 55 | Nammy COULIBALY     | Ménagère |
| 56 | Diché COULIBALY     | Ménagère |
| 57 | Robia COULIBALY     | Ménagère |
| 58 | Aya SAMAKE          | Ménagère |
| 59 | Aché DIAWARA        | Ménagère |
| 60 | Horie COULIBALY     | Ménagère |
| 61 | Taousse SOUCKO      | Ménagère |
| 62 | Koïfa SOUCKO        | Ménagère |
| 63 | Selehné DIAWARA     | Ménagère |
| 64 | Zidaha DIARRA       | Ménagère |
| 65 | Hawa COULIBALY      | Ménagère |
| 66 | Liné BABY           | Ménagère |
| 67 | Diani DIARRA        | Ménagère |
| 68 | Lezizé DICKO        | Ménagère |
| 69 | Fatma DICKO         | Ménagère |
| 70 | Mariam DICKO        | Ménagère |
| 71 | Boybani DICKO       | Ménagère |
| 72 | Youmma COULIBALY    | Ménagère |
| 73 | Melké NAMMA         | Ménagère |
| 74 | Aïche AJOM          | Ménagère |
| 75 | Fatma COULIBALY     | Ménagère |
| 76 | Fatinetou COULIBALY | Ménagère |
| 77 | Fatma DIARRA        | Ménagère |
| 78 | Absè DIARRA         | Ménagère |
| 79 | Lallé COULIBALY     | Ménagère |
| 80 | Heüné COULIBALY     | Ménagère |
| 81 | Melkè SAMAKE        | Ménagère |
| 82 | Chwaye BAH          | Ménagère |
| 83 | Rokia DICKO         | Ménagère |
| 84 | Maruje HAMORDE      | Ménagère |
| 85 | Omma TRAORE         | Ménagère |
| 86 | Zeinabé KONTA       | Ménagère |

| 87 | Zahara HAIDARA     | Ménagère |
|----|--------------------|----------|
| 88 | Rabia COULIBALY    | Ménagère |
| 89 | Kadiadia COULIBALY | Ménagère |
| 90 | Koïfa COULIBALY    | Ménagère |
| 91 | Tawousse COULIBALY | Ménagère |
| 92 | Tara COULIBALY     | Ménagère |
| 93 | Lara SAMAKE        | Ménagère |
| 94 | Aïché COULIBALY    | Ménagère |
| 95 | Mariam DICKO       | Ménagère |
| 96 | Néné COULIBALY     | Ménagère |
| 97 | Tawousse COULIBALY | Ménagère |

#### Liste de présence Femmes

| N° | Prénoms et Nom      | Qualité/Fonction |
|----|---------------------|------------------|
| 1  | Seba COULIBALY      | Ménagère         |
| 2  | Alima COULIBALY     | Ménagère         |
| 3  | Dousouba DEMBELE    | Ménagère         |
| 4  | Guerouga KAMISSOCKO | Ménagère         |
| 5  | Sokona SACKO        | Ménagère         |
| 6  | Ina CAMARA          | Ménagère         |
| 7  | Bita SACKO          | Ménagère         |
| 8  | Assa KOUMA          | Ménagère         |
| 9  | Téné TRAORE         | Ménagère         |
| 10 | Déné DOUCOURI       | Ménagère         |
| 11 | Mourina FOFANA      | Ménagère         |
| 12 | Indourou KEITA      | Ménagère         |
| 13 | M'Barsa SACKO       | Ménagère         |
| 14 | Maïmouna DRAME      | Ménagère         |
| 15 | Lallaïche DICKO     | Ménagère         |
| 16 | Kangue DRAME        | Ménagère         |
| 17 | Assa SILLA          | Ménagère         |
| 18 | Kadeye DIALLO       | Ménagère         |

#### Liste de présence des Hommes

| N° | Prénoms et Nom     | Qualité/Fonction     |
|----|--------------------|----------------------|
| 1  | Setigui DRAME      | Chef du village      |
| 2  | Bassi COULIBALY    | Conseiller           |
| 3  | Bouyé COULIBALY    | Conseiller           |
| 4  | Brahim DIAME       | Directeur école Nara |
| 5  | Dianjuina DRAME    | Cultuvateur          |
| 6  | Cheickné KOUMA     | Agro-eleveurs        |
| 7  | Samba COULIBALY    |                      |
| 8  | Gaoussou DEMBELE   |                      |
| 9  | Cheickné COULIBALY |                      |

| 10 | Mahamadou DRAME      |                  |
|----|----------------------|------------------|
| 11 | Abdoulaye KEITA      |                  |
| 12 | Moussa TOURE         |                  |
| 13 | Drahamane DRAME      |                  |
| 14 | Brehima BIDANISS     |                  |
| 15 | Modibo COULMIBALY    |                  |
| 16 | Papa COULIBALY       |                  |
| 17 | Cheickne COULIBALY   |                  |
| 18 | Fousseni COULIBALY   |                  |
| 19 | Lassana COULIBALY    |                  |
| 20 | Dramane KAMISSOKO    |                  |
| 21 | Madou DEMBELE        |                  |
| 22 | Amadou DRAME         |                  |
| 23 | Daya COULIBALY       |                  |
| 24 | Moulaye DRAME        | Cultivateur      |
| 25 | Amadou DOUCOURE      | Cultivateur      |
| 26 | Cheicki SACKO        | Cultivateur      |
| 27 | Salim DOUCARA        | Cultivateur      |
| 28 | Mahamet COULIBALY    | Cultivateur      |
| 29 | Hammou COULIBALY     | Cultivateur      |
| 30 | Cheické TRAORE       | Cultivateur      |
| 31 | Sékou COULIBALY      | Chauffeur        |
| 32 | Taoulé KEITA         | Chauffeur        |
| 33 | Mamadou KONATE       | Chauffeur        |
| 34 | Boubacar Ould AFMANE | C.A.P SLPIA      |
| 35 | Bakary KEITA         | Technicien       |
| 36 | Ganda KEITA          | Guide interprète |
| 37 | Mouse Djougou CISSE  | SCN Nara         |
| 38 | Ali TOURE            | Enseignant       |
| 39 | Bokoré DRAME         | Griot            |

#### LISTE DES PARTENAIRES STRATEGIQUES DE NARA

| N° | Prénoms et Nom       | Qualité/Fonction   |
|----|----------------------|--|
| 1  | Sambou SOUMARE       | Prof Ens-Sup-Lycée de Nara   |
| 2  | Dr Mark NICHOLSON    | Interna  |
| 3  | Yacouba DOUMBIA      | Chef de Site PVA   |
| 4  | Moussa Haméye MAIGA  | Adm civil Prefet du Cercle de Nara                                   |
| 5  | Mahamadou SACKO      | Président du conseil de cercle de Nara                               |
| 6  | Bakary MANGASSOUBA   | Maire commune rurale Nara  |
| 7  | Daouda Moussa TRAORE | Chef de service local des production des industries animales de Nara |
| 8  | Békaye KEITA         | 1 <sup>er</sup> Conseiller du chef de village Nara                   |
| 9  | Yacouba Yassa DIARRA | Chef de volet GRN STOP-SAHEL Nar                                     |
| 10 | Sékou TOURE    | Sous-préfet de Nara-Ouagadou-Gué |
|----|----------------|----------------------------------|
| 11 | Alpha A. MAIGA | Chef Secteur vétérinaire Nara    |
| 12 | Ousmane TOURE  | Adjoint projet Nara              |

#### LA COOPERATIVE MULTI FONCTIONNELLE DES FEMMES DE NARA

| N° | Prénoms et Nom               | Qualité/Fonction       |  |
|----|------------------------------|------------------------|--|
| 1  | Mme KEITA Aminata SOUCKO     | Secrétaire Production  |  |
| 2  | Mme DIALLO Fatoumata TRAORE  | Surveillance           |  |
| 3  | Mme SIDIBE Aminata SIDIBE    | S. développement       |  |
| 4  | Mme KEITA Nana SOUCKO        | Vice Présidente        |  |
| 5  | Mme DIALLO Fatoumata TOUKARA | Comité de surveillance |  |
| 6  | Mme SADESSY Djénéba SY       | Organisatrice          |  |
| 7  | Mme CAMARA Koudedia SISSOKO  | Trésorier général      |  |

## LISTE DES PERSONNES RESSOURCES RENCONTREES A BAMAKO

| N° | Prénoms et Noms        | Qualité/Fonction         |
|----|------------------------|--------------------------|
| 1  | Gaoussou TRAORE        | Chercheur IER            |
| 2  | Abdou Y MAIGA          | Chercheur IER            |
| 3  | Alamir TOURE           | Chercheur STP            |
| 4  | Amadou MAIGA           | Chercheur STP            |
| 5  | Boua NOUMANTA          | PRODESO                  |
| 6  | Mahalmadane GUITEYE    | INSTITUT DU SAHEL        |
| 7  | Abou BERTHE            | IER Sotuba               |
| 8  | Mahamane MAIGA         | Chercheur ISFRA          |
| 9  | KONATE, MARIKO, TRAORE | BEAGGES                  |
| 10 | Norbert DEMBELE        | Consultant PVA           |
| 11 | Mohamed KALLE          | Coordinateur PVA         |
| 12 | Yakouba DOUMBIA        | Chef de Site Nara        |
| 13 | Kalfa SANOGO           | PNUD                     |
| 14 | Felix DAKOUO           | Directeur National DNCN  |
| 15 | Alassane B MAIGA       | Conseiller Technique MEA |
| 16 |                        | Secrétaire Général MEA   |

Annex II: National consultant report (Botswana)

## Annex III: National consultant report (Kenya)

## Final Evaluation of the UNEP-UNDP-GEF project:

## Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in Arid Zones of Africa – GF/2740-03-4618

Report of the National Consultant, Kenya

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<sup>&</sup>lt;sup>3</sup> Unless otherwise stated, the views expressed in this report are those of the National Consultant

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List of Acronyms ALRMP: Arid Lands Resource Management Project

ASAL: Arid and Semi-Arid Lands

ALLPRO: ASAL Livestock and Livelihood Project

ADB: African Development Bank CAP: Community Action Plan CJPC: Catholic Justice and Peace Commission **CBO:** Community Based Organization **DEC:** District Environment Committee **DEAP:** District Environment Action Plan DRSRS: Department of Resource Surveys and Remote Sensing EMC: Environment Management Committee EMCA: Environmental Management and Coordination Act FHI: Food for the Hungry International FE: Final Evaluation GEF: Global Environment Management Facility GoK: Government of Kenya GIS: Geographic Information System GTZ: Gesselschaft Fur Technische Zusammanarbeit GTZ-IS: Gesselschaft Fur Technische Zusammanarbeit-International Services **IPAL:** Integrated Program on Arid Lands **IVP: Indigenous Vegetation Project** KARI: Kenya Agricultural Research Institute KEFRI: Kenya Forestry Research Institute MDP: Marsabit Development Program MENR: Ministry of Environment and Natural Resources MADEMA: Marsabit District Environmental Management Association NEMA: National Environment Management Authority NGO: Non-Governmental Organization NPSC: National Project Steering Committee NPU: National Project Unit NORAD: Norwegian Agency for Development PTMC: Project Technical Management Committee **RCU: Regional Coordination Unit** TAC: Technical Advisory Committee **TOR:** Terms of Reference **UNEP: United Nations Environment Programme** UNDP: United Nations Development Programme UNESCO: United Nations Educations, Scientific and Cultural Organization

UNOPS: United Nations Office for Project Services

#### **Executive Summary**

The objective of the final evaluation of the Indigenous Vegetation Project was to establish project performance so far, review and evaluate the implementation progress of planned project activities and outputs against actual results and provide lessons learnt and give recommendations on how to improve implementation of similar projects delivery in future. The scope of the evaluation included analysis of seven important aspects of project performance in Kenya namely: attainment of objectives, outputs and planned results; implementation approach; country ownership and drivenness; stakeholder participation and benefits accrued; sustainability; financial planning and; monitoring and evaluation. The report of the evaluation exercise presented herein gives a description of the outcomes of the project including the strengths and weaknesses.

Both the process implementation and impact evaluation were assessed. Methodology of evaluation involved a desk review of the literature including the project document and logframe, technical reports, quarterly and annual progress reports, mid-term evaluation report and, workshop proceedings. Broad consultations and interviews were undertaken with key individuals involved in the implementation of the project. Within the framework of nested evaluation, field visits were made to the two project sites in Marsabit and Turkana districts during which the consultant received briefings from the National Project Manager, field officers and implementation partners.

An assessment of project performance in relation to the status at project start up, as well as an indication of the extent to which the expected results at project end were achieved has been provided. This is based on the stated outputs and activities as outlined in the retrofitted logframe. Whenever possible, the rating system provided in the TOR for the regional evaluation was adopted. Overally, the attainment of objectives, outputs and planned results at the national level was rated as moderately satisfactory. In terms of implementation approach, the roles and responsibilities, organizational linkages and administrative procedures and implementation of project activities were well streamlined. Although there were consistent, timely and satisfactory linkages and assistance from the Regional coordination Units to the National project unit, with direct technical linkages between the regional and national levels, one major limitation at the regional level was the time lag in the decision -making process that nonetheless did not significantly affect the project activities at the national level. In the opinion of this evaluation, the work planning processes were quite stringent and the project performance was satisfactory. Further, good partnership arrangements with key stakeholders were fostered and would be important in ensuring sustainability of project outcomes. There was ample evidence to show adequate, responsive and positive stakeholder participation in the project activities. This inherently built the capacity of the local institutions in the two project sites to sustain project activities.

However, failure to agree on methodology at the regional level with the lead institution for the research component (University of Oslo) hampered the research process for two years. Nonetheless, the National Project concentrated on targeted research that addressed specific issues in collaboration with Egerton University especially in the Turkana project site, whose contribution with respect to temporal changes in the flood plain along river Turkwell is expected to be quite valuable to the project especially with respect to the development of community range resource management plans as an exit strategy. This evaluation finds that by involving communities in the preparation of CAPs, the project went out of its way to foster country ownership and drivenness.

One important lesson learned from the implementation of IVP is the need to factor in the project design, stakeholder awareness program especially in a community driven project. This should be done within the framework of joint planning which makes work easier and enriches knowledge sharing thus broadening the scope of stakeholders. In addition, range management systems must be adapted to the full range of climatic variability (increased frequency of droughts), and that these cannot be expected to occur within a single five-year period.

The evaluation recommends that since IVP was a pilot project aimed at developing models for sustainable rangeland resources management, there is need to upscale its findings on a larger scale over a longer period of time in order to have desired impact at community level. In addition, there is need to anchor the EMC by-laws on either EMCA (1999) or any other legal instrument. Further, to ensure sustainability of the project outcomes, there is need to identify an institution that will provide backstopping services and catalyze the process and to ensure the smooth continuity of project activities. NEMA which was the coordinating institution and whose mandate includes an overall environmental management oversight is best placed to carry out this mandate in collaboration with other lead institutions as provided for in the EMCA (1999).

#### 1.0 Introduction

#### 1.1 Background

The GEF-UNEP-UNDP-GoK project 'Management of Indigenous Vegetation for the Rehabilitation of Degraded rangelands in Arid Zones of Africa' was implemented in the three countries of Botswana, Kenya and Mali. In these countries, indigenous vegetation of dryland ecosystems forms a unique ecological association of globally significant biodiversity. This biodiversity supports important ecological processes and provides the primary resource for pastoral and agropastoral production systems.

Due to the fragile nature of drylands, land degradation and loss of biodiversity are serious environmental problems that have major implications to human livelihoods in all countries. The project was therefore intended to demonstrate biodiversity conservation and dryland ecosystem restoration in arid and semiarid zones of Africa at seven sites, two of which were in Kenya. It was also intended to combine community-based indigenous knowledge, findings of scientific research, and past practical experience to rehabilitate degraded ecosystems and conserve biodiversity by developing sustainable natural resource management systems.

The main objective of the project was to develop models for the conservation of biodiversity and rehabilitation of degraded rangelands, and to develop sustainable management systems using indigenous knowledge. Attainment of this objective would be based on achievement of six project outcomes (also referred to as impacts in the project document), namely:

i. Establishment and/or strengthen appropriate indigenous management systems. It was envisaged that this would involve facilitating the creation and strengthening of representative, competent and empowered community-based management authorities and strengthening the capacity of indigenous range managers. A key part of this would be to identify and build on indigenous methods of conservation.

ii. Enhancement of regional and national biological data base on indigenous production and management systems. This was expected to facilitate better decision making and management of dryland resources through participatory information collection, analysis, and use.

iii. *Rehabilitation of degraded lands with indigenous vegetation*. This was expected to involve the reduction of overgrazing and overexploitation of natural vegetation, replanting of indigenous species and, development of rational management and sustainable use of biodiversity through community participation.

iv. Provision of alternative livelihoods and improvement of livestock production and marketing, feed and other arid land resources, based on indigenous vegetation resources. This was to involve increasing income from traditional herding of animals and other activities aimed at increasing economic diversification and output for both pastoralists and agropastoralists.

v. *Transfer of technology and information*. This was to involve the testing of management systems on a community basis, demonstration of appropriate energy-saving technologies to conserve wood, and fostering exchange of experiences and comparative learning at national and regional levels.

vi. *Targeted research* to be used for developing methods for replicating the project findings in other arid areas, in different fields relevant to indigenous vegetation management. This was expected to be done in collaboration with the University of Oslo, local universities, research institutions and communities. It was expected to form a basis for comparative analysis with a regional as well as local focus.

In Kenya, the demonstration sites were in Marsabit and Turkana districts. The two districts were selected as a follow-up of a 7-year research programme sponsored by UNEP/UNESCO on Integrated Project in Arid Lands (IPAL) that was carried out in northern parts of Kenya. In Marsabit, the selected sites were located at Korr-Ngurunit and Hurri hills while in Turkana the sites were located in Central Turkwel and Upper Turkwel. After mid term review, the project sub-sites in Marsabit were refocused and narrowed down to Korr-Ngurnit while in Turkana the activities were refocused to lower Turkwel river (Nadapal, Tiya and Kawalase) and upper Turkwel river (Kanaodon, Lokapel, Katilu, Lopur, Kalemungorok, Nakwamoru, Kalomwae and Kaputir).

In Kenya, project implementation started under the regional logframe, with two objectively verifiable indicators namely: the achievement of substantial recovery of indigenous vegetation in project sites and functional local natural resource management systems at project sites. The regional logframe was considered to be too general to guide local level planning, monitoring and evaluation. The project therefore undertook to re-focus the regional logframe so as to highlight issues and activities relevant to the country and its two sites of Marsabit and Turkana, refine indicators in accordance with GEF retrofitting guidelines and, develop a basis for monitoring and evaluation. This resulted in a national logframe and two site specific logframes in which some of the regional outcomes were either revised or merged in order to create greater coherence and facilitate smoother implementation and monitoring. Thus, the five National outcomes in the retrofitted logframe and as agreed by IVP Kenya stakeholders were used in this final evaluation. These are stated below:

- A Bio-socio-economic knowledge base created to support integration of indigenous and scientific approaches for improved resource management;
- Appropriate indigenous management systems strengthened that integrate biodiversity conservation;
- Livelihood means that reduce pressure on the ecosystem adopted to diversify economic base, increase socio-economic benefits and promote biodiversity conservation ;
- Key stakeholders have knowledge (skills and awareness) to facilitate and/or manage dry lands resources to meet socio-economic and biodiversity conservation needs; and
- Project effectively managed.

The report of the evaluation exercise presented herein gives a description of the outcomes of the project including the strengths and weaknesses.

## 1.2 Review of development evaluation: Theoretical and Conceptual framework

According to Kusek and Rist (2004)<sup>4</sup>, evaluation is basically an assessment of a planned, ongoing or completed intervention to determine its relevance, effectiveness, impact and sustainability, with the goal of incorporating lessons learned into the decision-making process. Evaluation is complementary

<sup>&</sup>lt;sup>4</sup> Kusek, J.Z. and Rist, R.C (2004). A Handbook for Development Practitioners: Ten Steps to a Results-Based Monitoring and Evaluation System. The World Bank, Washington, D.C, pp 113-128

to monitoring although each asks different questions and will likely make different uses of information and analyses. Good evaluative information can provide answers to a broad range of questions relevant to performance and achievement of outcomes. It is key in differentiating between the contribution of design and implementation to outcomes.

|                            | Strength of Design |      |     |
|----------------------------|--------------------|------|-----|
|                            |                    | High | Low |
|                            | High               | 1    | 2   |
| Strength of implementation | Low                | 3    | 4   |

#### Figure 1: Using evaluation to determine the Impacts of Design and Implementation on Outcome

Square 1 in figure 1 represents the best place to be where the design is strong and the implementation of actions to address the problem is also strong. Square 2 generates considerable ambiguity in terms of performance on outcome indicators in which there is a weak design that is strongly implemented- but with little or no evident results. In this case, evaluative questions focus on the strength and logic of the design. Square 3 also generates considerable ambiguity in terms of performance with respect to outcome indicators-again with little or no evident results whereby a well crafted design is poorly implemented. Square 4 is not a good place to be. A weak design that is badly implemented leaves only the debris of good intentions. There will be no evidence of outcomes. Thus, the evaluation information can document both the weak design and the poor implementation. The final evaluation of the Indigenous Vegetation Project (IVP) was carried out within this theoretical and conceptual framework in which both the process implementation and impact evaluation were assessed.

#### 1.3 Objectives, scope and methodology of review

As outlined in the detailed Terms of Reference (TOR) (see Annex 1), the purpose of the final evaluation (FE) was to establish project performance so far, review and evaluate the implementation progress of planned project activities and outputs against actual results and provide lessons learnt and give recommendations on how to improve implementation of similar projects delivery in future. The objectives of the evaluation were to:

(i) Assess progress made in implementing the project, in particular the strengths and weaknesses of implementing the components/activities in the logical framework of the project document and role and effectiveness of project management structures and role in implementing the project;

(ii) Evaluate the strength and weaknesses of the project design with especial reference to the new strategic priority focus (BD2) of GEF;

(iii) Evaluate the degree to which the project strategy and objectives remain valid and in line with country context and priorities; and

(iv) Develop recommendations on lesson learnt, weakness observed and risks encountered during the implementation process.

The evaluation was conducted under the guidance and supervision of the lead evaluator and in collaboration with the UNDP country office. Preparation of the national report started at the commencement of the final evaluation and a draft delivered to the lead consultant within two weeks of his visit as stipulated in the TOR.

The scope of the evaluation included analysis of seven important aspects of project performance in Kenya namely: attainment of objectives, outputs and planned results; implementation approach; country ownership and drivenness; stakeholder participation and benefits accrued; sustainability; financial planning and; monitoring and evaluation.

Methodology of evaluation involved a desk review of the literature including the project document and logframe, technical reports, quarterly and annual progress reports, mid-term evaluation report and, workshop proceedings (see Annex 3). Data collection was appropriately designed to meet the technical adequacy of the evaluation with respect to correct sampling procedures and content analysis to ensure adequate support for conclusions and recommendations. Broad consultations and interviews were undertaken with key individuals involved in the implementation of the project including project staff, the UNDP Kenya Programme Analyst, members of the National Steering Committee, National Technical Steering Committee and beneficiary communities.

Within the framework of nested evaluation, field visits were made to the two project sites in Marsabit and Turkana districts during which the consultant received briefings from the National Project Manager, field officers and implementation partners. During the fieldwork, the consultant made observations on activities that had been implemented by the project at the two sites and held discussions with community members at the various project sub-sites in Korr-Ngurnit-Ilaut-Ilmonti areas of southern Marsabit, and along the Turkwell River in Turkana particularly at Lorugum, Kaitese, Lokichar and Juluk. Appendix 2 gives a list of stakeholders consulted in the two project sites and who were involved in the evaluation effort. The consultant could not visit the Hurri Hills due to the fact that the project had phased out its activities from this sub-site due to insecurity. However, the Project Manager at the Marsabit site provided adequate documentation on project activities at Hurri hills prior to the phasing out that was useful in this final evaluation.

Meetings with implementing partners were undertaken in the context of participatory evaluation whereby feedback from stakeholders and debriefing were important components (see annex 2). Information was shared in an appropriate, targeted and timely fashion to build trust and confidence in the evaluation findings. This was important in avoiding the limitations of the after-the fact approach to evaluation that is restricted to assessing causes and changes after an intervention or initiative is over. Thus the evaluation of the project in the Kenyan case with about six months remaining to its termination enabled the feedback into the ongoing management of the project of the evaluation information particularly with respect to the development of the project exit strategy.

In preparing this report, the national consultant took cognizance of the need to place it within the context of the TOR for the broader evaluation that required him to provide assistance to the lead consultant. This consisted of providing background and understanding of the enabling environment for the project at the national and local levels, interpretation of findings and background discussions. This report, therefore, forms an important input into the lead evaluator's evaluation of the overall project.

#### 2.0 National Project Performance

This section provides an assessment of performance in relation to the status at project start up, as well as an indication of the extent to which the expected results at project end were achieved. This is based on the stated outputs and activities as outlined in the retrofitted logframe. Whenever possible, it adopts the rating system provided in the TOR for the regional evaluation.

I Attainment of objectives, outputs and planned results at the national level <u>Outcome 1</u>: A Bio-socio-economic knowledge base created to support integration of indigenous and scientific approaches for improved resource management.

Flexibility and adaptability are relevant to understanding the behaviour of pastoralists and in designing effective participatory approaches for community natural resource management. In this context, IVP

re-introduced and effectively used the UNESCO-IPAL Red paint approach, an indigenous natural resource management system, to vegetation regeneration. The Red paint approach has been effectively used by local Environmental Management Committees (EMCs) to fence off and therefore conserve young and regenerating Acacia senegal at the Korr-Ngurnit-Ilaut sub-sites in Marsabit district. Red paint approach is based on the fact that pastoralists have a fear for red paint that is associated with both danger (morans who predominantly protect the community against external invasion also paint red) and loyalty to the Government and is culturally entrenched among the pastoral community of Marsabit. This has led to increased tree cover in both Korr and Ilaut project sub-sites in Marsabit district. In the Turkana project sites, the traditional knowledge systems of Epaka and Ekwar which respectively denote deferred grazing management systems and traditional tenure of tree ownership practiced by the Turkana people along the riverine vegetation have successfully been incorporated in the newly introduced EMC concept for the rehabilitation of degraded lands. In the Ekwar system, individuals or families are assigned exclusive access rights to tree resources. Ekwar (plu. Ngikwarin), also referred to as "trees beside the river", are mostly located along the riverine system and utilized as key source of dry season fodder for livestock. Ekwar system of tree management is especially important in the drier parts and along rivers where riparian vegetation also helps to conserve scarce water resources.

In the opinion of this evaluation therefore, the project has made significant and satisfactory efforts to identify indigenous range management systems in Marsabit and Turkana although mobilizing of communities to actively manage the resources was more active in Marsabit compared to Turkana. This could be attributed to long history of EMCs in Marsabit district as a result of the long presence of MDP. On the contrary, the concept of EMCs was only introduced in Turkana by IVP and this will therefore require a longer period of time to have a significant impact.

In order to make available the appropriate indigenous knowledge, the project envisaged that land use and natural resource status and socio-economic studies were to be undertaken to provide baseline information. In 2005, after mid-term evaluation, the Department of Resource Surveys and Remote Sensing (DRSRS) delineated vegetation types and status of natural resources on 70 sample plots established on Hurri hills. However, activities on Hurri hills sub-site were discontinued due to increased conflicts between the agropastoralists and pastoralists. In 2004, DRSRS in collaboration with IVP carried out a study to map the *Ngikwarin* along Turkwell River the Turkana site in order to establish the linkages between vegetation management within an *Ngikwarin*; assess woody vegetation structure and composition in *Ngikwarin*; and assess degradation levels in *Ngikwarin*. Land use maps and information was generated for the planning and management of natural resources. All these studies have contributed significantly to a bio-socio-economic knowledge base that has supported integration of indigenous and scientific approaches for improved resource management in the two project sites.

The status of the range condition, although seen as inevitable could not take place in time due to lengthy procedures from University of Oslo. Further, a regional training workshop on inventory and monitoring of biodiversity was organized in Turkana during which a range monitoring data capture sheet was tried out but found to be rather complex. In addition, the ecological monitoring baseline that should have been done in the first year of the project was delayed for nearly three years mainly due to failure to agree on methodological issues. Thus, it is apparent that data analysis and its usefulness within the life time of the project were not clear from the outset. Targeted research could therefore, not adequately feed into the management component of the project.

Nonetheless, despite the aforementioned scenario, there was evidence of efforts to ensure ecological monitoring of rangeland status. Sustainable links were established with research institutions especially

KARI and local Universities particularly Egerton University for targeted research to support project activities. For instance, KARI's National Arid Lands Research centre at Marsabit in conjunction with IVP established 8 transects with a total of 80 sample plots at Korr and Ilaut area for the purpose of long-term monitoring of vegetation changes. Information from the transects was analyzed and presented to community members. In the opinion of this evaluation, this aspect of the project outcome is moderately satisfactory. However, KARI-Marsabit has shown keen interest in continuing with these activities after the end of IVP and therefore, there is a realistic chance of achieving the long term expected results although not within the lifetime of the project. Nonetheless, IVP has made significant contribution in the initiation of this activity that is important in establishing the necessary benchmarks and indicators for environmental resources monitoring and assessment in Marsabit and Turkana districts.

The project effectively sought to build on the foundations of earlier projects mainly the UNESCO-IPAL in the two districts. Further, in the Marsabit site, the MDP had digitized information for Marsabit District and IVP in collaboration with the Arid Lands Resource Management Project in the Office of the President and Ministry of Water and Irrigation attempted to develop data base capabilities through acquisition of GIS capable computers and training of two officers from the Ministry of water and Irrigation. However, the sustainability of this project activity was curtailed by the transfer of the two trained personnel. However, at the national front, DRSRS that has both the institutional and technical capacity has been appropriately identified as the host institution for the GIS database.

## <u>Outcome 2</u>: Appropriate indigenous management systems strengthened that integrate biodiversity conservation.

In the context of this outcome and within the framework of community based range resources management, site specific community action plans (CAPs) were developed in collaboration with implementation partners and stakeholders in the two project sites of Turkana and Marsabit. These facilitated participatory natural resources management and planning in the project sites. The CAPs formed the basis of implementation of the prioritized community projects. The process entails an integrated neighbourhood resource management approach necessitated by the fact that the pastoral production system is traditionally characterized by collective ownership and use of the land resources. The processes and procedures were elucidated in a CBNRM manual produced by IVP and its stakeholders in the two project sites.

Within the framework of creating a local level institutional enabling environment, EMCs with membership of 390 in the Marsabit site were established and / or reconstituted and registered with the Ministry of Culture and Social Services to support planning and implementation of community management plans. In Korr-Ngurnit management areas, 6 EMCs with membership of 211 were established while in the Hurri hills-Kalacha management areas, 5 EMCs with membership of 180 were established. In 2004, Community based range resources management By-Laws for Korr and Ngurnit pilot areas were elaborated by EMCs and facilitated by IVP, NEMA and Ministry of Livestock and Fisheries development. The By-Laws cover water management, grazing management, resource use conflict management, range rehabilitation, wildlife conservation and protection, waste management and disposal, enforcement and sanctions of EMC regulations and networking of EMCs. In the Turkana project site, the concept of EMCs was introduced by IVP and three EMCs established in the three project sub-sites of Katilu, Turkwel and Central Division. The membership of EMCs in the Turkana site also includes a few selected members of the Council of Elders (also referred to as the "Tree of Men") who are responsible for traditional decision-making with respect to grazing management, dispute resolution among others. However, ccompared to the Marsabit site, in the Turkana project site, the traditional management systems are quite enhanced but at the pioneer stages of incorporating formal scientific management systems through the EMCs that are at pioneer stages in

comparison to the Marsabit site. Nonetheless, EMCs in the Turkana site underwent an induction training workshop between 18<sup>th</sup> and 23<sup>rd</sup> December 2006 to empower the representatives of the target community (EMCs) to conserve and manage biodiversity especially range resources.

A training curriculum geared towards increasing the technical capacity of EMCs was prepared and 2 EMCs in Korr (60 members) and Ilaut (50 members) were trained with funding from the Regional Coordination Unit, on a module that covers group organization management and institutionalization of EMCs. The EMCs have been given identification budges, uniform and promotional materials that have enhanced their recognition and patrols among the community. In the Marsabit site, IVP has linked the EMCs to NEMA and subsequently to the District Environment Committee (DEC) that is an organ recognized by EMCA (1999) and to the local county council. This has also strengthened the capacity of EMC especially in Marsabit in their revenue collection through levies on sand, timber, firewood among other range resources. Currently, the EMCs are proactive in their efforts to register an umbrella organization called Marsabit District Environment Management Association (MADEMA) that is aimed at enhancing their collective efforts in environmental governance and resource conservation at the local level.

In the opinion of this evaluation, this project outcome is satisfactory. For instance, within the framework of CAPs, several activities have been implemented successfully. These include among others:

- Rehabilitation of indigenous vegetation and degraded lands based on the principle of reducing grazing pressure in currently over-utilized areas around the settlements in the Marsabit project site. In this context, biodiversity conservation groups were established in Hurri hills. 30 group members were trained on tree planting techniques, nursery management techniques, indigenous seed collection and storage and monitoring of planted seedlings. This conservation initiative was however derailed in 2005 and IVP advised to phase out due to bloody conflict in the Hurri hills region. Nonetheless, Food for the Hungry International (FHI) has expressed keen interest to continue with this IVP initiated biodiversity restoration in Hurri hills.
- In the Turkana project site, several community biodiversity conservation sub-sites were established and promoted. For instance, at Juluk sub-site, human population increase led to increased settlement and cultivation that became a major threat to the riverine vegetation through increased fragmentation. IVP in conjunction with the Juluk community have promoted sustainable biodiversity conservation through the development of integrated land use plans that includes multipurpose forests (agroforestry) and silvi-pastoralism on the remaining forest patches. An inventory of the plant species in the Juluk forest was completed through a Ph.D study facilitated by IVP with the goal of setting up the conservation area to promote ecotourism activities around Juluk. This is expected to conserve the riverine ecosystem that is threatened by irrigated agriculture.
- Strengthening of deferred grazing system in the management areas of Korr, Halisruwa, Hafare, Ilaut, Ngurnit and Namarei within the Marsabit project area. In these areas, trees were marked with red paint within demarcated areas (6 plots of 500-1000 ha) for protection aimed at enhancing regeneration. Woodland management protocols have been established by EMCs in agreement with user communities in all management areas. This has led to a significant increase in tree cover around Korr sub-site (on 3 plots with fencing stones that were painted red) compared to the scenario in 1988 when the film "the Last tree of Korr" was produced. The EMC around Korr has also enhanced the use of livestock *bomas* (houses) in tree regeneration especially of *Acacia senegal*, that are also protected with red painted stones. The identification of sites for rehabilitation was based on i) proximity to the settlement to assure protection; ii) level of degradation and iii) estimated regeneration stand that assures faster regeneration. However, EMCs encourage sustainable use of vegetation whereby community

members are shown which tree parts to harvest for fencing materials and where to graze for example. In the Turkana site, the combined use of EMCs, Chief's Act (formal legislative authority) and the traditional deferred grazing systems (*Epaka*) coupled with climatic changes have enhanced vegetation regeneration especially *Acacia tortilis* tree cover in Lorugum, Tiya, Kaitese, and Juluk project sub-sites.

Range water improvement activities in Korr-Ngurnit and Hurri Hills were successfully implemented by the project despite the conflicts in the latter project sub-sites. The Ilmonti rock catchment is a good model of effective and responsive collaborative arrangements between IVP, Ministry of water and Irrigation and the local community. Whereas the local community provided labour and food for the Ilmonti rock catchment improvement, the Ministry of Water and Irrigation provided the technical capacity while IVP provided the materials that were used to construct the 50,000 litre capacity tank. This storage tank serves about 70 nomadic households. There is however need to construct an additional storage tank because the supply of water when it rains exceeds the current tank capacity. In deed, the second tank was provided for in the initial design process and the local community has already approached the local area Member of Parliament over allocation of Constituency Development Funds (CDF) in the construction of the second tank. The Ilmonti community has also put in place a water management plan, with each household (of about 4-5 members) getting 30 litres of water one in two days. One problem is with the maintenance of pipes as the local community lacks technical capacity. In Huri hills, Bori water catchment was improved with its capacity increasing from 750m<sup>3</sup> to 1,750m<sup>3</sup> in collaboration with ALRMP and Ministry of water resource and Irrigation. The improved water sources have extended the use of wet grazing areas in Korr and have contributed to improved dry season grazing plans in Ilimonti -Ngurmit areas. The extension of grazing areas was also complemented by conflict resolution and peace building efforts supported by GTZ. Within this framework, several community peace building, dialogue meetings and workshops were supported in collaboration with Catholic Justice and Peace Commission (CJPC) of Marsabit.

<u>Outcome 3:</u> Livelihood means that reduce pressure on the ecosystem adopted to diversify economic base, increase socio-economic benefits and promote biodiversity conservation In the context of outcome 3, several planned activities were successfully implemented that led to the realization of the three major outputs viz

- In the Marsabit and Turkana project sites, marketing of livestock and livestock products improved. In this regard, surveys to document livestock and livestock product marketing and alternative livelihood opportunities in Korr / Ngurmit area and in Lodwar were conducted. In addition, about 180 women group members and 24 community members in the Marsabit and Turakana project sites respectively were trained on goat and sheep skin improvement (wet salting) for value adding. This has increased the value of the skins for example for Korr Tidadakhan women group in Marsabit from 20/= to between Kshs. 60 and 70 in the local market and to about Kshs. 134/= in the Nairobi markets. Three groups in Korr (Umoja, Korrtidakhan and Ersin) have been trained on microfinance, entrepreneurship skills and business management plans. According to the chairlady of Kortidakhan group, this has increased their capacity and has now gone into other business enterprises, registered their group and have a bank account for better financial management. The group has been invited in exchange visits to Kalacha and North Horr. Currently, through the technical support of the District Cooperative office, there are attempts to link the three groups in Korr to form a cooperative to increase critical volumes of hides and skins to address the economies of scale in the marketing chain. Other non-livestock based alternative sustainable income generating activities that were identified and their implementation facilitated included:-
  - Bee keeping within 36 members of bee keeping group in Hurri Hills, Marsabit, who were trained and four service providers equipped with modern honey harvesting kit and for the Juluk community in Turkana project site.

- Aloe domestication and conservation in which 90 aloe interest community members in Ilaut were trained on cultivation of aloe and other culturally and economically important plants.

These two activities were however phased out based on the recommendations of mid-term project review. Nonetheless aloe domestication in Marsabit has received support from both the Ministry of Livestock and Fisheries Development through the ADB funded ASAL livestock and Livelihood Project (ALLPRO).

- Promotion of energy saving methods in Korr and Maikona areas within the Marsabit site, in which over 100 parabolic solar cookers were introduced and installed in Korr and Maikona. This has reduced drudgery among women. Over 50 women (25 for Korr and 25 for Maikona) were trained on the use and maintenance of solar cookers. This has contributed to reduction of fuel wood consumption per-capita. For instance, with the solar cooker installation, beneficiaries now fetch fuel wood once per week from three times per week. Currently, solar cookers technology is being taken up by other women at a cost of Kshs. 4,000 implying that this activity can be appropriately sustained by the community. One major challenge is the safety of the cookers in times of strong winds hence the need for constant surveillance.
- In the Turkana project site, sustainable production of gums, resins and oils was identified by the communities as a priority among alternative livelihoods during the preparation of CAPs. In this regard, IVP in collaboration with the Forest Department (Now Kenya Forest Service), Kenya Forest Research Institute (KEFRI), SALT LICK LTD, a private company, organized a series of capacity building activities to create awareness on the potential value of gums, resins and oils. Collectors have been organised into gum collector groups such as the Maridadi Women Group at Lokichar project sub-site that have been registered with the Department of Social Services as a Community Based Group. Maridadi women group benefited from activities of CAPACITY 21 project in activities related to income generation whose lessons learnt were key in sustaining the group's activities in gums and resin collection. IVP facilitated SALT LICK, now Arid Lands Resources Ltd, to set up a procurement store at Lodwar that buys between one to three tonnes of gums per week at Ksh 50 per Kg. SALT LICK Ltd came up with tools ("Sunki") adapted from Sudan for the sustainable collection of gum The major threats to sustainable gums and resins collection is domestic consumption by humans and as livestock feed; lack of market information; competition from several brokers who have emerged in the recent past and insecurity. However, this activity was scaled down after the project mid-term review and the activity picked up by Practical Action, an NGO, and KEFRI although on a reduced and less coordinated scale.

In the opinion of this evaluation, this project outcome is moderately satisfactory.

## <u>Outcome 4:</u> Key stakeholders have increased knowledge (skills and awareness) to facilitate implementation and sustainable management of natural resources.

Several key stakeholders involved in the joint planning and implementation of the project activities have benefited from technology transfer, training and regional comparative learning through workshops, short course trainings, farmer field schools, exchange visits to Mali IVP sister project (2), Botswana (1) and 3 MSc students from Marsabit were trained in Norway. This has significantly increased the technical capacity of the relevant national and district level stakeholders and fostered linkage with different training institutions. By facilitating the chairman of Korr- Ngurnit Umbrella EMC to participate in IVP Regional Policy steering meeting held in Lokichogio, it was expected that the capacity of EMC to plan, manage and monitor implementation of activities would be enhanced. The chairman of Central Turkana project sub-site visited Mali on an exchange visit that also enlightened him on the different biophysical and socio-economic challenges in Mali. These visits enabled the sharing of information despite the ecological differences and uniqueness in the three

project countries. In the opinion of this evaluation, this project outcome is rated moderately satisfactory.

#### **Outcome 5:** Project effectively managed.

At the national level, the management team consisted of the National Project Manager, National Project Liaison Officer, National Project Accountant and the two managers for the Turkana and Marsabit components. Establishment of a Project liaison office was necessitated by the fact that of the three project countries, only Kenya was unique in that the National Project Office was based outside the capital city of Nairobi. This therefore did not affect the project activities. All the five officers were directly engaged and paid for by the project. However, four of the officers were seconded from various organizations of the Public Service and one (the Marsabit Project Manager) was an expert from GTZ-IS. The other support staff consisted of 2 drivers directly paid by the project (one each in Nairobi and Turkana). For the Turkana project site, there was an additional driver deployed from Forestry department (now Kenya Forest Service) to work with the project but paid for by the Government. This is one way in which the Government of Kenya ensured soft injection of funds to the project. The number of full time project staff was therefore kept to an absolute minimum in all project structures and thus ensured their sustainability. The control of technical implementation of the Project was achieved through two committees i) Project Technical Management Committee (PTMC) and ii) National Project Steering Committee (NPSC) that played crucial regulatory role at national level. The PTMC consisted of UNDP, MENR, NEMA, and GEF and was chaired by NEMA as the coordinating institution while the NPSC was chaired by the Permanent Secretary, MENR and its role was to examine the progress report and approve the work plan for project implementation. This project outcome is thus rated highly satisfactory.

#### **II** Implementation Approach

## Clarity of Roles and responsibilities of project staff, agencies and institutions and level of coordination

An understanding of the role and needs of various stakeholders is essential particularly for those who were to be engaged in the execution and implementation of the project activities (UNDP, 2003). It was clear from the outset that the role of executing /implementing agency started immediately after the project was conceptualized and was consistent with the national policy objectives and had been given the green light to proceed. The participation of MENR through the design and planning stages before taking the execution or implementing role was notable. The project design allowed for an implementation arrangement that included a Regional Policy Steering Committee (RPSC) for providing policy guidance to both the Regional Coordination Unit (RCU) and the Technical Advisory Committee (TAC), based in Botswana. The RCU was responsible for ensuring coordination in the activities of the three National Project Units (NPU's) and other project partners, provision of technical backstopping, dissemination of relevant experiences, and monitoring of overall project progress. The RCU also acted as the project's liaison office with the United Nations Environment Programme (UNEP), United Nations Office for Project Services (UNOPS), and the University of Oslo. However, the TAC was never created at the regional level and only part-time staff were recruited. In addition, the Regional Technical Expert post was never filled and the Regional Coordinator did not have this function in his TOR. This was a major problem for the project because no technical advice was available to the national/field team.

In Kenya, the project was implemented by the Ministry of Environment and Natural Resources with the National Environmental Management Authority (NEMA) as technical coordinating institution. The

National Project Steering Committee and Technical Advisory Committee provided regular guidance as required in the project design. The National Project Unit (NPU) was located in Lodwar, where the National Project Manager, a field officer for the Turkana site and administrative staff were based. A liaison office based in Nairobi provided linkage between the project and partners at the national level. At the Marsabit site, implementation was undertaken by GTZ International Services (GTZ-IS) under contract with GoK and UNDP and a second field officer was responsible for day to day management. In the opinion of this evaluation, locating the NPU in Lodwar within one of the project sites and establishment of an efficient liaison office in Nairobi constituted a satisfactory implementation arrangement.

The Government of Kenya continued with its support to the IVP in terms of timely and effective execution and implementation of all aspects of the projects / programmes while UNDP was accountable for all resources provided to the national project sites. The participation of local communities in the decision-making, planning, implementation and appraisal of project activities was most beneficial in the eradication of their poverty. This also ensured that capacity building continued to be an integral part of the project. These roles and responsibilities, organizational linkages and administrative procedures and implementation of project activities were well streamlined.

## Timeliness and effectiveness of supervision and technical assistance from Regional Coordination Unit

There were consistent, timely and satisfactory linkages and assistance from the Regional coordination Units to the National project unit, with direct technical linkages between the regional and national levels. The Regional Programme Coordinator visited all the project areas at the two sites and maintained constant contact with the NPU. The Regional Project steering committee met annually to discuss and agree on regional reports and work plans and to give technical advice and harmonise the three countries' work plans. However, one major limitation at the regional level was the time lag in the decision –making process that nonetheless did not significantly affect the project activities at the national level. This was because of the phasing out period given especially where the RPSC made recommendation regarding the downsizing of some of the project activities at the national level. In addition, the lack of Regional Technical Expert meant that the technical guidance initially planned for the project did not materialize. The gap was supposed to be filled through a separate contractual arrangement with the University of Oslo, which did not happen due to administrative and logistical problems.

Of the three countries (Mali, Botswana and Kenya), only Kenya successfully retrofitted the log frame after two years of project implementation by simplifying and refocusing it. Mali and Botswana continued to use the old logframe. However, the regional office continued using the initial project log frame that missed out on impact indicators. This affected harmonization between the regional and national levels.

## Timeliness and effectiveness of supervision and technical assistance from the National Project Unit to the community support Units

At the National level, timely and effective technical support was provided by the National Project Unit to the Community Support Units. This could be attributed to the wealth of managerial and technical experience of the National Project Manager and the two site managers. Under the coordination of the National Project Unit, various consultancies and implementing partners worked closely with local communities to successfully realize various project outputs in the two project sites of Marsabit and Turkana as detailed in section I (National Project Performance).

# Appropriateness and usefulness of methods and tools used to measure/monitor National project performance

Initially, the principal methods and tools for monitoring performance were provided by the objectively verifiable indicators and means of verification in the project logical framework. However, the initial project document did not have appropriate input with respect to monitoring and evaluation as the articulation of impact indicators was missed out. Site visits were therefore, used as a form of evaluation against set indicators. However, after mid-term review, monitoring of National Project outputs in Kenya was based on the retrofitted log frame, in which site evaluation, quarterly reports, feedback meetings, follow up activities and the monthly financial to GTZ-IS, UNDP, UNEP and Ministry of Environment and Natural Resources were used effectively at the National level to measure and monitor national project performance. Further, the two project sites started with close partnerships with the community through rigorous consultative process that culminated in the development of 5 year, site specific Community Action Plans (CAPs). The two sites appropriately interpreted the CAPs into annual work plans that were developed together with district stakeholders who were mainly selected key government departments, NGOs and CBOs. The annual work plans for the Marasbit and Turkana sites were then brought together at the national level and harmonised into the annual work plan for the National project. The work plans were translated into quarterly budgets for implementation because funds were allocated and disbursed on a quarterly basis (for Turkana and Marsabit sites) but on condition that they provided progress reports. Microsoft Project Manager's soft ware, a planning tool, was used at the both the national and regional level to monitor the implementation of the work plan. In the opinion of this evaluation therefore, the work planning processes were quite stringent and the project performance was satisfactory.

#### Partnership arrangements

The IVP project identified key partners in the two project sites (see Annex 2) of Marsabit and Turkana who were involved in joint planning and implementation of project activities from the start of the project. This was mainly because the mandates of project partners revolve around some of the IVP activities. At the community level, the grassroot activities that were implemented by the project through the Community Action Planning process were a priority to the communities and touched on their real problems.

For instance, at both the Marsabit and Turkana project sites, the District Environment Officers (NEMA) were fully incorporated into the project. At the Turkana site, the NEMA officer was seconded to the project and served as the Field Officer for the Turkana site while in Marsabit, although the officer remained in full employment with NEMA, he was based at IVP offices as part of collaborative and partnership arrangements. These arrangements enhanced the outputs of the two NEMA officers in particular and NEMA as an institution in the supervision and coordination of environmental issues at the District and National level. In addition, within its national core mandate and based on its institutional capacity and expertise, DRSRS was approached formally to carry out land cover assessment in the project sites. Within these collaborative arrangements, two officers from DRSRS sustained this project activity.

Further, in my opinion, the good partnership arrangements would be key in ensuring sustainability of project outcomes. Within the partnership framework, there was clear delineation of roles and responsibilities of project staff, agencies and institutions that were coordinated at two levels: Project site and National level. This observation is reinforced / supported by the fact that, for instance at the Marsabit site, the project had only one technical officer and one support staff directly employed by the project yet they were able to accomplish successfully the planned project outputs. The same applied to the Turkana site but which had slightly more staff (5) by virtue of it being the National Coordination office.

However a few challenges were noted in the partnership arrangements. For instance, since the project was meant to be community-driven, there was need to sensitise the community through awareness creation, a process that took 12 months for the Turkana site. This delayed actual project implementation which ideally justified the zero-cost project extension. Thus, there is need to factor such community awareness program in future projects to ensure sustainable and responsive community participation.

#### Effectiveness of regional mechanisms for communicating research findings

It was envisaged that the targeted research undertaken by the project would lead to the development of rational, scientifically documented and sustainable tools for rehabilitation and conservation of biodiversity applicable to the arid and semi arid areas. To be of maximum benefit, these research findings must be communicated to national stakeholders and policy makers within and outside the region. At the national level, the project has amassed a lot of useful information that requires an effective and efficient communication strategy that includes both national and regional stakeholders in order to meet its targeted goal. It is expected that the research findings by DRSRS, Egerton University and KARI will be disseminated through the established web prototype with the assistance of the Regional Coordinating Unit. In deed the Project could not be able to develop a regional database but to rather develop means of linking the three national databases into a network, an objective that has been achieved with the development of the prototype. However, since the developed prototype as a communication strategy was yet to be tested at the time of evaluation, it was not possible to determine its effectiveness.

At the national level, Integrated Natural Resource Management Database System to be coordinated by the MENR with technical backstopping being given by DRSRS is part of the regional network that is being established through contractual arrangement with KIMETRICAL Ltd and UNOPS on behalf of UNEP as part of the Regional Coordination Activity. In collaboration with KEFRI, the National Project Management set up a National Resources Information Centre where any relevant materials, both past and present have been stored. This serves as a good reference centre for students. In addition, linkages were established with the DRSRS where all captured spatial data are analysed and stored. Several maps have been produced by DRSR through participatory Geographic Information System (GIS) in the framework of this partnership arrangement. These are expected to enhance the information management system.

## Support by UNEP, UNOPS and UNDP to national executing agencies and institutions

UNOPS disbursed project funds and exercised administrative and financial oversight of the RCU while UNEP and UNDP were implementation partners at the technical and policy levels. UNEP contracted UNOPS and in agreement with University of Oslo contracted Egerton University to undertake targeted research at the Turkana project site. UNEP was the lead GEF implementing agency for the regional aspects while UNDP was the direct partner of the Government of Kenya. In the opinion of this evaluation, the project did not experiencing any difficulties associated with the support role of the three key agencies, thus this aspect is rated as highly satisfactory.

The National project management was actively involved in the contractual obligations development between UNEP and UNOPS and between UNOPS and Egerton University. Further, the national component was required to oversee the implementation of the research component and to also report to the National Project Steering Committee in terms of progress on the mandate. It also linked UNOPS to Egerton University. In the opinion of this evaluation, these contractual obligations by the National component were satisfactorily met.

#### Efforts of research and Training coordination from University of Oslo

Four Kenyan students sponsored by the project successfully undertook studies at Noragric, the Department of International Environment and Development Studies at the Norwegian University of Life Sciences with their course work being undertaken at Egerton University. Three of them did their field work in Marsabit while the fourth did his field work in Turkana. However, one of the students undertook his research at the Hurri Hills, a site that was experiencing serious tension over political and ethnic rivalry, against the advice of the field manager. Their research topics were generally relevant and useful and the MSc training equipped the students with appropriate skills for natural resources management in arid lands. For example, the research by the Masters student from the Turkana project site focused on drought management in Turkana district. Although IVP provided data that shaped his thesis, the findings were useful in project implementation. This aspect of the project has been rated as moderately satisfactory.

The research component was expected to be a regional output with the National project benefiting from the regional outcome. However, failure to agree on methodology at the regional level with the lead institution for the research component (University of Oslo) hampered the research process for two years. Nonetheless, the National Project concentrated on targeted research that addressed specific issues in collaboration with local institutions (Egerton University) especially in the Turkana project site, whose contribution with respect to temporal changes in the flood plain along river Turkwell is expected to be quite valuable to the project especially with respect to the development of community range resource management plans as an exit strategy. The Marsabit site collaborated with KARI on baseline information. However, the research component by local universities came in during the 4<sup>th</sup> vear of project implementation, which was rather too late to have significant impact on management of the project. Further, because the Technical Advisory office at the regional level was not created and only part-time staff was recruited, the ability of the regional office to implement the research component was severely hampered. Nonetheless, although the University of Oslo moved away, it sourced funds from NORAD for the implementation of targeted research activities. Thus the departure by the University of Oslo did not have major adverse impact on the project. It is the considered opinion of this evaluation that the difficulties in implementing the research component also hampered effective communication of research findings to national stakeholders and policy makers.

Further, because the research component came in later, the development of baseline data, benchmarks and indicators that are necessary in measuring/monitoring project performance was missed out in the initial project stages. The implementation of this activity of the project came in mid-stream after mid-term evaluation. This also hampered effective monitoring of national project performance.

#### III Country ownership/ drive ness

The NPSC comprised, among others, representatives from government and pilot communities. The participation and contribution by the government representatives in providing guidance and policy advice was reported as satisfactory. In addition, the government maintained its commitments as pledged to the project, which is further signified by the strong partnership that was shown by various ministries in the implementation process.

The Government of Kenya provided office facilities for the two project sites. The National Liaison Office was housed by the Forestry Department (now Kenya Forest Service) while the staff of the Turkana Project Site were housed by the Ministry of Water and Irrigation. These arrangements were also part of the Government of Kenya's contribution to the project and therefore part of value of funds provided to the project. By the launch of the project in July 2002 at UNEP, all the structures were in place. Thus the Government of Kenya had put in place all the staff, equipment and office space in time. In the opinion of this evaluation therefore, the Government maintained its financial commitments as pledged to the project.

All the vehicles and stores (i.e. non-expendables-equipment such as photocopies, printers) were bought by UNDP through the project and were all in place at the time of the launch. The Memorandum of Agreement (MoA) between GTZ-IS, MENR and UNDP was put in place that later translated to a contractual agreement that was also in place at the time of launching the project. The project management team at the national level was involved in the whole contractual negotiation process.

At the site level, the project commenced with strong public participation, with the development of Community Action Plans (CAPs). These enabled beneficiaries to take a lead in identifying threats to indigenous vegetation and opportunities for combating these at the site level. The CAPs also helped the project identify priorities for project intervention. This evaluation finds that by involving communities in the preparation of CAPs, the project went out of its way to foster country ownership and drivenness. It also found evidence of high community expectations and enthusiasm generated by the CAP process, clearly indicating that the project had adequate room for being country owned and driven.

#### IV. Stakeholder participation and benefits accrued

In this context of this aspect of project implementation, there is ample evidence to show adequate, responsive and positive stakeholder participation in the project activities. The entire implementation process was indeed based on partnership and the CAPs developed jointly by IVP and its implementing partners. In fact much time and resources were dedicated to the preparation of CAPs, identification, funding and development of micro-projects. The revival of EMCs that had been established under the Marsabit Development Programme, establishment of new ones in Turkana, and inclusion of local elders and opinion leaders, provided an opportunity for ensuring that the project encouraged participation of the best informed and influential sections of the local communities. With regard to benefits accruing to targeted communities, it is the considered opinion of this evaluation that local communities gained both directly and indirectly from the project activities that led to improved range conditions and provided alternative livelihoods. It found the transfer of energy and water saving technologies in Marsabit contributed immediate benefits to the stakeholders, and that participation of the stakeholders was satisfactory. In addition, one staff from Practical Action, an implementing partner in the Turkana project site was sponsored to undertake a Masters course in Natural Resource Management. Various stakeholders also benefited through local, national and regional exchange visits.

## V. Sustainability

IVP involved different project partners and institutions renowned in rangelands resources development in the joint planning and implementation of the project activities at the outset. This inherently built the capacity of the local institutions in the two project sites to sustain project activities. The focus on working directly with CBOs such the Environmental Management Committees and the traditional council of Elders was particularly important in ensuring sustainability of the project activities and outcomes.

However, a few challenges that pertain to the sustainability of project outcomes have to do with institutional leadership. Such a lead institution must have the technical and managerial capacity to sustain project outcomes. In addition, low resource allocation (low funding levels and lack of transport) for Government departments, high turnover of government officers working in the two project sites, are critical limiting factors to sustainability of the project outcomes. It is however expected that solutions to these challenges will come from the good partnership arrangements that IVP has fostered in the last five years with its implementing partners. The IVP project activities could be embedded in the work programs and budgets of various government departments and local institutions to ensure sustainability. For instance, activities pertaining to information management systems are expected to be sustained by the Department of Resource Surveys and Remote Sensing (DRSRS). This

is indeed within the core national mandate of DRSRS. DRSRS has already established linkages with existing institutions and has both the requisite technical expertise and equipment that require minimal maintenance costs to adequately accomplish this activity on a sustainable basis. For instance, the land use maps that were produced by DRSRS through participatory Geographic Information System (GIS) in the lifetime of the project will assist in the development of the community resource management pan at the time of exit. In deed, currently, the National Project Office is working with NEMA on a project exit strategy that is emphasising on mainstreaming activities mainly i) development of community based range resource management plan; ii) development of District Environment Action Plans (DEAP) for Marsabit and Turkana sites and iii) producing several project publications.

The scenario is however different especially with regard to the capacity of local institutions such as the EMCs. For example, to sustain community involvement in data collection that is quite technical and that the community cannot handle, as was done at the Turkana site (participatory climate and ecological monitoring), there will be need to build such capacity for continuity of data collection. On the other hand, the EMCs at the Marsabit site are already raising revenue through levies on local range resources such as sand and firewood collection. This would ensure financial sustainability, although on a lower scale, of the EMCs.

Developing sustainable natural resource management systems and building the institutional capacity of CBOs to the point of self-sufficiency is rarely achieved quickly. Community-based management of indigenous vegetation / range resources is one of the most difficult challenges in the whole area of sustainable use of biological and land resources. Range management systems must be adapted to the full range of climatic variability, and these cannot be expected to occur within a single five-year period. These must also take into account the low capacity at grassroot levels. The short five- year period in a way affects the trust of the local communities. Nonetheless, IVP was a pilot project that was intended to test new and innovative approaches. Its success has tremendous potential for replicability in the dryland of Africa and should be able to attract additional interest for follow-up funding from multiple sources.

#### VI. Financial management system

The financial management system was set up in tandem with the national project management system. The project account was opened with the Central bank of Kenya and two commercial accounts opened at Lodwar and Nairobi. Marsabit financial system was covered in the contractual agreement. Budgeting for the project was within the Ministry of Environment and Natural Resources budgetary system. The Project Liaison Office was able to handle well the budgetary issues with the MENR, an arrangement that worked well for the project. Total GEF funding was split between UNEP headquarters and UNDP headquarters based on the totals for the RCU and for the country components, respectively. UNEP disbursed to the University of Oslo and UNDP headquarters disbursed to the UNDP country missions as per approved budget. All expenditures in relation to GTZ-IS were directly paid to GTZ by UNDP. However, such expenditures and requests were usually scrutinized and authorised for payment by the National Project Management Unit. Thus, all the financial matters pertaining to the project were guided by government policies and procedures. As such, the project prepared its work plans, budgets, accounts and audits according to the government's requirements. Disbursement and reimbursement of funds were also undertaken according to UNDP, UNEP and UNOPS procedures. However, project operations were sometimes hampered by the late release of funds. For example, owing to the cycle of accessing funds, there were operational delays from the time the project made a request for advance to the time the funds were actually received by the project from the MENR. These time lags partly contributed to the no cost extension of the project in Kenya. Despite this challenge, there were good checks and balances with respect to financial management. It is therefore, the considered opinion of this evaluation that the financial management system was appropriate, satisfactory and strictly adhered to by the project management team and its partners.

## VII. Monitoring and Evaluation System

There was evidence of a comprehensive financial reporting system by the national project management to both the UNDP and MENR. The MENR was involved in internal monitoring and evaluation of the project. In terms of technical reporting, quarterly technical reports to UNDP, MENR and NEMA and the verbatim reports that covered most technical issues couple with the annual reports that were discussed by the NPSC and the RPSC were used to monitor and evaluate the project activities. A specific project implementation report was submitted annually to GEF through several stages viz: technical reports driven by activities at site level were first submitted to the National Project Management Office then to MENR, NEMA, UNDP and ultimately to GEF Office in New York through the Regional GEF Office. This served as a monitoring tool of the project implementation by GEF. With respect to personnel, protocols that were a hybridised format between UNDP and MENR and accepted by the National Project Steering Committee were effectively used to appraise personnel and handle issues of discipline and performance –based promotions. In the life of the project, using this protocol, one officer was promoted from secretary to administrative assistant and her responsibilities changed to include taking charge of the project liaison office in Nairobi.

Ecological monitoring was achieved through the development of a harmonised regional format in which data sheets were used to capture information on six major aspects viz i) livestock and livestock management, ii) Management systems, iii) Technology transfer, iv) Ecological monitoring data and v) Mainstreaming activities. The data capture was done for three years after the mid-term project review and one regional report given to the National Project Office. Thus, although the Regional Coordination Unit developed thematic questionnaires on all components of the project that were used to give baseline information for impact monitoring, this input was too delayed (after mid-term review) to contribute significantly to improved monitoring of national project performance.

#### 3. Lessons learned

One key lesson learned from the implementation of IVP is the need to factor in the project design, stakeholder awareness program especially in a community driven project. This should be done within the framework of joint planning which makes work easier and enriches knowledge sharing thus broadening the scope of stakeholders. This would minimise the unforeseen need of project extension besides contributing to the sustainability of project activities at grassroot levels. In addition, range management systems must be adapted to the full range of climatic variability (increased frequency of droughts), and that these cannot be expected to occur within a single five-year period. In addition, issues such as insecurity and hence increased resource use conflicts that is a major challenge to sustainable arid lands resource management have to be factored in the project design.

The EMCs that were either established or reconstituted by the project are an important step towards creating institutions for sustainable range resource management in the arid lands. However, there is need to clearly delineate the roles and responsibilities of EMCs vis-a vis other government departments. Further, the incorporation of EMC members in the local council of elders as was done in the Turkana project site offers a good potential to hybridize the traditional and scientific management systems in the efforts to rehabilitate degraded rangelands and conserve biodiversity.

#### 4. Recommendations

Since IVP was a pilot project aimed at developing models for sustainable rangeland resources management, there is need to upscale its findings on a larger scale over a longer period of time in order to have desired impact at community level. Although in the Marsabit site, there was self-replication and up-scaling (put at about 10-20%), this was not directly attributed to IVP but rather to the previous experiences with UNESCO-IPAL and MDP projects and the good partnership arrangements with other implementing stakeholders who have taken up some of the models in their

operation/mandate areas. For instance, the EMC concept has been extended to Mt. Kulal region by FHI. For Turkana site, there has been minimal up-scaling mainly due to the fact that the Turkana site did not have the same advantageous position as Marsabit and did not benefit from such previous experiences. However, training offered for improvement of the implementation capacity of such projects will in future need enhancing for improvement on project implementation and help those trained to internalize a sense of ownership of the projects.

The EMCs in the Marsabit project site are now legally recognized by the local authority and administratively recognized by public sector institutions as resource management entities. However, the EMC by-laws still need to be anchored on either EMCA (1999) or any other legal instrument. For the Turkana site, there is need to revitalize the District Environment Management Committee (DEC) that would in turn play a crucial role in the institutionalization of EMCs and thus enhance their capacity in natural resource management. It will be important to incorporate this aspect in any future programs for the Turkana site.

To ensure sustainability of the project outcomes, there is need to identify an institution that will provide backstopping services and catalyze the process and to ensure the smooth continuity of project activities. NEMA which was the coordinating institution and whose mandate includes an overall environmental management oversight is best placed to carry out this mandate in collaboration with other lead institutions as provided for in the EMCA (1999). This can be embedded in the DEAP. Thus NEMA should ideally set up a budget line for mainstreaming of the project outcomes on larger scale. However, given that NEMA did not send an officer to Turkana district once the previous one was seconded to IVP, there is need for it to re-engineer and refocus its activities especially in the arid lands if it is to play this role effectively. For instance, IVP has developed models of rangeland resource management and re-energized the concept of EMC. NEMA in collaboration with implementing partners have the collective responsibility to propel this model and concept. The concept of EMCs should ideally be up-scaled over the vast arid lands of Kenya. This would require follow up funding within the framework of Community Based Natural Resources Management.

In order to ensure that some of the project success stories (best practice model) are kept for posterity, there is need to carry out a documentary of activities in all the project sites and sub-sites. This could be blended with the film on "the last tree of Korr" especially for the Marsabit site. This would put to rest many of the theories on the collapse of pastoralism.

#### 5. Annexes

#### ANNEX 1. TERMS OF REFERENCE FOR NATIONAL CONSULTANTS

The national consultants in Kenya will provide country specific support to the International Team. This support consist of providing background and understanding of the enabling environment for the project at national and local level, assisting in interpretation, providing background discussions, etc.

The objective of the <u>National Report</u> is to (1) review progress made at national level towards the project's objectives and outputs, (2) identify strengths and weaknesses in implementation, (3) assess the likelihood that the project achieved its objectives and delivered its intended outputs, (4) identify and distil lessons learned and (5) provide recommendations to improve project design and implementation strategies for future projects.

The scope of the <u>National Report</u> is the activities implemented in the country as part of the UNEP/UNDP/GEF project "Management of Indigenous Vegetation for the Rehabilitation of Degraded Lands in Arid Zones of Africa".

More specifically, the national consultant shall evaluate <u>national project performance</u> and rate following implementation aspects:

## 1. Attainment of objectives, outputs and planned results

• Assess progress towards attaining the projects environmental objectives, outcomes and outputs at national level. This should include the extent to which the project at national level is contributing to: (a) developing and strengthening appropriate indigenous management natural resource management systems; (b) rehabilitating indigenous vegetation, degraded land and ecosystems through use of community-based indigenous knowledge and scientific findings; (c) developing integrated bio-socio-economic data systems and approach to conserve biodiversity; and (d) developing of alternative livelihood systems in the project areas.

• Prepare a detailed overview of status of implementation of project activities and outputs against expected activities outputs with comments explaining any derivations from time plan.

#### 2. Implementation approach

• Review the clarity of roles and responsibilities of project staff, agencies and institutions and the level of coordination.

• Assess the timeliness and effectiveness of supervision and assistance provided from the Regional Coordination Unit to the National Project Unit.

• Establish the timeliness and effectiveness of technical support provided by the National Project Unit to the Community Support Units.

• Determine the appropriateness and usefulness of the methods and tools which are being used at national level to measure/monitor national project performance.

• Evaluate any partnership arrangements established for implementation of the project with relevant stakeholders involved in the country.

• Assess the effectiveness of the regional mechanisms used by this project to ensure that research findings are communicated to national stakeholders and policymakers.

• Describe and assess efforts of UNEP, UNOPS and UNDP in support of the national executing agencies and national institutions.

• Describe and assess efforts of the Research and Training coordination from University of Oslo with particular reference to: (a) the value of the MSc training programme; (b) development of indicators and monitoring programme and (c) the overall research support from Egerton University.

• Make recommendations as to how to improve project performance in terms of effectiveness and efficiency in achieving impact on both capacity building and the targeted conservation concerns at national level.

#### 3. Country ownership/drivenness

• Assess the extent to which country representatives (including governmental officials, civil society, etc.) are actively involved in project implementation.

• Asses whether the Government has maintained its financial commitments as pledged to the project.

• Identify lessons learned in terms of strengthening country ownership/drivenness.

• Provide recommendations if deemed appropriate.

## 4. Stakeholder Participation and benefits accrued

• Assess the level of public involvement in the project and comment as to whether public involvement has been appropriate to the goals of the project.

• Review and evaluate the extent to which project impacts are reaching the intended beneficiaries.

• Identify lesson learned in terms of strengthening stakeholder participation.

• Provide recommendations if deemed appropriate.

#### 5. Sustainability

• Assess the likelihood of continuation of project outcomes/benefits after completion of GEF funding; and describe the key factors that will require attention in order to improve prospects for sustainability of project outcomes. Factors of sustainability that should be considered include; institutional capacity (systems, structures, staff, expertise, etc.), social sustainability, policy and regulatory frameworks that further the project objectives and financial sustainability

• Identify lessons learned in terms of efforts to secure sustainability.

• Provide recommendations on to how to sustain project outcomes in terms of capacity built.

#### 6. Financial Planning

• Assess the effectiveness of the financial control systems, including reporting and planning, that allow the project management to make informed decisions regarding the budget.

• Assess the extent to which the flow of funds has been proper and timely both from UNEP and UNDP and from the project management unit to the field.

• Provide recommendations if deemed appropriate.

#### 7. Monitoring and Evaluation

• Review the projects reporting systems including project progress reports and district surveys and their efficiency.

• Review the implementation of the projects monitoring and evaluation plans including any adaptation to changing conditions (adaptive management).

- Identify lessons learned regarding the role of M&E in project implementation.
- Provide recommendations if deemed appropriate.

#### 8. Logistics

It is expected that the national consultants will be recruited via UNDP Country Offices/National Project Units and more detailed proforma for implementing the TOR will come from the Evaluation Team Leader.

## 9. National report format

This national report shall be a detailed report written in English in the case of Kenya The report should be of no more than <u>15 pages (excluding annexes)</u> and include:

- 1. An executive summary (no more than 1 page)
- 2. Objective, scope and methodology of review (no more than 1 page)
- 3. National project performance
- 4. Lessons learned
- 5. Recommendations
- 6. Annexes, including list of interviewees.

## ANNEX 2: LIST OF PERSONS AND COMMUNITIES MET AND PROJECT ACTIVITIES VISITED

A) Persons met

1. Mr Charles Nyandiga, UNDP Kenya 2. Mr Esau Omollo, National Project Coordinator, IVP 3. Mr Guyo O. Haro, Project Field officer, IVP Marsabit 4. Dr. Mark Nicholson, Regional Consultant 5. Mr Maina Mwangi, Project Field Officer, IVP Turkana 6. Mr Francis Lochuch Administration Officer, IVP 7. Mr Samuel Njoroge, Project Accountant 8. Mrs Rose Antipa, NEMA 9. Mr Charles Situma, DRSRS 10.Mr. Dan Marangu Kithinji, DRSRS 11. Mr Edward Lentoror, MLFD, Marsabit 12.Mr Mamo, B. Mamo, NEMA, Marsabit 13.Mr Thomas I. Amuyo, Chairman, EMC, Korr 14. Mr Meshack Owuor, Ministry of Cooperative Development, Marsabit 15. Mr. Godana J. Doyo, Arid Lands Resource Management Project, Marsabit 16.Mr. Peter Oyugi, Kenya Forest Service, Marsabit 17.Mr. Wilson Ngoriareng, Kenva Wildlife Service, Marsabit 18. Ms Asha, Kenya Wildlife Service, Marsabit 19.Mr. Michael Okoti. Kenya Agricultural Research Institute, Marsabit 20.Dr. Simon G. Kuria, Ag Centre Director, Kenya Agricultural Research Institute, Marsabit 21.Mr. Guyo Tuke Dabalo, Food for the Hungry International, Marsabit 22.Mr. Phillip Koima, District Officer, Korr, Marsabit 23. Mrs Abiba Lochomutt, Beneficiary, Parabolic Solar cookers, Korr, Marsabit 24. Mr. Paul Kunyuk, Meterological Department, Turkana 25. Mr. Charles Lochodo, EMC Chairma, Upper Turkwel, Turkana 26. Mr. Henry Etabo, Assistant Chief, Kalemngong locaton, Turkana 27. Mr. Calistus L. Napulo, Assistant Chief, Turkana 28. Mr. Alakwa Lochi, Assistant Chief-Lokapel, Turkana 29. Ms Elizabeth Engiro, EMC Chairperson, Turkana 30. Mr. Charles E. Lopuya, Chief-Kapuyir Location, Turkana 31. Mr. Joseph Ekalole Imuntor, KIDOKEA, Turkana 32. Mr. Eliud Emeri, ALIPO, Turkana 33. Mr. Phillip Ebei Aemun, Practical Action (East Africa), Turkana

#### **B**)Communities met

34.Environmental Mangement Commmittee, Korr, Marsabit 35. Korr Tidakhan Women Group. Korr, Marasbit

36. Environmental Mangement Commmittee, Ilaut, Marsabit
37. Ilmonti community, Marsabit
38 Lorugum Elders and Environmental Management Committee, Turkana
39. Tiya and Kaitese Elders and Environmental Mangement Commmittee, Turkana
40. Maridadi Women Group, Lokichar, Turkana
41. Juluk Elders and Environmental Management Committee, Turkana

#### C) Project activities visited

42. Ilmonti rock catchment improvement and storage tank, Marsabit
43. Korr community tree protection plot, Marsabit
44. Homestead at Korr installed with Parabolic Solar cooker, Marsabit
45. Ilaut community aloe nursery, Marsabit

46. Gums and Resins collection and storage Centre for Arid Lands Resources Ltd, Turkana

47. Community dryland rehabilitation site at Lorugum (deferred grazing plot-*epaka*), Turkana 48. Riverine rehabilitation at Kaitese, Turkana

49. Riverine demonstration site and traditional conservation site (ekwar) at Kaitese, Turkana 49. Turkwell tree nursery and *ekwars*, Turkana

50. Community biodiversity conservation site at Juluk, Turkana

## ANNEX 3. LIST OF DOCUMENTS CONSULTED

1. UNDP-GEF Project Document: Project No BOT98G32/A/IG/99 – KEN98G32/A/IG/99 – MLI98/A/IG/99.

- 2. Annual progress report, 2004
- 3. Annual progress report, 2005
- 4. Annual progress report, 2006
- 5. Annual project report, January-December 2003
- 6. report on study of indigenous knowledge of turkana community
  - 7. Situational Analysis Report, Turkana Project Area, Kenya
- 8. Mid-term Evaluation of the UNEP-UNDP-GEF project: Management of Indigenous

Vegetation for the Rehabilitation of Degraded rangelands in Arid Zones of Africa – GF/2740-03-4618, Report of the National Consultant, Kenya

- 9. Socio-economic Importance of Doum Palm (*Hyphaene compressa*) in Turkwel Riverine Ecosystem by Amwatta Mulla, CJ and Omollo, EO. UNDP and GoK, 2006
- 10. Development of Sustainable Range Management Plan: EMC Workshop for Korr-Ngurnit Management Area, Marsabit, 14<sup>th</sup>-15<sup>th</sup> November 2006
- 11. Land and Natural Resources use Status and Issues in Hurri Hills Sublocation, Marsabit District, Kenya. By Wargute, PW and Roimen, HP, June 2005.
- 12. Mapping of Ekwar along Trukwel River, report by Kaburu, HM; Situma, C; Marangu, D and Wamichwe, K. November 2004.
- 13. Report of the Kenya Logframe Focusing and Retrofitting Consultancy by Muthui, V. March 2005.

14. Report of the Livestock Marketing Workshop held on 5-8 July 2005, Lodwar.

- 15. Livestock Marketing and Alternative Livelihoods in Marsabit and Turkana Districts, Kenya. Final Consultancy Report by Chomba, JM and Obunga, R. February 2005.
- Report on Community Action Plan for Sustainable Natural Resources Management in Katilu (2004-2007). Turkwell Gorge, 27 Oct – 1 Nov 2003.
- 17. The Socio-economic and Ecological Status of Lokapel Hills, Turkana. A technical report by Kaburu, HM and Mwaura, F. 2005.
- 18. Report on Community Based Range Management By-Laws for Korr and Ngurnit pilot area, Marsabit

19. Report of the World Environment Day, 5<sup>th</sup> June 2007, Marsabit District

20. Report on Monitoring of Natural Resources in South West Marsabit: A collaboration activity between GTZ-IS, KARI-Marsabit and MoL&FD

21. Report on participatory methods for facilitating community based natural resource management and planning for sustainable utilization, September 2003.

22. Report on Improvement of Garba Dahao, Garba Bor and Qarsa Baqaqa seasonal water catchment sites within Hurri Hills location of Marsabit District., November 2003

23. Report on Livestock marketing and alternative livelihood survey in Marsabit District, Kenya.24. Report on micro-finance, savings and credit management training workshop for various

groups in Korr, July 2005

- 25. Livestock marketing and alternative livelihoods: the proceedings and outcome, Marsabit, March 2004.
- 26. Terminal Evaluation Draft Report for Marsabit, September 2002-Septemebr 2007 by Guyo.O Haro, August 2007
  - 27. Report on training course on quality improvement of skins for self help groups in Korr location , August 2004

28. Joint livestock production and marketing and conflict management work plan, April-September 2004 by Food for the Hungry International and Arid Lands Resources Management Project.

29. Report of the consultancy on Legalization and empowerment of Environmental Management Committees, May 2007

 Report on Community Based Natural Resources Management Strategies and Action Plan Development for Hurri Hills and Korr/Ngurnit IVP Pilot Sites, May 2003.
 Report on Hides and Skins value adding, Turkana, 2006.

32. UNDP NEX in Kenya: A manual covering General Management and Financial Management.

Final Draft, April 2003

33. Standard Cooperation Agreement Involving UNDP, Ministry of Environment and Natural Resources and the Gesselschaft Fur Technische Zusammanarbeit (GTZ) GmbH. GTZ-International Services, March 2001.

34. GEF: Biodiversity in the GEF Operational Strategy: Strategic Priorities

35. GEF Evaluation Office Guidelines for Implementing and Executing Agencies to Conduct Terminal Evaluations, May 2007

## **Annex IV: Terms of Reference for Lead Evaluator**

FE of the UNEP UNDP GEF "Botswana, Kenya and Mali: Management of Indigenous Vegetation for the Rehabilitation of Degraded Lands in Arid Zones of Africa (GF/2740-03-4618)

## BACKGROUND

## Project rationale

The UNEP/UNDP/GEF full size project on "Management of Indigenous Vegetation for the Rehabilitation of Degraded Lands in Arid Zones of Africa" that is being implemented in Botswana, Kenya and Mali is a demonstration programme for biodiversity conservation and arid lands ecosystem restoration in arid and semi-arid zones of Africa. The summary from the GEF Project Brief states:

"The project will combine community based indigenous knowledge, the findings of scientific research and past practical experience to rehabilitate degraded ecosystems and conserve biodiversity by developing sustainable natural resource management systems. A major goal of the project is to facilitate an exchange of knowledge and experience between three comparable but different situations and develop models, which can be transferred elsewhere within the continent. Technology transfer and supporting research will be a vital part of the project".

The main objective of the project is to develop models for the conservation of biodiversity and rehabilitation of degraded rangelands, and to develop sustainable management systems using indigenous knowledge.

The expected outcomes at the end of the project are:

Establishment of appropriate indigenous management systems

Regional and national data availability on indigenous production and management systems significantly enhanced

Indigenous vegetation in degraded rangelands rehabilitated, through reducing pressure on the vegetation resources

Provision of alternative livelihoods, and improved livestock markets and feed resources in other arid areas

Transfer of technology and information

## Relevance to GEF, UNEP and UNDP Programmes

The project was consistent with GEF Operational Programme no. 1: Arid and Semi-Arid Ecosystems, and is cross-cutting with land degradation with some linkages to climate change and international waters. The project falls under UNEP Sub-Programme of Environmental Science and Research and forms an integral part of UNEP support to Africa. The programme has relevance to UNDP's focus on poverty-environment linkages.

## Executing Arrangements

The project is implemented jointly by UNEP/GEF and UNDP/GEF. UNDP/GEF is responsible for the three national units of the project. UNEP/GEF is responsible for the regional component that is being managed and executed by UNOPS in collaboration with The University of Oslo.

The regional component was managed and coordinated by a Project Coordinator (based in Botswana), in consultation with UNEP/GEF, UNDP, UNOPS and project partners. The Project Coordinator was advised by, and reported to, the Regional Policy Project Steering Committee that is composed of representatives of UNEP/GEF, UNDP/GEF, UNOPS, the University of Oslo, and of the three National Project Units (Botswana, Kenya and Mali).

## **Project Activities**

The project duration is five years that started in November 2002. However, due to delays in finalising the executing arrangements and the recruiting the Project Coordinator and relevant staff the Regional Coordination Unit only became fully operational in October 2003.

The project has six components: Establishment and strengthening of appropriate indigenous management systems Establishment of a Regional Arid zone Bio-database Rehabilitation of indigenous vegetation and degraded lands Improved livestock production and marketing, and provision of alternative livelihoods Technology Transfer, Training and Regional Comparative Learning; and Targeted Research.

## Budget

The total budget of the project is US\$ 13,384,000, with US\$ 9,054,000 funded by the GEF Trust Fund, and counterpart contributions of US\$ 1,680,200 by The University of Oslo

(secured from NORAD) and US\$ 2,650,300 from governments of the three countries participating in the project.

## **Objective and Scope of the FE**

The objective of the FE is to determine the extent to which the project objectives were achieved, or are expected to be achieved, and assess if the project has led to any other positive or negative consequences. If possible the extent and magnitude of any project impacts to date will be documented and the likelihood of future impacts will be determined. The evaluation will also assess project performance and the implementation of planned project activities and planned outputs against actual results. The evaluation will focus on the following main questions:

Has the project:

Established appropriate indigenous management systems? Where? Over what land area?

Have regional and national data availability on indigenous production and management systems been significantly enhanced over their pre-project levels?

Has indigenous vegetation in degraded rangelands been rehabilitated, through reducing pressure on the vegetation resources? If so, where and over what land area?

Assisted in the provision of alternative livelihoods, improved livestock markets and feed resources in other arid areas?

Transferred technology and information to the primary target audiences?

## Methods

The FE will be conducted as an in-depth evaluation using a participatory approach where by the UNEP/GEF and UNDP/GEF Task Managers, and other relevant staff are kept informed and regularly consulted throughout the evaluation. The evaluation team lead by a principal evaluator will consult with the UNEP/EOU and UNEP/DGEF Task Manager on any logistic and/or methodological issues to properly conduct the review in as independent a way as possible given the circumstances and resources offered.

The findings of the evaluation will be based on the following:

- 1. A desk review of project documents including, but not limited to:
  - (a) The project documents, outputs, monitoring reports (such as quarterly progress and financial reports to UNEP, UNDP and GEF annual Project Implementation Review reports) and relevant correspondences
  - (b) Review of specific products developed for the project by collaborating partners including regional synthesis papers, reports from regional workshops as well as



national case studies, highlighting case studies, technical information, methodological guidelines, databases, etc.

- (c) Notes from the Regional Policy Steering Committee meetings.
- (d) Report of the mid-term review conducted in 2005
- (e) Other material produced by the project team
- (f) Project Web site, <u>www.ivp-rcu.org</u>

Interviews with key individuals involved in the implementation of the project including: UNEP/GEF Task Manager and relevant staff in UNEP/DGEF

UNDP/GEF Regional Coordinator for East Africa based in Nairobi

UNOPS Programme Manager and relevant staff based in Nairobi

The Regional Coordinator and relevant staff of the Regional Coordination Unit based in Botswana

Professor Nils C. Stenseth, University of Oslo and relevant staff at Noragric, the Norwegian University of Life Sciences (UMB)

National Project Coordinator, National Project Team Leader and relevant staff of the National Project Unit in Botswana, Kenya and Mali

Relevant staff in UNDP Country Office in Botswana, Kenya and Mali

Local/immediate beneficiaries and other stakeholders in the projects sites in the three participating countries

Key government officials and independent observers of the project and its activities

Selected members of the Regional Policy Steering Committee and the Technical Advisory Committee as deemed appropriate.

The Royal Norwegian Embassy in Nairobi

- 2. Field visits to project sites will also be conducted to view activities first hand and to meet with site contractors, local leaders, local government officials and immediate beneficiaries.
- 3. The evaluator(s) shall determine whether to approach other representatives of donor agencies or stakeholder groups, for example, representatives of the GEF Secretariat. The task should then be performed by e-mail or telephone communication.

The success of project implementation will be rated on a scale from highly unsatisfactory to highly satisfactory.

Key Evaluation principles.

In attempting to evaluate any outcomes and impacts that the project may have achieved, evaluators should remember that the project's performance should be assessed by considering
the difference between the answers to two simple questions "*what happened*?" and "*what would have happened anyway*?". These questions imply that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. In addition it implies that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project.

Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluator, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

**Project Evaluation Parameters** 

#### A. Attainment of objectives and planned results:

The assessment of project results seeks to determine the extent to which the project objectives were achieved, or are expected to be achieved, and assess if the project has led to any other positive or negative consequences. While assessing a project's outcomes the evaluation will seek to determine the extent of achievement and shortcomings in reaching the project's objectives as stated in the project document and also indicate if there were any changes and whether those changes were approved. If the project did not establish a baseline (initial conditions), the evaluator should seek to estimate the baseline condition so that achievements and results can be properly established (or simplifying assumptions used). Since most GEF projects can be expected to achieve the anticipated outcomes by project closing, assessment of project outcomes should be a priority. Outcomes are the likely or achieved short-term and medium-term effects of an intervention's outputs. Examples of outcomes could include but are not restricted to stronger institutional capacities, higher public awareness (when leading to changes of behaviour), and transformed policy frameworks or markets. The evaluation should assess the extent to which the project's major relevant objectives were effectively and efficiently achieved or are expected to be achieved and their relevance.

- *Effectiveness:* Evaluate how, and to what extent, the stated project objectives have been met, taking into account the "achievement indicators" specified in the project document and logical framework<sup>5</sup>. In particular, the analysis of outcomes achieved should include, *inter alia*, an assessment of whether and to what extent the results of this project have informed national, regional or international processes such as greenhouse gas inventories, the IPCC or others.
- *Relevance:* In retrospect, were project's outcomes consistent with the focal areas/operational programme strategies and country priorities? The evaluation should also assess the whether outcomes specified in the project document and or logical framework are actually outcomes and not outputs or inputs. Assess the level to which the project has followed GEF Biodiversity Strategic Priority 2 (BD 2) guidelines.
- *Efficiency:* Cost-effectiveness assesses the achievement of the environmental and developmental objectives as well as the project's outputs in relation to the inputs, costs, and implementing time. Include an assessment of outcomes in relation to inputs, costs, and implementation times based on the following questions: Was the project cost-effective? Was the project the least cost option? Was the project implementation delayed and if it was then did that affect cost-effectiveness? The evaluation should assess the contribution of cash and in-kind co-financing to project implementation and to what extent the project leveraged additional resources.

The evaluation will also ascertain to what extent the project implementation benefited from relevant ongoing and past research and operational activities of the scientific community, the GEF, UNEP, UNDP and the University of Oslo, and indicate how such synergies may help sustain this project (see section B below).

### B. Assessment of Sustainability of project outcomes:

Sustainability is understood as the probability of continued long-term projectderived outcomes and impacts after the GEF project funding ends. The

evaluation will identify and assess the key conditions or factors that are likely to contribute to or undermine the persistence of benefits after the project ends. Some of these factors might be outcomes of the project, e.g. stronger institutional capacities or better informed decision-making. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes. The evaluation should ascertain to what extent follow-up work has been initiated and how project outcomes will be sustained and enhanced over time.

Four aspects of sustainability should be addressed: financial, socio-political, institutional frameworks and governance, and ecological (if applicable). The following questions provide guidance on the assessment of these aspects:

- *Financial resources.* To what extent are the outcomes of the project dependent on continued financial support? What is the likelihood that any required financial resources will be available to sustain the project outcomes/benefits once the GEF assistance ends (resources can be from multiple sources, such as the public and private sectors, income generating activities, and market trends that support the project's objectives)? Was the project successful in identifying and leveraging co-financing?
- Socio-political: To what extent are the outcomes of the project dependent on socio-political factors? What is the likelihood that the level of stakeholder ownership will allow for the project outcomes/benefits to be sustained? Is there sufficient public/ stakeholder awareness in support of the long-term objectives of the project?
- *Institutional framework and governance.* To what extent are the outcomes of the project dependent on issues relating to institutional frameworks and governance? What is the likelihood that institutional and technical achievements, legal frameworks, policies and governance structures and processes will allow for, the project outcomes/benefits to be sustained? While responding to these questions consider if the required systems for accountability and transparency and the required technical know-how are in place.
- *Ecological.* Are there any environmental risks that can undermine the future flow of project environmental benefits? The TE should assess whether certain activities in the project area will pose a threat to the sustainability of the project outcomes. For example, construction of dam in a protected area could inundate a sizable area and thereby neutralizing the biodiversity related gains made by the

project or, a newly established pulp mill might jeopardise the viability of nearby protected forest areas by increasing logging pressures.

As far as possible, also assess the potential longer-term impacts considering that the evaluation is taking place upon completion of the project and that longer term impact is expected to be seen in a few years time. Frame any recommendations to enhance future project impact in this context. Which will be the major 'channels' for longer term impact from the project at the national and international scales? The evaluation should formulate recommendations that outline possible approaches and necessary actions to facilitate an impact assessment study in a few years time.

#### C. Catalytic role

The FE will also describe any catalytic or replication effect of the project. What examples are there of replication and catalytic outcomes that suggest increased likelihood of sustainability? Replication approach, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated or scaled up in the design and implementation of other projects. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out. No ratings are requested for the catalytic role.

#### **D.** Achievement of outputs and activities:

- Delivered outputs: Assessment of the project's success in producing each of the programmed outputs, both in quantity and quality as well as usefulness and timeliness. Assess the feasibility and effectiveness of the work plan in implementing the components of the project.
- Assess the soundness and effectiveness of the methods used for developing indigenous vegetation management systems.
- Assess to what extent the project outputs produced have the weight of scientific authority / credibility, necessary to achieve widespread uptake.
- Assess the quality, appropriateness and timeliness of the scientific contributions as well as the scientific leadership being provided by the University of Oslo in the implementation of the regional training and comparative learning and targeted research components of the project that it is coordinating

### E. Assessment of Monitoring and Evaluation Systems:

- M&E design. Did the project have a sound M&E plan to monitor results and track progress towards achieving project objectives? The FE will assess whether the project met the minimum requirements for project design of M&E and the application of the Project M&E plan (Minimum requirements are specified in Annex 4). The evaluation shall include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The M&E plan should include a baseline (including data, methodology, etc.), SMART (see Annex 4) indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified.
- **M&E plan implementation.** Was an M&E system in place and did it facilitate tracking of results and progress towards projects objectives throughout the project implementation period. Were Annual project implementation reports (PIRs) complete, accurate and with well justified ratings? Was the information provided by the M&E system used during the project to improve project performance and to adapt to changing needs? Did the Projects have an M&E system in place with proper training for parties responsible for M&E activities to ensure data will continue to be collected and used after project closure? Did the project respond adequately to the recommendations made in the mid-term review?
- **Budgeting and Funding for M&E activities.** Were adequate budget provisions made for M&E made and were such resources made available in a timely fashion during implementation?
- Long-term Monitoring. Is long-term monitoring envisaged as an outcome of the project? If so, comment specifically on the relevance of such monitoring systems to sustaining project outcomes and how the monitoring effort will be sustained.

### F. Assessment of processes that affected attainment of project results.

The evaluation will consider, but need not be limited to, consideration of the following issues that may have affected project implementation and attainment of project results:

i. **Preparation and readiness.** Were the project's objectives and components clear, practicable and feasible within its timeframe? Were capacities of the executing institutions and counterparts properly considered when the project was designed? Were lessons from other

relevant projects properly incorporated in design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to implementation? Was availability of counterpart resources (funding, staff, and facilities), passage of enabling legislation, and adequate project management arrangements in place at project entry?

- Ascertain to what extent the project implementation mechanisms outlined in the project document have been closely followed. In particular, assess the role of the various committees established and whether the project document was clear and realistic to enable effective and efficient implementation, whether the project was executed according to the plan and how well the management was able to adapt to changes during the life of the project to enable the implementation of the project.
- Determine the effectiveness of project execution arrangements to the regional and national components of the project and by partners at all levels (1) policy decisions; Regional Policy Steering Committee; National Advisory Committee and National Steering Committees; (2) day to day project management and (3) the role and functions of the national coordinators of the project.
- Determine the effectiveness of organizational/institutional arrangements for collaboration between the various agencies and institutions (UNEP, UNDP, UNOPS, NORAD/Royal Norwegian Embassy, Nairobi and The University of Oslo/Noragric) involved in project arrangements and execution.
- ii. **Country ownership/Driven-ness.** This is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements. Examples of possible evaluative questions include: Was the project design in-line with the national sectoral and development priorities and plans? Are project outcomes contributing to national development priorities and plans? Were the relevant country representatives, from government and civil society, involved in the project? Did the recipient government maintain its financial commitment to the project? Have the government approved policies or regulatory frameworks been in-line with the project's objectives? Specifically the evaluation will:
  - Assess the level of country ownership, and whether the project was effective in providing and communicating information and tools that assisted governments in assessing the role of their coastal waters as sinks/sources of carbon.
    - 15

- Assess the level of country commitment to the use of estimates of the changes of regional and global biochemical cycling of nutrients and carbon flux from coastal and shelf seas to the atmosphere for decision-making during and after the project, including in regional and international fora.
- iii. **Stakeholder involvement.** Did the project involve the relevant stakeholders through information sharing, consultation and by seeking their participation in project's design, implementation, and monitoring and evaluation? For example, did the project implement appropriate outreach and public awareness campaigns? Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the design, implementation and evaluation of project activities? Were perspectives of those that would be affected by decisions, those that could affect the outcomes and those that could contribute information or other resources to the process taken into account while taking decisions? Were the relevant vulnerable groups and the powerful, the supporters and the opponents, of the processes properly involved? Specifically the evaluation will:
  - Assess the mechanisms put in place by the project for identification and engagement of stakeholders in each participating country and establish, in consultation with the stakeholders, whether this mechanism was successful, and identify its strengths and weaknesses.
  - Assess the degree and effectiveness of collaboration/interactions between the various project partners and institutions during the course of implementation of the project.
  - Assess the degree and effectiveness of any various public awareness activities that were undertaken during the course of implementation of the project.
- iv. **Financial planning.** Did the project have the appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds. Specifically, the evaluation should:
  - Assess the strength and utility of financial controls, including reporting, and planning to allow the project management to make informed decisions regarding the budget and allow for a proper and timely flow of funds for the payment of satisfactory project deliverables throughout the project's lifetime.
    - 15

- Assess the extent to which the planned budgets for each of the project components and participating countries were realistic.
- Assess the effectiveness of supervision and administrative and financial support provided by UNEP/DGEF.
- Assess the effectiveness of administrative and financial support provided by UNDP/GEF and UNDP's country offices
- Present the major findings from the financial audit if one has been conducted.
- Did promised co-financing materialize? Identify and verify the sources of co- financing as well as leveraged and associated financing (in co-operation with the IA and EA).
- Assess whether the project has applied appropriate standards of due diligence in the management of funds and financial audits.
- The evaluation should also include a breakdown of final actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co- financing. This information will be prepared by the relevant DGEF Fund Management Officer of the project for scrutiny by the evaluator (table attached in Annex 1 Co-financing and leveraged resources).
- v. **UNEP Supervision and backstopping.** Did UNEP Agency staff identify problems in a timely fashion and accurately estimate its seriousness? Did UNEP staff provide quality support and advice to the project, approved modifications in time and restructure the project when needed? Did UNEP and Executing Agencies provide the right staffing levels, continuity, skill mix, frequency of field visits?
- vi. **Co-financing and Project Outcomes & Sustainability.** If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for this? Did the extent of materialization of co-financing affect the project's outcomes and/or sustainability, and if it did affect outcomes and sustainability then in what ways and through what causal linkages?
- vii. **Delays and Project Outcomes & Sustainability.** If there were delays in project implementation and completion, the evaluation will summarise the reasons for them. Did delays affect the project's outcomes and/or sustainability, and if so in what ways and through what causal linkages?

The ratings will be presented in the form of a table with each of the categories rated separately and with brief justifications for the rating based on the findings of the main

analysis. An overall rating for the project should also be given. The rating system to be applied is specified in Annex 1:

Evaluation report format and review procedures

The report should be brief, to the point and easy to understand. It must explain; the purpose of the evaluation, exactly what was evaluated and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Evidence, findings, conclusions and recommendations should be presented in a complete and balanced manner. The evaluation report shall be written in English, be of no more than 50 pages (excluding annexes), use numbered paragraphs and include:

- i) An **executive summary** (no more than 3 pages) providing a brief overview of the main conclusions and recommendations of the evaluation;
- ii) **Introduction and background** giving a brief overview of the evaluated project, for example, the objective and status of activities;
- iii) **Scope, objective and methods** presenting the evaluation's purpose, the evaluation criteria used and questions to be addressed;
- iv) **Project Design, Performance and Impact** providing factual evidence relevant to the questions asked by the evaluator and interpretations of such evidence. This is the main substantive section of the report and should provide a commentary on all evaluation aspects (A F above).
- v) **Conclusions and rating** of project implementation success giving the evaluator's concluding assessments and ratings of the project against given evaluation criteria and standards of performance. The conclusions should provide answers to questions about whether the project is considered good or bad, and whether the results are considered positive or negative;
- vi) **Lessons learned** presenting general conclusions, based on established good practices that have the potential for wider application and use. Lessons may also be derived from problems and mistakes. The context in which lessons may be applied should be clearly specified, and lessons should always:
  - 1. briefly describe the context from which the lesson is drawn
  - 2. state or imply some prescriptive action.
    - 15

- 3. specify a 'domain of application' i.e. where the lesson could be applied e.g. in other projects or at portfolio level;
- vii) **Recommendations** suggesting *actionable* proposals regarding improvements of similar projects in the future. They may cover, for example, project design, resource allocation, financing, planning, implementation, and monitoring and evaluation. Recommendations should always be specific in terms of who would do what, provide a timeframe, and a measurable performance target. In general, Terminal Evaluations are likely to have very few (only two or three) actionable recommendations;
- viii) **Annexes** include Terms of Reference, list of interviewees, documents reviewed, brief summary of the expertise of the evaluator / evaluation team, a summary of co-finance information etc. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Examples of UNEP GEF Terminal Evaluation Reports are available at <u>www.unep.org/eou</u>

### Review of the Draft Evaluation Report

Draft reports submitted to UNEP EOU are shared with the corresponding Programme or Project Officer and his or her supervisor for initial review and consultation. The DGEF staff and senior Executing Agency staff are allowed to comment on the draft evaluation report. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. UNEP EOU collates the review comments and provides them to the evaluators for their consideration in preparing the final version of the report.

All UNEP GEF Evaluation Reports are subject to quality assessments by UNEP EOU. These incorporate GEF Office of Evaluation quality assessment criteria and are used as a tool for providing structured feedback to the evaluator (see Annex 3).

Submission of Final Terminal Evaluation Reports.

The final report shall be submitted in electronic form in MS Word format and should be sent to the following persons:

Segbedzi Norgbey, Chief, Evaluation and Oversight Unit UNEP, P.O. Box 30552-00100 Nairobi, Kenya Tel.: (254-20) 7624181 Fax: (254-20) 7623158

Email: <a href="mailto:segbedzi.norgbey@unep.org">segbedzi.norgbey@unep.org</a>

With a copy to:

Shafqat Kakakhel, Officer-in-Charge UNEP/Division of GEF Coordination P.O. Box 30552-00100 Nairobi, Kenya Tel: + 254-20-7624686 Fax: + 254-20-7624041/4042 Email: Shafqat.Kakakhel @unep.org

Mohamed Sessay United Nations Environment Programme (UNEP) Division of GEF Coordination (DGEF) PO Box 30552-00100 Nairobi, Kenya Tel: 254 20 7624294 Fax: 254 20 7624041 Email: mohamed.sessay@unep.org

The final evaluation report will be printed in hard copy and published on the Evaluation and Oversight Unit's web-site <u>www.unep.org/eou</u>. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website. In addition the final Evaluation report will disseminated to: The relevant GEF Focal points, Relevant Government representatives, UNEP DGEF Professional Staff, The project's Executing Agency and Technical Staff. The full list of intended recipients is attached in Annex 5.

#### Annex V: Community-based management of rangeland resources

#### A review by Gerrit Bartels

#### 1 Introduction

In an attempt to find relevant examples of communal action in rangeland management, the RCU has gone through a number of published reports and articles on community-based rangeland management. Unfortunately, it has proven to be very hard to find examples in the literature of successful management of common pool resources (CPR), especially when it comes to grazing lands. Where successes have been reported they almost invariably involve high value resources such as (irrigation) water and wildlife. Where collective action is seen in the case of grazing, it is mainly in such areas as water point maintenance, erosion control, seasonal access restrictions (predominantly for cropland) and restrictions on settlement location. Common management actions that are of immediate interest to IVP such as formal rules on stocking rates, stock densities, grazing land allocation, or mobility of herds are rarely found in the literature.

The literature on the other hand is quite informative with regard to the factors assumed to have a beneficial effect on the emergence of communal management of natural resources (CBNRM) related to the management of communal resources. We have tried to summarize these in the belief that by studying these factors, IVP projects may be able to extract a number of useful recommendations for their own work in community-based management of natural resources from the experiences of others. From a variety of sources we have distilled the factors that are thought to be conducive to the establishment of common property management arrangements. The resulting list is followed by a discussion of the relevance of some of these factors in the context of livestock production and range management and by an examination of the question why there seems to be a lack of congruence between the cases reported in the literature and the actual experiences by workers in the field. We end this overview with the question what governments can do to promote the idea of communities managing their own natural resources and what role the State could play in making such an option more successful than it has been thus far.

2 Factors that influence the likelihood of success of common pool resource management

In reviewing the written accounts of others working in the field of community-based management of natural resources, one is able to arrive at a list of factors that may be

considered conducive to the emergence of a form of management of natural resources in which local communities actively participate. This list is fairly long and most of the factors are self-explanatory.

The list is largely theoretical and consists of beliefs and judgments expressed by researchers who base their opinion on the analysis of a growing number of case studies. It is important to emphasize that almost all these case studies deal with common resources other than grazing lands. It is believed, however, that many (but not all, see below) of the principles found to apply to the management of those resources are also relevant to that of the pastoral resources IVP is mainly dealing with.

These factors are not ranked in any order of importance but the bulk of the literature makes it very clear that the issue of costs and benefits (nr. 19 of the list below) weighs heavily on the final outcome of processes promoting the communal use of natural resources, as does the enforcement of rules and regulations (nr. 16).

The smaller the area of common pool resources, the greater the likelihood of successfully introducing community-based management of these resources. *However, see nr. 9: probably the ratio of area and number of users is a more important variable.* 

The likelihood of success increases when these areas have clearly defined boundaries.

Common pool resource management becomes more acceptable to community members if the costs of alternative forms of exclusion (*of other potential users, for instance by fencing*) become very high.

Common pool resource management is more likely to develop when the dwellings of the users are located in the vicinity of these resources.

Common pool resource management is more likely to be successful when the resources in question are vital for local incomes and survival.

Common pool resource management is more likely to be successful when the common resource is scarce. This hypothesis is based on a case study on the use of irrigation water. It is doubtful whether it can be extrapolated to other resources such as grazing lands as scarcity of the resource may also tempt individuals to enclose the commons for private use. Spontaneous enclosure has been observed in a variety of countries in response to increases in the value of land and subsequent speculation. Note that this hypothesis contradicts nr. 9, which was the outcome of a study in Ethiopia.

Common pool resource management is more likely to be successful when communities are aware of the "sustainability" concept.

Common pool resource management has better chances when user groups are small and homogenous. This hypothesis is easy to understand. Heterogeneity in terms of social differentiation and/or wealth has a negative impact on collective action. In a grazing context, such inequality often leads to higher stock densities on limited land and more land being

allocated to private users. On the other hand, as a number of case studies appear to demonstrate, when communities are very small, households may not be able to bear the fixed costs of collective action. When the number of households is very high on the other hand, collective action may be low due to increasing transaction costs and/or more competition for the resources in question.

Collective action for grazing management may be more beneficial and more effective in communities that have access to large tracts of land that are far away from markets and where population pressure is low.

When communities possess strong authority structures common resource management is likely to be more effective.

Common pool resource management is more likely to be successful when those community members favoring retaining the commons are in positions of power.

When a community has well-developed arrangements for the discussion of problems and the resolution of conflicts, common pool resource management may be a viable resource management option.

When the users of the common resource are bound by other mutual obligations, they may be more inclined to collaborate in common pool resource management (see also 14).

When community members share access to other resources (*such as revolving fund schemes*) or have previous experiences with collective action (*such as successfully completed small infrastructure projects*), they may be more inclined to collaborate in common pool resource management. *Previous or concurrent activities requiring community members to collaborate may contribute to the creation of a sense of trust among community members.* 

Common resource management is more plausible under circumstances where the breaking of the rules can be easily detected. The actions of community members must be observable. Monitoring the condition of the commons and of cheating by members must be fairly easy for common property management to be effective.

Common resource management is not possible when there are no mechanisms for punishing those who break the rules. Without selective punishments or inducements, individuals will free ride. The penalties for breaking the rules must be sufficiently severe relative to the benefits free riders expect to gain from doing so. On the other hand, punishments should not become an impediment to free riding when people become desperate, for instance during a severe drought. In critical circumstances punishment may well become impossible.

Where the state is not tempted to undermine local authority, common pool resource management stands a better chance. Local common property resources need effective support from outside and only sometimes a higher authority to function properly (see also nr. 20).

Where the state has no power to enforce private property rights common pool resource management may be a more viable option for the management of natural resources.

Common pool resource management has the best chances when the collective benefits for participating resource users exceed the costs. *These conditions arise mainly in situations where high value resources are involved that can provide communities with a potential* 

income stream and thus incentives to participate. In some areas the lack of significant high value resources may prevent the achievement of community-based management as the costs of collective action will always be higher than its potential benefits.

For the development of viable community-based management of resources the long-term facilitation by NGOs and similar agencies seems indispensable. *Marsabit is a prime example*.

3 Relevance of these determinants of common property regimes in the context of rangeland management

When studying the factors listed under section 2, it becomes clear that there are quite a number of them that may not directly apply to the grazing practices in arid lands. Areas that are being used for grazing are normally quite extensive and more often than not have no clearly defined boundaries. Real pastoralists do not have fixed dwellings but move around with their herds as part of an opportunistic strategy to optimize their exploitation of available resources and to minimize risks. This complicates the monitoring of their actions and at the same time makes it difficult for development agencies to provide them with support and elementary services.

As indicated earlier, the enforcement of rules and regulations appears to be a key aspect in determining the success of failure of community-based management. In a rangeland setting, sanctioned rules are a necessary ingredient of any arrangement for common pool resource management; in addition, encroachment by outsiders needs to be prevented. A case study from Japan showed that even the most cooperative, compliant group of people was vulnerable to temptations to bend and violate the rules governing the commons. Even in this small otherwise cohesive Japanese community there had to be a scheme of penalties - and these penalties had to be enforced. Naturally, the harshness of the punishment should exceed the benefits that perpetrators expected to gain from their illegal actions. It is clear that in the setting of mobile grazing, monitoring and policing infractions is a far more difficult task than in situations in which other uses are made of natural resources.

The most important factor by far in determining the outcome of attempts to uphold or introduce common property management is the balance between the benefits accruing to individual households and these households' costs of participating in that form of management. Collaboration among community members in the management of common property resources is a function of the perceived benefits and costs of that collaboration to individuals or individual households. This ratio of costs and benefits is influenced by such factors as the nature of the resource, the characteristics of the community and the relation it is having with the resource base as well as by the role of external agents and the community's own links with the rest of society and the nation's economy. In arid lands the net collective

benefit in most cases is fairly low as a result of their remoteness, weak infrastructure, and a resource availability that is extremely variable in space and in time.

Examples of functioning common resource management arrangements appear to involve mainly resources with high product value (irrigation water, wildlife, forests, and - in a few cases - pasture management in higher rainfall zones). However, it is important to realize that dealing with high value resources is not a guarantee that common resource management arrangements will work.

Some researchers have claimed that there is a positive relationship between collective action and resource scarcity (see # 6 on page 2). In the case of pasture management such a view appears questionable. A far more likely scenario is the one in which institutional arrangements break down under ecological stress in the form of a lack of water and insufficient fodder. Exploitation of grazing resources in non-equilibrium environments in many countries is characterized by almost endless conflicts. In fact, a study in Ethiopia demonstrated that the likelihood of herders violating communal grazing restrictions was lower in areas with higher rainfall than in dry areas. In higher rainfall areas one would expect more alternative resources of animal feed, thus reducing the dependence on the communal grazing resource. Optimum exploitation of low productivity grazing lands in dry areas is probably best achieved when individual resource users can make their own discretionary management decisions within the context of assured mobility and equal access to resources.

Despite a dearth of examples of successful communal grazing schemes, it is important to point out that common property institutions do have a number of advantages, especially for the extensive pastoral production systems found in many arid regions. The variability in space and in time of fodder availability demands an opportunistic form of livestock management that relies on flexibility and herd mobility to access a range of ecological zones and to exploit more localized patchiness in the landscape. The herders' ability to track such variability over sometimes long distances is made possible by common property regimes and negotiated arrangements of access to key resources. This ability to move around allows stocking rates to be higher on a regional basis than they would be in the absence of such mobility. The establishment of "boundaries" may, therefore, negatively impact livestock production in systems that depend on this flexible access to a patchwork of key resources. Breaking up the common resource pool trough the privatization of land and fencing it will jeopardize this essential feature of extensive livestock farming in arid lands. Once land is privatized and animals fenced in, livestock operators can no longer take advantage of the patchiness found in arid landscapes. It is not surprising therefore, that the benefits that were expected from the privatization of rangelands have in the great majority of cases not materialized - this in sharp contrast to schemes in which arable land was privatized.

At the same time should it be recognized that such mobility of animals – made possible by common tenure regimes guaranteeing equal access to resources – needs to go hand in hand with individualistic decision-making by herders. Traditionally centralized control over livestock and rangeland management does not appear to have been a feature of pastoralism in Africa. In order to be a successful livestock operator one needs to respond to prevailing environmental and economic conditions in a flexible and independent manner, frequently symbolized by opportunistic decision-making. All evidence from economic and ecological research so far shows that in arid lands there is no sustainable alternative to the traditional opportunistic way of managing grazing resources. A tenure system that allows such flexibility in response to climatic and economic uncertainty provides the best form of insurance against the risks of living in an arid environment.

Since most rangelands are low value resources, the costs of exclusion by fencing as required in the case of privatization and resource subdivision may just be too high for individuals or small groups to bear. In such cases, collective tenure arrangements are likely to be more economical with many livestock producers together monitoring and enforcing boundaries to ensure exclusion of non-members. Other such economies of scale may be operating as well under common tenure arrangements. For instance, several herd owners may employ one herdsman to graze their livestock. In addition, disputes between resource users may be much quicker resolved when community-based mechanisms for conflict management are in place than when such users have to go through the formal channels of arbitration and jurisdiction.

#### 4 Theory and practice: why are successes so few?

As we all know by now, the implementation of CPR management systems faces numerous challenges and many hurdles. Optimism about the potential of CPR management systems seems to exist more in the scientific literature and within development organizations than among workers on the ground. This suggests that much of the literature published so far has limited applicability to on-going attempts to develop community-based property systems on the ground. The reason for this is that some of the obstacles that are described below may have been more influential in determining the final outcome of efforts to initiate common resource management and to build the corresponding institutional structures than any set of favorable conditions mentioned previously under section 2.

#### 1. Interventions have generally been too short

It was mentioned earlier that for community-based management of natural resources to become successful, outside support for communities is crucial. Unfortunately, there is a general tendency among development agencies and donors to promote project activities for

periods of time that are too short to give outcomes any chance of reaching acceptable levels of sustainability. This applies in particular to interventions in dry land zones. There is also a tendency among development agencies and projects to treat communities as passive recipients of project activities. Especially in pastoral settings this propensity is reinforced by an attitude of inactivity and lack of commitment demonstrated by community members themselves. If real changes in tenure and resource access are to take place, community leadership has to become a much more active advocate for community rights. Policy adjustments with regard to issues like land tenure and resource access require long processes of documentation and analysis of experiences. Eventually, policy changes will also have to be accompanied by institutional modifications and human capacity building. Such processes only have a realistic chance of succeeding if donors and development agencies give their interventions a much more open-ended character.

#### 2. Flawed characterization of communities

The poor performance by local institutions (see point 6) raises the important question of community participation. Frequently CBNRM projects assume that distinct communities exist and often the portrayal of such communities is faulty. Community-level organizations are commonly assumed to regulate the use of resources in a harmonious way in the interest of the community as a whole. Yet many communities are internally differentiated with different actors having different priorities at different times, making different claims to resource access and use, and exercising different degrees of power and influence. The equitable sharing of benefits so often cited as an incentive for community participation in natural resource management needs to be seriously questioned in societies that are characterized by strong divisions along power structures. Without a thorough analysis of communities the danger is real that the interests of certain social groups in a community will be marginalized. Embracing the view of the community as a (once) relatively consensual group of actors in the management of natural resources is in many cases an oversimplification that underestimates the impact that internal community dynamics may have on the success of project interventions. Links between people and the natural resources are far more complex in community settings than is generally assumed by most projects' strategies. Suggesting that the rehabilitation of traditional management institutions in the form of - for instance environmental committees with their own management plans will be a workable first step to the improvement of degraded resources is a leap of faith. There is little evidence that such new institutions serve a collective purpose as is normally assumed. Caution is needed before accepting that new formal institutions will replicate the assumed successes of indigenous systems, or that they will enhance community involvement in an effective way. Different institutions within a community, both formal and non-formal, may be more effective in determining the use of natural resources than any set of rules drafted by new institutions promoted by projects.

3. National policies and legislation may have little impact on the emergence and sustainability of common pool resource management

While many projects advocate the creation of an enabling environment for the creation of community-based institutions, it can be argued that national legislation is of limited relevance to actions at the local level, as local people often do not know or uphold the laws and the level of enforcement by authorities so far has been close to nonexistent. As far as rangeland management is concerned, most policies and legislation also seem to have a bias towards crop production and the more sedentary systems of livestock production. In addition, policies generally considered favorable to the development of local resource management systems such as the decentralization of administrative decision-making, are often less effective than originally anticipated because their introduction may be accompanied by decreasing central government grants to the local level. One should also not overlook the fact that empowerment of communities is often viewed with misgivings by government institutions and public sector officials afraid to lose some of their prerogatives.

#### 4. Household strategies may change

In bad times rural households, especially the poor ones, have to turn to a range of incomegenerating activities, which are considered ecologically detrimental. Woodland and rangeland resources are essential components of many of such emerging livelihood strategies, largely because they come as "free" resources needing only labor for extraction.

### 5. The impact of social and economic developments

In the face of market forces and general "modernization", there is a breakdown of all types of traditional CPR institutions and arrangements. The same factors that caused the weakening of traditional power structures also lead to increasing individualism and differentiation within villages. The likelihood of CPR institutions functioning effectively in heterogeneous communities is small. Increasing population pressure also contributes to greater competition for land, water, livestock and other resources.

### 6. Questioning the legitimacy of local institutions

Although the nature of the institutional controls can vary from one community to the next, local governance structures in communal areas generally tend to be ineffectual and often take large overheads; seldom do they represent the interests of the local communities. Local enforcement regimes are frequently absent and observance of local controls is generally low. Local elites are often tempted to use inefficient local institutions to serve their own interests.

The functioning of such local institutions is frequently often disappointing not only because of these factors but also due to widespread inertia and other problems related to collective action.

## 7. Resource features

Successes found in common property management can often be attributed to the very high value of the resources involved. Theory predicts that higher resource values can support the higher transaction costs associated with complex property rights arrangements. The returns to rangeland resources may just be too low and the transaction costs involved just too high to encourage the emergence of effective CPR institutions. Those transaction costs can be particularly high in variable environments that require a high degree of management flexibility from individual resource users.

## 8. Capacity deficits

Many people at the local level have an inadequate understanding of the functioning of cooperatives and there is a general tendency not to respect the rules governing the use of common resources. While enforcement of rules regulating the access by outsiders to the common resource has often been effective and associations in general have been keen to use external authority to exclude outsiders, they have been reluctant to make and apply internal rules governing grazing and other uses of that same resource. Such enforcement of rules and regulation faces managerial but also social constraints. Management capacities within communities are often weakly developed and also the associations' potential to make necessary investments in the proposed management systems is low. This difficulty adds to the general problem of under-investment in common property resources resulting from the fact that improvements in the value of the resource will typically also benefit those who did not contribute to such investments. Poor maintenance of fences, roads, veterinary installations and other livestock infrastructure, and in some cases even watering points, are typical examples of this phenomenon.

### 5 What role for the State?

In many countries, states have taken it upon themselves to administer the use of communal resources but direct state management has rarely worked well: local people were seldom consulted and their inputs and opinions rarely solicited. State management therefore, suffered from a lack of timely and local information. Just as important is the fact that authority remained weakly developed and enforcement mechanisms were seldom put into use. Experience of the past few decades has shown that communities too suffer from significant weaknesses in their ability to manage these grazing resources. Communal management

arrangements have generally been negatively impacted by an array of the factors that were summarized in section 4.

Since the privatization of communal lands in non-equilibrium ecosystems is unlikely to generate productivity increases from rangelands and since privatization policies so far have also been unable to demonstrate any environmental benefits, the issue of what tenure system would be more appropriate under these conditions boils down to the question of who is the best manager of these resources: the State or the communities? The answer will vary depending on the specific characteristics of each individual situation, but in light of the aforementioned weaknesses of both, probably the best solution is to be found in a marriage of the two in which their strengths in managing collective resources are exploited and their weaknesses reduced. The role of the State should preferably be limited to creating the necessary conditions for local action and CPR management. This would involve the official recognition in a number of countries that pastoralism as a genuine economic activity, the development of supportive policies, the introduction of legislation and the monitoring of its enforcement and - when necessary - also assistance in the enforcement of rules and regulations drafted by communal institutions, and otherwise general support to communities in their efforts to administer grazing lands. An important and probably everlasting task of the state in this context will be the management of local conflicts.

Some authors have pleaded for some form of co-management between state and communities. They see co-management as a major departure from what they describe as ineffective policies to regulate resource use through the administration of rules. What roles could/should the State play in an arrangement of "co-management" of such resources?

#### 1. Policies

Policies must be based upon the recognition of the limits of and opportunities for local management. Range management and pastoral production should be integrated into an overall framework for rural land use, land allocation and land management. The exploitation of rangelands, especially in non-equilibrium ecosystems, is very different from other agricultural land uses and its particular features need to be recognized and acknowledged. Governments should consult and involve local people in the development of policies and be aware of the dangers of having a one-policy-fits-all approach. Different agro-ecological zones with different degrees of infrastructural development, different socio-economic conditions, and different resource user groups all with their own production objectives create a patchwork of conditions in which favoring one tenure system over others may not be the most effective way to approach the problem of managing communal resources. Policies supportive of management by communities should, therefore, ensure that in any given situation the appropriate incentives exist for individuals to participate in collective resource management.

Should that not be the case, then support for other tenure arrangements may be more appropriate.

# 2. Legislation

a. The State should adopt a legal framework in which territorial rights are clarified and common property rights officially recognized. Although security of tenure is vital, property rights by themselves may not provide adequate incentives or create the necessary conditions for sustainable management.

b. The State should institute formal mechanisms for the management of conflicts among resource users and act as a mediator in the event of unresolved local resource conflicts.

c. Existing legislation should be regularly reviewed and assessed for its continuing pertinence and appropriateness. Legislation should also be made known to the land users most affected by it.

# 3. Enforcement

The State has an important role to play not only in consequently enforcing national laws as they pertain to property rights and resource management, but should, in a co-management arrangement, also assist in the enforcement of communal management rules and regulations when community authority is not strong enough.

# 4. Institutional arrangements

a. The State should not devolve responsibility for management without also devolving real authority. Real commitment by governments to transfer management authority and rights to the lowest level possible is essential.

The State should ensure the existence of credible and legitimate institutional structures.

Appropriate local institutions need to be identified and clear criteria for this identification need to be formulated. Representativeness and accountability need to be guaranteed, while at the same time recognition must be given to the importance of local leaders.

The State should clearly articulate the rights and responsibilities of local institutions in managing pasture resources. These rights may be made conditional on responsible use of the resources, which should be negotiated and be clearly defined. The same applies to higher level institutions of the State. Clarity around the mandates of the different stakeholders is needed.

The State should safeguard the rights of weaker groups and ensure that these community members are not marginalized in the functioning of local institutions. Ensuring equitable access to resources and the equitable distribution of benefits among community households is part of this task.

## 5. Support and facilitation

a. Especially in pastoral production systems, the State should/could play a leading role in facilitating cooperation across various communities. For transboundary rangelands, the State should seek international agreements and collaboration in the management of such grazing resources.

b. Governments should attempt to improve the economic incentives for the participation of community members in arrangements aimed at proper management of the commonage. The State should consider strategic investments to generate public goods that may act as economic incentives for collective action and at the same time phase out those production-oriented subsidies that only reach commercial producers or have negative environmental impacts. Incentives can also take the form of preferential treatment of communities in marketing, taxation and subsidies.

The State should provide technical assistance to local groups attempting to improve and intensify resource management. It should encourage knowledge transfer and the dissemination of information, and play an active role in the transfer of basic skills.

The State should encourage income diversification and seek the involvement of the private sector where feasible.

The State should provide security and guarantee a minimum of livelihood protection for pastoral people. This may include the design of contingency plans and the creation of safety nets in the case of droughts.

Finally, the State should to the extent possible avoid bureaucratic delays in the implementation of policies and legislation which tend to discourage community participation in co-management arrangements.

It is not necessary or even desirable that Government execute all these tasks. Its main task should be to concentrate on policy development and monitoring. Many of the remaining tasks are probably better handled by NGOs or private sector actors that already possess the specialized skills and experiences required. Co-management requires high levels of technical inputs by trained staff. Such staff may be in short supply in government and capacities may have to be built.

# Conclusions

As this brief overview has demonstrated, many factors will eventually determine the success of collective action and the quality of management of the commonage. It may therefore be incorrect or at least risky to recommend the management of natural resources by communities in all situations. Other forms of tenure and the allocation of user rights may be more

appropriate and sustainable in particular situations. What is certain is that a process to develop viable common property management regimes is extremely complicated and time consuming, even when remnants of traditional management systems are still in place. Quick solutions such as this project is asked to deliver ignore these inherent complexities and this may very well play into the hands of the best-placed community members. Even when plans for the management of common resources are developed and are accepted by the communities in question, much work still remains to be done in order to make community organizations more substantial and vigorous than they are right now. Maybe with the exception of Marsabit, we are still very far removed from that state of affairs. Ultimately these organizations must reach a point at which they will be able to express their own views on the policy and institutional issues that affect them.

In all what we are trying to do in this project, one should not lose sight of the fact that the physical constraints of dry land resources, namely ever-diminishing space and stochastic rainfall, mean that significant improvements in livelihoods cannot be built exclusively on improved management of the natural resources because any increase in (average) productivity that we hope to attain will be small, will take a long time to materialize and will be obscured by large and random variations: these are not resources with high intrinsic values unless they support wildlife. The literature suggests that in such situations it would not be unrealistic to expect only timid participation of communities in the execution of natural resource management plans. As the costs of initiating common pool resource management and the establishment of the appropriate institutional structures are very high, it may well be preferable to take a more gradual and somewhat exploratory approach to the question which form of management would be more appropriate in any particular situation rather than assuming that one option, i.e. community-based management is optimal in all. Such an approach would mean that at the project level relatively more time and effort should be invested in those types of activities that produce those attributes among the beneficiaries that are needed no matter what tenure regime eventually will be adopted: greater integration into national economies, organizational strengthening, capacity building and conflict resolution.

Unfortunately, the literature also leads one to conclude that in virtually all countries only little progress has been made in formulating new tenure policies. At the donor and agency level the emphasis should therefore be on the stimulation of processes aimed at national policy change. Such donor initiatives should be supported by projects on the ground in the form of serious attempts to quantify in monetary terms the contributions made by pastoralists to national economies. Only this type of data will convince decision-makers that there is real value in the proper management of arid lands.

#### Annex VI: Non-IVP persons & groups met (see also lists of National Consultants)

#### Botswana

Magweregwede, Richard BOCOBONET Lecholo, Douglas BOCOBONET Maba, Abel BOCOBONET Moipolai, Obusitswe Chairperson Matsheng Conservation Trust Segapo, Ompule, Vice-Chairperson Matsheng Conservation Trust Legodi, Tsegojabo, Treasurer, Matsheng Conservation Trust Tshwavagarang, Simane, Secetary, Matsheng Conservation Trust Mosimanegape, Simon, Vice-Secretary, Matsheng Conservation Trust Pheto, Thandie, Member Matsheng Conservation Trust Bogosi, Npiletsang, Member Matsheng Conservation Trust Kejorilwe, Sekai, Member Matsheng Conservation Trust Monnaatice, David, Member Matsheng Conservation Trust Selabe, Thebenyana, Member Matsheng Conservation Trust Ragontse, Keelena, Officer-in-Charge, Kithopo Ranch Charles Motshubi, Leonard Dikobe, UNDP Luca Perez Raymond Kwerepe, National Coordinator, DFRR Ragontse, Keelenao O/c

#### Kenya

Charles Ndigwa, UNDP IVP team, Lodwar Ms. Anne Kitubo, DFO, Lodwar Elixabeth Ereng, Arid Lands Co. Store Manager, Lodwar Ezron Odhiambo, Data Logger, IVP Herbarium Ben Watkins, KIMETRICA Elders of Lorugum Elders of Tiya Elders of Kaitese

### Mali

Members of Nara site esp. four women groups comprising 119 women (full list of names in National consultant's report)

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