ORIGINAL

WORLD WIDE FUND FOR NATURE

TANZANIA PROGRAMME OFFICE (WWF - TPO)

TERMINAL EVALUATION REPORT

Consultancy Services for:

TERMINAL EVALUATION OF THE PROJECT ON IMPROVING NATURAL RESOURCES USE ON THE EASTERN SIDE OF UDZUNGWA MOUNTAINS NATIONAL PARK, TANZANIA

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Brief Project Description and Context

The Udzungwa Mountains National Park (UMNP) and its surrounding areas represent one of the few parts of the Eastern Arc Mountains range, a global biodiversity hotspot, which has endemic plant and animal species and also have dense forest cover remaining from low to high altitude (approximately 250-2,500 ma.s.l). The Park covers an area of 1,990km^2 and together with other parts of the mountains, UMNP, serves as water towers for surrounding high value agricultural land and feed streams and rivers flowing into the Great Ruaha and Kilombero Rivers and the Rufiji Basin. Water from the mountains supports various commercial services such as the two country's key hydropower generation facilities (total capacity of 380 MW at the Kidatu and Kihansi hydropower stations connected to the national grid), irrigated agriculture, tourism and fisheries.

Despite the Udzungwa catchments being one of Tanzania's critical water towers, information on their true economic value is poorly analysed, documented and understood. Unsustainable utilisation of forest, water and land resources in areas adjacent to the mountains, particularly the Vidunda hills (adjacent to Great Ruaha River and Kidatu Dam), threatens future local people's access to these resources and causing loss of ecosystem goods and services.

Conservation of these forests has been essential and a pre-requisite to sustainable development not only in the districts immediately surrounding area, but to the broader Tanzanian population through being part of the wider and vital Udzungwa Mountains. In realization of this, there have been several initiatives by different actors in the area which included forest protection, management and restoration to allow for maintenance of ecological services and local and national economic development. While some interventions were initiated, unsustainable financing and inadequate coordination of partners' efforts have led to limited impacts from previous conservation initiatives in the Udzungwa Mountains.

In the first half of 2006, WWF Tanzania Programme Office (WWF-TPO) with financial support from WWF-Norway and the Norwegian Agency for Development Cooperation (NORAD) began to implement a three years project on 'Improving Natural Resources Use on the Eastern Side of Udzungwa Mountains National Park' ('the Project') in collaboration with, Kilosa and Kilombero District Councils, local communities and Tanzania National Parks (TANAPA). A summary of key project facts is given in Table 1.

The Project was intended to contribute to the implementation of international initiatives to which Tanzania is part including the United Convention on Biological Diversity (UNCBD), Millennium Development Goals (MDGs) as well as WWF's One Global Programme priorities. At national level the Project contributes to various policies, legislations and strategies that are focusing on conservation and livelihoods development.

The project area lies on the eastern side of the Udzungwa Mountains and covers 29 villages around the Udzungwa Mountains National Park in Kilombero and Kilosa

Districts, Morogoro region. The eastern side of the Udzungwa Mountains National Park covers 20 per cent of the whole area of the park (1, 990km^2).

The area faces pressure on the utilization of water, land and forests resources mainly because of its good rain s and productive land for agriculture. The 29 villages have a total population of 83,238 (Msigula, 2009) people with annual growth rate of 3.4% and stretches from Lumango village in Kilosa District to Sakamaganga village in Kilombero District. A number of economic activities are carried out in the areas that attract immigrants hence increasing pressure on the land, water and forest resources. These activities include sugar cane farming, teak plantations, rice farming, hydropower generation and transport through the Tanzania Zambia Railway (TAZARA) crossing the area which attracts the influx of people. The Park protects the catchment forests to ensure continuous supply of water for power generation, agriculture, domestic use and tourism. Local communities also depend on the Park for firewood. The land crisis, competition on water use and shortage of fuelwood sources are the key problems that the project purpose is addressing.

Table 1: Summary of key project information

Project Location	Africa region, Tanzania, Eastern Arc Ecoregion, Udzungwa Ecosystem. Mang'ula and Kidatu Wards in Kilombero District, Vidunda and Kidodi wards in Kilosa District, Morogoro region.
Project Name	Improving Natural Resources use on the Eastern side of Udzungwa Mountains National Park, Tanzania
Project reference number	WWF TPO: TZ004404-3018, WWF-Norway: 5013, Norad: GLO-05/312-6.
Project budget	Main funding: WWF-Norway/Norad: NOK 5,316,207 Complementary funding: EAMCEF Tshs. 30,311,000 (ending June 2009) CEPF US$ 70,000 (ending Dec. 2009) WWF-Sweden SKr 1,700,000 (up to Dec 2009)
Donor(s)/ funding sources	World Wide Fund For Nature (WWF)-Norway and Norwegian Agency for Development Cooperation (Norad). Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) Critical Ecosystem Partnership Fund (CEPF) World Wide Fund For Nature-Sweden (WWF-Sweden)
Project duration	January 2006 – December 2008
Implementing agency and partners	WWF Tanzania Programme Office in collaboration with Tanzania National Parks (TANAPA / Udzungwa Mountains National Park), Kilombero and Kilosa District Council and Local communities in 29 villages, private sector.
Project Coordinator	Zakiya M. Aloyce supported by Proches Hieronimo (Land Use Planner)

The overall project goal was to ensure that "*the integrity of the Udzungwa Mountains Catchment is conserved so that it continues to provide vital sustainable goods and services at local, national and international levels*" and the purpose is to ensure "*reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by end of year 2008.*"

The overall and specific objectives of the project were to be achieved as a result of implementing activities contributing to four overall outputs/results namely:-

Output 1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration.
Output 2: Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP. [1]
Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.
Output 4: Increased supply of fuelwood and improved utilization of fuelwood efficient stoves.

Purpose and Objectives of the Evaluation

NORAD through WWF Tanzania Programme Office (WWF-TPO) commissioned this participatory terminal evaluation of a three years project on 'Improving Natural Resources Use on the Eastern Side of Udzungwa Mountains National Park' ('the Project') as part of the project monitoring and evaluation plan. This evaluation process assessed the project's performance in terms of achievement of the planned outputs and identified challenges, weaknesses, limitations, gaps and lessons learnt during the project life span operating between and including years 2006 – 2008. The review provides practical recommendations which will help in formulating any future project plans.

Approach and Evaluation Methodology

Participatory approaches were used to collect information from different Project stakeholders. The Team was guided by a tentative plan of activities prepared by the Project Coordinator as part of the Evaluation's Terms of Reference. The plan included a list of project partners and stakeholders whom the evaluation team could discuss and interview. It is worth noting here that the key aspects for the project evaluation outlined in the ToR included the programme design and relevance, its effectiveness, efficiency, impact and sustainability. The team exercised some flexibility in the timing provided in the tentative plan but maintained the list of partners and stakeholders as proposed in the ToR. The methodology followed in this terminal evaluation was participatory and adequately addressed the TOR and the suggested evaluation matrix (Annex 2). Four approaches were used to collect information for this end of project evaluation of the Project:

- Review and analysis of programme documentation and other reports relevant to the Project
- Face to face interviews with Regional and District officials who represent their respective regions and districts in the Project area.
- Face to face questionnaire guided interviews with selected staff of WW-TPO, National Land Use Planning Commission, Forestry and Beekeeping Division, UMNP, TANESCO – Kidatu Hydropower Plant, Kilombero Sugar Company

[1] This output was not implemented as another project was working on payment for ecosystem services in the same region and hence there was a risk of duplication and overlap and therefore inefficient use of resources until there was more clarity on the outputs and recommendations from the other project.

(ILLOVO), District PLUM team members, District head of departments, Village leaders, Villagers,, school teachers, school environmental clubs
- Field visits for observations of the already observable impacts of the different activities supported and implemented by the Project

Principle Findings and Conclusions related to project goals and targets

Principle Findings

The WWF-EUMNP Project has its measurable indicators and has recorded the degree of performance measured through outputs and indicators. While the indicators set the target to be achieved by the project, the outputs present the achievement by comparing the initial situation in the project area and the situation by the end of the project (Table 2).

Comparing the statistical analysis and the analysis from the stakeholders' consultation the following can be derived regarding the evaluation results on the achievement of the project outputs:

Output 1: The statistical analysis (Table 2) of the project monitoring data suggests that the set target have been achieved in the order of about 80%. On the other hand the stakeholders suggest a figure of about 60% (based on the scoring criterion in table 3a). The evaluation team sees these two figures comparable in a sense that the stakeholders uses estimation which looks more on the problem at hand and probably with huge ambition that the project was supposed to solve the problem indefinitely. As for the monitoring data, they only focus on the target set at the beginning of the project.

Output 3: Similarly the statistical analysis of the monitoring data shows an achievement of the order of 70% for this output. This is even much closer to what was estimated by the stakeholders. The stakeholders estimated an achievement of about 60% for this output (Table 3b).

Output 4: Looking at all indicators/targets set by the project on this output the level which has been achieved can be generalised at 50% achievement (using monitoring data). This closely relate to the ranking made by the stakeholders (40% achievement) during the consultation by the evaluation team.

Generally, it is worth noting that, the interviewed respondents had positive perception on the project performance and achievement and in a way the conceived performance through imagination very much relate to statistical analysis based on monitoring data collected by the project at its start and during the end.

Table 2: Project performance evaluated from monitoring data

Outputs	Indicators/Targets	Achievement by the end of the project (Dec. 2008)
Output 1		
Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration	• Incidences of illegal logging in adjacent to the park reduced by at least 25% by end of 2008	95 poachers recorded in 2008 which calculates to about 23% reduction compared to 2006. It has to be noted however that there was no consistent patrol intensity for 2006, 2007 and 2008.
	• Village forest reserves (VFR) established in 3 villages by end of 2008	6 VFRs have been established in Kilosa-Mapped and Surveyed by FBD, with Management plans and by-laws in place. 2 VFR identified and set aside during land use planning process and are protected by Land use plans by-laws. This is ideal achievement by the project
	• At least 10% of degraded forest restored by end of 2008	Forest area restored is found in VFR & Community Forests for Ruaha,Kifinga,Tundu and Iwemba villages which is 771.37 ha. This calculates to about 8.5%
	At least 5 village buffer zone woodlots established by end of 2008	401 woodlots established in the project. This is far ahead of project targets set.
Output 2		
Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP[2]		
Output 3		
Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved	Land use plans in place for at least 10 villages by end of 2008	7 land use plans developed in Kilosa District and approved at all levels. Implementation is ongoing and will need time. This translates to about 70% target achievement.
	At least 5 extension officers trained and using new skills by end of 2007.	10 farmers trained as pioneer extension personnel and this is another ideal achievement for the set target by the project.
	By-laws are approved and in use by end of 2008	7 by-laws developed, approved at village and district levels and enforcement is ongoing in Kilosa District.
	3 forest officers are trained on agro forestry techniques and PFM and applying the new skills by end of 2007	2 Foresters were trained which translate to about 66% achievement in relation to project set targets.
Output 4		

[2] This output was dropped as the Ministry for Natural Resources & Tourism with the Rufiji Water Basin had planned to undertake a similar activity in the area

Outputs	Indicators/Targets	Achievement by the end of the project (Dec. 2008)
Increased supply of fuelwood and improved utilization of fuelwood efficient stoves	Number of households practicing agroforestry increased by 50% by end of 2008. (*No baseline existed with this target*)	17 HHs in Kilosa practicing agroforestry. 6 Agroforestry farms demonstration plots established in Kilosa.
	At least 10 tree nurseries established and supplying seedlings to communities by end of 2007	A total of 35 tree nurseries (with an average of more than 800 seedlings) out of which 15 are school nurseries, 1 individual and 19 groups' nurseries. This is great achievement.
	Number of trees planted and surviving increased to at least 60% by end of 2008	• **2006: (**Kilombero: 6,084, Kilosa: 15,897) • **2007: (**Kilombero: 106,205,Kilosa: 179,116) • **2008: (**Kilombero: 71,224, Kilosa: 96,376) • Avg. survival rate in both districts is 80% • Overall total (2006 to 2008): **474,902 trees**
	Number of households (HHs) using energy saving stoves increased by 50% by end of 2008; (Total households in the target villages is 33,754)	10,329 HHs adopted fuel efficient stoves (equivalent to 30.6 %). The district distribution is 6,686 HH in Kilombero and 3,643HH in Kilosa district. This calculate a target achieved of about 61%
	Time used to collect fuelwood reduced by 50% for households with energy saving stoves by end of 2008	10,329 HHs save 11,852.5 days for year, this is equivalent to 15.3% time reduction. For the households adopted technology time has been reduced by 50%
	Amount of fuelwood used by households with energy saving stoves reduced by 50% end 2008.	The specification of the energy efficient stove suggest that for the households properly adopted the technology, the quantity of fuel wood used is reduced by 50%

Table 3(a): Criterion used in scoring the respondents answers

S/N	Response from stakeholders on project implementations/outputs	Score Given
1	strongly disagree	0%
2	Disagree	0%
3	Neutral/mixed opinion	10% - 29%
4	Average	30% - 49%
5	Agree	50% - 69%
6	Strongly agree	70% - 100%

Table 3(b): Project performance evaluated from stakeholders consultation in both districts

Expected Output by the end of the Project Phase	% ranking by Kilosa respondent groups	% ranking by Kilombero respondent groups
Output 1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration	60	NA
Output 2: Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP	NA	NA
Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.	60	70
Output 4: Increased supply of fuel wood and improved utilization of fuel wood efficient stoves	40	40

***Note that**, NA stands for Not Applicable. Output No. 4 was ranked low because the fuel wood from the planted trees are not yet been used and thus their tangible benefits are not yet reached. Some village land (nine villages)on Kilosa side have been delineated by the villagers to be managed as Village Land Forest Reserves (VLFRs) management plans and subsequent approvals on-going.*

Conclusions

Given the Project goal "***the integrity of the Udzungwa Mountains Catchment is conserved so that it continues to provide vital sustainable goods and services at local, national and international levels***'' and purpose to ''***ensure reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by the end of year 2008***"; the evaluation team is of the opinion that the implementation of the project interventions, although not completed to the planned level, is generally in good progress (Compare Annex 3 against Annex 4a). The current progresses have indicated relevant signs of reducing pressure on the Udzungwas together with improving livelihoods of the target community.

Stage 1: Project Design, Planning and implementation

The project uses an adaptive management plan which is highly recommended for projects dealing with conservation with people. The project is designed in such a way that, it supports the implementation of Tanzanian policies, legislations and strategies related to natural resources conservation and community development. Further, the project is in line with a number of international treaties and conventions like United Nations Convention on Biological Diversity (UNCBD), Millennium

Development Goals as well as WWF's One Global Programme priorities. The project is also in line with Norway's support for environmental sustainability and the overall Norway-Tanzania bilateral engagement in reducing poverty and ensuring sustainable environmental management, gender decentralization and decision making and participatory resources government.

Despite the little time allocated to achieve the project goal and purpose through its planned activities against their expected outputs (through a number of verifiable indicators), the evaluation team could clearly see the relevance of the entire project's planned activities. However, the evaluation team is of the opinion that, the project planners had somehow under estimated the project's demand and challenges therein. In that regard, the three years have been seen un- realistic by the evaluation team. Experience indicates that, at least five years are needed for someone to realize some tangible benefit accrued from a conservation project. This situation also apply to this project, hence it calls for a longer duration to implement its intended interventions.

The fact that the project will not last forever in the EUMNP area, the evaluation team strongly urges the project management to prepare an acceptable exit strategy that will consider both **sustainability** (*cultural beliefs, enough capacity, follow-up or monitoring strategies, proper stakeholders for different tasks, and good communication between stakeholders*) and **population growth rate** as major existing challenges in the area.

Implementing a project which touches people livelihood needs a lot of planning and consideration. Land use planning was noted to be one of such activities which touches peoples' livelihood. Due to this fact, land use planning and implementation is a very sensitive and long term process that needs people's buy-in, political will, stakeholders' commitments and clear understanding of the governing laws by the facilitators. Since WWF had already committed to support the farmers who relinquished their farmlands for conservation purposes in the three villages (Ruaha, Kifinga and Tundu), it is inevitable that the exercise is accomplished so that all the registered farmers are allocated with farming land elsewhere. This will not only keep the livelihood of those farmers who were affected but also will ensure to some degree the sustainability of the project's current impacts

Stage 2: Project most significant impacts

Among the realized impacts of the project interventions is the increased conservation awareness among the target community. Although the level could not be assessed, different interviewed respondents indicated this aspect. This also had been assed through the physical change of the Vidundas which was reported to have been in a very critical condition before the project interventions. It is always known that, increased knowledge contributes to a positive attitudes, perceptions and right behaviors of the people around protected areas. This was also observed by the team from the few interviewed respondents. However, this percent of the interviewed respondents cannot be used as the actual representation of the majority of the target community because most of them were either from the village formed groups, village governments or from the district officials.

A number of forest reserves alongside 7 approved village land use plans have been established and these were part of the result of the land use plans activity which had a purpose of contributing to the improved land use practices output (Annex 3). Following this evaluation, it was noted that deforestation and degradation along mountain slopes and catchment areas had significantly reduced. Following the status report it was realized that, at least 6.4% of the Vidunda Mountains had regenerated, based on four village sampled, by the time of the project evaluation. However, the evaluation team thought that there should be a more reliable monitoring process (probably through satellite images/ GIS techniques) that would provide a more reliable feedback on cover changes. Eye observations are good but they are always subject to errors.

The evaluation team understands the difficult in realizing tangible project benefits direct to the human livelihoods within such short duration. However, some indirect livelihood benefits such as reduction of floods in the lowlands are acknowledged. Since the park remains to be an important protected area for both its biodiversity and people around, there is a need for the project to set a long-term monitoring plan that will track both human impacts and benefits accrued from the park's protection by the target community. This is to ensure that there will be a win-win scenario in the whole project implementation.

Another significant impact which under pin the success of this project is the fact that people in the project area have started using alternative source of energy (e.g the use of biogas and the popularity of using rice husks in bricks making). Also the project's effort to implement efficient stove, where by about 30.6% households have these stoves, was noted as a great move in ensuring reduced pressure on the natural resources in the Udzungwas. If this initial momentum is continued it will in the long run play a great impact on the sustainability of the project's current impacts. It is the view of the evaluation team that close monitoring of the adoption of these new innovations would provide much confidence and define what should be the future direction and effort of the project.

Stage 3: Project Sustainability

The project has efficiently implemented activities and has both secured some community commitment (level not yet assessed) and addressed some conservation threats such as severe land degradation especially on Vidunda Mountains. Despite some delays in the project's initial stages, the project has achieved some commendable level of intended outputs in all its key planned activities (Annex 4a). The effectiveness is basically contributed by its design as elaborated early in this report. To a large extend, the project strived to use and communicate to the right stakeholders whom have largely contributed to its present level of success. The project had an advisory committee which had an advisory task to the project, and largely it has contributed to its success through various guidance which were noted in the minutes of meetings (WWF – TPO 2008).

Using the right stakeholders, providing knowledge to the right groups of people like primary school teachers and pupils ensures the project's sustainability. However, a number of challenges do exist which might jeopardize the project's future. These are; 1) willingness of people to acquire the knowledge transpired and their capacity to transfer to others; 2) increased population growth rates and 3) continued

government's (through regional and district' authorities) support in the general implementation of some sensitive project' interventions like land use plans.

The evaluation team however stresses that there is a need for the project team to find a way of connecting all its stakeholders in such a way that they can all speak similar language when it comes to this language. This would further help in reducing un-necessary costs that would be incurred by the project when it is working in the same are as the one worked by say ILLOVO or TANESCO. Some stakeholders are willing to contribute in implementing some important activities, but they should be recognized first.

Stage 4: Project Resources (Human and Finance)

Achievements of any project need resources of various forms. As for this project two types of resources were crucial:

Human resource was one of the resources. Based on the literature review and the evaluation by the team, the assembled team to manage this project was capable of implementing the planned activities. This complemented the observed excellent project design which resulted on the measurable success which could be seen today in the project area. However, the evaluation team has an observation on the human resource aspect. It was noted by the team that project covers a large area with only one technical staff at the start of the project with the land use planner brought on board toward the end of the project's first year. The evaluation team feels that the project would have achieved more if either both staff started at the project's onset or more than two staff were employed for the project.

The other aspect of project resources was the finance. The review analysis indicated that there were steady supplies of financial resource to this project from its start to finish. Due to this, the project was able to over spend and sometime to under spend in undertaking different activities. Over spending and under spending of this project is translated by the evaluation team as the ability of the project budget to respond to any economic shocks. This again reflects the good design aspect of the project. Generally, the expenditures for the three years by the Project were reasonably in accordance with the planned activities and are regarded by the evaluation team as to have closely followed the budget. The variance which occurred in each of the three years is regarded by the evaluation team to be in an acceptable range given the explanation for each of the variances which were mainly either due to an avoidable circumstances or economic shocks/inflations.

Stage 5: The land Use Planning Process

The land use planning process has been one of the major activities in this project. Also, the evaluation team believes that this activity lies at the heart of success of this project. Annex 9 shows the importance of this process and details of its implementation. Based on this, the team has the following to conclude regarding the entire process:

- The main objective of facilitating land use planning and implementation by WWF was to restore the degraded catchment forests of Vidunda so that the

catchment continues to provide the required service for livelihoods of local communities and social economic development of the country. The positive sign of this could now be seen and this is based on the results from four sampled villages (Ruaha, Kifinga, Tundu and Iwemba) which have indicated a total area regenerated of about 1,887 ha equivalent to 6.4% regeneration of originally degraded area in Vidunda catchment. The process has also helped in identification and establishment of village forest reserves (6,858 ha).

- Farmers in Ruaha, Kifinga and Tundu villages (villages targeted for land reallocation) have stopped cultivation activities on the fragile steep slopes of Vidunda Mountains and regeneration is gradually taking place.
- The land allocation exercise has gained popular support from the government. The National Land Use Planning Commission, Morogoro Region and Kilosa District have been keen in making follow-up on this issue and have been providing technical support in creating awareness and educating villagers on Land use plan and by-laws implementation and various policies and legislations (for example Village Land Act no. 5 of 1999, Forest Act, 2002 and The National Land Use Planning Act, 2007).
- With awareness creation, villagers have gradually started to understand the laws governing land use planning and implementation and that they are not eligible for any compensation as the land still belongs to the villages.
- The established Village Land Use Management Committees (VLUMs) are enthusiastic and well informed and therefore very important local level governance structure in implementing the developed land use plans.

Key Recommendations for future project plans

Despite the 100% demand of the project's extension by the interviewed respondents probably because of the donor dependence syndrome, the evaluation team realizes the need for the project's continuation of its activities to reach the originally planned targets. Reviewing the project's log-frame especially the final project achievement as of December 2008 (WWF Terminal progress report prepared February, 2009) and talking to the project's coordinator and WWF management, it was very clear that the project still had a number of important interventions which needed fully implementation. It was also apparent to the evaluation team that leaving these unfinished activities unimplemented might jeopardize the long-term impact (i.e. sustainability) and the project current impact in the project area. Activities like land use plans which had previously caused some serious conflicts were partly on good progress, but the process of land relocation was still a challenge to the project because of the issue of finding some alternative land for the relocated people. It is very obvious to the evaluation team that, in case such important activity will be left in-complete then there is a big possibility of the relocated farmers from Vidundas and elsewhere to return to their original lands hence returning back to the degradation situation.

Apart from the land use plans, the project had initiated activities such as installation of fuel efficient stoves and biogas plants which to the evaluation team were very crucial activities to ensure sustainable utilization of forests around EUMNP after the land use plans. The fuel efficient stoves had been implemented to more than 10,000 households (approximately 30.6%) in the project area. However, the success of this activity (in terms of the coverage and community's willingness to use) was still un-known by the time of this evaluation, and further there was a need of spreading such

stoves to almost the entire community in the project area. Also, only a small fraction of biogas plants (which are costly) had been installed by the time of this evaluation.

Another point which makes the evaluation team believe that the project is having a potential component of unfinished planned activities is the fact that most of the implemented activities were found to be in the Kilosa side whilst the original project plan had targeted both Kilosa and Kilombero districts in equal dimension. Referring to the project log frame, there is a lot which need to be implemented in Kilombero which include the most important issues of land use planning and implemention which is yet to be initiated on this side of the project. Implementation of activities in this nature does not create a balanced result for the project to achieve its planned purposes and goals for the defined project area. Hence the evaluation team suggest for similar work to be done on the Kilombero side.

Given the importance of the above activities and the rest of the remained project interventions the team clearly foresees the need for the project to extend its duration in the area in order that all un-finalized tasks are completed to the required level.. The team has made a review of the log-frame and the summary of activities which need to be implemented for each output to reach their planned level of achievement. Tables 4, 5, and 6 present project's status in terms of its achievements until this evaluation and the remained tasks for each of outputs 1, 3 and 4.

Table 4: Status of achievements and remained tasks for output 1

No.	Milestone/Target	Achievements until 31 Dec., 2008	Comments
Output1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration			
1.	Organize environmental awareness and education meetings and workshops in five (5) villages.	6 environmental awareness and education meetings and workshops (134 participants in 2006 and 121participants in 2007) were organized in 9 villages-Kilosa (4 in 2006 and 2 in 2007). 0 Kilombero	2 more w/shops were yet to be organized in 9 villages
2.	Establish and strengthen at least five (5) Village Natural Resources Committees	29 VNRCs were strengthened on natural resources policies and fire management. (20 in Kilombero and 9 in Kilosa) 240 people from Kilombero and 250 from Kilosa attended the training. 212 people from 9 villages in Kilosa were strengthened on fire mgt.	Good progress although the training on fire braking and fire management was not strengthened in all districts
3.	Facilitate establishment of at least three (3) Village Forest Reserves (VFRs) (including identification and adjudication of VFRs, survey and mapping, resources assessment,	5 Village Forest Reserves have been established in Kilosa (1 in 2006 and 4 in 2007), 0 in Kilombero	2 more Village Forest Reserves are to be established. Note the lack of VFRs in Kilombero district.

	formulation of management plans, facilitation of the formulation and enforcement of village by-laws).		
4.	Establish and maintain at least 5 village woodlots.	395 have been established in 2007 (357 in Kilosa and 38 in Kilombero).	20 more woodlots to be established
5.	Restore forests in degraded sites (at least 2,000 hectares including tree planting):	About 771 hectares equivalent to 8.5% of the total degraded forest area 9,086.79 ha) have been rehabilitated in the Vidunda Catchment area-Kilosa	The restored land had reached at least about 10% while the target was 20%.
6.	Develop and implement a simple ecological monitoring and research programme in Vidunda catchment-Kilosa	Ecological baseline data were generated. 5 community members are being trained to implement the monitoring plan	The implementation of the monitoring plan is yet to be completed.

Source: NORAD periodic Progress results Report, (2006- 2008) by Msigula, (2009)

Table 5: Status of achievements and remained tasks for output 3

Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.			
	Milestone/Target	**Achievements until 31 Dec., 2008**	**Comments**
1.	• Facilitate preparation and implementation of Land use plans	7 Village land use plans prepared and approved at village level. 3 out of 7 above approved at district level and submitted to the Ministry of Lands, Housing and Human Settlement Development 7 Village Land Use Plans By-Laws prepared and approved at village level. 7 Village Land Use Management Committees (VLUM) formed and were involved in preparation of land use plans. 7 Village Forest Reserves were set aside during preparation of village land use plans. Village land boundaries conflicts minimized.	Land Use Planning was done in ***Kilosa District only***. The 4 land use plans approved at village level was submitted to District Council in Jan 2008. 7 Land Use Plans By-laws submitted to District Council and the implementations of these had started for only 3 villages of out of 7.
2.	Train and support at least 5 extension Officers to help	6 Extension Officers were trained at LITI in Morogoro in	Non of the trained extension officers was

	communities use good agricultural practices	2006, all of them were from Kilosa District	from Kilombero district
3.	Facilitate implementation of land use income related activities	Not yet implemented	Needs to be implanted for project sustainability
4.	Train and support 3 Foresters on agro forestry techniques and PFM	2 Foresters, 1 from each district were trained at MSTDC-USA River, Arusha	The remained number need to be completed

Source: NORAD periodic Progress results Report, (2006- 2008) by Msigula, (2009)

Table 6: Status of achievements and remained tasks for output 4

No.	Milestone/Target	Achievements until 31 Dec., 2008	Comments
Output 4: Increased supply of fuel wood and improved utilization of fuel wood efficient stoves			
1.	Develop agroforestry schemes that encourage tree planting on farmers land	2 agroforestry schemes have been developed for both districts, Agroforestry training including beekeeping was conducted for 229 farmers from Kilosa	**Bias towards** Kilosa district. 11 households in Kilosa are practicing agroforestry 17 fish farmers were supplied with 3,0009 fingerlings, 177 for each farmer 6 groups were supported with 30 beehives , 5 per groups
2.	Establish 10 private and village tree nurseries	52 tree nurseries have been established (17 in Kilosa and 35 in Kilombero	74 teachers in Kilosa were trained on tree nursery management; Tree Nursery supplies were also donated to schools, villages and communities groups established tree nurseries **Kilombero**: 20 Village nurseries, 4 community tree nurseries, 11 schools' tree nurseries **Kilosa:** 5 community owned and 11owned by schools, 1 by individual
3.	Promote agricultural extension service for farmers to implement agroforestry	Extension service to farmers is being provided –not effectively though, especially in Vidunda	More solid training is needed
4.	Promote and support fuel-efficient stoves	202 communities from Kilosa were trained on fuel efficient stoves and the monitoring of the adoption has been on-going in both districts	At least 10,329 (equivalent to 30.6%) HHs adopted fuel efficient stoves). 3,643 in Kilosa and 6,686 in

			Kilombero. Hence more effort needed in Kilosa district
5.	Conduct awareness programmes on the use of alternative energy sources	Awareness creation on the use of alternative energy was conducted in 3 villages in Kilombero and 3 biogas sites have been established.	This process is very crucial and still needs to be expanded
7.	Facilitate 3 evaluation workshops to assess the progress of implementation of the plan developed in August, 2006	1 workshop was conducted on 18 December 2006 and village reports on the progress of implementation were presented at the workshop.	***The rest of the workshops have been cancelled to minimize costs***

Source: NORAD periodic Progress results Report, (2006- 2008) by Msigula, (2009)

Taking close observation of the tables above, very crucial activities are yet to be completed. Like mentioned above implementation in Kilosa are far more than those in Kilombero. Although this might also reflect the cooperation given by the district authorities, the evaluation team suggests that for the betterment of the project results, techniques to win Kilombero's cooperation by the project are necessary in order to achieve similar levels of success provided the importance of both districts in the conservation of the Udzungwas. In case the project sees the need to extend its stay in the area, it should however remember that awareness creation process is a cut across issue and need to be well strategized in such a way that the majority of the target community is reached and understands and practice what they ought to. However, this should be accompanied by a frequent evaluation (preferably 3 months interval) procedure to ensure the desired level of awareness by the target community. It is well known that, capacity building/awareness creation initiatives are long term, expensive (in terms of time and money) and need an acceptable procedure, which in this case the adaptive management strategy is still recommended.

Given the above assessment of the project performance by the time of this evaluation, the following table provides a suggested set of priority issues to be addressed for maximum success of any next phases of project implementation in both Kilosa and Kilombero districts. Most of these have been derived from the project log-frame and stakeholders themselves. The evaluation team sees them as important aspect regarding the project sustainability. Table 7 illustrates the recommended activities for each of the two districts.

Table 7: The suggested priority issues for project future plans

Location/ District	**Important suggestions for project future plans**			
	Area of Focus	Key stakeholders to be involved	Approaches and strategies to be employed	Remarks
	Finalizing the remained processes for land use planning in the 9 target villages	The district council	WWF should work behind the district councils so that the solution for land reallocation process for Ruaha, Kifinga nd Tundu	Communication between WWF and DED and

Location/ District	Important suggestions for project future plans			
	Area of Focus	Key stakeholders to be involved	Approaches and strategies to be employed	Remarks
Kilosa			villages is seriously analyzed and worked out. The participatory procces used to finalise the remaining steps for 7 VLUPs and all steps for the 2 untouched villages (Udungh'u and Chonwe)	PLUM team enhanced. Adherence to guidelines Increased transparency in all processes
	Finalize the Land reallocation process for Ruaha, Kifinga nd Tundu villages	The district council and villagers from the three villages	Recognize influential people to avoid some of un-necessary misunderstandings during implementation of some agreed activities.	Needs more participation and time
	Finalize the management plans and By-laws for the six (6) Village Land Forest Reserves initiated in Vidunda, Ruaha, Tundu, Msowero and Lumango villages	Kilosa District Council, Kidodi, Mikumi Forest staff, VNRCs and WWF technical support	Assist these villages through their VNRCs to operationalize their VFR management plans and by-laws including division of roles and responsibilities and benefit sharing scheme.	Device management approaches and roles and responsibilities. Identify Benefits from VLFRs
	Devise alternative sources of income and energy while waiting for the products from the currently planted trees	All villagers around the project area	Identify possible use of rice husk as alternative energy source	
	Increase awareness creation activities to reach all groups of people	All villagers around the project area	Educated villagers should be trained Use of films to get more people on board WWF should crosscheck the selected individuals to make sure that only qualified participants are selected and that not only same people attend the offered trainings	
	Continuing with tree planting scheme within the project sites	TFCG, TANESCO and ILLOVO could also be involved for some seed	Some trees produced by different environmental groups (schools, individuals etc) can be used as source of income to make the	

Location/ District	Important suggestions for project future plans			
	Area of Focus	Key stakeholders to be involved	Approaches and strategies to be employed	Remarks
		money	groups sustainable	
	Building some documentation offices in the villages under project	TFCG, TANESCO and ILLOVO could also be involved for some seed money	Building of Village land Registry Offices. One of the process of land use planning	
Kilombero	Intensive capacity building activities to reach all people in the area	All villagers around the project area and the district council	Devise a method to reach more grassroots	
	Design and avail your exit strategy to all key stakeholders	All villagers around the project area and the district council	Identify committed stakeholders for monitoring and implementers who should be known in the area	
	Connect all stakeholders to speak similar language	All stakeholders at the grassroot to national level.	Devise an incentive giving mechanism to reward the committed stakeholders and penalty mechanisms for the law breakers at all levels	Incentive giving could be through competition between villages and districts
	Initiate land use planning for Kilombero side of the project	Kilombero district council and villages within the project area	Similar approach used in Kilosa with lessons learned in mind.	

Summary of Lessons Learned

During the course of this project, the evaluation team has come up with a number of key issues that could be usefully for this project and other conservation related interventions in future. These are the lessons learned. The lessons learnt in this project can be divided into three stages of the project lifespan:

Stage 1: During project design and planning stage

Adaptive collaborative management (ACM): It has been learned that ACM is a usefully tool in changing peoples' behaviours, attitudes and perceptions towards conservation of areas such as EUMNP. It is thus vital to consider integration of a tool like this during early days of project design and planning. This technique management incorporates research into natural resource management. Specifically it is the systematically integration of design, management and monitoring in order to adapt and learn (Wageningen University & Research Centre, 2008). Although this project had not reached its 100% achievement by the time of this evaluation, the evaluation team thought that the project had generally successful in its implementation because of the strategy used (ACM). Literature indicate that, adaptive collaborative management places the multiple stakeholder character of natural resource management centre stage and translates the experimental and reflective learning practice of resource managers into a social learning process amongst stakeholders. Although not yet full completed, ACM process had allowed the successfully implementation of the land use plans which are always difficult to process and implement. However, since the community was involved through participation, learning and practicing, it made the process easier and implementable despite the experienced difficulties.

Communication strategy (CS): Communication is a key to all the life's success. Good communication strategy designed at the outset of the project contributed to good performance through its various stakeholders. The key issue here is to eliminate negative attitudes and perceptions among key stakeholders which may hinder project activities. It appeared to the evaluation team that, the project team had a better communication to Kilosa district stakeholders than the Kilombero ones hence better performance, understanding and willingness to implement the project interventions in Kilosa than Kilombero district.

Stage 2: Project implementation stage

WWF Position in the project area: It has been learned that one of the key issues which should be defined right before the start of any project implementation is a clear definition of the role of every stakeholder. This helps to assign some responsibilities to key stakeholders and make them feel part of the project. Also, it limits every stakeholder to only do what they are ought to "*Play only your role*!" The importance of this was highly noted especially in that, WWF took a position of an implementer than a facilitator during the project implementation, hence somehow got some unnecessary negative perception from the targeted local community. For example, a majority of respondents in the targeted area could not distinguish between WWF roles and responsibilities from those of TANAPA. This was very significant in Kilombero district, and surprising enough this came from the district level officials who are regarded as knowledgeable practitioners. Similar scenario was observed in Kilosa especially the VLUM and VNRCs whom in practice they were expected to be knowledgeable. Following this weakness, the evaluation team urges WWF to increase awareness creation initiatives and make sure that they always clearly define and practice their position in the project which is mainly facilitation.

Prioritizing project planned activities: Despite the importance of all the set activities against their expected outputs to meet the intended goal and purpose of the

project, the evaluation team thinks that given the project longevity (3 years) it would be a good idea for the project to have a priority list for implementing their activities. For example, the land use plans activity was thought by the evaluation team to be a very crucial intervention in achieving sustainable natural resource management particularly in complex areas like the Udzungwas. Although this process had been completed by 70%, its implementation would mean a lot to the sustainability of the conservation initiatives in the area. Thus, prioritizing an activity like this to reach its 100% target would mean a lot to the success of the project. It should further be noted that, the land use planning could be regarded as a base for most of other project activities like having set aside land for woodlots, forest reserves and also agriculture and/or settlement land; because it is land use plans that calls for such other activities. Given its importance, more time and concentration would mean a lot to the project.

Stage 3: Project terminal stage (Exit stage)

Project sustainability: The evaluation team learnt that, the sustainability aspects of a project depend on the project's design, community attitudes and willingness to adopt the intended/planned interventions for the project and any early planned exit strategy prepared to equip the intended audience for long-term impact of the project interventions. One important aspect in ensuring the sustainability is the exit strategy planned before hand. It is always good to have an exit strategy devised alongside with the project proposal in order that all the implementation strategies prepared should always put the exit strategy under consideration. In this regard the evaluation team learnt that always when devising such strategy, WWF should consider both **sustainability** (*cultural beliefs, enough capacity, follow-up or monitoring strategies, proper stakeholders for different tasks, and good communication between stakeholders*) and **population growth rate** as major existing challenges and threats to the sustainability of the implemented interventions.

Donor Dependence Syndrome: Just like any other project initiated elsewhere in the developing world, the target community was seen to have a weakness in over dependence to WWF as a life time donor than getting prepared to take and own the project after its life span. Almost 100% of all interviewed respondents thought that the project should first provide them with some alternative sources of income before they leave the project area. In other words, most interviewed stakeholders appeared not ready to run the project without WWF in place. This has very much contributed to failure of many such projects elsewhere, and there were clear signs of such a situation in the project area. Following this, the evaluation team thought that the project team needs to widen the scope of awareness creation initiatives, and make people understand their position and responsibilities very clearly. An exit reminder should be set to all stakeholders (especially the immediate ones) right at the beginning of the project. This will not only facilitate early achievement of project goal, but also will enable early owning of the project by the stakeholders.

Acknowledgements

WEMA Consult (T) Ltd Team would like to acknowledge the Project Coordinator for the well prepared and very flexible work plan that enabled efficient collection of information and successful completion of this consultancy work. We particularly appreciate on the appointments and organization of different groups of stakeholders who were interviewed. In addition, we thank the management team at WWF – TPO in Dar es Salaam for the well organized logistical schedule from the start to finish of this assignment. We also commend the cooperation of different stakeholders particularly the Regional Office – Morogoro, ILLOVO, TANESCO - Kidatu, District Councils (Kilosa and Kilombero), Primary schools, village leaders, village environmental committees and Farmers. Their participation was very encouraging and supportive. The team would also like to use this opportunity to thank the Member of Parliament (for Mikumi Constituency) for managing to attend the interview with us.

Acronyms

ACM	Adaptive Collaborative Management
CCS	Community Conservation Services
CEPF	Critical Ecosystem Partnership Fund
DC	District Council
DED	District Executive Director
FGD	Focus Group Discussions
ITCZ	Intertropical Convergence Zone
MNRT	Ministry of Natural Resources and Tourism
MoU	Memorandum of Understanding
MWLD	Ministry of Water and Livestock Development
NEMC	National Environmental Management Council
NGO	Non- Governmental Organisation
Norad	Norwegian Agency for Development Cooperation
PLUM	Participatory Land Use Planning and Management
RAS	Regional Administrative Secretary
TAFORI	Tanzania Forestry Research Institute
TANAPA	Tanzania National Parks
TANESCO	Tanzania Electric Supply Company
TAWIRI	Tanzania Wildlife Research Institute
TOR	Terms of Reference
UMNP	Udzungwa Mountains National Park
VICOBA	Village Community Banks
VLUM	Village Land Use Management
VNRC	Village Natural Resources Committee
WWF-TPO	World Wide Fund for Nature-Tanzania Programme Office

1.0 Background

1.1 The Context

Udzungwa Mountain ranges are located in south central Tanzania, and forms part of the greater Selous ecosystem that encompasses some of Tanzania's most important grasslands, woodlands and forest, with wildlife species found no where else in the world. These mountainous ranges are essential water catchment areas which contribute significantly to the livelihoods of a large population who are also reliant on forest resources, as well as affecting the economic development of the country as a whole, particularly as the source of vast volumes of water utilised in hydro-electric power generation and irrigation. Eleven rivers from Udzungwa drain into the Ruaha River in the northern part of the park (Msosa, Lukosi, Lofya, Mhalaga, Mhuka, Msinga, Malenga Makali, Mgalange, Datha and Modshagon). Water from the mountains flows into the Great Ruaha and Kilombero Rivers in the Rufiji Basin. These mountains are located to the west of the Kilombero Valley, an area of considerable agricultural importance to Tanzania. The Vidunda range in particular feed into the Great Ruaha including Kidatu dam, a principal source for Tanzania's hydroelectric power supply. They further provide water for sugar cane plantations, rice fields and horticultural gardens just below the mountains as well as flood plains and irrigated fields used by thousands of farmers down stream.

The Udzungwa Mountains Range consists of Udzungwa Mountains National Park and a number of forest reserves and village lands. The Udzungwa Mountains forests play an essential role in water catchment, supplying water for agricultural and domestic usage in the lowlands. To their east is the northern end of the Kilombero agricultural heartland, which is dominated by the estates of Illovo, the Kilombero Sugar Company. Considerably more degraded, the Udzungwa are neighboured to the north east by the Vidunda Mountains, divided by the Great Ruaha river. Both ranges are part of the Eastern Arc biogeographical range that span from south-eastern Kenya to south west Tanzania and of considerable ecological importance to both East Africa and the wider world.

The Udzungwa Mountains form one of the largest blocks of the Eastern Arc Mountains which combined together with the Coastal Forests of Eastern Africa are recognised as one of the worlds' 25 biodiversity hotspots. The Udzungwa Mountain range and its forests also generate a microclimate that increases rainfall in the area (Doody *et al*, 2005). Rainfall is seasonal and variable in the region, and relatively abundant compared to other parts of the country as a whole. Rainfall is bimodal, produced by the movements of the Intertropical Convergence Zone (ITCZ). The ITCZ produces two wet and two dry seasons near the equator, with rainfall seasons occurring from March to April and from October to December when the ITCZ moves overhead.

1.2 Purpose of Evaluation

Unsustainable utilisation of natural resources in the Udzungwa area, particularly in the Vidunda range is threatening livelihoods by restricting access to timber, wood, forest products and freshwater supplies. This situation called for interventions to ensure that both the natural resources are protected and livelihoods of local communities

adjacent are improved. WWF Tanzania Programme Office, funded by the Norwegian Agency for Development Cooperation (NORAD) and WWF-Norway, seeks to address the problems relating to this ongoing threat to natural resources and livelihoods. The project goal is:

"The integrity of the Udzungwa Mountains Catchment is conserved so that it continues to provide vital sustainable goods and services at local, national and international levels". Specifically, the project purpose is to ensure: *"reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by end of 2008"*

Improving Natural Resources on the Eastern Side of Udzungwa Mountains National Park, Tanzania, ('the Project') is a project that has just completed its three years of implementation (2006 – 2008). As part of project monitoring and evaluation plan, the Project scheduled a Participatory Terminal Evaluation.

1.3 Objectives of the Evaluation

The objective of the assignment was to conduct a terminal evaluation of the Project in order to provide a comprehensive project assessment with recommendations for future development. The process involved a participatory undertaking of evaluation between consultants and identified key stakeholders focusing on achievement of the objectives, effectiveness of the strategies and methods and impacts of the Project from its start in 2006 until end of December 2008. The detail of the scope of the evaluation is illustrated by Annex 1.

2.0 Audience for and Use of the Evaluation

The targeted audiences for this evaluation are categorized at different levels from local communities to central government level. Local communities living around the Udzungwas generally gain direct benefits from the better conservation and management of forest resources and the catchment forests (including small-scale agriculture for both household food supplies and income generation), fuel wood and timber and these communities contribute to the delivery of all project outputs. They are at the same time the central target for the initiative to reduce their negative impacts on ecosystem values through unregulated and unsustainable resource use. The Project focused on improving livelihoods through provision of alternative resource base such as beekeeping and fish-farming, benefit-sharing and improved management of community natural resources. Long-term livelihood security within local communities will also be improved by strengthening water supplies, local rainfall and improved land productivity and tenure security. The Project focused on community groups and community-based organizations including disadvantaged members of the communities – women and youth to implement livelihood initiatives.

The Project evaluation also targeted Village Governments, the District Councils of Kilombero and Kilosa, and Government institutions that use natural resources. The Ministry of Lands, Housing and Human Settlements Development, The Ministries of Water and Livestock Development (MWLD) and that of Natural Resources and Tourism (MNRT) responsible for water, forest and wildlife resources and the energy

sectors are the secondary beneficiaries while Tanzania as a whole stands to benefit from the Project's contribution to national development particularly the improved energy and water supply, land use planning and management and enhanced management of the Udzungwa Mountains National Park as well as the contribution in poverty reduction.

WWF worked closely with TANAPA and the Udzungwa Mountains National Park management to further integrate local communities into the management of UMNP. This implies that the evaluation findings will be beneficial to TANAPA as they develop close partnerships with government agencies and NGOs. Developing TANAPA's capacity and its target beneficiaries to manage their own resources and to participate in park Community Conservation Service (CCS) programmes will ensure sustainability of the project interventions and the resources on which the whole region depends. UMNP will provide input in the ecological monitoring and protection of the catchment forest.

It is clearly noted that the Udzungwa Mountain ranges and the surrounding areas have great potential in terms of resources of major benefits to communities by contributing to food security and income, but ill-considered utilization can result in damaging environmental impacts and harmful consequences for peoples' livelihoods. The wise use of these resources requires consideration of all the diverse benefits that they provide and the way that these benefits are best maximized in a sustainable manner. The problem addressed by WWF in Udzungwa was to reduce pressure and improve utilization of forest, water and land resources on the eastern side of the Udzungwa Mountains National Park. The wise use of such resource is highly valuable for sustainable development in terms of livelihood improvement and environmental conservation. This evaluation provides insight into the extent to which the Project has managed to address its goals.

3.0 The Methodology

3.1 General Approach

The general approach to the assignment was participatory the consultants and key stakeholders. The target group composed mainly; Project beneficiaries adjacent to the Udzungwa Mountains National Park. Consultations were also undertaken with Morogoro Regional officials, the Regional Commissioner in particular. Local Government representatives at villages/ district levels were also consulted. One of the key approaches employed in this assignment was undertaking systematic consultations. The methodology involved both primary and secondary data collection based on the following steps.

i) Mobilization and Literature review

Upon signing the contract, the consultants were briefed regarding the background of the Project and project activities by the Project Coordinator. The literature review undertaken by the consultant covered both published and unpublished information regarding the Project (Annex 7). The literature review was undertaken to further provide the geographical and historical context of the project and some of the issues and theoretical arguments influencing and surrounding the assignment. Furthermore, existing project documents, reports from previous studies and other

documents directly related to the Project were reviewed to provide both qualitative and quantitative data of which provided strong background and evidence during field visit and the results of the analysis.

ii) Stakeholder Consultations

Field surveys entailed consultations with relevant stakeholders in the Udzungwas area. A well focused checklist of questions was developed to guide the discussions with key informants and Focus Group Discussions (FGD) (Annex 8). This entailed collecting information from the intervention areas from consultations with key stakeholders at all levels (National, Regional, district and village level). The study team undertook consultations with communities living adjacent to the Udzungwa Mountains National Park and stakeholders in terms of perceived changes with regard to resource utilization and resource management as a result of implementation of the Project activities; with an important focus on the management of natural resources. A list of people consulted is included in Annex 5.

The issues addressed were relevant of the Project in terms of objectives and efficiency. The assessment further covered the project outputs, lessons learnt and future plans. On the spot observations were done during field visits, which included observations of the socio-economic activities in area as a result of WWF interventions.

iii) Data Analysis

The consultants undertook a comprehensive analysis of the information or data collected in order to evaluate the Project in terms of quality and relevance, efficiency, outputs and inputs, lesson learned, sustainability and future plans. The consultants assessed the socio-economic aspects in terms of natural resource use for communities living in the areas adjacent to the Udzungwa Mountain National Park in order to build information for the future development strategies in the area.

Before undertaking the analysis, the evaluation team undertook a thorough literature review, in order to build a base for evaluating the projects' achievement. Data from the literature were hugely dominated by the monitoring data and the consultation data was obtained from different interviewed stakeholders. The results from the literature and stakeholders consultations were analysed with the key objective of understanding the project's achievement on its set outputs, goals and purpose.

Evaluation of each outputs based on the monitoring data was relatively easy since it only required a comparison of what has been achieved against what was planned. As for the analysis of the stakeholders' idea, an evaluation criterion to score different responses from respondents was made (Table 8). Each evaluated project component and or outputs was subjected to the scoring mechanism so as to establish the stakeholders' feeling in terms of the project success. With the scoring mechanism in place, the stakeholders' opinion for every output was analysed (Annex 4b) and alongside the analysis of the monitoring data (Annex 4a).

Table 8: Criterion used in scoring the respondents answers

S/N	Response from stakeholders on project implementations/outputs	Score Given
1	strongly disagree	0%
2	Disagree	0%
3	Neutral/mixed opinion	10% - 29%
4	Average	30% - 49%
5	Agree	50% - 69%
6	Strongly agree	70% - 100%

3.1 Specific approach toward achieving the scope of the assignment

A standard project evaluation questionnaire which exists with the consultants was modified to fit the questions laid out in the ToR (evaluation matrix) in order to address the evaluation criterion of the Project. The questionnaire was strategically designed to be able to obtain primary data from different stakeholders.

With the working tools in place and a clear understanding of the objectives of the Project, the consultant undertook the evaluation process through interview of various project stakeholders as discussed in the next subsection.

3.1.1 Approach to Data Collection

Four approaches were used to collect information for this end of project evaluation of the Project:

- Review and analysis of programme documentation and other reports relevant to the Project
- Face to face interviews with Regional and District officials who represent their respective regions and districts in the Project area.
- Face to face questionnaire guided interviews with selected staff of WWF-TPO, National Land Use Planning Commission, Forestry and Beekeeping Division, UMNP, TANESCO – Kidatu Hydropower Plant, Kilombero Sugar Company (ILLOVO), Division and Ward leaders and officials, school teachers, school environmental clubs and to the representatives of villages who are directly affected by the project activities including the villagers which are supported by the Project.

Based on key focus areas of the evaluation and the evaluation matrix as defined in the TOR, a process of interview with key respondents was designed. The interview guides/questionnaires (Annex 8) were administered to 17 key informants (groups). Apart from the WWF-TPO interviewees, most of the key respondents were identified by the WWF-TPO. Interviews were conducted in the offices of the respective officials for the District Executives, District Commissioners and District PLUM teams. For Village and Ward leaders, Division Leaders, Village Land Use Management Committees (VLUMs), famers' representatives, and Village Natural Resources Committees (VNRCs), interviews were conducted either at the village government offices or in a

venue identified by the project coordinator. The procedures for interviews were arranged in such a way that, the groups of respondents with similar responsibilities and positions were formed to ensure that unbiased data was obtained whenever possible. For example, all members of district and/or village management authorities including the council representatives were put in the same group while farmers' representatives were in their own group. For the case of schools, teachers were put in different group as well as their pupils and there was different set of questions used depending on the type of information to be collected from that particular group. According to Chambers (1992;1993), for a successful and reliable information gathering through the use of PRAs, one should group people based on how free they can discuss important issues together. The different categories of respondents' groups are indicated in Table 9.

Table 9: Groups of interviewed respondents during field visits by the Evaluation team

Stakeholders' Category	Number of interviewed Personnel	Origin/details
WWF Project Management	3	WWF –TPO Country Representative, WWF – TPO Finance Manager, WWF – TPO Udzungwa Project Coordinator
Ministry of Natural Resources and Tourism	1	Participatory Forest Management Officer
Ministry of Lands, Housing and Human Settlements Development	2	Director General – National Land Use Planning Commission, Director - Village Land Planning
RAS	1	Morogoro Region
Morogoro Regional Secretariat - Lands	2	Morogoro Region
DCs	2	Kilosa and Kilombero Districts
Member of Parliament	1	Mikumi Constituency
DEDs	2	Kilosa and Kilombero district councils
Heads of departments from different sectors at district and senior level staff	37	Kilosa and Kilombero districts
PLUM Teams & other District Functional Staff	22	Kilosa and Kilombero districts
UMNP-TANAPA	6	Mang'ula center
TANESCO-Kidatu Hydropower Plant	3	Kidatu Hydropower Plant
Kilombero Sugar Company	3	K1 Compass
NGOs	1	Udzungwa Ecological Monitoring Centre, Mang'ula
Primary School	45	Schools in the project area
Villagers/community which include (Councilors, Division leaders, Ward leaders, Village leaders, Committee Members and Farmers)	117	Stakeholders in the project area

For both face to face and questionnaire guided interviews/discussions the evaluation team introduced itself to the interviewees or discussants followed by a question on how that particular group understood the activities of the Project in the area, and the role played by each group in implementing the Project's activities. For the interviewed school teachers and pupils (through their environmental clubs), the groups had presented a brief report about their activities, impacts and challenges to the evaluation team before interviews and discussions had started. To a large extend these reports helped to answer most of the questions in our questionnaire beforehand.

During interview process, the respondents were given an opportunity to give explanations in support or against the statement presented. For example in the statement whether "The Project responds to priority issues of integrated natural resource management in the Project explanation was given why they think so or not if they disagree with the statement.

3.1.2 Major Limitations

Time has always been a limiting factor and we think the time allocated for this assignment was insufficient to get all the necessary evidence and have a thorough analysis of the Project. Timeframe for conducting the whole activity was too tight and squeezed in a way that some interviews were conducted up to late hours of the day, and literature review hardly had any allocated time. Had the time been sufficient, a more independent approach of collecting views from the stakeholders particularly the resource users at grass root would have been used. Also a broader base of stakeholders would have been more appropriate for large scale project like this. However, the consultants foresee this as a lesson learned for any future evaluations of this nature. Also, with this comment, in this report, the consultant assumes that the client will consider more time allocation in future assignments. However, despite the mentioned time limitation and the resulting shortcoming, the findings presented in this evaluation report remain relevant and reliable for WWF management decisions in the future.

Although participatory approaches are considered the best in collecting information on programme activities from the stakeholders, stakeholders who have different feelings about the project as opposed to the general feelings of the majority tend to be obscured particularly when they are outnumbered by outspoken members. As a result some of the key issues or lessons crucial to project implementation might not be raised during the participatory discussions.

The group respondent's analysis, as represented by the charts, does not represent statistically verifiable results but rather shows how different groups perceive the project implementation based on the observable changes or effects as result of the project activities.

This Project is part of the WWF long term presence in the project area. Some stakeholders could not distinguish the project under evaluation from previous WWF projects in the area thus failed to provide a clear distinction of the project impacts. However, since the evaluation team was aware of this situation, they tried as much as possible to realign the responses to make sure that they refer to the 2006 – 2008 WWF projects.

4.0 The Evaluation Team Composition

The Terminal Evaluation Team included four experts being a mixture of core and associate members of WEMA Consult (T) Ltd. The summary of their profile is presented below:

- **Dr. Emma Liwenga**: Agriculture/livelihood and natural resource management analyst with over 15 years experience in livelihood issues and natural resources management. She has been widely involved in the use of participatory approaches to analyze livelihood, socio-economic and environmental aspects in natural resource management.

- **Dr. Machibya Magayange**: Water resources/irrigation/Environment/GIS specialist. He has 12 years experience in river basin water resources management by working with different international agencies, local communities, and local governments in various countries. He has a good hand of experiences in project design, implementation, monitoring, evaluation and overall project management.

- **Dr. Makarius Victor Mdemu**: Land/Water/Agriculture and Remote Sensing Specialist. He has over ten years of experience in natural resources management, specializing on management of river basin and agricultural water resources. He has been involved in various projects involving local communities and local government institutions in East and West Africa. His PhD was on reservoir water productivities in the Upper East Region of Ghana at the Center for Development Research (ZEF), University of Bonn in Germany. He also undertook courses on interdisciplinary studies, water and other natural resources. His particular strength includes project design, implementation, monitoring and evaluation and overall project management. He is well versed in Participatory Rural Appraisal (PRA), Participatory Action Research (PAR), and other social science survey techniques for natural resources management. He is also experienced in quantitative and qualitative data handling techniques, conceptual analytical skills, use of sophisticated computer-based data management systems, basic computer programming, application of Agro-hydrological models and Social sciences software's.

- **Ms. Catherine Aloyce Masao:** Ecologist/Conservation Biologist. She has an academic background of MSc. Conservation Biology from Kent University, Canterbury UK and BSc. General (majoring in Wildlife Ecology and management and Zoology) from University of Dar es Salaam- Tanzania. During her working period at IRA (over 5 years) she has gained a considerable experience in applied research especially in relation to environmental ecology/ natural resources management and conservation related issues. Ms. Masao has taken part in different research and consultancy activities.

5.0 Project Description

5.1 Project Coverage

The project area lies on the eastern side of the Udzungwa Mountains National Park covering 29 villages in Kilombero and Kilosa Districts, Morogoro region, in the Southern-central part of Tanzania. The area rises from an altitude of 300 m in the Great Ruaha river valley to the highest peak in the Park at 2,576 metres (TANAPA 1999).

The Udzungwa Mountains National Park (UMNP) and its surrounding areas represent one of the few parts of the Eastern Arc Mountains range, a global biodiversity hotspot, which has endemic plant and animal species and also have dense forest cover remaining from low to high altitude (approximately 250-2,500 ma.s.l). The UMNP together with other parts of the Udzungwa Mountains; serve as water towers for surrounding high value agricultural land and feed streams and rivers flowing into the Great Ruaha and Kilombero Rivers and the Rufiji Basin. Water from the mountains supports various commercial services such as the two country's key hydropower generation facilities (total capacity of 380 MW at the Kidatu and Kihansi hydropower stations connected to the national grid), irrigated agriculture, tourism and fisheries.

5.2 Key Issues Addressed by the Project

5.2.1 Environmental Issues

Udzungwa Mountains provide valuable services for both national economy and livelihoods development. In terms of environmental services, besides playing a significant role in watershed protection and stabilising stream flows, these forests maintain ecological cycles and micro-climates, nutrient cycling and soil fertility, erosion control and carbon sequestration.

The areas around the Udzungwa Mountains National Park represent one of the few parts of the Eastern Arc Mountains range which have dense rainforest cover remaining from low to high altitude (approximately 250-2,500 meters above sea level). The mountains serve as water towers for surrounding high value agricultural land and feed streams and rivers flowing into the Great Ruaha and Kilombero Rivers and the Rufiji Basin. The water from the mountains supports various commercial services such as hydroelectric power generation, irrigated agriculture, tourism and fisheries.

Although the Udzungwa Mountains rainforests were originally designated as forest reserves, unsustainable extraction of animals and plants by surrounding human populations posed a threat to their integrity, especially their rich biodiversity and important watershed value. The Government of Tanzania recognised this threat and in 1992 gazetted parts of the Udzungwa Mountains as the Udzungwa Mountains National Park covering 1,990 km^2.

5.5.2 Socio-economic Issues

WWF has worked with communities surrounding the Udzungwa Mountains since 1990. Several socio-economic studies have been conducted to establish information on population, natural resource uses and needs (TANAPA &WWF 2004). The socio-economic issues in the area include the following:

Population: The 35 villages around the Udzungwa Mountains National Park have an estimated total population of 141,073 whose livelihoods depend directly on forests resources including water from the Udzungwa mountain range and its associated mountains.

Education: In terms of education, majority of people (79%) have primary education and only 7 per cent have acquired secondary education.

Farming: Farming is the major source of income for the majority of households both for income generation and subsistence. With increasing population and land scarcity, of recent there has been an increase in farming on fragile lands including the bottom valleys. Maize and rice are the major crops on the eastern part and maize and horticulture crops are important in the western part

Water resources: Drinking water is an important domestic service derived from the catchments and contributes on the health and incomes of the people. The majority of the respondents depend on spring water as the main source of domestic water and horticultural products.

Food security: The majority of households experience food scarcity during certain parts of the year. Insufficiency in maize is perceived as food insecurity in all the districts, insufficiency in rice is also perceived as food insecurity in Kilombero District. Food insufficiency in Kilombero District, which is fertile, is attributed to the fact that food crops are also the most dependable sources of cash income. Food shortage has been increasing because of the expansion of sugar cane farming. The South African owned company ILLOVO has stimulated the sugar cane market leading to communities putting more investments into sugar cane farming at the expense of food production, particularly rice that was a famous and major staple food and cash crop for the Eastern Udzungwa Mountains communities.

Fuelwood: Firewood is the main source of fuel in the area. The majority of people in Kilombero District (80%) obtain their firewood from the UMNP, while in Kilolo District the majority (98.7%) obtains their firewood from village forests. Shortage of firewood is a crisis now in the Eastern Udzungwa Mountains because of increasing demand caused by the growing population. TANAPA's current plan to end the provision for fuelwood collection in the Park by year 2011 will definitely aggravate the situation, hence sustainable source of firewood need to be developed for these poor communities. The use of energy saving stoves is still limited where only about 30 per cent of the households use this technology although many of the energy saving stoves are fabricated locally. There has been a slow adoption of this technology because majority of people are still not aware of its importance. There is low use of electricity that due to high power tariff rates and connection costs for local communities. Some afforestation activities have been initiated where majority of people in the area plant trees. The main sources of seedlings have been from

TANAPA run nurseries and local communities' nurseries supported by WWF. This is an intervention that needs continued support to ensure adequate supply of fuelwood and construction wood.

Access to protected areas: Majority of communities get various benefits from the park, including capacity development in environmental education and training, infrastructure and social services, direct benefits (products from the forest) and tree planting.

Bush fires: Bush fires are common in villages. The main sources of bush fires are land preparation, hunters, firewood collectors and honey gatherers.

Local institutions: The previous initiatives of the WWF/TANAPA have facilitated the establishment of local institutions, like Village Conservation Committees, school clubs, youths and women's associations which thrive as local institutions engaged in a number of conservation activities and income generating activities. Members in the institutions have been trained in many areas, including leadership. Such institutions and the capacity built are key in sustaining communities in many development efforts, including participation in the management of Udzungwa Mountains National Park.

5.5.3 Cultural Issues

Because of influx of people in the area, there has been a mixture of tribes from different parts of the country. The original people of the region (Ndamba, Pogoro, Sagara and Hehe) had some traditional, cultural beliefs that helped conserve some of the forests. For example, the people on the eastern side of the Udzungwa Mountains have used the mountains as a sacred place for worship during times of drought, disease or famine through the mountain god *Bokela* (TANAPA 1999). In addition, the second highest peak in the Park, Nyumbanitu (2,302 m) is considered sacred by the Wadzungwa people on the western side of the Park. These traditions persist but are diluted as more people migrate in to the region for the agricultural opportunities or to work in the large companies.

5.5.4 Institutional and Legal Issues

In Tanzania the institutional frameworks that structure the interactions of people and forests and wildlife are largely an inheritance from the colonial governments (CEPF 2003). The country has a Civil Service structure that includes ministries, permanent secretaries and national institutions (divisions, departments) dealing with different sectors of society and the economy. The Ministry of Natural Resources and Tourism (MNRT) oversees four divisions (Wildlife, Forestry and Beekeeping, Fisheries, and Tourism) and supervises five parastatal organisations including the Tanzania National Parks Authority (TANAPA), Tanzania Forestry Research Institute (TAFORI) and the Tanzania Wildlife Research Institute (TAWIRI). Other Ministries include the Ministry of Water and Livestock Development, which oversees water resources management in the area through the Rufiji Water Basin Office. There is Ministry of Energy and Minerals under which Tanzania Electricity Supply Company (TANESCO) falls; the Ministry of Lands, housing and human settlements development. The Vice President's Office through a National Environmental Management Council (NEMC) oversees pollution and biodiversity management.

a) Governance issues in forest resources

In Tanzania, the Forestry and Beekeeping Division (FBD) is accountable to the Permanent Secretary in the MNRT and is responsible for the protection of forests and the productive use of forest lands to meet demands for wood products. Until recently, protection focused on watersheds rather than biodiversity and production involved harvesting of indigenous hardwoods and the establishment of industrial plantations of pine and cypress. Now there is official recognition of the biodiversity values of the indigenous forest reserves and the harvesting of indigenous hardwoods has been banned in conservation areas, including the Eastern Arc Forests. The Government Catchment Forests have remained under government control, administered by the FBD. Because of the national decentralization policy, most of the remaining forests are managed at the district level under a variety of regimes. There are at least six categories of management status in Tanzania: Forest Reserves, Local Authority Forest Reserves, Monuments, Village Forest Reserves, Private Forest Reserves and Public Lands/Public Forest (WWF EARPO 2002).

There is an additional management category in the project area that is outside the FBD/District level framework for forests: National Parks. The Udzungwa Mountains National Park, like all national parks, is managed by the Tanzania National Park Authority based in Arusha.

A number of problems have been identified with the administrative framework of FBD, some of which are exacerbated by the decentralized structure for forest management in Tanzania (GEF 2002). These include:

- Emphasis on regulation and enforcement rather than on service delivery;
- Weak oversight on forest management, poor accountability and supervision;
- Ineffective fiscal procedures in terms of meeting objectives and delivering services;
- Poor revenue collection;
- No institutional mechanisms for biodiversity conservation;
- No scope for the public financing of biodiversity conservation; and
- Diverse and complex tenure systems.

b) Government of Tanzania Policy Framework for Forestry

The Forest Policy of Tanzania (1998) gives the responsibility of managing forest resources in collaboration with key stakeholders. Among the main features of the policy are participatory forest management, decentralisation and privatisation. The Forest Policy is implemented through the National Forest Programme (Ministry of Natural Resources and Tourism, 2001). The key challenges for this programme are ensuring sustainable utilization of forest produce and meeting the national demand for forest produce such as wood fuel, sawn timber, non-timber forest products and other forest produce. The dependence on forest products by the majority of the rural communities for their livelihoods enables forests to contribute to poverty reduction (CEPF 2003).

The National Forest Programme (2001) aims to reduce poverty through: (1) increased employment in forest industry and related activities by 25 percent by 2010; and (2) increased income generation from forest resources and services to local

communities by 20 percent by 2010. The anticipated major benefits resulting from increased community and private sector participation in the management and sustainable utilisation of forests are:

- Better recognition of the needs and aspirations of local communities as stakeholders and joint forest owners in natural and plantation forests where land pressure is an issue;
- Poverty reduction through increased income generation in the most deprived areas; and
- Greater certainty of tenure and supply of forest products and services to encourage investment in forestry and forest industries.

c) Government of Tanzania Legal Framework for Forestry

Existing legislation pertaining to forest management in Tanzania is the Forest Act (2002), which was operational from July 2004. The Forest Act bestows management rights under respective instruments, including:

- Development of collaborative forest management arrangements and management plans for National and Local Authority, Community, Village and Private Forests; and
- Development of by-laws and other local instruments to facilitate forest development at the local level.

The Forest Act recognizes such initiatives and the roles of different stakeholders are acknowledged and supported, including allocation of management responsibilities, rights and duties. The Act also addresses compliance with international initiatives toward sustainable forest management, including support for bio-prospecting that benefits indigenous communities. Development of the Forest Act also recognizes related legislation, which includes the Land Act (1999), and the Village Land Act (1999). The Forest Act (2002) provides for communities, Civil Society Organizations, (non-governmental organisations or NGOs, and community-based organisations or CBOs) to participate in forest management including ownership of the resources. The Act also supports enabling environment for such stakeholders' involvement.

d) National Forest Programme

The National Forest Programme (NFP) was formulated and endorsed by the Government in November 2001 as an instrument for implementation of the National Forest Policy (1998). The objectives of the NFP are to:

- Enhance the contribution of the forest and beekeeping sector to sustainable development of Tanzania; and
- To enhance the conservation of natural resources for the benefit of present and future generations.

The NFP has four development programmes, namely:

- Forest Resources Conservation and Management Programme that focuses on promoting stakeholders' participation in the management of natural and plantation forests, ecosystems/biodiversity conservation and sustainable utilization of forest resources.

- Institutions and Human Resources Development Programme that addresses strengthening institutional set up, coordination of forest management, establishing sustainable forest sector funding, improvement in research, extension services and capacity building.
- Legal and Regulatory Framework Programme that focuses on development of regulatory frameworks that include the Forest Act, rules, regulations and guidelines to facilitate, among other things, operations of the private sector and participatory management.
- Forestry Based Industries and Products Programme that attempts to enhance forest industry development, through promoting private sector investment and improving productivity and efficiency.

Implementation arrangements have been developed through partnerships with the main stakeholders, including local communities, the private sector and local governments. This proposed project will contribute to the NFP implementation.

e) The Land Act No. 4 of 1999

Land matters are governed by the Land Act No. 4 of 1999 that categorised land into general land, reserved land and village land. The Commissioner for Lands has been given the mandate to administer general lands and reserved lands. In the Land Act, "general land" is defined to mean all public land, which is not reserved land or village land. "Reserved land" is land designated by provisions of specific Acts (Forest, National Parks, Ngorongoro Conservation Ordinance, Wildlife, Marine Parks and Reserves Acts) or any other law, which provides for land to be set-aside for special purposes such as public recreation grounds. The Act provides for sustainable management of natural resources under the respective land categories and discourages land use like nomadism and shifting cultivation in favour of effective occupancy.

f) The Village Land Act No. 5 of 1999

The Village Land Act No. 5 of 1999 administers village land where the main authority is the Village General Assembly with assistance from the Village Council as trustee to villagers. "Village land" refers to land declared under and in accordance with the Land Act No. 4 and Village Land Act No. 5 of 1999. It also includes any transfer of reserved or general land to a village.

It terms of access and use opportunities, Part IV of the Village Land Act 1999 empowers the village assembly to divide the village land into used land, land available for occupation, community and public used land. It also recognizes the right of occupation and use by individual, family, or group of persons under customary law. The village council has mandates to set aside land for communal or individual occupation and use, through allocation by the village council and plan the land uses to be designated to the communal village land. These are opportunities that provide right for access and ownership of land even by the very poor members of the village hence ensuring access to the basic resources including common resources.

g) Political Issues

There are no major political issues relating to this Project. The Government of Tanzania has expressed, through its wildlife and forestry legislation and policies its commitment to sustainable natural resource management and the involvement of local communities. Schemes for implementing community-based conservation and natural resource management have been under development for a few years (e.g. Leader-Williams *et al.* 1996). This project is closely in line with government policies, practices and plans. Furthermore, WWF's long-standing partnership with the Government, and in particular the Ministry of Natural Resources and Tourism and its departments and divisions, puts WWF in an ideal position to implement the Project.

The only local issue that may become politicised is the plan by TANAPA to close the Park to firewood collection. However, this means the current project with its emphasis on community forestry and sustainable resource management) is timely and (among its many benefits) will help provide alternative sources of fuelwood for local people.

5.5.4 Participatory Village Land Use Management

Since land is the basic resource for livelihoods in rural areas, village land use planning and management was considered as one of the important tools for natural resource management. Land use planning can help decision-makers (such as government or land users) to use land in such a way that current land use problems are reduced and specific social, economic and environmental goals achieved. The Project thus employed **participatory village land use planning and management** approach as per national guidelines of 1998 by the National Land Use Planning Commission.

Village land-use planning is the process of evaluating and proposing alternative uses of natural resources in order to improve the living conditions of villagers. The optimal use of the existing natural resources depends mainly on the potential of people to utilize and manage the resources, their priorities, the socio-economic conditions and the carrying capacity of the natural resources. **Village land use management** is the process of designing, implementing and revising village land use plans. It is believed that this process only becomes effective when it is carried out in a **participatory** way, which means that the principal users of land, the villagers are fully involved. This is clearly stated in the Land Use Planning Act. No. 6 of 2007 section 22 that "Every village council shall be a village land use planning authority for the respective village and further that subject to approval by the respective village assembly, the village land use planning authority shall prepare detailed land use planning for implementation in its respective area of jurisdiction.

6.0 Evaluation Findings

6.1 The Log-frame and Summary Results

6.1.1 Project Goal and Expected Outputs

The ***Project Goal*** was "to ensure that the integrity of the Udzungwa Mountains Catchment is conserved so that it continues to provide vital sustainable goods and services at local, national and international levels."

Accordingly, the ***Project purpose*** was to ensure "reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by end of year 2008."

The Project purpose verifiable indicators were: i)degraded areas in Vidunda near Kidatu Dam regenerated by 20% by end of 2008; ii) siltation in the Great Ruaha River reduced by end of 2008 and area with tree cover in village land increased by at least 20% by the end of 2008 compared to baseline analysis undertaken in 2006. At the time of this evaluation, at least 6.4% of Vidunda areas regeneration was claimed to have been achieved (Msigula, 2009). Although less than half the intended level (20%), this was seen as a good progress to the project given the project life span (i.e. between 2006 – 2008) and significant delays during project initiations.

The tree cover increase of 9.2% in the village land which is almost 50% achievement of the project target which was to have 20% increase by the end of the project, was seen as good progress by the evaluation team.

On the other hand, the third verifiable indicator which was to have siltation in Great Ruaha River reduced by 15% was seen by the evaluation team as unrealistic. The evaluation team had two reasons which made them feel that this indicator was unrealistic to be used as a verifiable indicator to attain the project purpose:

- The catchment of the Ruaha river extend beyond the study area and thus its siltation level is subject to management of its entire catchment
- The life span of the project was relatively short in respect to real and measurable impact regarding river siltation which is very dynamic in nature.

Similar observations were also made by midterm review team study team (Kajembe et al., 2007) who had suggested that this indicator was unrealistic to be achieved within the project's lifetime; hence it was supposed to be removed from that list, else there should have been a parallel study to at least have few data giving some glimpse of the situation on the ground by the time of evaluation. Always practical indicators are encouraged for realistic monitoring and evaluation processes.

However it is understood by the evaluation team that analysis of level from the Vidunda Mountain would be a value addition to the result of this project. The evaluation team therefore fully support the idea of having a parallel study on siltation change in the Ruaha River. This is particularly important when considering future

phases of this project. This can be done by making measurement in the Ruaha River before and after the runoff from the Vidunda Mountain enters the Ruaha River. Even though, the indicator should be changed to something like "Siltation from Vidunda Mountains into the Great Ruaha River reduced by 15% by end of the Project"

The expected project outputs: The project had four main outputs expected to be delivered by the end of its third year (2008). Against these outputs, different activities were set, and different indicators were put forward in order to monitor and evaluate levels of success and failures. Generally, the activities and verifiable indicators set were seen relevant and sufficient in monitoring and evaluation of the project performance by the evaluation team. Some specific comments on each of the outputs and their verifiable indicators are given in the next subsections:

Output 1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration. Verifiable indicators for this output included incidences of illegal logging in adjacent areas to the park reduced by at least 25% by end of 2008; Village forest reserves (VFRs) established in three villages by end of 2008; at least 10% of degraded forest restored by end of 2008 and at least 5 village buffer zone woodlots established by end of 2008. The outputs together with its verifiable indicators were seen very practical by the evaluation team. However, although "incidences of illegal logging" was suggested to suit better on assumptions than verifiable indicators (Kajembe et al., 2007), the evaluation team suggests it to still maintain its original position. Since the monitoring process was planned to be done in a participatory manner by the communities around this area, still reliable data could be obtained on the current status. This was also proved by discussions carried out during this evaluation study.

Output 2: Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP activities were set, and different indicators were put forward. This output was not part of the evaluation because it was removed from the Project as it was implemented by the Eastern Arc Mountains Conservation and Management Project (Proches *Personal Communication*, 2009).

Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved. The main focus on this output was on land use practices compatible with catchment forest protection, management and restoration. This output is particularly very crucial to the project area under, and could be the most important output towards achieving the project's main goal and purpose. The verifiable indicators and planned activities towards achieving this output and hence the main project goal were seen by the evaluation team as relevant and acceptable.

Output 4: Increased supply of fuel wood and improved utilization of fuel wood efficient stoves. This output is also very important towards achievement of the project goal and purpose. The set verifiable indicators and also activities to achieve the said are very practical. If successfully, this output will very much contribute dramatically to the achievement of the main project goal and purpose. However, the challenge to the project is that, how many people will be willing to use the fuel efficient stoves especially after the project's life span? Another challenge would be the duration

required by trees to be ready for fuel wood harvesting which would be vital for the community as an immediate project impact in their eyes.

6.1.2 Summary of the Project Achievement

Despite the fact that, WWF-EUMNP Project has its measurable indicators (Annex 3) and have recorded, through project monitoring data, degree of performance by output and indicators comparing the initial situation in the project area and the situation by the end of the project (Table 4a) the evaluation team wanted also to see what would be the feeling from the stakeholders (Community) point of view. In order to testify this, different stakeholders were interviewed and had different opinions on project's achievement of its outputs and hence the project goal. The average opinion was valued, and their imaginations summarised in average percentages provided against each output by different respondents (Annex 4b).

Comparing the statistical analysis and the analysis from the stakeholders' consultation the following have been derived by the evaluation team regarding the projects achievement on its planned outputs. For more details please see Annex 4a and 4b.

Output 1: The statistical analysis (Annex 4a) of the project monitoring data suggest that the set target have been achieved in the order of about 80%. On the other hand the stakeholders suggest a figure of about 60%. The evaluation team sees these two figures comparable in a sense that the stakeholders uses estimation which looks more on the problem at hand and probably with huge ambition that the project was supposed to solve the problem indefinitely. As for the monitoring data, they only focus on the target set at the beginning of the project.

Output 3: Similarly the statistical analysis of the monitoring data shows an achievement of the order of 70% for this output. This is even much closer to what was estimated by the stakeholders. The stakeholders estimated an achievement of about 60% for this output (Annex 4b).

Output 4: Looking at all indicators/targets set by the project on this output the level which has been achieved can be generalised at 50% achievement (using monitoring data). This closely relate to the ranking made by the stakeholders (40% achievement) during the consultation by the evaluation team.

Generally, it is worth noting that, the interviewed respondents had positive perception on the project performance and achievement and in a way the conceived performance through imagination very much relate to statistical analysis based on monitoring data collected by the project at its start and during the end.

6.2 Quality and Relevance of the Project Design

The relevance and project design was assessed on three criteria. First in terms of how the Project is in line with national and international policies and legal frameworks. Secondly it was on how it responds to priority issues of natural resources management in the Udzungwa Mountains and thirdly by examining if the project

goals, objectives and strategies are valid in relation to existing challenges (i.e. *natural resource dependence due to high levels of poverty, willingness to change and high rate of population growth*) in the project area. From visiting different literatures and consultations with different stakeholders, it was realized by the evaluation team that the project on Improving natural Resources Use in Eastern Side of Udzungwa Mountains National Park has significant relevance to conservation of this important area of the country and to the target communities with regard to its purpose of improving utilization of forest, water and land resources.

With review to various Tanzania's Policies, Legislations, strategies, Plans also looking at different regional priorities and global ecological target areas the project touches top agendas. The detailed reviews by the evaluation team on national, regional and international relevance of this project is discussed in the next subsections. Based on this analysis the evaluation team is strongly convinced that this project has significance national and international relevance. This conclusion by the evaluation team is backed up by the results from the stakeholders' consultation in which the majority strongly agree that the project has national and international relevance (Figure 1)

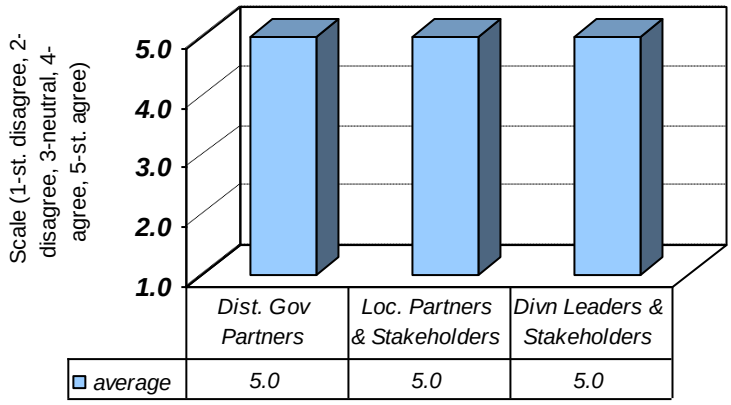

Figure 1: Project national and international relevance

6.2.1 Contribution to the implementation of national plans

(i) Poverty Reduction Strategy Paper (PRSP)

Tanzania's second PRSP is entitled the "National Strategy for Growth and Reduction in Poverty" (NSGRP). WWF policy staff played a major role in advocating for the mainstreaming of environmental issues in to the NSGRP, which runs from July 2005.

The strategy identifies three major clusters of poverty reduction outcomes: (i) growth and reduction of income poverty, (ii) improvement of quality of life and social well-being, and (iii) good governance. These include specific outcomes focused on: achieving and sustaining broad-based and equitable growth; improving and

reducing inequalities in the quality of life and social well-being; and improving good governance, accountability and democracy, and deepening national unity.

Goals and targets within the strategy that are been addressed directly by the WWF Udzungwa project include:

- Reduced negative impacts on environment and peoples' livelihoods (by conserving catchment forests);
- Reduced land degradation and loss of biodiversity (by conserving catchment forests);
- Increased sustainable off-farm income generating activities (through helping develop income generating activities);
- Increased contributions from wildlife, forestry, and fisheries, to incomes of rural communities (by ensuring local people gain direct and equitable benefits from village forest reserves);
- Reduced vulnerability to environmental disasters (by conserving catchment forests); and
- Soil, forest and aquatic ecosystems that people depend upon for production and reproduction conserved (by conserving catchment forests).

The Project's focus on protecting water supplies from catchment forests also contribute to goals aimed at ensuring people have access to clean, affordable and safe water.

The strategy also states: *'The government aims to reduce vulnerability to environmental risk through interventions aimed at checking soil erosion and deforestation, reducing environmental pollution and promoting sustainable use of natural resources through community based natural resource management and enhanced district level planning. To reduce vulnerability from natural events such as drought and flooding, strategies will be put in place mitigation measures including plans to halt desertification and promotion of water conservation practices*". Sustainable catchment forest management at the village and district level, as supported by this project, will help contribute to these elements of the strategy.

(ii) Environmental plans and strategies

The National Environmental Action Plan for Tanzania was published in 1996 but has been superseded by the National Environmental Policy (1997) and the Environmental Management Act (2004). These aim at ensuring the sustainability of Tanzania's environment through collective responsibility as a basis for the country's economy. The National Environment Policy objectives are all or at least in part addressed by the Project:

- To ensure sustainability, security and equitable use of resources for meeting the basic needs of the present and future generations without degrading the environment or risking health or safety;
- To prevent and control degradation of land, water, vegetation and air which constitute our life support systems;
- To conserve and enhance our natural and man-made heritage, including the biological diversity of the unique ecosystems of Tanzania;

- To improve the condition and productivity of degraded areas including rural and urban settlements in order that all Tanzanians may live in safe, healthy, productive and aesthetically pleasing surroundings;
- To raise public awareness and understanding of the linkages between environment and development and to promote individual and community participation in environmental action; and
- To promote international cooperation on the environment agenda, and expand our participation and contribution to relevant bilateral, sub-regional, regional and global organizations and programmes, including implementation of treaties.

(iii) Other national, sectoral, regional and local development plans

In addition to the PRSP and NEAP, at national level the Project contributes towards the implementation of a range of the Tanzanian Government's polices and legislation related to environment and natural resources management, poverty reduction and governance. Such policies include:

- Tanzania's Vision 2025 which sets a road map for high quality livelihood, good governance and development of an economy capable of producing sustainable growth and shared benefits.
- The National Water Policy (2002) that recognizes water as a scarce resource and calls for integrated and efficient management. It also requires water users to mobilize and organize themselves into associations, especially into Water User Associations (WUAs), to apply for water rights, and to pay application and user fees.
- The National Forest Policy (1998) that promotes sustainable management of forests including watershed management.
- The Wildlife Policy of Tanzania, (1998) which provides direction on conservation and sustainable use of wildlife recognizing the contribution of wildlife in local livelihoods, thus promoting community participation in management and benefits.
- The Land Policy of 1997, Land Act and Village Land Act (1999) all aiming at securing land tenure, as a basis for sustainable resources use and management.
- The Agriculture Policy (1997) and Agricultural Sector Development Strategy (2001) that focus on increasing agricultural production and rural incomes including promoting integrated and sustainable land use and highlighting irrigation as a basis for agricultural development. They also advocate increased support for agricultural extension work, which is being supported by this project.
- Local Government Reform Programme, 1999 that promotes decentralization and devolution of powers, functions, resources and responsibilities from central government to local government and community institutions.
- National Policy on Women Development and Gender, (2000) which provides guidelines for including women and gender aspects in all development activities in Tanzania. Section 14f of the policy for instance puts emphasis on supply of firewood, water catchment and production of non-wood products to alleviate the burden on women.
- The Country Strategy Paper and National Indicative Programme (2001) for the period 2001-2007, as defined with the European Commission, also

highlights the need to improve agriculture and water management, areas addressed by the Project.

- The Udzungwa General Management Plan (2001–2005) by TANAPA, which was supported by WWF, states that the long-term goal is to conserve species and ecological functions of Udzungwa Mountains National Park for their biodiversity and socio-economic importance. Specifically the plan aims at creating awareness of the people to ensure full protection improve visitor facilities and collaborate with other institutions to promote conservation and tourism in the region.

Internationally, this Project was also envisaged to contribute to the implementation of international initiatives; to which Tanzania is part including United Nations Convention on Biological Diversity (UNCBD), Millennium Development Goals as well as WWF's One Global Programme priorities as follows:

6.2.2 Global thematic programme, ecoregional targets or global policy initiatives

The project contributes to the following targets and milestones of the WWF Global Forest and Freshwater Programmes:

Target 1: The establishment and maintenance of viable, representative networks of protected areas in the world's threatened and most biologically significant forest regions, by 2010.

- Milestone 1.4: By 2007, ecological integrity and resilience ensured in at least 20 priority landscapes through approval and implementation of plans that enhance connectivity and build protected area networks.
- Milestone 1.5: Three innovative mechanisms for sustainable funding of protected areas, such as payment for environmental services, developed and applied by 2007.

Target 2: By 2010, improved management in 200 million hectares across the world's production forests, through a combination of credible certification and a step-wise approach improved forest management.

- Milestone 2.5: 5 million hectares in focal forest ecoregions are managed under community-based forest management agreements that increase locally retained revenue from, and enhance tenure over the full range of forest products by 2007.

Target 3: By 2020, restore forest goods, services and processes in 20 landscapes of outstanding importance within priority ecoregions to regain ecological integrity and enhance human well-being.

- Milestone 3.1: By 2007, 20 detailed landscape restoration plans with clear biodiversity and socio-economic goals are integrated within ecoregion action plans.

Target 3: Conserving freshwater habitats

- Milestone 3.1: An additional 45 million hectares of representative freshwater habitats are protected by June 2007 in priority river basins and ecoregions.

- Milestone 3.2: An additional 30 million hectares of freshwater habitats are more sustainably managed in priority river basins and ecoregions by June 2007.

6.2.3 Regional Priorities

The Udzungwas are part of the Eastern Arc Montane Forest Ecoregion, which is one of WWF's Global 200 ecoregion – the top global priorities for conservation. Along with the East African Coastal Forests Ecoregion, the Eastern Arc Mountains have been targeted as forest conservation priorities in eastern Africa by WWF and its partners. The Critical Ecosystem Partnership Fund, a non-governmental conservation funding body, identified conservation investment priorities for 2003–2008 in the Eastern Arc and Coastal Forests with support from WWF (CEPF 2003). This project addresses the following agreed priorities:

- Increase the ability of local populations to benefit from and contribute to biodiversity conservation, especially in and around Lower Tana River Forests, Taita Hills, East Usambaras/Tanga, Udzungwas, and Jozani Forest;
- Restore and increase connectivity among fragmented forest patches in the biodiversity hotspot, especially in Lower Tana River Forests, Taita Hills, East Usambaras/Tanga and Udzungwas; and
- Improve biological knowledge in the biodiversity hotspot.

Together with it addressing important national and international issues and priorities, the Project also was designed to have adaptive collaborative management in its implementation process. Adaptive management incorporates research into natural resource management. Specifically it is the systematically integration of design, management and monitoring in order to adapt and learn (Wageningen University & Research Centre, 2008). Different interviewed respondents indicated that, the Project had used participatory techniques in all stages of its implementation. They indicated that, even the land maps which are already in geo-referenced format were first drawn by the responsible villagers who knew their area well, and thereafter they were digitized through technical support from WWF. It was also noted that, different tools (legal documents, brochures, maps, working tools/gears etc) were prepared and used by WWF during the whole time of operation in the area. Also, a number of stakeholders were provided with different trainings and field visits. However, some interviewees from regional and district levels indicated that if WWF would have been more close to them, there would be a possibility of more realization of changes. Generally the PLUM team in Kilosa had ranked the performance by WWF up to the time of evaluation to be about 60%, and this was caused by the fact that the activity of land use planning (which is the toughest and financially demanding activity) to have not been complete although some 7 villages had reached advanced stage while the rest of the villages in the project area had not yet started. The evaluation team considers all these as relevant aspects of the project and contributes to it been ranked as representing an excellent design of integrated natural resources management in complex biodiversity area like the Udzungwas. The general ranking regarding quality and relevance of the project design by different interviewed respondents is illustrated by Figure 2

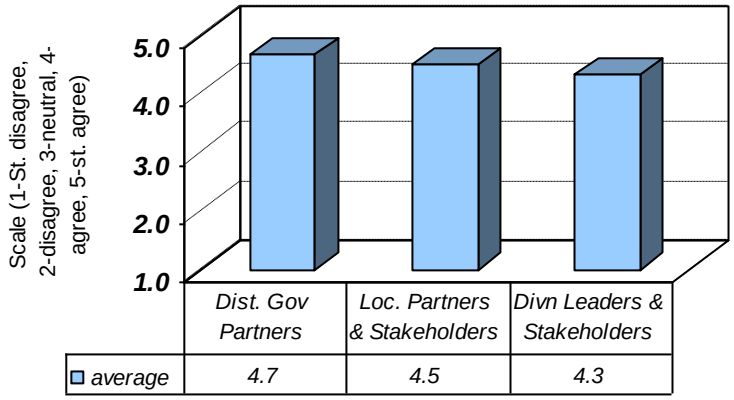

Figure 2: Quality and relevance of project desig**n**

From figure 2 above it could be generalized that all the interviewed respondent groups strongly agreed that the Project was relevant to national and international priorities (also seen above). They indicated how the Project was integrated in the national priorities through policies, legislations and strategies. Some of the direct policies/legislations and/or strategies mentioned were: the land policy, beekeeping policy 1998, Forestry policy 1998, water policy, 2002, Village land planning policy 1969, The National Land Use Planning Act, 2007, Fisheries Act, 1998, The National Strategy for Conservation of Land and Water Sources (2006) and other important statements given by national and international leaders.

6.3 Efficiency in Project Planning and Implementation

Various Project reports indicate that, e Project was being implemented by a Management Team led by a Project Coordinator working with a Land Use Planner and technical staff from the District Councils. The team was responsible for among other things, daily implementation and management of activities and participatory monitoring in cooperation with partners and stakeholders. Execution of project activities involved communities, resource user groups, district councils and TANAPA staff and also the private companies using water from the Udzungwa Mountains for various purposes or otherwise have interests in the mountains. The Project received financial management support from Finance Department of WWF Tanzania Programme Office (WWF-TPO) and WWF-Norway had the overall responsibility for the Project through the cooperation agreement with the Norwegian Agency for Development Cooperation. The Project was overseen by an Advisory Committee. This Committee comprised of representatives from key actors and beneficiaries such as WWF, the Kilombero, and Kilosa districts, representatives from TANAPA, Rufiji Basin Water Office (Iringa), Illovo Sugar Company Ltd, Mazingira Institute (MAI)-Tanzania and Imara Trust (a local NGOs) and the Forestry & Beekeeping Division. Roles and responsibilities of all parties involved were defined and memorandums of understandings were signed.

This structure of responsibilities was seen efficient to plan, implement, monitor and guide the project by the evaluation team. However the evaluation team is of the opinion thatonly two staffs to implement the whole project within this huge coverage (two big districts) was too few people to imagine. Although, many respondents

acknowledged a good performance by the project especially with regards to its strategy from initial project planning and implementation in the area, they also pointed out the unfinished activities as weakness. One of the alarming unfinished activities to most stakeholders is the land use planning issues to those villages which haven't done and the issue of land reallocation to some of the people who lost their farm land as a result of land use planning in their villages. They however commended the participatory nature of the whole project (see also Project design section). All stakeholders interviewed ranked the project's performance as high. For example, on the side of Kilombero, the performance of the Project was ranked 70% where the remained 30% was left for the WWF to complete capacity building initiatives around the project area together with devising the best exist strategy that will make all the implemented activities sustainable.

In terms of clear definition of different stakeholders and their roles, the Project was ranked quite high (Figure 3) by many interviewed respondents. It was reported that, since the beginning of the Project, different stakeholders from the grassroots community were contacted and involved at different stages of the Project (Annex 5). It was further reported that, WWF was not directly conducting its activities in the project area but through the use of districts and village authorities. They applied the agreed procedure of selection of who had to be in different committees formulated during the process, e.g. the members of VLUM teams and environmental committees in all targeted villages. During their meetings in the villages, all the stakeholders outside were invited e.g. TANESCO, TANAPA, Kilombero Sugar Company and members from district councils. All this had a major aim of ensuring good communication among stakeholders in order that positive results could be achieved by the Project.

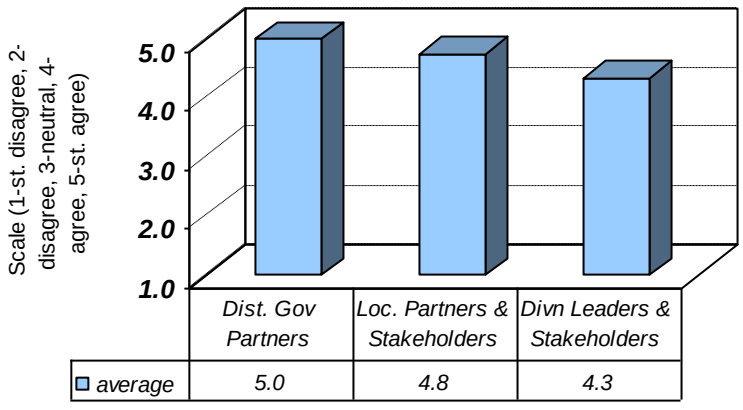

Figure 3: Role of Stakeholders

However, reading through various project report particularly the report on update on land reallocation (*Udzungwa Conservation Project Team, 2008*), the evaluation team noted that the Project had a direct hand on implementing project activities which might have contributed to them being seen as project implementers than facilitators, which eventually contributed to difficulties in resolving some sensitive conflicts which had previously emerged. A good example to indicate such cases where WWF was

seen wrong is during interview when the PLUM team from Kilosa indicated that somehow WWF had slipped a tongue by having a direct communication with the land valuer instead of involving the entire PLUM team. This had a serious impact on the issue of land relocation which to them was termed as compensation by WWF. Despite the fact that, this was not how the process was undertaken, the evaluation team intends to show WWF how people can perceive some of the processes undertaken by a project in an area.

It was further reported that, the goals, objectives and strategies used by the Project authorities were valid and cost-effective (Figure 4). The interviewed respondents insisted that, a number of achievements could be realized although not much because of the limited time allocated for the Project. Some participants from Vidunda Ward, TANESCO, and ILLOVO showed that, it was WWF good techniques that enabled them to even see what could be visualized today. TANESCO management insisted that, for an environmental project to show visible change, it must be monitored for at least 5 years, although the highest length a tree can be harvested is between 15 to 20 years. ILLOVO agricultural technical director and TANESCO management reported that in the past there had been some initiatives to conserve Vidunda Mountains but it was not successful until WWF had shown interest in that indicating that their approach and strategy is unique and acceptable.

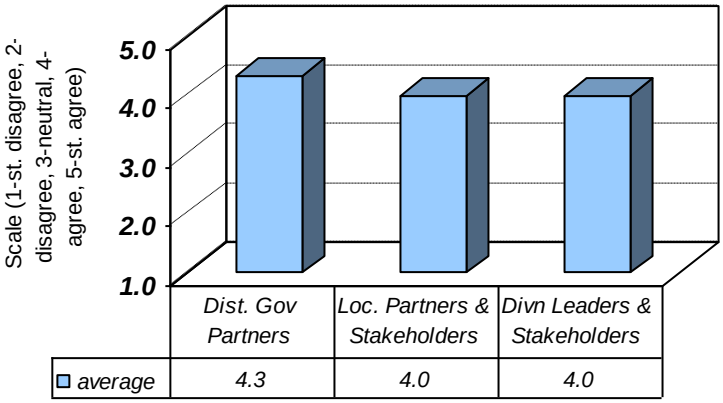

Figure 4: Validity of goals, objectives and strategies

6.3.1 Human and Financial Resources

(a) Human resource

For a project to be efficient and successful, it needs an excellent human resources selection. Based on the literature review and the evaluation by the team, the assembled team to manage this project was capable of implementing the planned activities. This complemented the observed excellent project design which resulted on the measurable success which could be seen today in the project area. However, the evaluation team has an observation on the human resource aspect. It was noted by the team that project covers a large area with only one technical staff at the start of the project with the land use planner brought on board toward the end of the project's first year. The evaluation team feels that the project would have achieved more if one or both of the following would have been done.

(i) both staff started at the project's onset,

(ii) Having more than two technical staffs especially someone on energy efficient matters

Increasing the number of staff (especially short terms or consultant) was also apparent, especially after having some difficulties in the issue of land reallocation. This issue, which eventually turned to be political, took a lot of time of the already limited number of staff to address. Issues touching peoples' livelihood always are sensitive and the evaluation team believes that project staff spent valuable and significant time in facilitating negotiation and resolving conflicts which otherwise would have been spent differently. In resolving land disputes the project had been using district staff to create awareness to village leaders, conduct adjudication and the land survey. All these activities are sensitive and probably needed more technical staff than it was. Comparing the man power implementing the observed activities/outputs, the team is convinced that the Project would have been more successful if there were other staff to work on the planned activities e.g. some staff dealing with promotions of fuel efficient stoves while others trying to resolve the land use/reallocation issues. It was therefore noted by the evaluation team that, if the project activities should continue in future, the Project need to consider hiring additional staff or outsourcing some capacities through grants or partnerships (should the need arise) at different project stages. This will lead to more achievement on project's intended goal and purpose.

(b) Financial Resources/Value for Money

There have been overspending and under spending in various project components/activities. Generally, the expenditures for the three years (Tables 10, 11 and 12) by the Project were reasonably in accordance with the planned activities and are regarded by the evaluation team as to have closely followed the budget. The variance which occurred in each of the three years is regarded by the evaluation team to be in an acceptable range given the following explanation for each of the variance:

First Year (2006): There were several under spending and overspending in this year (see Table 10 which compares budget and expenditure). The overall outcome for the whole year is an under spending of about 5%. The reasons for this variance are as given below:

- There was under expenditure on the staff costs. This was caused by the fact that the Project Land Planner was employed in the mid of September, while his costs were budgeted for the six months from July 2006. In addition to the amount budgeted for technical, finance and administration support staff was for the entire year while the actual amount incurred was for six months when the project was fully operational. Inflation on local currency also contributed to the lower resulting NOK actual figure as personnel costs are incurred and paid in local currency.
- There was under expenditure under travel, meeting and training costs. This was caused by the fact that some of the activities carried out during the first year were implemented and completed at less than the budgeted costs. Again, field implementation of the workshop on Energy Saving activity that was budgeted under workshop costs was undertaken and subsequently erroneously charged

under field running costs budget line instead of travel, meeting and training budget line.

- There was an obvious under expenditure for the office running costs. The reason is that the budgeted office running costs were for the whole year, whereas operationally, the project consumed for the six months only.
- Also there was under expenditure on capital assets costs, the reason being that the procurement of the assets was done at slightly lower prices than budgeted. Equally so there was under expenditure due to the fact that some of the consultancies conducted during this year were executed at slightly lower prices than previously budgeted

Table 10: Project Expenditure (Tshs) - implementation period: 1 January-31 December 2006

No	Item	Annual Budget	Annual expenditure	Expenditure as % of Budget
1	Human Resources	39315161	35,686,948	90.77%
2	Travel ,Training, meetings, workshops	77909636	61,304,845	78.69%
3	Office running costs	9445250	6,170,738	65.33%
4	Equipment & supplies	25570192	26,896,760	105.19%
5	Services	42171263	39,696,950	94.13%
6	Field running costs	63497928	79,133,396	124.62%
7	Management fees	20632787	19,884,001	96.37%
	TOTAL	**278,542,217**	**268,773,638**	**96.49%**

Second Year (2007): Equally so, in the second year there were over spending and under spending in different project activities. The overall variance is under spending of about 6% for the project. Some facts for the variance are given below:

The project made some saving on hiring a consultant to monitor allocation of alternative agricultural land for complying with the existing law. During search and negotiations, WWF TPO managed to get a consultant to do the work at the fee of about 66% of the original estimated cost. Equally so, a significant saving was made on purchase of project vehicle as the prices went down compared to the amount that was budgeted. Table 11 present the budget and expenditure of different project activities in year 2007.

Table 11: Project Expenditure (Tshs) - implementation period: 1 January-31 December 2007

No	Item	Annual Budget	Annual Expenditure	Expenditure as % of Budget
1	Staff costs	54,905,759	55,956,751	101.91%
2	Third party fees	38,267,756	34,559,261	90.31%
3	Other grants and agreement	59,065,811	58,308,900	98.72%
4	Travel, meeting, w/shop and training costs	86,229,208	86,689,432	100.53%
5	Communications and fundraising costs	1,845,221	1,190,950	64.54%
6	Office running costs	13,172,699	13,993,073	106.23%
7	Field running & activity costs	115,586,510	107,958,165	93.40%
8	Capital asset costs	62,499,921	56,233,394	89.97%
9	Management fees – TPO 12.5%	53,951,628	51,861,241	96.13%
	TOTAL	**485,524,512**	**466,751,167**	**94%**

Third (Last year 2008): This year has the most significant under spending of all (Table 12). There are many reasons which include the followings:

- The big part of the under spending on this budget category is due to the amount budgeted for the Project evaluation that was postponed and is now expected to be done in year 2009. This was decided since the mid-term evaluation was done and completed some months back and also giving sometime for some of the activities to be concluded before they are evaluated.

- In addition to that, the activity for deadwood collection and monitoring recovery of forest reserves could not be concluded in 2008 as the lead consultant passed away suddenly. A revision of the activity implementation was done so that it can be concluded by the remaining consultants. It has been concluded and paid for in early 2009 and the budget for this remaining part is included in 2009 budget.

- Funds were budgeted to be granted to Kilosa District Council for implementation of land use income and facilitation of acquisition of cultivation land. This could not be done because the process needed thorough review before it could be done. At present, a consultant is being hired who will advise the way forward in regards to this process.

- Some of the project activities during 2008 required a lengthy process of engaging stakeholders and decision makers to reach agreement and general consensus for example land relocation process. Hence drugging more precious time on few but crucial activities.

- The departure of the former project manager leads to reduced spending on human resources. Also her departure created a slag time for execution of project activities; the time which the new (Acting)coordinator required orienting himself on how to manage the project activities

Table 12: Project Expenditure - implementation period: 1 January-31 December 2008

No	Item	Annual Budget	Annual expenditure	Expenditure as % of Budget
1	Human Resources	56,515,073	54,272,869	96.03%
2	Travel ,Training, meetings, workshops	39,187,008	25,790,238	65.81%
3	Office running costs	19,007,427	17,135,019	90.15%
4	Equipment & supplies	16,037,059	10,770,705	67.16%
5	Services	30,107,168	9,634,491	32.00%
6	Field running costs	112,190,031	112,371,587	100.16%
9	Other	49,220,158	0	0.00%
10	Management fees	39,971,480	28,746,863	71.92%
	TOTAL	**362,235,404**	**258,721,772**	**71.42%**

6.4 Project Most Significant Impact

The project's most significant impact was assessed under three important aspects: the Environmental changes, community livelihoods and Institutional capacity. The three aspects are discussed in details in the next subsections.

6.4.1 Environmental Changes

This aspect was assessed through different activities successfully implemented for the environment, and which could be visualized by the evaluation team and any other interested party. These impacts are therefore categorized as follows:

i) Tree planting initiatives

This was the most acknowledged change by the interviewed respondents. Since the beginning of the project up to the evaluation time, at least 474,902 trees had been planted around the Project area. Comparing to the initial number of trees (238,328 trees); this was a significant increase in the number of trees in the area. The project team had facilitated and assisted in the whole process of tree planting using different techniques like advocating agro-forestry, tree nurseries and facilitation to having own and communal woodlots. Different interviewed respondents had positive view about this aspect. Also looking at the target by WWF, the total number

of targeted tree had been exceeded by far. The target was to reach 60% of the trees which were present (238,328) when the project started by the end of 2008. By the time of evaluation the total number of surviving trees was about 200% of the planned numbers to be planted. Except for ILLOVO sugar Company, all the tree nurseries and all other tree planting initiatives were supported by WWF project through individuals, groups, village governments and primary schools in the area.

Observations in the field, by the evaluation team, indicated that a number of trees had been planted in the field (i.e. in individual farms, schools and groups). It was vividly clear that, the community (especially in Kilosa district) was highly motivated to implement this process. This was also commented by school teachers and other interviewed respondent groups. For example the teachers in Ruaha A, B, and Tundu primary schools acknowledged the efforts by the Project team indicating that the school greening programs had a significant contribution to reduced dust around their school compounds resulting to pupils becoming cleaner. They further insisted that, the school run-off and floods during rain seasons had been reduced as a result of the school greening programs. However, no quantitative data had been collected to prove this change.

Through talking to different respondent groups and through direct observations in the field, it was noted that many trees in Kilosa were planted on degraded landscapes on the mountains to rehabilitate the catchment forests while on the side of Kilombero these trees were planted in schools, homesteads and farms. Similar trend was also observed during midterm review (Kajembe *et al*., 2007). Generally, it was noted by the evaluation team that participating individuals in Kilosa district were more motivated than those in Kilombero. The reason to this difference could not be found.

Generally, despite this successfully endeavor, the evaluation team thought that for the project to achieve its intended output no. 4 "*increased supply of fuel wood and improved utilization of efficient stoves*" fast growing tree species are required. So far among the planted tree species (i.e. *Khaya anthotheca, Cedrella ordorata, Albizia lebbeck* and *Senna siamea*) only *Senna siamea* have fast growing characteristics indicating a need of introducing more of such species and advocate the need of growing such plant species. Similar observations were put forward by Kajembe *et al*., (2007) hence needs to be worked out fastest possible.

ii) *Village Land Use Plans*

To achieve its ***output 2*** "Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration and ***output 3*** "land use practices compatible with catchment forest protection, management and restoration in Vidunda" the project had facilitated the implementation of land use plans to ensure proper utilization of the land which is a key resource in the whole project context. Formation and Strengthening of Village Land Use Management Committees(VLUMs) and Village Natural Resources Committees (VNRCs) in each of the targeted villages in the project area which are backbone in the entire process of making sure that the impact is going a long way is apparent. Despite the experienced difficulties during implementation of this intervention by WWF the process was reported to have contributed in reduction of conflict between land resources (including agricultural land, forest resources, water

and land for settlements) users in the project area. Also, this process have largely contributed to Vidunda Mountain (particularly the Vidunda mountain/foothills slopes facing the Great Ruaha River and Kilombero Sugar Estates) increased plant regeneration and vegetation/woodlands coverage.

Despite the clear importance of having land use plans for both Kilosa and Kilombero; since this process is expensive and time consuming, the project team decided that they should concentrate in Kilosa (Vidunda Hills) district because of the extent of degradation observed during the initial stages of the project. These villages in Kilosa district have mountainous areas characterized by various forms of soil erosion (e.g. landslides) and they are important water source areas hence important biodiversity areas. The decision was therefore based on the land use/cover baseline study which had revealed that Vidunda hills were highly degraded and needed attention than the side of Kilombero. By the time of this evaluation exercise, the Project had facilitated the development and approval of land use plans and bi-laws in seven villages (i.e. 70% of the target villages) (Ruaha, Kifinga, Tundu, Iwemba, Msowero, Lumango, and Vidunda) in Kilosa district (WWF annual report 2008). The target was to have land use plans and bi-laws for 10 villages (including Chonwe, Iyunji and Udung'hu villages which had not initiated).

iii) Establishment of Village Forest Reserves

As one of important aspects in fulfilling the project goal, six Village Forest Reserves (Annex 4a) were established through the support/facilitation from the Project. These include: Iyunji Village forest Reserve (356 ha) being managed by three villages (Vidunda, Chonywe and Udung'hu) in Vidunda ward; Ruaha Village Forest Reserve (263 ha) and Tundu Village Forest Reserve (36 ha) both being managed by Ruaha village, Kidodi Ward. All the six forest reserves are been managed by communities in their respective villages through PFM system. During the field visits, all the mentioned three forest reserves above were seen recovering and were in encouraging good status although threatened by possibilities of encroachment and wildfires in the future in case some important aspects of land use plans implementation will not be completed. This good status might have been contributed by increased protection by the responsible villages. Except for the respondents from Iyunji, Chonwe and Udung'u (from which the process of land use plans was not yet initiated) all other interviewed respondents in Kilosa district had a positive perception about these forest reserves although they were worried about their future status. Kilombero participants also indicated interest (and or envy) to be considered for the process of land use plans implementation in their area.

iv) Improved Land Use Practices:

Despite the fact that the maps in the GIS reports to only contain the land use/cover categories, the report was still very useful for the evaluation team. This shortcoming was also noted by the mid-term evaluation team (Kajembe *et al*., 2007). The observed shortcoming on assessment using the map was overcome through direct field observation and discussions with different respondent group's discussions. There should have been a map indicating the extent of degradation e.g. from the baseline study used to decide about which areas were threatened than others. It was highly noted that there is a significant improvement on the whole issue regarding farming (on hill slopes and catchment areas), which eventually led to a significant change

on the environment. For example, the respondent groups in Kilosa district insisted that environmentally, the area (especially on the side of Vidunda Mountains-Kilosa district which was highly degraded) is now recovering and is evidently covered with significant amount of trees/vegetation cover which could physically be witnessed. Participants in Kilosa indicated that some small streams which had dried up as a result of environmental degradation processes in the past had started to crop-up, and domestic water have become clean as a result of increased vegetation cover up hill. However, some hydrological data to substantiate these results were not available. About 80% of the interviewed respondents further reported that there is a significant reduction in various forms of soil erosion floods and soil sedimentation along the Mikumi – Ifakara road. Some said that, there have been no more recently reported killings due to floods alongside the footscape of the Vidunda Mountains especially at the Ruaha town. This might have been contributed by a number of factors especially the significant decrease in landslides which were very common in this area.

BOX I: "In past years, during rain season the lowland people were highly affected by floods which in most cases were muddy! BUT last year during rain season (which was higher than previous) there were no floods of any sort. Following this important improvement, people have understood why they should NOT destroy the vegetation cover UP-HILL on the Vidunda Mountains"

v) Reduced Wildfires

Although this was not an indicator to any of the set outputs of this project, the evaluation team found it to be a challenge in the Project area. Wildfires were reported to have significantly contributed to degradation of the Vidunda mountains. As a secondary output to this project, wildfires were reported to have drastically gone down. Specifically this has been contributed by increased knowledge about the importance of conservation and why people should not practice such cultural destructive activities like burning their farms during dry seasons. Although no quantitative data was found during evaluation, comparing the project initial stages (by different respondent groups) and now, all the interviewed respondents acknowledged the significant reduction of wildfire incidences in the mountains as a result of awareness creation and the by laws which are in place. According to them, the Project team purposely inspired knowledge to various groups of people in the project area, and this included provision of fire fighting gears and preparation of fire monitoring and management plans. The respondents acknowledged the project's efforts, although they indicated that some wildfires incidences were still occurring especially on the side of Iyunji village, the majority relating them to sabotage (failure of Project to complete land use planning to all the targeted villages). Since wildfires remain an important threat in the Project area and Morogoro region at large, the evaluation team highly suggests that there should be a reliable data collecting strategies and records in order that reliable trends can be clearly seen in the future for better fire fighting strategies.

6.4.2 Community Livelihoods

Given the short time between the beginning of the project to the time of this evaluation, the team thought that it was difficult to all the respondents to point out significant changes that had directly affected their individual livelihoods (in terms of income and healthy aspects). It is well known that the project had a number of activities and indicators set in order to achieve its intended overall goal and purpose (Annex 3). However the respondents genuinely indicated that it was not possible for them to realize any significant changes. However, after long discussions they indicated that actually flood incidences had reduced dramatically (see BOX I). Although no data were found regarding the water flows in the area, the interviewed respondents from both Kilosa and Kilombero districts, highlighted that in the past the area was very much affected by floods (water and muddy from the mountains as a result of landslides and soil erosion) which in a number of occasions had caused death, a number of houseless people and diseases; but at the time of interviews, this problem had become almost negligible. Some further indicated that, during rain seasons there were a lot of diseases including cholera, dysentery and other related disease outbreaks, but after the process of reforestation of the mountains, these diseases have significantly reduced.

On the other hand, wind was also another problem which previously had caused a number of deaths and house breaking, but had already reduced as a result of improved plant cover on the area. Such important changes need quantitative data in order that one can conclude the project's significant impact since its initiation. In this regard, the evaluation team suggests that the project could have good collaboration with such centers like clinics and hydrological centers in which they have individuals data-basing such important information for the project.

The anecdotal data further indicate that, the mentioned impacts apart from ensuring direct safety on people's life also have impact on soil fertility which eventually has resulted in increased production and hence higher income of the people in the area than before.

Other projects activities which were regarded to have some impact in peoples livelihood were the: introduction of small livelihood activities such as beekeeping and fish farming and introduction of fuel efficient stoves in the project area. However, though a good strategy by the project these activities had not contributed any significantly to the responsible community. Further, the PLUM teams in both districts reported that, many people had shown interest to use fuel efficient stoves which according to them is a good substitute to the huge firewood collection from the forests around these mountains. However, there was no evidence to substantiate this argument, hence remain a future challenge to the Project's initiatives to achieve its intended goals. The Kilosa District forester reported that, agro forest is now been accepted by many villagers in his area although some more awareness creation activities are needed to make these impacts long-term.

6.4.3 Institutional Capacity

The overall ranking of the capacity building initiatives by the Project to the entire community in the project area was ranked as illustrated by Figure 5.

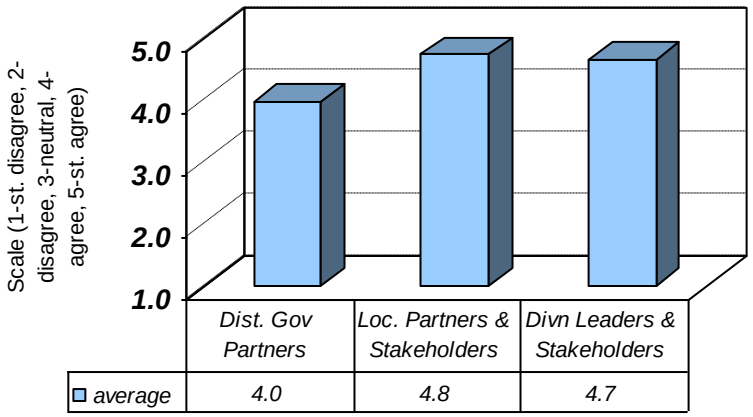

Figure 5: Enhancing capacity building to the community

Following various reports and interviews conducted during this exercise it was noted by the evaluation team that, the Project has facilitated institutional capacity building at district and village levels particularly in Kilosa district through strengthening and or formation of natural resource management committees and put in place village land use plans and by-laws. A number of people in the project area got an opportunity to attend different trainings, workshops and seminars as was planned (Annex 3 and 4a). Table 13 indicate the number of people trained during the project life span.

Table 13: The number of trained people from the beginning of the project

No.	Milestone/Target	Achievements up to the evaluation time	Comments
1.	Train and support at least 5 extension Officers to help communities use good agricultural practices	5 Extension Officers were trained at LITI in Morogoro in 2006, all of them were from Kilosa District	Bias towards Kilosa district. More training is needed in Kilombero side
2.	Train and support 3 Foresters on agro forestry techniques and PFM	2 Foresters, 1 from each district were trained at MSTDC-USA River, Arusha	One more forestor is yet to be trained
3.	Facilitate agricultural Extension service training for 18 pioneer and devoted farmers serving as demonstration farmers	10 pioneer farmers trained at LITI in Morogoro in 2008, all of them were from Kilosa District	4 from Vidunda, 3 from Chonwe and 3 from Udunghu villages
4.	Facilitate 20 village scouts training at the Community Based Conservation Training Centre-to be implemented in August, 2008	10 village game scouts trained at Sakamaganga wildlife college, Songea, all of them were from Kilosa District	5 from Vidunda, and 5 from Ruaha villages

In terms of awareness, 90% of the participants in the evaluation appreciated that, at least peoples' understanding on environmental conservation issues has increased although not yet complete (See comment in Box 2). For example, Participatory Land Use Planning and Management Team (PLUM) Team in Kilosa district insisted that, in the past people preferred to farm on the steep slopes and on catchment areas, but at the moment very few were secretly trying to invade restricted areas mostly from Chonwe and Udung'hu villages which are yet to be covered by the project activities. It was further reported that there had been increased capacity of people to establish tree nurseries and undertake tree planting. Generally, according to the interviewed respondents, awareness of people on environmental matters has risen significantly

BOX 2: "Education is power, and it is in most cases continuous. Seeing people willingly leaving 30m of their land un cultivated if it is near to a water source or river/stream for purposes of conserving the nature is something that could never be done by anyone without having people trained by WWF and gained a high level of understanding and clear tradeoff analysis made between different resources. History indicates that, there has never been such an environmental project that had such influence to people like this one" (Chonwe and Udung'hu Village Leaders).

6.5 Project sustainability, Challenges and Lessons Learned

6.5.1 Project Sustainability

The Project sustainability aspect is assessed through a number of factors such as: Project design (on paper) i.e. the overall project goal, purpose, outputs, objectively verifiable indicators and their means of verification. Looking at the general project, it fits so well with country's current conservation priorities and policies as discussed in previous sections above. The Eastern Side of Udzungwa Mountains area remain an important area for the country that needs a well thought conservation strategy which will solve the existing challenges like land use disputes as a result of increasing population size (currently growth rate in the area is about 3.4%) and the sugar can industry (ILLOVO Sugar Company) which encourages clearing of forests to get a bigger land for farming.

Another factor that contributes to the sustainability of the project interventions is the implementation strategy. The project uses an adaptive management strategy which contributes a lot in ensuring community ownership of the project interventions. Looking at different categories of stakeholders (Annex 5) in the project, their different roles and responsibilities in each stage, and the way the co-ordination team communicated with them increases the chances of ownership of the project by the targeted community. The project considers gender dimensions in different aspects, and this to a large extent contributes to project sustainability. A good number of women (at least 40%) were members in each of the established committees and groups in the villages and at district level. This have enabled women (who in most

cases are left out during such important projects as this one) to participate in implementing different project activities such as growing tree nurseries, beekeeping and making and using fuel efficient stoves. We all know that "*to every successfully man, there is a woman behind*".

Together with involving women, the fact that different groups such as village land use management committees (VLUMs) and village natural resource committees (VNRCs) were formed and still active up to the time of this evaluation. This is another sign towards sustainability of interventions developed by the project. These organs are good way through to address different land use disputes emerging in the area.

Another important aspect that increases this Project interventions' sustainability level is the capacity building aspect. As seen in previous sections, education is power, and in most cases continuous. The fact that training, workshops and seminars were held from primary school levels to village and district officials' levels increases the chance of sustainability. The knowledge base created to these different key persons/stakeholders will ensure a continued knowledge transfer to grassroots communities in long time. A good example is the number of primary schools pupils who every year join the community when they finish standard seven. These also will have the knowledge with them and thus will not be new to the matters.

Despite the fact that all the planned activities against their expected outputs were plausible and contribute to the project goal and purpose (See project log-frame – Annex 3), development and implementation of the land use plans in Kilosa District is highly acknowledged by the evaluation team. Although expensive in terms of time, finance and energy used, this process is seen as a core to the success of this project. The fact that land use planning will mean allocating different uses including land for settlement, agriculture, woodlots and VFRs then in a long run, all land disputes will remain history, and encroached areas will fully regenerate (i.e. 100% which is larger than the target 20%). However, the implementation strategy (*including availability of alternative land for relocation of people from Vidunda catchment*) remains an important challenge to the project and will need a continued support from different levels including district councils, ministry of lands, housing and human settlement development and Prime Minister's office.

Comparing the two districts in the project area (Kilosa and Kilombero), the evaluation team is convinced that project interventions in Kilosa district appeared to be more sustainable than in Kilombero. One of the reasons for the difference, which the evaluation team thinks, is the willingness to participate in implementing different interventions by different stakeholders at district levels. Kilosa district authorities had mainstreamed the project activities within district's development plan, while in Kilombero this was not clearly observed. It is also worth noting that in both the districts, WWF is understood to operate as a facilitator and not implementer.

6.5.2 Challenges

Despite the general positive perception by the interviewed respondents and the observed good progress on ground so far, the project faces a number of challenges basically regarding the project design and interventions' sustainability as discussed next:

(i) Project Design

The evaluation team agrees with the project design, and it is very well set following the desired goal and purpose. However, some aspects were seen as a challenge to the project. One being how could the project connect all stakeholders and make them speak one language when it comes to matters related to this project. The evaluation team understands the complexity of this process. The team suggests that, WWF could find a means to ensure that all the participating stakeholders are aware of others, and should be made to work together whenever possible instead of duplicating effort. WWF should take advantage of the existence of other big stakeholders who can also compliment some of activities like ILLOVO Sugar Company, Kilombero Valley Teak Company, the Eastern Arc Mountains Conservation Endowment Fund, and TANESCO. All these companies/organizations could even participate (in terms of physical money or in kind) in different activities by WWF. TANESCO for example indicated that they could volunteer in some activities with WWF in case a need is expressed. However, the position of each collaborating institution should be clearly defined.

On the other hand, the evaluation team found out that one of the project's strategy in the capacity building process was a selection of few representatives to attend different training sessions and come back to teach others. The evaluation team had a question that "were the trained grassroots representatives capable of delivering the acquired knowledge to the majority of people as expected by the Project?" It is however suggested that, together with this, the project team should use other means of teaching like showing them cinemas on various project matters, acquiring an area in a particular village to be used as demonstration land for bigger groups, and also continue using schools. There are also few people who had succeeded to attend higher levels of education who could also assist in teaching others. Probably these would be the best groups than just choosing them haphazardly. These would be usefully particularly at situations where language could be a major barrier.

Lack of trust by some village and district authorities was also observed as a problem. This has implications especially in implementing some project activities and even on the future of the project. The evaluation team suggests that at such situation, instead of the project to work through government leaders only, they could as well find some famous village people who are sometimes reputable than some political leaders. This would ensure the project sustainability to a larger extent.

(ii) Project interventions' sustainability

As previously discussed, the evaluation team strongly support project' interventions prepared to achieve the project goal. However, a number of issues remain important when considering the project performance and the way forward. Reading through different literature and talking to different stakeholders it appeared that, the land relocation process had brought in another perception to the target communities. Until this evaluation process, many had big expectations and they actually were complaining for the process not been handled the way it should be. Quite a big number (more than 80%) of the interviewed respondents in Kilosa district thought that WWF had the intention to compensate them but Kilosa district authorities had hindered the process. To the evaluation team, this was a big problem

that needs to get sorted. Some affected respondents indicated that in case this process will not get finalized, then it might jeopardize the whole work already done by the project. The evaluation team understands that there is no compensation process (vocabulary) by WWF, but it seems that there is still mixed feeling and understanding among different stakeholders, and this need to be handled very strategically to ensure the project sustainability. Further, talking to the project coordinator and from project documents (e.g. Network Technical Progress Report, 2008) clearly indicated that, the project is still faced by a number of challenges to secure an alternative land for relocating people in order to ensure the long term conservation of the fragile Vidunda catchment (see annex 9 for more details).

Along side that dilemma is the issue of promotion of biogas and fuel efficient stoves which seem to have great potential in 20 villages in Kilombero in reducing firewood demand from the park and village forests. However, this process needs enough capital, and probably would need to be re-designed in such a way that the bigger bio-gas plants are used to serve more than one household. Alternatively, the evaluation team feels that the use of plastic biogas tanks for areas facing energy problem like this could be an appropriate substitute of bricks constructed biogas tank where bricks will require energy (e.g. fuel wood) to be burnt. Simba Plastic Company in Dar es Salaam already has developed tanks for this purpose in different sizes. Plastic tank will have the advantages of easy to install and probably cheaper. The project could as well train some people in the project area such that the process is used as source of income for those people with cows and the technicians responsible with making the biogas plants and the fuel efficient stoves. This would definitely ensure the project sustainability.

Another aspect that remains questionable to the project implementation is the issue of knowledge acquisition and willingness to use. It is well known that, a majority of people in Tanzanian rural set up have low levels of education (a majority been poor primary school education or none). Hence sometimes it becomes difficult for some people to understand even some simple facts. Thus, the project needs to find more simple ways of reaching all people, e.g. using few talented locals who could assist in knowledge transference. On the other hand, it is also known that teaching is one thing and willingness to learn and adopt is another thing all together. It is evident from the project reports and from the field that a number of project interventions were implemented, but no one was sure how many continues to implement after the project. For example, some anecdotal data indicated that despite the big number of fuel efficient stoves (in about 10,329 households) already built in the project area, only a few were being used by local communities. The reason of this could not be found. Based on such un-proven stories, the evaluation team suggests for some follow-up studies to evaluate such kinds of interventions.

6.5.3 Lesson Learned

Following the review of the project documents, consultations with key stakeholders and physical field experience, the evaluation team has come up with a number of key issues that could be usefully for this project and other conservation related interventions. The lessons learnt here can be divided into three stages of the project lifespan:

Stage 1: During project design and planning stage

Adaptive collaborative management (ACM): It has been learned that ACM is a usefully tool in changing peoples' behaviours, attitudes and perceptions towards conservation of areas such as UMNP area. It is thus vital to consider integration of a tool like this during early days of project design and planning. This technique management incorporates research into natural resource management. Specifically it is the systematically integration of design, management and monitoring in order to adapt and learn (Wageningen University & Research Centre, 2008). Although this project had not reached its 100% achievement by the time of this evaluation, the evaluation team thought that the project had generally successful in its implementation because of the strategy used (ACM). Literature indicate that, adaptive collaborative management places the multiple stakeholder character of natural resource management centre stage and translates the experimental and reflective learning practice of resource managers into a social learning process amongst stakeholders. Although not yet full completed for this project, this process had allowed the successfully implementation of the land use plans which are always difficult to process and implement. However, since the community was involved through participation, learning and practicing, it made the process easier and implementable despite the experienced difficulties.

Communication strategy (CS): Communication is a key to all the life's success. Good communication strategy designed at the outset of the project contributes to good performance of the project through its various stakeholders. The key issue here is to eliminate different feelings between different stakeholders which may hinder project activities. It appeared to the evaluation team that, the project team had a better communication to Kilosa district stakeholders than the Kilombero ones hence better performance, understanding and willingness to implement the project interventions in Kilosa than Kilombero district.

Stage 2: Project implementation stage

WWF Position in the project area: It has been learned that one of the key issues which should be defined right before the start of project implementation is a clear definition of the role of every stakeholder. This will assign some responsibilities to stakeholders and make them feel that they are major part of the project. Also, this will limit every stakeholder to only do what they are supposed to do "Play only your role!" The importance of this was highly noted when WWF took a position of an implementer than a facilitator during the project implementation, hence somehow got some unnecessary negative perception from the targeted local community. For example, a majority of respondents in the targeted area could not distinguish between WWF roles and responsibilities from those of TANAPA. This was very significant in Kilombero district, and surprising enough this came from the district level officials who are regarded as knowledgeable practitioners. Similar scenario was observed in Kilosa especially the VLUM and VNRCs whom in practice they were expected to be knowledgeable. Following this weakness, the evaluation team urges WWF to increase awareness creation initiatives and make sure that they always clearly define and practice their position in the project which is mainly facilitation.

Prioritizing project planned activities: Despite the importance of all the set activities against their expected outputs to meet the intended goal and purpose of the

project, the evaluation team thinks that given the project longevity (3 years) it would be good for the project to have a priority list for implementing their activities. For example, the land use plans activity was thought by the evaluation team to be a very crucial intervention in achieving sustainable natural resource management particularly in complex areas like the Udzungwas. Although this process had been completed by 70%, its implementation would mean a lot to the sustainability of the conservation initiatives in the area. So prioritizing an activity like this and achieving it at 100% would mean a lot to the success of the project like this. It should further be noted that, this process would trigger most of other activities like having set aside land for woodlots, forest reserves and also agriculture and/or settlement land. Given its importance, more time and concentration would have been given to this activity.

Stage 3: Project terminal stage (Exit stage)

Project sustainability: The evaluation team learnt that, the sustainability aspects of a project depend on the project's design, community attitudes and willingness to adopt the intended/planned interventions for the project and any early planned exit strategy prepared to equip the intended audience for long-term impact of the project interventions. One important aspect in ensuring the sustainability is the exit strategy planned before hand. It is always good to have an exit strategy devised alongside with the project proposal in order that all the implementation strategies prepared should always put the exit strategy on mind. In this regard the evaluation team learnt that always when devising such strategy, WWF should consider both **sustainability** (*cultural beliefs, enough capacity, follow-up or monitoring strategies, proper stakeholders for different tasks, and good communication between stakeholders*) and **population growth rate** as major existing challenges and threats to the sustainability of the implemented interventions.

Donor Dependence Syndrome: Just like any other project initiated elsewhere in the developing world, the target community was seen to have a weakness in over dependence to WWF as a donor than getting prepared to take and own the project as their own after the life time of this project. Almost 100% of all interviewed respondents thought that the project should first provide them with some alternative sources of income before they leave the project area. In other words, most interviewed stakeholders appeared not ready to run the project without WWF in place. This has very much contributed to failure of many such projects elsewhere, and there were clear signs of such a situation in the project area. Following this, the evaluation team thought that the project team needs to widen the scope of awareness creation initiatives, and make people understand their position and responsibilities very clearly. An exit reminder should be set to all stakeholder right at the beginning of the project. This will not only facilitate early achievement of project goal, but also will enable early owning of the project by the stakeholders.

7.0 Conclusion and Recommendation for future project plans

7.1 Conclusion

Given the Project goal "***the integrity of the Udzungwa Mountains Catchment is conserved so that it continues to provide vital sustainable goods and services at local, national and international levels***'' and purpose to ''***ensure reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by the end of year 2008***"; the evaluation team is of the opinion that the implementation of the project interventions, although not completed to the planned level, is generally in good progress (Compare Annex 3 against Annex 4a). The current progress have indicated relevant signs of reducing pressure on the Udzungwas together with improving livelihoods of the target community.

Stage 1: Project Design, Planning and implementation

The project uses an adaptive management plan which is highly recommended for projects dealing with conservation with people. The project is designed in such a way that, it supports the implementation of Tanzanian policies, legislations and strategies related to natural resources conservation and community development. Further, the project is in line with a number of international treaties and conventions like United Nations Convention on Biological Diversity (UNCBD), Millennium Development Goals as well as WWF's One Global Programme priorities. The project is also in line with Norway's support for environmental sustainability and the overall Norway-Tanzania bilateral engagement in reducing poverty and ensuring sustainable environmental management, gender decentralization and decision making and participatory resources government.

Despite the little time allocated to achieve the project goal and purpose through its planned activities against their expected outputs (through a number of verifiable indicators), the evaluation team could clearly see the relevance of the entire project's planned activities. However, the evaluation team is of the opinion that, the project planners had somehow under estimated the project's demand and challenges therein. In that regard, the three years have been seen un- realistic by the evaluation team. Experience indicates that, at least five years are needed for someone to realize some tangible benefit accrued from a conservation project. This situation also apply to this project, hence it calls for a longer duration to implement its intended interventions.

The fact that the project will not last forever in the EUMNP area, the evaluation team strongly urges the project management to prepare an acceptable exit strategy that will consider both **sustainability** (*cultural beliefs, enough capacity, follow-up or monitoring strategies, proper stakeholders for different tasks, and good communication between stakeholders*) and **population growth rate** as major existing challenges in the area.

Implementing a project which touches people livelihood needs a lot of planning and consideration. Land use planning was noted to be one of such activities which touches peoples' livelihood. Due to this fact, land use planning and implementation

is a very sensitive and long term process that needs people's buy-in, political will, stakeholders' commitments and clear understanding of the governing laws by the facilitators. Since WWF had already committed to support the farmers who relinquished their farmlands for conservation purposes in the three villages (Ruaha, Kifinga and Tundu), it is inevitable that the exercise is accomplished so that all the registered farmers are allocated with farming land elsewhere. This will not only keep the livelihood of those farmers who were affected but also will ensure to some degree the sustainability of the project's current impacts

Stage 2: Project most significant impacts

Among the realized impacts of the project interventions is the increased conservation awareness among the target community. Although the level could not be assessed, different interviewed respondents indicated this aspect. This also had been assed through the physical change of the Vidundas which was reported to have been in a very critical condition before the project interventions. It is always known that, increased knowledge contributes to a positive attitudes, perceptions and right behaviors of the people around protected areas. This was also observed by the team from the few interviewed respondents. However, this percent of the interviewed respondents cannot be used as the actual representation of the majority of the target community because most of them were either from the village formed groups, village governments or from the district officials.

A number of forest reserves alongside 7 approved village land use plans have been established and these were part of the result of the land use plans activity which had a purpose of contributing to the improved land use practices output (Annex 3). Following this evaluation, it was noted that deforestation and degradation along mountain slopes and catchment areas had significantly reduced. Following the status report it was realized that, at least 6.4% of the Vidunda Mountains had regenerated, based on four village sampled, by the time of the project evaluation. However, the evaluation team thought that there should be a more reliable monitoring process (probably through satellite images/ GIS techniques) that would provide a more reliable feedback on cover changes. Eye observations are good but they are always subject to errors.

The evaluation team understands the difficult in realizing tangible project benefits direct to the human livelihoods within such short duration. However, some indirect livelihood benefits such as reduction of floods in the lowlands are acknowledged. Since the park remains to be an important protected area for both its biodiversity and people around, there is a need for the project to set a long-term monitoring plan that will track both human impacts and benefits accrued from the park's protection by the target community. This is to ensure that there will be a win-win scenario in the whole project implementation.

Another significant impact which under pin the success of this project is the fact that people in the project area have started using alternative source of energy (e.g the use of biogas and the popularity of using rice husks in bricks making). Also the project's effort to implement efficient stove, where by about 30.6% households have these stoves, was noted as a great move in ensuring reduced pressure on the natural resources in the Udzungwas. If this initial momentum is continued it will in the long run

play a great impact on the sustainability of the project's current impacts. It is the view of the evaluation team that close monitoring of the adoption of these new innovations would provide much confidence and define what should be the future direction and effort of the project.

Stage 3: Project Sustainability

The project has efficiently implemented activities and has both secured some community commitment (level not yet assessed) and addressed some conservation threats such as severe land degradation especially on Vidunda Mountains. Despite some delays in the project's initial stages, the project has achieved some commendable level of intended outputs in all its key planned activities (Annex 4a). The effectiveness is basically contributed by its design as elaborated early in this report. To a large extend, the project strived to use and communicate to the right stakeholders whom have largely contributed to its present level of success. The project had an advisory committee which had an advisory task to the project, and largely it has contributed to its success through various guidance which were noted in the minutes of meetings (WWF – TPO 2008).

Using the right stakeholders, providing knowledge to the right groups of people like primary school teachers and pupils ensures the project's sustainability. However, a number of challenges do exist which might jeopardize the project's future. These are; 1) willingness of people to acquire the knowledge transpired and their capacity to transfer to others; 2) increased population growth rates and 3) continued government's (through regional and district' authorities) support in the general implementation of some sensitive project' interventions like land use plans.

The evaluation team however stresses that there is a need for the project team to find a way of connecting all its stakeholders in such a way that they can all speak similar language when it comes to this language. This would further help in reducing un-necessary costs that would be incurred by the project when it is working in the same are as the one worked by say ILLOVO or TANESCO. Some stakeholders are willing to contribute in implementing some important activities, but they should be recognized first.

Stage 4: Project Resources (Human and Finance)

Achievements of any project need resources of various forms. As for this project two types of resources were crucial:

Human resource was one of the resources. Based on the literature review and the evaluation by the team, the assembled team to manage this project was capable of implementing the planned activities. This complemented the observed excellent project design which resulted on the measurable success which could be seen today in the project area. However, the evaluation team has an observation on the human resource aspect. It was noted by the team that project covers a large area with only one technical staff at the start of the project with the land use planner brought on board toward the end of the project's first year. The evaluation team feels that the project would have achieved more if either both staff started at the project's onset or more than two staff were employed for the project.

The other aspect of project resources was the finance. The review analysis indicated that there were steady supplies of financial resource to this project from its start to finish. Due to this, the project was able to over spend and sometime to under spend in undertaking different activities. Over spending and under spending of this project is translated by the evaluation team as the ability of the project budget to respond to any economic shocks. This again reflects the good design aspect of the project. Generally, the expenditures for the three years by the Project were reasonably in accordance with the planned activities and are regarded by the evaluation team as to have closely followed the budget. The variance which occurred in each of the three years is regarded by the evaluation team to be in an acceptable range given the explanation for each of the variances which were mainly either due to an avoidable circumstances or economic shocks/inflations.

Stage 5: The land Use Planning Process

The land use planning process has been one of the major activities in this project. Also, the evaluation team believes that this activity lies at the heart of success of this project. Annex 9 shows the importance of this process and details of its implementation. Based on this, the team has the following to conclude regarding the entire process:

- The main objective of facilitating land use planning and implementation by WWF was to restore the degraded catchment forests of Vidunda so that the catchment continues to provide the required service for livelihoods of local communities and social economic development of the country. The positive sign of this could now be seen and this is based on the results from four sampled villages (Ruaha, Kifinga, Tundu and Iwemba) which have indicated a total area regenerated of about 1,887 ha equivalent to 6.4% regeneration of originally degraded area in Vidunda catchment. The process has also helped in identification and establishment of village forest reserves (6,858 ha).
- Farmers in Ruaha, Kifinga and Tundu villages (villages targeted for land reallocation) have stopped cultivation activities on the fragile steep slopes of Vidunda Mountains and regeneration is gradually taking place.
- The land allocation exercise has gained popular support from the government. The National Land Use Planning Commission, Morogoro Region and Kilosa District have been keen in making follow-up on this issue and have been providing technical support in creating awareness and educating villagers on Land use plan and by-laws implementation and various policies and legislations (for example Village Land Act no. 5 of 1999, Forest Act, 2002 and The National Land Use Planning Act, 2007).
- With awareness creation, villagers have gradually started to understand the laws governing land use planning and implementation and that they are not eligible for any compensation as the land still belongs to the villages.
- The established Village Land Use Management Committees (VLUMs) are enthusiastic and well informed and therefore very important local level governance structure in implementing the developed land use plans.

7.2 Recommendation for future project plans

Despite the 100% demand of the project's extension by the interviewed respondents probably because of the donor dependence syndrome, the evaluation team

realizes the need for the project's continuation of its activities to reach the originally planned targets. Reviewing the project's log-frame especially the final project achievement as of December 2008 (WWF Terminal progress report prepared February, 2009) and talking to the project's coordinator and WWF management, it was very clear that the project still had a number of important interventions which needed fully implementation. It was also apparent to the evaluation team that leaving these unfinished activities unimplemented might jeopardize the long-term impact (i.e. sustainability) and the project current impact in the project area. Activities like land use plans which had previously caused some serious conflicts were partly on good progress, but the process of land relocation was still a challenge to the project because of the issue of finding some alternative land for the relocated people. It is very obvious to the evaluation team that, in case such important activity will be left in-complete then there is a big possibility of the relocated farmers from Vidundas and elsewhere to return to their original lands hence returning back to the degradation situation.

Apart from the land use plans, the project had initiated installation of fuel efficient stoves and biogas plants which to the evaluation team were very crucial activities to ensure sustainable utilization of forests around EUMNP after the land use plans. The fuel efficient stoves had been implemented to more than 10,000 households (approximately 30%) in the project area. However, the success of this activity (in terms of the coverage and community's willingness to use) was still un-known by the time of this evaluation, and further there was a need of spreading such stoves to almost the entire community in the project area. Also, only a small fraction of biogas plants (which are costly) had been installed by the time of this evaluation.

Another point which makes the evaluation team believe that the project is having a potential component of unfinished planned activities is the fact that most of the implemented activities were found to be in the Kilosa side. Referring to the project log frame, there is a lot which need to be implemented in Kilombero which include the most important issues of land use planning and implementation which is yet to be initiated at all on this side of the project. Implementation of activities in this nature does not create a balanced result for the project to achieve its planned purposes and goals for the defined project area. Hence the evaluation team suggest for similar work to be done on the Kilombero side.

Given the importance of the above activities and the rest of the remained project interventions, the evaluation team has reviewed the planned activities and prepared a summary of those implemented and the ones which were not implemented. The summary is provided in tabular form and each table gives the details of one output. So, the status of output 1, 3 and 4 are illustrated by Table, 14, 15 and 16 respectively. As noted early in this report, output two was not implemented under this project and thus not included in the summary tables below:

Table 14: Status of achievements and remained tasks for output 1

No.	Milestone/Target	Achievements until 31 Dec., 2008	Comments
Output1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration			
1.	Organize environmental	6 environmental awareness	2 more w/shops were yet

	awareness and education meetings and workshops in five (5) villages.	and education meetings and workshops (134 participants in 2006 and 121participants in 2007) were organized in 9 villages-Kilosa (4 in 2006 and 2 in 2007). 0 Kilombero	to be organized in 9 villages
2.	Establish and strengthen at least five (5) Village Natural Resources Committees	29 VNRCs were strengthened on natural resources policies and fire management. (20 in Kilombero and 9 in Kilosa) 240 people from Kilombero and 250 from Kilosa attended the training. 212 people from 9 villages in Kilosa were strengthened on fire mgt.	Good progress although the training on fire braking and fire management was not strengthened in all districts
3.	Facilitate establishment of at least three (3) Village Forest Reserves (VFRs) (including identification and adjudication of VFRs, survey and mapping, resources assessment, formulation of management plans, facilitation of the formulation and enforcement of village by-laws).	5 Village Forest Reserves have been established in Kilosa (1 in 2006 and 4 in 2007), 0 in Kilombero	2 more Village Forest Reserves are to be established. Note the lack of VFRs in Kilombero district.
4.	Establish and maintain at least 5 village woodlots.	395 have been established in 2007 (357 in Kilosa and 38 in Kilombero).	20 more woodlots to be established
5.	Restore forests in degraded sites (at least 2,000 hectares including tree planting):	About 771 hectares equivalent to 8.5% of the total degraded forest area 9,086.79 ha) have been rehabilitated in the Vidunda Catchment area-Kilosa	The restored land had reached at least about 10% while the target was 20%.
6.	Develop and implement a simple ecological monitoring and research programme in Vidunda catchment-Kilosa	Ecological baseline data were generated. 5 community members are being trained to implement the monitoring plan	The implementation of the monitoring plan is yet to be completed.

Source: NORAD periodic Progress results Report, (2006- 2008) by Msigula, (2009)

Table 15: Status of achievements and remained tasks for output 3

Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.			
	Milestone/Target	**Achievements until 31 Dec., 2008**	**Comments**
1.	Facilitate preparation and	7 Village land use plans prepared	Land Use Planning was

	implementation of Land use plans	and approved at village level. 3 out of 7 above approved at district level and submitted to the Ministry of Lands, Housing and Human Settlement Development 7 Village Land Use Plans By-Laws prepared and approved at village level. 7 Village Land Use Management Committees (VLUM) formed and were involved in preparation of land use plans. 7 Village Forest Reserves were set aside during preparation of village land use plans. Village land boundaries conflicts minimized.	done in ***Kilosa District only***. The 4 land use plans approved at village level was submitted to District Council in Jan 2008. 7 Land Use Plans By-laws submitted to District Council and the implementations of these had started for only 3 villages of out of 7.
2.	Train and support at least 5 extension Officers to help communities use good agricultural practices	6 Extension Officers were trained at LITI in Morogoro in 2006, all of them were from Kilosa District	Non of the trained extension officers was from Kilombero district
3.	Facilitate implementation of land use income related activities	Not yet implemented	Needs to be implanted for project sustainability
4.	Train and support 3 Foresters on agro forestry techniques and PFM	2 Foresters, 1 from each district were trained at MSTDC-USA River, Arusha	The remained number need to be completed

Source: NORAD periodic Progress results Report, (2006- 2008) by Msigula, (2009)

Table 16: Status of achievements and remained tasks for output 4

No.	**Milestone/Target**	**Achievements until 31 Dec., 2008**	**Comments**
Output 4: Increased supply of fuel wood and improved utilization of fuel wood efficient stoves			
1.	Develop agroforestry schemes that encourage tree planting on farmers land	2 agroforestry schemes have been developed for both districts, Agroforestry training including beekeeping was conducted for 229 farmers from Kilosa	**Bias towards** Kilosa district. 11 households in Kilosa are practicing agroforestry 17 fish farmers were supplied with 3,0009 fingerlings, 177 for each farmer 6 groups were supported with 30 beehives , 5 per groups
2.	Establish 10 private and village tree nurseries	52 tree nurseries have been established (17 in Kilosa and 35 in Kilombero	74 teachers in Kilosa were trained on tree nursery management; Tree Nursery supplies were also donated to schools, villages and communities groups

			established tree nurseries **Kilombero**: 20 Village nurseries, 4 community tree nurseries, 11 schools' tree nurseries **Kilosa:** 5 community owned and 11owned by schools, 1 by individual
3.	Promote agricultural extension service for farmers to implement agroforestry	Extension service to farmers is being provided –not effectively though, especially in Vidunda	More solid training is needed
4.	Promote and support fuel-efficient stoves	202 communities from Kilosa were trained on fuel efficient stoves and the monitoring of the adoption has been on-going in both districts	At least 10,329 (equivalent to 30.6%) HHs adopted fuel efficient stoves). 3,643 in Kilosa and 6,686 in Kilombero. Hence more effort needed in Kilosa district
5.	Conduct awareness programmes on the use of alternative energy sources	Awareness creation on the use of alternative energy was conducted in 3 villages in Kilombero and 3 biogas sites have been established.	This process is very crucial and still needs to be expanded
7.	Facilitate 3 evaluation workshops to assess the progress of implementation of the plan developed in August, 2006	1 workshop was conducted on 18 December 2006 and village reports on the progress of implementation were presented at the workshop.	***The rest of the workshops have been cancelled to minimize costs***

Source: NORAD periodic Progress results Report, (2006- 2008) by Msigula, (2009)

Taking close observation of the tables above, very crucial activities are yet to be completed. With this status of the outputs, the team clearly foresees the need for the project to extend its duration of operation in the project area for at least 3 more years to be specific.

Like clearly indicated in the tables above, implementation in Kilosa are far ahead of those in Kilombero. Although this might also reflect the cooperation given by the district authorities, the evaluation team suggests that for the betterment of the project results techniques to win Kilombero's cooperation by the project is necessary in order to achieve similar levels of success provided the importance of both districts in the conservation of the Udzungwas. In case the project sees the need to extend its stay in the area, it should however remember that awareness creation process is a cut across issue and need to be well strategized in such a way that the majority of the target community is reached and understands and practice what they ought to. This should be accompanied by a frequent evaluation (preferably 3 months interval) procedure to ensure the desired level of awareness by the target community. It is well known that, capacity building/awareness creation initiatives are long term, expensive (in terms of time and money) and need an acceptable procedure, which in this case the adaptive management strategy is still recommended.

Given the above assessment of the project performance by the time of this evaluation, the following table provides a suggested set of priority issues to be addressed for maximum success of any next phases of project implementation in both Kilosa and Kilombero districts. Most of these recommendations have been derived from the project log-frame and stakeholders consultation. The evaluation team sees them as important aspects regarding the project sustainability. Table 16 illustrates the recommended activities for each of the two districts.

Table 17: The suggested priority issues for the next phase of the project

Location/ District	**Important suggestions for project future plans**			
	Area of Focus	Key stakeholders to be involved	Approaches and strategies to be employed	Remarks
Kilosa	1) Finalizing the remained processes for land use planning in the 9 target villages	The district council	WWF should work behind the district councils so that the solution for land reallocation process for Ruaha, Kifinga nd Tundu villages is seriously analyzed and worked out. The participatory procces used to finalise the remaining steps for 7 VLUPs and all steps for the 2 untouched villages (Udungh'u and Chonwe)	Communication between WWF and DED and PLUM team enhanced. Adherence to guidelines Increased transparency in all processes
	2) Finalize the Land reallocation process for Ruaha, Kifinga nd Tundu villages	The district council and villagers from the three villages	Recognize influential people to avoid some of un-necessary misunderstandings during implementation of some agreed activities.	Needs more participation and time
	3) Finalize the management plans and By-laws for the six (6) Village Land Forest Reserves initiated in Vidunda, Ruaha, Tundu, Msowero and Lumango villages	Kilosa District Council, Kidodi, Mikumi Forest staff, VNRCs and WWF technical support	Assist these villages through their VNRCs to operationalize their VFR management plans and by-laws including division of roles and responsibilities and benefit sharing scheme.	Device management approaches and roles and responsibilities. Identify Benefits from VLFRs
	4) Devise alternative sources of income and energy while waiting for the products from the currently planted trees	All villagers around the project area	Identify possible use of rice husk as alternative energy source	
	5) Increase awareness creation activities to	All villagers around the	Educated villagers should be trained	

Location/ District	Important suggestions for project future plans			
	Area of Focus	Key stakeholders to be involved	Approaches and strategies to be employed	Remarks
	reach all groups of people	project area	Use of films to get more people on board WWF should crosscheck the selected individuals to make sure that only qualified participants are selected and that not only same people attend the offered trainings	
	6) Continuing with tree planting scheme within the project sites	TFCG, TANESCO and ILLOVO could also be involved for some seed money	Some trees produced by different environmental groups (schools, individuals etc) can be used as source of income to make the groups sustainable	
	7) Building some documentation offices in the villages under project	TFCG, TANESCO and ILLOVO could also be involved for some seed money	Building of Village land Registry Offices. One of the process of land use planning	
Kilombero	1) Intensive capacity building activities to reach all people in the area	All villagers around the project area and the district council	Devise a method to reach more grassroots	
	2) Design and avail your exit strategy to all key stakeholders	All villagers around the project area and the district council	Identify committed stakeholders for monitoring and implementers who should be known in the area	
	3) Connect all stakeholders to speak similar language	All stakeholders at the grassroot to national level.	Devise an incentive giving mechanism to reward the committed stakeholders and penalty mechanisms for the law breakers at all levels	Incentive giving could be through competition between villages and districts

Location/ District	Important suggestions for project future plans			
	Area of Focus	Key stakeholders to be involved	Approaches and strategies to be employed	Remarks
	4) Initiate land use planning for Kilombero side of the project	Kilombero district council and villages within the project area	Similar approach used in Kilosa with lessons learned in mind.	

Note: the priority activities are by district's demand, and are organized according to preference by district.

Annexes

Annex 1. Terms of Reference for the Evaluation

Evaluation Issues and Key Questions

The proposed evaluation criteria (i.e. the checklist) are set out in the evaluation matrix in Annex 2. However the evaluators may wish to refine these further/prioritize according to the time available under this contract in consultation with WWF-TPO and WWF-UK.

The evaluation team should assess the following key areas:

5.1 Quality and relevancy of project design: The evaluators will assess the project concept and design. They will review the issues addressed by the project and the project strategy, encompassing an assessment of the appropriateness of the objectives, planned outputs, activities and inputs as compared to cost-effective alternatives. The team will also judge the planned executing modality and managerial arrangements set up for the project. The evaluator will assess the relevance of indicators and the work plan, duration and budgets and other resources.

5.2 Efficiency in Project Planning and Implementation: The evaluators will assess the implementation of the project in terms of quality and timeliness of inputs and efficiency and effectiveness of activities carried out. Also, the effectiveness of management as well as the quality and properness of monitoring and backstopping by stakeholders to the project will be evaluated. In addition, the team will assess the capacity and appropriateness of staff in comparison to project activities implemented.

5.3 Project outputs and impact: The evaluation team will assess the outputs, outcomes and impact achieved by the project as well as the likely sustainability of project results. This will encompass an assessment of the achievement of the outputs, purpose and the contribution to attaining the overall objective of the project. The evaluation should also assess the extent to which the implementation of the project has been inclusive of relevant stakeholders and created the necessary collaboration between partners. The evaluation will also examine if the project has had significant impacts and unexpected effects (both positive and negative). In this aspect, a more detailed appendix will be expected covering the land use planning process

5.4 Lessons Learnt: The evaluation team will identify and document lessons learnt with regard to development and implementation of the project. This includes highlighting experiences, lessons learnt, success and challenges, strengths, weaknesses and opportunities. With reference to the documentation available and consultations with key stakeholders, the team should produce a separate detailed annex covering the land use planning process (in the seven villages) and its implementation within the three villages that involved options for relocating some community members

5.5 Project sustainability: The evaluation team will assess the extent to which the benefits of the project will continue, within or outside the project area, in terms of

actions initiated during the project implementation. A special emphasis will be drawn on the capacity for the districts, regional authorities and other partners to upscale and support the land use planning and implementation in the remaining villages.

5.6 Future project plan: The evaluation team should provide recommendations on future plan for the project, area of focus, key issues to be addressed, key stakeholders to be involved, the approach and strategies to be employed. The team should note that while the other project outputs were fairly straight forward, the land use planning process and the initial implementation was more challenging. Continuation of this component will rely on a critical input from this evaluation.

Annex 2. Evaluation Matrix

The evaluation matrix is incorporated to help provide a check list on key questions as well as specific research questions including data sources are identified, data collection tools/ methods.

Issue	Key Questions	Specific Research Questions	Data Sources	Methods/Tools
Design	Is the project design appropriate to the situation?	To what extent does the project respond to priority issues? To what extent are the objectives of the project still valid? Is the project team planning the most appropriate strategies Are there any major risks or killer assumptions that are currently not being taken into consideration? Do stakeholders value the project and believe it make sense?	Project document Project Technical reports Relevant National Policies/legislations and strategies Verbal communication with senior government officials, TPO mgt. and the project team	Literature review Interviews Focus group discussions Observation Triangulation
Efficiency	Are the planning and implementation processes seen to be efficient?	Are there capacity gaps (within the project team/ other internal functions/external organizations) which are impeding progress towards the project goal and objectives How are working relationships within the project team? How are working relationships with partners, stakeholders and donors? Is the overall project plan used and up to date? What % of activities in the work plan has been delivered? Is financial spending in line with the plan? Is monitoring data being collected as planned, stored and used to inform future plans?	Project document, annual work plans and budgets Project Technical and financial reports Verbal communication with senior government officials, TPO mgt. and the project team Partners signed agreements and MOUs, Monitoring plan and MTR report	Literature review Interviews discussions Observation Triangulation Focus group discussions Observation Field visits
Effectiveness	What are the major achievements of the project to date in relation to its stated	What has been achieved? Quantitatively and qualitatively and focus should be at the higher level results What is the likelihood of future achievements? What is the significance / strategic importance of the achievements?	Project document , Technical reports, various studies reports, people's opinion	Literature review Interviews discussions Observation Triangulation Focus group discussions

	objective and intended outputs or results?	Any exceptional experiences that should be highlighted? What are the opinions of the people on the project effectiveness based on impressions and interviews with target groups/key informants, partners and Government		Observation Field visits
Impact	Is the project contributing to long –term positive effects to people and nature?	What are the positive effects of the project to people and the environment? How is WWF making a difference?	Project document and reports People's opinion Study report	Literature review Interviews and individual/focus group discussions Field visits, Triangulation discussions
Sustainability	Is the project getting the required support and acceptance from stakeholders at different levels?	Is the project addressing stakeholders' priority issues? -What is the social and political environment/acceptance of the project -Will the project contribute to lasting benefits? Is the project operating at a sufficiently large scale to bring about desired, long term impacts? -Is there evidence of the project activities being scaled up by other organization/partners/communities? Is magnification likely?	Project document and technical reports Districts and respective village plans Socio-economic study reports Village land use plan reports, action plans and by-laws	Literature review Interviews discussions Observation Triangulation Focus group discussions Observation Field visits
Other key issues as necessary	What are the key lessons learnt?	What went well, what went bad what were the causes and how to address the gaps	Project document and reports People' opinion Minutes of the various meetings MTR report	Discussion, Interviews, field visit, focus groups discussions, literature review
	What will be the way forward and future plan of the project?	What will be the area of focus? What are the key issues to be addressed? Who will be the key stakeholders/partners? What strategies and approaches to be used	Project documents, MTR report, Monitoring plan, GIS, socio-economic and ecological study reports, people's opinion/thoughts	Discussion, Interviews, field visit, focus groups discussions, literature review

Annex 3. Project Logical Framework Analysis

	Intervention logic	Objectively verifiable indicators	Baseline	Sources of verification	Assumptions
Project Goal:	The integrity of the Udzungwa Mountains Catchment is conserved so that it continues to provide vital sustainable goods and services at local, national and international levels				
Project Purpose:	Reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by end of year 2008	• Degraded areas in Vidunda near Kidatu Dam regenerated by 20 % by end of 2008; • Siltation in the Great Ruaha River reduced by 15% by end of 2008 ; • Area with tree cover in the village land increased by at least 20% by end of 2008 compared to the baseline in 2006.	• 26,800 ha degraded in areas adjacent to Kidatu Dam and around Vidunda Catchment in 2006 (scattered and highly degraded woodland, grassland, scattered bushland, settlement cultivation on steep slopes of mountains). • Kilombero: Tree cover in the village land was 58%, 2003	• Ecological surveys at the beginning and end of the project; • Socio-economic survey at beginning and end of the project; • Hydrological reports from RWBO • Biological surveys • Law enforcement reports from UMNP • Reports from Foresters • GIS report • Land Use plan reports • Land use/cover change detection report	• No dramatic change in current climatic patterns • Government and stakeholders maintain commitment to conserve the Udzungwas • Capacity and will to enforce laws and by-laws

	Intervention logic	Objectively verifiable indicators	Baseline	Sources of verification	Assumptions
	Output 1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration.	• Incidences of illegal logging adjacent to the park reduced by at least 25% by end of 2008; • Village forest reserves established in 3 villages by end of 2008; • At least 10% of degraded forest restored by end of 2008; • At least 5 village buffer zone woodlots established by end of 2008;	• 124 poachers in 2006; • 2 village forest reserves in Kilombero, 2005; • 6 woodlots in Kilombero, District, 2005.	• Survey reports; • VCC/village; governments' meeting reports; • District extension officers reports; • Law enforcement reports (TANAPA, police) • site visit reports	• Financial resources available • Local community willing and able to participate • Political willingness and accountability to support the project • TANAPA, forest authorities and other stakeholders willing and able to play their roles efficiently • natural and man-made fires are manageable

	Intervention logic	Objectively verifiable indicators	Baseline	Sources of verification	Assumptions
	Output 2: Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP[3]	• A study report on watershed services produced by end of 2007; • Stakeholders consensus on the way forward by end of 2007	•	• Study report available in implementers offices • Stakeholders' workshop report. • Correspondences with the government	• Stakeholders willing to take part in the process • Government will ensure the payments for watershed services are made • Governments timely willingness to review the policies and laws • The revenues raised will be ploughed back for environmental conservation • Clear link between ecosystem and its services appreciated by stakeholders • Tourists appreciate natural beauty of Udzungwas and willing to pay for visitation

[3] This output was dropped as the Ministry for Natural Resources & Tourism with the Rufiji Water Basin had planned to undertake a similar activity in the area

	Intervention logic	Objectively verifiable indicators	Baseline	Sources of verification	Assumptions
	Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.	• Land use plans in place for at least 10 villages by end of 2008; • At least 5 Extension Officers trained and using new skills by end of 2007. • By-laws are approved and in use by end of 2008. • Villagers implementing environmentally friendly IGAs by end of 2008; • At least 3 Forest Officers are trained on agro forestry and PFM techniques and applying the new skills by end of 2007.	• 5 land use plans in Kilombero district, 2005; • 1 Extension Officer in Kiidodi ward-Kilosa was trained on Agricultural Extension Service, 2004 • 3 village by-laws drafts, -Kilombero, 0 Kilosa, 2006 • 25% were doing beekeeping, 47.2% animal husbandry in Kilosa, 2006. • 3 Foresters Kilosa and -1 in Kilombero trained in agrogorestry and PFM techniques in 2004	• Village government reports and meetings minutes; • Maps and land use plans; • Workshop reports; • Training manuals; • Approved by-laws; • Socio-economic survey reports; • District council reports	• Support from districts; • Availability of technical staff; • Community support and willingness to participate.

	Intervention logic	Objectively verifiable indicators	Baseline	Sources of verification	Assumptions
	Output 4: Increased supply of fuelwood and improved utilization of fuelwood efficient stoves	• Number of households practicing agroforestry increased by 50% by end of 2008. • At least 10 tree nurseries established and supply seedlings to communities by end of 2007; • Number of trees planted and surviving increased to at least 60% by end of 2008; • Number of households (HHs) using energy saving stoves increased by 50% by end of 2008; (Total households in the target villages is 33,754); • Time used to collect fuelwood reduced by 50% for households with energy saving stoves by end of 2008. • Amount of fuelwood used by households with energy saving stoves reduced by 50% by end of 2008. • Number of houses constructed using rice husk burned bricks technology increased by 50% by end of 2008;	• 3 individual tree nurseries in Kilombero district, 2005; 1 big nursery owned by Illovo and 1 by HIMAVIKIRU-Kilosa District • 238,328 trees planted in 9 villages in Kilosa DC, 2006; • 1,298 (5.94%) HHs were using energy saving stoves in Kilombero and 2 in Kilosa by 2005 • 7.5 days spent per month per HH for collecting firewood • 1,298 HHs reduced amount of fuel wood used by 1.9%	• Socio-economic survey reports; • Monitoring reports; • Technical progress reports; • Training workshop reports; • Village government reports; • Socio-economic survey reports; • Monitoring reports • Technical progress reports; • Village government reports; • Situation analysis report of April 2006 • Minutes of the 2005 stakeholders meeting • Deadwood impact study report;	• people are willing to adopt and adapt to new techniques • adequate support from village and district governments • enough land available for agroforestry

Annex 4 (a) Table of progress towards planned project outputs, targets and goals as analysed from monitoring data

Project Targets	**Indicators**	**Baseline** (value and time of measurement)	**Progress by the end of the project (Dec. 2008)**
Project purpose: Reduced pressure and improved utilization of forests, water and land resources on the eastern side of the Udzungwa Mountains National Park by end of year 2008	Degraded areas in Vidunda near Kidatu Dam regenerated by 20 % by end of 2008	29,513.4 ha (80.8% of total lands i.e Village lands and Public land near Dam) degraded in areas adjacent to Kidatu Dam and around Vidunda Catchment in 2006 (Encroached and cleared: scattered and degraded woodland, grassland, scattered bushland: settlement & cultivation on hill slopes of mountains). Also presence of soil erosion features	A total area regenerated during the project life span is 1,887.6 ha equivalent to 6.4 % regeneration of originally degraded area. The statistic is based on four sampled villages.
	Siltation in the Great Ruaha river reduced by 15% by end of 2008	Difficult to establish at a subcatchment/catchment area covered by the project	Difficult to determine the impact contributed by the subcatchment area covered by the project but local people reported a noticeable reduction on siltation in their home/areas from the mountains.
	Area with tree cover in the village land increased by at least 20% by end of 2008 compared to the baseline in 2006.	Total area with tree cover for Kilosa District is about 2,369.07 ha. Equivalent to 40% of total village land area: GIS report; 2006 status Kilombero: Tree cover in the village land was 58%, in 2003. Its equivalent in hectares was not established due to limited information by the baseline.	Total area (without tree cover) Rehabilitated in Kilosa- **Insitu**: (naturally regenerated in VFRs and Com. Forests; Area is 1,134.32 ha (Equivalent to 9.2% increase). **Ex-situ**: Total tree planted and surviving in Kilosa and Kilombero - Overall total (2006 to 2008) **474,902 trees**
Output 1			

Project Targets	**Indicators**	**Baseline** (value and time of measurement)	**Progress by the end of the project (Dec. 2008)**
Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration	Incidences of illegal logging in adjacent to the park reduced by at least 25% by end of 2008	124 poachers, in 2006 and 165 poachers in 2007	95 poachers in 2008 which calculates to about 23% reduction compared to 2006. It has to be noted however that there was no consistent patrol intensity for 2006, 2007 and 2008.
	Village forest reserves established in 3 villages by end of 2008	2 village forest reserves in Kilombero, 2005; 0 Village Forest Reserve in Kilosa, in 2006	6 VFRs have been established in Kilosa- Mapped and Surveyed by FBD, with Management plans and by-laws in place. 2 VFR identified and set aside during land use planning process and are protected by Land use plans by-laws.
	At least 10% of degraded forest restored by end of 2008	Total degraded forest area in Vidunda catchment was (9,086.79) ha in 2006.	Forest area restored is found in VFR & Community Forests for Ruaha,Kifinga,Tundu and Iwemba villages which is 771.37 ha and calculates about 8.5%
	At least 5 village buffer zone woodlots established by end of 2008	12 woodlots in Kilosa and 6 woodlots in Kilombero, in 2006	401 woodlots established in the project. This is far ahead of targets set.
Output 2			
Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP[4]			
Output 3			

[4] This output was dropped as the Ministry for Natural Resources & Tourism with the Rufiji Water Basin had planned to undertake a similar activity in the area

Project Targets	**Indicators**	**Baseline** (value and time of measurement)	**Progress by the end of the project (Dec. 2008)**
Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved	Land use plans in place for at least 10 villages by end of 2008	5 land use plans in Kilombero district, 2005 0 Land use plan in Kilosa district, in 2006	7 land use plans developed in Kilosa District and approved at all levels. Implementation is ongoing and will need time. This translate to about 70% target achievement.
	At least 5 extension officers trained and using new skills by end of 2007.	No trained Extension Officers, in 2006	10 farmers trained as pioneers extension personnel and this is ideal achievement for the set target by the project.
	By-laws are approved and in use by end of 2008	3 villages in Kilombero had draft by-laws, 2005	7 by-laws developed, approved at village and district levels and enforcement is ongoing in Kilosa District.
	3 forest officers are trained on agro forestry techniques and PFM and applying the new skills by end of 2007	3 trained Foresters –Kilosa, 2006 1 trained Forester-Kilombero, 2004	2 Foresters were trained which translate to about 66% target achievement.
Output 4			
Increased supply of fuelwood and improved utilization of fuelwood efficient stoves	Number of households practicing agroforestry increased by 50% by end of 2008.	No baseline in 2006	17 HHs in Kilosa practicing agroforestry. 6 Agroforestry farms demonstration plots established in Kilosa.
	At least 10 tree nurseries established and supply seedlings to communities by end of 2007	3 individual tree nurseries in Kilombero district, 2005; 1 big nursery owned by ILLOVO and 1 by HIMAVIKIRU (CSO)-Kilosa District, 2006	A total of 35 tree nurseries (with an average of more than 800 seedlings) out of which 15 are school nurseries, 1 individual and 19 groups' nurseries.

Project Targets	**Indicators**	**Baseline** (value and time of measurement)	**Progress by the end of the project (Dec. 2008)**
	Number of trees planted and surviving increased to at least 60% by end of 2008	238,328 trees planted in 9 villages in Kilosa District , 2006;	• **2006: (**Kilombero: 6,084, Kilosa: 15,897) • **2007: (**Kilombero: 106,205,Kilosa: 179,116) • **2008: (**Kilombero: 71,224, Kilosa: 96,376) • Avg. survival rate in both districts is 80% • Overall total (2006 to 2008): **474,902 trees**
	Number of households (HHs) using energy saving stoves increased by 50% by end of 2008; (Total households in the target villages is 33,754)	1,298 HHs were using energy saving stoves in Kilombero and 2 HHs in Kilosa by 2005 (3.85%)	10,329 HHs adopted fuel efficient stoves (equivalent to 30.6 %). The district distribution is 6,686 HH in Kilombero and 3,643HH in Kilosa district. This calculate a target achieved of about 61%
	Time used to collect fuelwood reduced by 50% for households with energy saving stoves by end of 2008	7.5 days spent per month per HH for collecting firewood Total of 253,155 days per year spent for 33,754 HHs	10,329 HHs save 11,852.5 days for year, this is equivalent to 15.3% time reduction. For the households adopted technology time has been reduced by 50%
	Amount of fuelwood used by households with energy saving stoves reduced by 50% end 2008.	1,298 HHs adopted the stove in 2005 reduced amount of fuel wood used reduced by 1.9%	10, 329 HHs adopted. This is equivalent to 15.3% reduction. For the households adopted technology time is reduced by 50%

Annex 4(b) Project performance evaluated from stakeholders consultation in both districts

Expected Output by the end of the Project Phase	% ranking by Kilosa respondent groups	% ranking by Kilombero respondent groups
Output 1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration	60	NA
Output 2: Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP	NA	NA
Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.	60	70
Output 4: Increased supply of fuel wood and improved utilization of fuel wood efficient stoves	40	40

***Note that**, NA stands for Not Applicable. Output No. 4 was ranked low because the fuel wood from the planted trees are not yet been used and thus their tangible benefits are not yet reached. Some village land (nine villages)on Kilosa side have been delineated by the villagers to be managed as Village Land Forest Reserves (VLFRs) management plans and subsequent approvals on-going.*

Annex 5. List of Individuals Consulted

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
1	15/4/09	Walter Mgalula	Assistant RAS	RC - Morogoro		+255 23 2600464	rasmorogoro@ralg.co.tz
2		Kilenga Msuya	Land Officer	RC - Morogoro		+255 23 2600464	rasmorogoro@ralg.co.tz
3		Dalson Mateso	Regional Land use Secretariat	RC - Morogoro		+255 23 2600464	rasmorogoro@ralg.co.tz
4	16/4/09	Mpangala Magnus	CDO - Kilosa	Kilosa District		+255784947270	
5		Mwile E.D	Water Officer	Kilosa District		+255784414092	
6		Malisa S.F	DFO - Kilosa	Kilosa District		+255785634404	
7		Mbena G	TP - Kilosa	Kilosa District		+255713757501	
8		Mwakabana A.M	DPLO	Kilosa District		+255784538725	amwakabana@yahoo.com
9		Regis Kalipesa	Legal Officer	Kilosa District		+255786344065	
10		Hosea Kibakaya	Internal Auditor	Kilosa District		+255784726196	
11		Faustin Kakamba	DTO	Kilosa District		+255784657608	bakumbafaustine@yahoo.com
12		Mwasha A.Y	TEO	Kilosa District		+255784623881	
13		Ako Tluway	Ag DT	Kilosa District		+255713480004	
14		Dr Frank Kimoleta	Ag DMO	Kilosa District		+255713480004	
15		Eng. Ndaskot R.R	DE	Kilosa District		+255782331010	
16		Kinduu R.T	DLDO	Kilosa District		+255784866087	
17		Omary Juma	HRO	Kilosa District		+255784602625	
18		Radegunda Ngowi	DCDO	Kilosa District		+255784339389	
19		Lulu Nchiha	DCIS	Kilosa District		+255787272828	
20		Martin Nkumbi	TAEO	Kilosa District		+255786575057	
21		Issa Josephat	Ag DAS	Kilosa District		+255784797342	
22		Alis Mwegole	DEO	Kilosa District		+255787785140	
23		Mkumba Wellia	DSWO	Kilosa District		+255784959979	
24		Eng. H. Salehe	DWE	Kilosa District		+255787282551	
25		Malongo Gugara	DSEC	Kilosa District		+255782761067	
26		Kalimalwewo E.W	DED	Kilosa District		+255784936920	
27		Mh. Mdoe A. H	DC	Kilosa District		+255787888998	

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
28	16/4/09	Emmanuel Libuma	Member VLUM	Ruaha Village			
29		Asia Mtkahaki	Secretary Env. Committee	Kifinga Village			
30		Dhuhura Habibu	Member Env. Committee	Msowero Village		+255 755 853277	
31		Siwazuri Mchimile	Member	Tundu Village			
32		Mwajuma Msemeo	Member Env. Committee	Ruaha Village			
33		Desdelia Isdory	Member Env. Committee	Iwemba Village			
34		Abdallah Magomola	Chairman Env. Committee	Kifinga Village			
35		Beatrice Chaulechi	Member VLUM	Kifinga Village			
36		Ferdinand Mtewele	Secretary VLUM	Kifinga Village			
37		Evarista Kinawile	Secretary VLUM	Msowero Village			
38		Christopher Hembula	Chairman VLUM	Lumango Village			
39		Chaud Gasaha	Secretary Env. Committee	Msowelo Village			
40		Deo Masagati	Member	Tundu Village			
41		Claudi Anthoni	Secretary Env. Committee	Lumango Village			
42		Patrick Mkuyu	Memba	Lumango Village			
43		Medard Lwanda	Member VLUM	Tundu Village			
44		Asha Kondo	Member	Tundu Village			
45		Simon Williamu	Chairman VLUM	Vidunda Village			
46		George Mdesa	Chairman Env. Committee	Tundu Village			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
47		Devota Chanefabo	Member VLUM	Tundu Village			
48		Pili Mlangi	Chairman VLUM	Iwemba Village			
49		Stephano Elias	Member	Msowero Village			
50		Luka Mgwalle	Secretary VLUM	Lumango Village			
51		Keneth Madega	Member	Lumango Village			
52		Atanas Kilumbi	Member	Lumango Village			
53		Tukae Mchimile	Secretary Env. Committee	Tundu Village			
54		Fatuma Muchanga	Member Env. Committee	Iwemba Village			
55		Shaabani Kuziwa	Member	Ruaha Village			
56		Lucy Kiyama	Member	Ruaha Village			
57		Amina Lupanga	Secretary VLUM	Ruaha Village			
58		Neema Ngalapa	Treasurer	Ruaha Village			
59		Eva Abdu	Chairman Env. Committee	Lumango Village			
60		Asha Salufu	Member	Msowero Village			
61		Seleman Kipande	Member	Iwemba Village			
62		Charles Lihamka	Secretary VLUM	Iwemba Village			
63		Waati Ismail	Chairman VLUM	Msowero Village			
64		Rajabu Mshamu	Member VLUM	Msowero Village			
65		Husein Kikungwe	Vice Chairman	Tundu Village			
66		Tamasha Kondo	Member	Iwemba Village			
67		Albin Mkami	VEO	Ruaha Village			
68		Remi Duma	Member	Tundu Village			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
69		Vicent Mnyasenga	Village Chairman	Msowero Village			
70		Tea Matajiri	Member Village Council	Iwemba Village			
71		Kanuti Samato	Village Chairman	Iwemba Village			
72		Leonard Mkuyu	Village Chairman	Lumango Village			
73		Gaspar Ksanga	Village Chairman	Tundu Village			
74		Rashid Kurugutu	VEO	Kifinga Village			
75		Abel Mwangila	Deputy VEO	Tundu Village			
76		Lucian Matimbo	VEO	Msowero Village			
77		Costa Msambala	Member Village Council	Lumango Village			
78		Godwin Willison	MEK	Kidodi Village			
79		Jonas Adam	VEO	Iwemba Village			
80		Uswege Mwanakwetu	Member Village Council	Kifinga Village			
81		Halima Madaku	Member Village Council	Msowero Village			
82		Salum Chana	Member Village Council	Msowero Village			
83		Fatuma Ngapawa	Member Village Council	Iwemba Village			
84		Cleophas Poneja	WEO	Kidodi Village			
85		Condary Luwanda	VEO	Lumango			
86		Magdalema Ritte	Teacher	Lumango			
8788		Christina Simon	Member Village Council	Lumango			
89		Hussein Lumeta	Village Chairman	Ruaha			
90		Mathew	Village	Kifinga			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
		Lyachema	Chairman				
91		Haji Bushtu	Member Village Council	Ruaha			
92		Hubi Ntayi	Member Village Council	Ruaha			
93		Salehe Naganoga	Member Village Council	Iwemba			
94	17/4/09	Paul Banga	Ecological Monitoring Wardern	Udzungwa National Park			
95		Erasmy Kimaryo	Outreach Park Warden	Udzungwa National Park			
96		Arafat Mtui	Project Coordinator	VEME – Udzungwa National Park			
97		Lazaro Loishooki	Park Warden protection	Udzungwa National Park			
98		Rukia Mallya	Conservationist	Udzungwa National Park			
99		Jora Ponjoli	Park Ecologist	Udzungwa National Park			
100	18/4/09	Venance Mapembe	Deputy WEO/MEK	Vidunga Village			
101		Oscar Chaula	Farmer	Vidunga Village			
102		Pankras Nghyudy	Farmer	Vidunga Village			
103		Leonard Mbunga	Chairman Env. Committee	Vidunga Village			
104		Ewardi Mnyamani	Farmer	Vidunga Village			
105		Eleotel Matulo	Member Village Council	Vidunga Village			
106		Eztaki Katwela	Farmer	Chonwe Villlage			
107		Jafeti Raulenty	Farmer	Chonwe Villlage			
108		Fokas Floriani	Farmer	Chonwe Villlage			
109		Peter	Member	Vidunda Village			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
		Mkwanhembo	Village Council				
110		Dafrosa Saka	Secretary VLUM	Vidunda Village			
111		Rufina Gabriel	Member Env. Committee	Vidunda Village			
112	18/4/09	Adriani Chiugwa	VEO	Vidunda Village			
113		Laura Mkumbaye	Member Village Council	Chonwe Villlage			
114		Pantaneo Joakim	Member Village Council	Chonwe Village			
115		Venance Rajabu	Member Village Council	Chonwe Village			
116		Restuta Andreas	Member Env. Committee	Chonmwe Village			
117		Rose Chiweya	Secretary Env. Committee	Chonwe Village			
118		Deograt Gustaku	Farmer	Vidunda Village			
119		Syrvester Kaugala	Farmer	Vidunda Village			
120		Monica Mazachi	Farmer	Vidunda Village			
121		Nsila Damasi	Member Village Council	Chonwe Villlage			
122		Cleofas Mdidimu	Village Chairman	Udung'hu Village			
123		Leonada Madega	Secretary Evn. Committee	Chonwe			
124		Melkiory Mgoda	Chairman Env. Committee	Chonwe			
125		Godfrey Martin	Village Chairman	Vidunda Village			
126		Veridiana Simon	VEO	Udung'hu Village			
127	15/4/09	Clemence B. Lyamba	MP	Mikumi Division			
128		Gweti J. Athanas	Administrative officer	Mikumi Division			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
129		Maryam Naheka	Concillor (VM)	Kidodi -			
130		Abdullatif Kaid	Concillor	Kidodi – Subdivision			
131		William Ngao	Forest Officer	Mikumi Division			
132	15/4/09	Ezekiel Mcharo	Head teacher	Ruaha – A primary school			
133		Ridhiwani Kalage	Env. Teacher	Ruaha – A primary school			
134		Johari Said	Env. Club Teacher	Ruaha – A primary school			
135		Kuruthumu Nyagonge	Env. Club Teacher	Ruaha – A primary school			
135		Mariana Yateri	Env. Club Teacher	Ruaha – A primary school			
136		Mwajabu Killo	Env. Club Teacher	Ruaha – A primary school			
137		Gasper Kasanga	Teacher	Tundu Primary School			
138		Abel Mwagila	Teacher	Tundu Primary School			
139		Juma Pengo	Teacher	Tundu Primary School			
140		Godwin Siame	Teacher	Tundu Primary School			
141		Shemu Mhina	Teacher	Tundu Primary School			
142		Emmanuel Mzavas	Teacher	Tundu Primary School			
143		Alli Mwenda	Forest Officer	Tundu Primary School			
144		William Ngao	Teacher	Tundu Primary School			
145		Albine Mkami	Teacher	Ruaha – A primary school			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
146		Nipaeli Mzava	Chairman	Ruaha			
147		Abuu Kalongwanim	Member Env. Club	Ruaha – A primary school			
148		Dorisi Msole	Member Env. Club	Ruaha – B primary school			
149		Godwuni Tarimo	Member Env. Club	Ruaha – B primary school			
150		Mpega Said	Member Env. Club	Ruaha – B primary school			
151		Befa Mgoha	Member Env. Club	Ruaha – B primary school			
152		John Julias	Member Env. Club	Ruaha – B primary school			
153		Agnes Mkami	Member Env. Club	Ruaha – B primary school			
154		Jenifa Jackson	Member Env. Club	Ruaha – B primary school			
155		Adam Mzava	Member Env. Club	Ruaha – B primary school			
156		Mwajuma Mkidadi	Member Env. Club	Ruaha – B primary school			
157		Maria Wilson	Member Env. Club	Ruaha – B primary school			
158		Jamila Ulimbo	Member Env. Club	Ruaha – B primary school			
159		Sipendeki Isa	Member Env. Club	Ruaha – B primary school			
160		Ruth Fabian	Member Env. Club	Ruaha – A primary School			
161		Asia Kassim	Member Env. Club	Ruaha – A primary School			
162		Zainabu Jafari	Member Env. Club	Ruaha – A primary School			
163		Emma Eliudi	Member Env.	Ruaha – A primary			

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
			Club	School			
164		Felesia Noel	Member Env. Club	Ruaha – A primary School			
165		Zulfa Mhamed	Member Env. Club	Ruaha – A primary School			
166		Sara Fundikila	Member Env. Club	Ruaha – A primary School			
167		Halima Bomani	Member Env. Club	Ruaha – A primary School			
168		Fadhila Omari	Member Env. Club	Ruaha – A primary School			
169		Christina Evarist	Member Env. Club	Ruaha – A primary School			
170		Husna Mlohi	Member Env. Club	Ruaha – A primary School			
171		Farida Samola	Member Env. Club	Ruaha – A primary School			
172		Fatuma Juma	Member Env. Club	Ruaha – A primary School			
173		Ezekieli Mharo	Teacher	Ruaha – A primary School			
174		Ridhiawani Kaleng	Teacher	Ruaha – A primary School			
175		Johari Said	Teacher	Ruaha – A primary School			
176		Kuruthum Nyangiongi	Teacher	Ruaha – A primary School			
177		Mwajabu Killo	Teacher	Ruaha – A primary School			
178	20/4/09	Mbena G P	Agde	Kilombero District	P.0.Box 263 Ifakara	0784 37 07 01	Petergdus2000@Yahoo.Com

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
179		Mabuba Maliki	Coperative	Kilombero District	P.O Box 263	0782 95 09 29	Zmababu@Yahoo.Com
180		Ernest Kyovecho	School Inspector	Kilombero District	P.O Box 253 Ifakara	0783 76 77 95	
181		Aloyce Likali	Ag.DT	Kilombero District	P.O. BOX 263 IFK	0754 42 21 22	Aloyce@Yahoo.Com
182		Mangia T	Ag DEO	Kilombero District	P.O BOX 263 IFK	0755 87 37 17	
183		Sebastian M.Kaoliti	Ag DCDO	Kilombero District	BOX 263 IFK	0784 51 24 68	
184		Germanus Hanga	Ag DCULTO	Kilombero District	BOX 263 IFK	0782 77 44 77	
185		Dominiga Ngaleka	Ag DAPO	Kilombero District	BOX 263 IFK	0782 06 62 95	Dominicateenwen@Yahoo.Com
186		Barazae A Mbaraka	Ag DNRO	Kilombero District		0784 54 39 13/ 0713 88 76 73	Barazae03or@Yahoo .Com
187		Mrs Hawa Lipossi	Ag DAS	Kilombero District	BOX 34 IFK	0784 50 24 10	Mampossi@Yahoo.Com
188		Evance Mlaponi	Ag DMO	Kilombero District	BOX 47 IFK	0789 12 17 88	Evance Mlapoli@Yahoo.Co
189		Chonya Bahati	L O	Kilombero District	BOX 263 IFK	00783 90 01 97	
190		Mr Mpossi Jacob	WBD	Kilombero District		0787 40 80 43	Jmpossi@Hotmail.Com
190		Chaile	I/A	Kilombero District		0713 79 09 99	Simbamwene@Yahoo.Com
191		Ally M Ekkome	Ag.DTO	Kilombero District		0784 45 83 77	Aekome@Yahoo.Com
192		Daniel Kirumbi	Ag.DWE	Kilombero District	BOX 218 IFK	0787 35 90 35	

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
193		Mary G Minja	Agric. Officer	Kilombero District	BOX 45 41 IFK	0784 42 98 40/ 0715 42 98 40	ujingamary@Yahoo.Com
194		Issa Yeo	Technicias	Kilombero District	BOX 218	0785 07 41 64	
195		Balbina Msemwa	Technician	Kilombero District	Box 218	0786 84 84 60	
196		Soma A.W	Technician	Kilombero District	BOX 263 Ifkara	0784 86 07 94	
197		Kunambi Vg	Technician	Kilombero District		0787 05 73 05	
198		Jakson Ngongela	Adminstration	Kilombero District	Box 263	0784 33 06 28	
199		Mrem R	Tresuerer	Kilombero District	Box 623 Ifk	0782 95 2220	
200		Mahenba P Wandiba	Natural Resources Officer	Kilombero District	Box 263 Ikf	0756 91 39 10	
201		David P Ngunga	Livestock Officer	Kilombero District	BOX 263 IFK	0785 04 07 19	
202		Memne M Kinana	Agric. Officer	Kilombero District	BOX 263 IFK	0756 51 45 94	
203		Chales Chal M/Jamii	Community officer	Kilombero District	BOX 263 IFK	0717 23 36 37	
204		Nuru Nguya	CDO 11	Kilombero District	BOX 203 IFK	0787 87 91 23	
205		Plasidia K Fande	SRMA	Kilombero District	BOX 263 IFK	0787 83 75 17	
206		Rehema Mayandika	K/M	Kilombero District	BOX 263 IFK	0784 818151	
207		Maria Kitua	PAOI	Kilombero District	BOX 263 IFK	0787 08 77 25	
208		Christian Mapunda	PS	Kilombero District	Box 263 Ifk	0784 88 20 12	
209		Said I Kijayo	DBO/KDC	Kilombero District	BOX 263 IFK	0784 46 34 25	
210		Matimbwi E. Lukelo	DEMO	Kilombero District	BOX 263	0717 24 05 16	

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
211	20/4/09	Reuben A Mmari	Farmer	Kidatu	BOX 224	0784 98 36 47	
212		Mazimwana Salm	Farmer	Kidatu	BOX 193	0787 270772	
213		Albert Kapengo	Farmer	Kidatu	BOX 40	0787 521065	
214		Shukuru Rashidi	Tree Nursery Manager	Kidatu	BOX 266	0784 72 99 53	
215		Wenceslaus P. Magera	Farmer	Kidatu	BOX 50	0753 099904	
216		Tina Kiyunga	Member Env.Commette	Mang'ula	BOX 1		
217		Hamisi Mchimbi	Member Env.Commette	Mang'ula	BOX 1	0788 33 51 65	
218		Joyce Ndambi	Member Env.Commette	Mang'ula	BOX 54		
219		January Kilumika	Member Env.Commette	Mang'ula	BOX 54	0785 16 82 39	
220		Hamisi Nkrumah	Member Env.Commette	Mang'ula	BOX54	0785 469185	
221		Athumani T Mdb	WEO	Mang'ula	BOX 7	0754 41 06 86	
222		Acley J Mhenga	WEO	Ifakara	BOX 263	0784 50 28 14	
223		Jerome.N.Chuku	WEO	Mang'ula	BOX 11	0789 05 79 51	
224		Abels Masima	WEO	Mkula	BOX8	0784 508475	
225		Issa Kondo	Farmer	Kidatu	BOX 40	0784 56 80 37	
226		Aidan Mbingi	WEO	Ifakara	BOX 263	0784 48 76 02	
227		Alice Libenanga	Division Officer	Mang'ula	BOX 9	0784 45 10 61	
228		Festo Makweta	VEO	Kidatu	BOX 40	0786 19 16 24	
229		Victor J. Ndiva	Division Officer	Kidatu	BOX 34	0783 27 2738	
230		Adinawi.H. Kindende	WEO	Mang'ula	BOX 7	0786 00 97 78	

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
231		Tabia Kawinga	Farmer	Kidatu	BOX 40	0786 105071	
232		Angel Bilali	Farmer		BOX 7	0786 1954 56	
233		Heltha Mamboleo	Farmer		BOX 7	0757 00 31 91	
234		Faraji Mayota	VEO		BOX 7	0785 044478	
235		Abdalah Kulalata	Chairman	Kidatu	BOX 40	0786 15 48 77	
236		Hawa J Ndachuwa	WEO		BOX58	0783 20 65 13	
237	21/4/09	Shukrani Chidoli	Safety, Health and Env. Manager	Kilombero Sugar Company	P.O.BOX 50 Kidatu	0784410778	
238		Fred Kayega	Risk Control Manager	Kilombero Sugar Company	P.O.BOX 50 Kidatu	0784747055	
239		Siama Songambele	Agric. Technical Service Manager	Kilombero Sugar Company	P.O.BOX 50 Kidatu	0784386383	
240	17/4/09	Eng. Nazir Kachamba	Plant Manager	TANESCO	P.O.BOX 186 Kidatu	Tel 0232626130 Fax 0232626270	Nazir.kachwamba@tanesco.co.tz
241		Eng Lyaluu	Plant Engineer	TANESCO	P.O.BOX 186 Kidatu	Tel 0232626130 Fax 0232626270	
242		Richart Mwachumu	Security Manager	TANESCO	P.O.BOX 186 Kidatu	Tel 0232626130 Fax 0232626270	
243	22/4/09	Gerald Mango	Director General	National Land Use Planning Commision	P.O.BOX 76550 DSM	Tel: +255222115573 Fax : +255222128057	dgnlupc@ardhi.go.tz mango@ardhi.go.tz
244		Ms. Catherine	Director	Village Land Planning	P.O.BOX 76550	Tel: +255222115573	

Nr.	Date:	Name (First, LAST):	Position:	Organization/Village	Address	Telephone/Fax	Email:
					DSM	Fax : +255222128057	
245		Joseph Kigula	PFM - Officer	Forest and Bee keeping	DSM		
246		Stephen Mariki	Ag. Country Representative	WWF - Tanzania			smariki@wwftz.org
247		Amos Mugisha	Finance Manager	WWF Tanzania	P.O.BOX 108566 DSM	Tel: +255222775346 Fax: +255222775535	amugisha@wwftz.org
248		Proches Hieronimo	Ag. Project Coordinator	WWF- Udzungwa project			pheronimo@wwftz.org

Annex 6. Tentative Timetable

Date	Time	Venue	Purpose	Activity	Responsibility
Tues: 14th April, 2009	am	TPO offices Dar	Reviewers acquainted with the project	The Project Team briefs the Reviewers and provide copies of relevant reports to the Review Team	Proches and Review Team
	pm		Review of the programme and Evaluation instruments and discuss logistics	Meeting with Review Team	Proches and Review Team
Wed: 15th April 2009	6.00-8.30 a.m	Travel to Morogoro – Mang'ula			
	9.00-11.00	Morogoro RC's Office	Consultations with Morogoro RC on the project performance, impacts and lessons learnt particularly on the issue of	Meeting with RC and relevant Technical staff	Proches and Review Team

Date	Time	Venue	Purpose	Activity	Responsibility
			alternative land allocation		
	15.00-17.00	Kidodi	Consultations with the Member of Parliament (MP), Divisional Secretary and Councillors on the project performance, impacts and lessons learnt	Meeting with Mikumi MP, Councillors and Division Secretary	Proches and Review Team
	17.30	Drive to Mang'ula with some stop-overs for observation of activities	Get a glimpse on the project's impact while heading to Mang'ula	Mang'ula-Udzungwa View Hotel	Proches and Review Team
	20.00	Udzungwa View Hotel	Reflection	Discussion over the dinner	Proches and Review Team
Thurs 16th April 2009	7.30am			Drive to Kilosa	Proches and Review Team
	9.00 am-12.00 noon	Kilosa, DC's Office	Discussions with the Kilosa district on the project performance, management structures, success and impacts of the project including lessons learnt. Acquire district ideas on the sustainability of the established activities and future plans/interventions particularly on issues related to land use plans development and implementation and alternative land allocation	Meeting with Kilosa DC, DED, DNRLO, PLUM and other technical staff	Proches and Review Team
	12.30-17.00	Kidodi	Assess activities implemented by the project (school greening, VFR, tree planting, woodlots, and fuel efficient stoves) to see if they are making any significant impact.	Field visit	Proches and Review Team Division Forester, Village leaders, Teachers, school clubs

Date	Time	Venue	Purpose	Activity	Responsibility
	19.00	Udzungwa View Hotel	Reflection	Meeting/discussion	Proches and Review Team
Friday: 17th April 2009	8.30- 11.30	Kidodi	Meeting with Village leaders on the success, problems and impacts of the project including lessons learnt	Meeting with village leaders (Village govts., VLUM, VNRCs, Councillors, Division Secretary, Division Forester, Ward Education Officers,	Proches and Review Team, Division Forester, Respective Village leaders
	13.30-15.00	TANESCO-Kidatu	Consultations with TANESCO on the project performance and impacts and assess their contribution on conservation activities.	Meeting with General Manager and key staff	Proches and Review Team
	18.00-20.00	Udzungwa View Hotel	Discussions on the deadwood collection from the park and strategies set by the park to address the problem	Meeting with Park Management and Researchers	Proches and Review Team, Chief Park Warden and heads of departments
Sat: 18th April 2009	8.30am-11.00	Vidunda	Meeting with Village leaders on the success and impacts of the project including lessons learnt	Meeting with village leaders (Village govts., VLUM, VNRCs, Councillors, Division Secretary, Division Forester, Ward Education Officers,	Proches and Review Team Division Forester, Divisional Secretary, WE and Village leaders
	12.30-17.00	Vidunda	Assess activities implemented by the project (VFR, Fish farming, school greening, woodlots, tree planting, and fuel efficient stoves) to see if they are making any significant impact.	Field visit	Proches and Review Team Division Forester, Divisional Secretary, WE and Village leaders
Sun 19th April 2009		Travel to Kilombero	Review of some important reports, reflection and report structuring	Discussion and preliminary analyses	Proches and Review Team
Mon. 20th April 2009	08.30 - 10.00am	Kilombero DC's office	Discuss the District's preparations in addressing the problem of the sources of fuelwood for 20	Visit the Kilombero District Office and hold a discussion with DC, DED	Proches and Review Team, Divisional Forester, Chief Park Warden, DED,

Date	Time	Venue	Purpose	Activity	Responsibility
			villages when the park is closed in 2011 and their role in facilitating farmers allocated alternative land at Mkangawalo and Mchombe villages	and other Technical Staff	DNRLO, DFO, DCFO, UMNP Chief Park Warden, Outreach Warden, Division Ecologists, Secretary, Ward Leaders
	10.00-17.00	Sakamaganga-Mang'ula	Assess project activities implemented (tree planting, fuel efficient stove, and bio-gas) to see how they contribute in reducing pressure to the park resources.	Visit Community activities (Tree nurseries, biogas, fuel efficient stove etc).	Project Team/Reviewers, Divisional Forester, Chief Park Warden, DED, DNRLO, DFO, DCFO, UMNP Chief Park Warden, Outreach Warden, Division Ecologists, Secretary, Ward Leaders
Tues 21st April	8.30-9.30a.m	ILLOVO	Discuss with Illovo on their contribution and plans on the conservation of the Udzungwa	Meeting with Illovo GM and senior staff	Proches and Review Team, Illovo GM and key staff,
	9.30 – 13.00		Travel to Dar		
	15.00	WWF-TPO	Discuss with TPO on general project management and finance issues	Meeting with WWF-TPO Management	Proches and Review Team, Ag CR, Finance Manager, HR Manager
Wed. 22nd April, 2009	9.00 -10.00am	National Land Use Planning Commission	Discussions with the Director on land policy and legislative issues particularly the Village Land Act no. 5 1999, National Land Use Planning Act, 2007 and if the project is making any contribution,	Meeting with the NLUPC-Director	Proches and Review Team, NLC-Director
	11.00am-12.00noon	Forestry and Beekeeping Division	Discussions with the Director of FBD on the project's contribution to the Forestry and Beekeeping Policy and Legislation including PFM	Meeting with the FBD Director	Proches and Review Team
	14.00-17.00	WWF-TPO	Recap/Reflection and winding up	Discussion	Proches and Review Team

Date	Time	Venue	Purpose	Activity	Responsibility
23rd 29th April 2009			Report production	Reviewers to write the report	Review Team
30th April		Through e-mail or otherwise	Draft report received	Draft report submission	Review Team
06th May		Through e-mail	All comments received by consultants	Comments submission	Client staff
11th May		Through email	All comments incorporated	Final report preparation	Consultant Team
13th May 2009		WWF-TPO		Final report submission	Lead Consultant

Annex 7. List of Document Consulted

Aloyce Z.M. (2006). Training report on fuel efficient stove, Kidodi and Vidunda, Kilosa District, Tanzania. World Wide Fund for Nature Tanzania Programme Office.

Aloyce Z.M. (2006). Training workshop report on agroforestry and soil conservation, kidodi ward, Kilosa District, Tanzania. World Wide Fund For Nature Tanzania Programme Office.

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FAO (1989). *Guidelines for Land Use Planning. Food and Agriculture Organisation of the United Nation*, Rome. 154 pp.

Hijweege, W.L. (ed.) 2008 Emergent practice of Adaptive Collaborative Management in natural resources management in Southern and eastern Africa: Eight case studies. 66pp.

Harrison, Paul. (2006). Socio-Economic Baseline Survey of Villages Adjacent to the Vidunda Catchment Area, Bordering Udzungwa Mountains National Park. Incorporating a Socio-Economic Monitoring Plan for 29 Villages North and East of the Udzungwa Mountains National Park. World Wide Fund For Nature Tanzania Programme Office with support from WWF Norway and NORAD. 63pp.

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Annex 8. Questionnaire / Interview Guide

WWF-TPO: Improving Natural Resources Use on the Eastern Side of Udzungwa Mountains National Park (UMNP), Tanzania

Terminal Evaluation

INTERVIEW GUIDE /QUESTIONNAIRE

You have been selected as a key source for input for the end of project evaluation of the WWF-EUMNP Project covering the period 2006 to December 2008. The review focuses on the following aspects of the project:

Objectives of the evaluation

a) To assess Project relevance to national and international priorities and overall performance against the Project objective and outcomes as set out in the Project Document.
b) To assess the effectiveness and efficiency of the Project.
c) To analyze the implementation and management arrangements of the Project.
d) To assess the sustainability of the project's interventions.
e) To identify and document lessons learnt including the design, implementation and management.
f) To assess changes in the baseline situation (impacts) or processes towards generating impacts and provide guidance for future intervention/exit.

The review is being carried out by WEMA Consult (T) Ltd of Dar es Salaam, Tanzania

The purpose of this questionnaire guide is to provide quantitative and qualitative data to the evaluation. There are 19 questions concerning the programme being evaluated. We hope to get your response in person or by telephone or by email communications. We would appreciate to receive all the responses before the 22nd **of April 2009**.

All the interviews and questionnaires will be treated in the strictest confidence. They will not be passed to anyone. Information will be aggregated by stakeholder group, synthesized and presented in a report to WWF. If direct citations are used, the identity of the respondent will be kept anonymous.

Your views are extremely valuable for this exercise. We realize that your time is precious, and we thank you very much for your input to the review.

IDENTIFICATION	
Your Name (First LAST):	
Position:	
Organization:	
Address:	
Telephone:	
Email:	
Date:	
Please briefly describe your relation to WWF Eastern Side Udzungwa Mountain National Park Project, and which aspects of the project you are most familiar with:	

Interviewed by: _____

PLEASE SUMMARIZE YOUR VIEWS ON THE FOLLOWING BROAD STATEMENTS BY TICKING THE APPROPRIATE BOX, AND THEN EXPLAIN.
TICK ONLY ONE BOX FOR EACH QUESTION

CURRENT PROGRAMME

Most Significant Change

1. Thinking about all the effects of the project "Improving Natural Resources use on the Eastern side of Udzungwa Mountains National Park" has had to date, what in your opinion, has been the most significant change of all?
   - effects to the environment
   - effects on peoples/community livelihoods
   - effects on capacity building etc.

2. How does this change contribute to the main goal of the project, *which is to conserve the integrity of the Udzungwa Mountain Catchment so that it continues to provide vital sustainable goods and services at local, national and international levels*?

Quality and relevance of project design

3. The project responds to priority issues of integrated natural resource management in the Eastern side of Udzungwa Mountains National Park

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain in relation to the following aspects

- participatory planning and decision making
- awareness creation
- catchment management tools
- Natural resources demand management
- Policies and legal framework
- Institutional capacity

4. (a)The project clearly define the roles of different stakeholders in its implementation plans

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

(b) The stakeholders believe the project is relevant to national and international priorities

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

5. The goals, objectives and strategies of the programme are valid (appropriateness as compared to cost-effective alternatives)

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain in relation to the programme objectives and activities

Efficiency in project planning and implementation

6. The project ensures quality and timeliness of inputs during its implementation

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

7. In terms of efficiency and effectiveness of the activities carried out, the project has achieved its indented results/or has been successful

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

8. The project engaged a proper and well defined monitoring and backstopping by stakeholders

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

Project outputs and impact

9. The project is achieving all the indented outputs successful

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

Output 1: Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration.

Output 2: Pilot feasibility study to investigate the options for payment of environmental services is carried out and completed in UMNP.

Output 3: Land use practices compatible with catchment forest protection, management and restoration in Vidunda, Kidatu, Mkula, Kisawasawa, Mang'ula, Sanje and Kiberege Wards on the eastern side of UMNP improved.

Output 4: Increased supply of fuelwood and improved utilization of fuelwood efficient stoves.

10 Implementation of the project has been inclusive of relevant stakeholders and created the necessary collaboration between stakeholders

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain

11. Based on the 2 years of its operation, the project has shown signs that it will contribute to long-term positive effects for people and nature or environment

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain
- what are the indications that the programme contribute to long-term positive effects
- what are the indication of negative effects
- link with wider national parks or protected areas conservation Programmes

Lessons learnt /Effectiveness and failures/

12. In terms of promoting good practices for natural resources conservation in the UMNP the project is achieving its intended results.

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain in relation to the following aspects
- Good participation
- Harmonized activities/integrated approach in executing the activities
- Development of natural resource management tools and guidelines

13. In terms of improving <u>political and legislative process</u>, the project is achieving its intended results

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain the in relation to the following issues

- Adherence to national policies and strategies
- engagement with decision making or legislators
- contributing to policy changes/legislation or by-laws

14. In terms of influencing stakeholders, the programme is achieving its intended results

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Specify which categories of stakeholders and what kind and level of influence

15. In terms of enhancing capacity building, the programme is achieving its intended results.

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain the significance and strategic importance of the results related to capacity building:

- Awareness creation (exchange visits, training etc.)
- Dissemination of information (brochures, calendars, website)
- Development of information/resource centre(s) etc)

16. Communications efforts have had a positive impact on target groups.

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain, noting to which target groups you are referring (any communication strategy):

- strategy that includes indicators for monitoring effectiveness and impacts

17. Apart from successes, there are challenges, strengths, weaknesses and opportunities, failures and strong lessons learnt from the programme.

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain:

<u>Challenges</u>

Strengths

Weaknesses and opportunities

Project sustainability

18. Can the benefits of project activities continue, within or outside the project area in terms of actions initiated during the project implementation?

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain, noting to which aspects of the programme you are referring, eg:

- formation of Natural resource user groups
- alternative to natural resource based livelihoods
- partnership,
- stakeholder participation
- capacity of the districts, regional authorities and other partners to upscale and support the land use planning and implementation in the remaining villages

Future project plan

19. Based on the project performance and impacts to date, areas of focus, key issues to be addressed, key stakeholders to be involved, the approaches and strategies to be employed can be recommended for future project plan:

Don't know	Strongly disagree	Disagree	Neutral or Mixed Opinion	Agree	Strongly agree

Please explain the key strategic option in relation to:

- Areas of focus,
- Key issues to be addressed,
- Key stakeholders to be involved,
- Approaches and strategies to be employed,

Is there anything else you would like to tell us? (**Bear in mind the land use planning component)**

Thank you very much for your cooperation

Annex 9. Land use planning processes and implementation of the developed plans (lessons learnt and follow up interventions)

9.1 Introduction

In Tanzania, the Village Land Act no. 5 of 1999 and the Land Use Act no. 6 of 2007 (section 22) both empowers the village councils through their village assemblies to prepare, approve and implement village land use plans in their areas of jurisdiction. Land use plans help to reduce land use conflicts, promote wise use of land resource, enhance sustainable natural resource management and utilization and securing tenure of various land resources within the village land. At the national level, land use plan contributes in achieving socio-economic development and conservation goals.

The implementation of Village Land Act, 1999 must take care that various types of land uses such as forests in village land can obtain certificate of customary right of occupancies to secure its tenure. Other land uses such as joint forests, water sources, grazing areas and many others are capable of obtaining customary titles for securing those land uses. The securing of tenure of those land resources can not be done without carrying out participatory village land use planning and agreements being reached between stakeholders. Otherwise without village land use plans, the certificate of customary right of occupancies offered to individuals are temporary titles which will be revoked after village land use planning due to changes in land uses. Villages should have land use plans to define, secure such land uses and scientifically manage village land

WWF's facilitation in development and implementation of land use plans on the eastern side of Udzungwa Mountains National Park is delivering project outputs 2 and 3:

(a) ***Output 2:*** *Degradation of Vidunda water catchment adjacent to the UMNP reduced through catchment forest protection, management and restoration*

(b) ***Output 3:*** *Land use practices compatible with catchment forest protection, management and restoration in Vidunda.*

9.2 Land use plans development steps

According to the Village Land Act, 1999; The National Land Use Planning Act, 2007 and The Guidelines for Participatory Village Land Use Management in Tanzania, 1998*;* land use planning and implementation process has to follow six main steps:

Step 1: Preparations - PLUM formation and introduction of the Project purposes to District officials:

This step includes formation and strengthening the District Participatory Land Use Management Team (PLUM) and preparation of the action plan for

participatory land use management implementation in targeted villages. PLUM is a multidisciplinary team (8 people) with staff e lands, natural resources, agriculture and livestock, community development, planning and water resources.

Step 2: Participatory Rural Appraisal for Participatory land use management.

- Meetings with the village council and the village assembly, elaboration on the duties and responsibilities of villagers over their land, management of natural resources agreement on the action plan prepared at the district, selection and approval of Village Land Use Management (VLUM) committee.
- Reconnaissance (general survey),
- Participatory Rural Appraisal,
- Problem identification, opportunities, priority setting
- Preparation of village action plan.

Step 3: Supplementary surveys:

- Identification and mapping of village boundaries
- Identification of major land uses i.e. agriculture, grazing, residential, forests, wildlife (public vs. private ownership)
- Preparation of a base map
- Soil survey (land classes, soil texture, erosion, soil suitability, land suitability and capability)

Step 4: Participatory village land use planning and administration

- Demarcation, mapping and registration of Public land, reserved land
- Organise meetings with Village Council and sub village authority
- Agree on broad zoning for land uses and community facilities
- Negotiate tenure rights between individuals and the community
- Involve stakeholders in actual planning
- Draft and finalise village land use plan and Creating bye-laws
- Present draft land use plan to stakeholders for discussion and approval at Village General Assembly
- Establish institutions for evaluation and monitoring
- Submit land use plans to district and ministry of lands, housing and human settlements developments for endorsement
- Gazzetment

Step 5: Implementation

After what has been done in the previous steps the multidisciplinary team integration will guide the implementation activities according to the agreed measures and schedule. Major activities for implementation depend on the results of the problems identified. Examples of problems can be land use conflicts, loss of soil fertility, deforestation, soil erosion, low yields, etc. all these will call for different measures like conflicts resolution, better farming practices, afforestation, etc.

Approvals of Land Use Plans by-Laws

Land use planning by-laws have to be approved by respective authorities at village and district levels for enforcement for all developed land use plans.

Step 6: Consolidation

- Assessment of impact of PLUM process in the village
- Assessment of capacity of villagers and their institutions to continue independently
- Preparing villagers to continue with PLUM more independently
- Ensuring good communication between villages and districts institutions regarding land use management after PLUM team presence in the village.

Securing Land Tenure:

- Issuing of certificate of village land to planned villages
- Constructing permanent village offices with village land registries;
- Awareness creation for Community to secure Certificate of Customary Right of Occupancies;
- Issuance of Certificate of Customary Right of Occupancies to individual villagers.

9.3 Land Use Planning Process in Kidodi and Vidunda villages, Kilosa District

During the period of 2006 - 2008, WWF has being supporting Land Use Planning activities in various villages in the project area. To date seven villages (Ruaha, Kifinga, Tundu, Msowero, Lumango, Iwemba and Vidunda) in Kidodi and Vidunda Wards have managed to develop and approve their Land use plans and By-laws (Table 9.2 and Figure 9.1). The plans have been approved in all levels and now are useful tools in natural resources management and conservation of the Vidunda Mountains which are the major source of water for the local communities besides their global biological importance. The development of these village land use plans followed all steps as stated in section 9.2 above. Currently, the development and implementation of these land use plans are at step no. 6. However some of the step 6 activities and Gazzetment have not yet being accomplished and these include the followings. The complete status of each village before the start of the project and at the end of the project is as shown on Tables 9.1 and 9.2 respectively.

- Issuing of certificate of village land to planned villages
- Constructing permanent village offices with village land registries;
- Awareness creation for Community to secure Certificate of Customary Right of Occupancies;
- Issuance of Certificate of Customary Right of Occupancies to individual villagers.

In the course of the land use planning of the seven villages ((Ruaha, Kifinga, Tundu, Msowero, Lumango, Iwemba and Vidunda), a total of about 9,860ha equivalent to 60.9% of total village lands in seven villages have been set aside as Village Forest Reserves and Community Forests (table 9.1). This new land use resulted into some villagers getting their land parcels they used for food crops cultivation being changed into forestry use (i.e located in Village Forest Reserves and Community Forests).

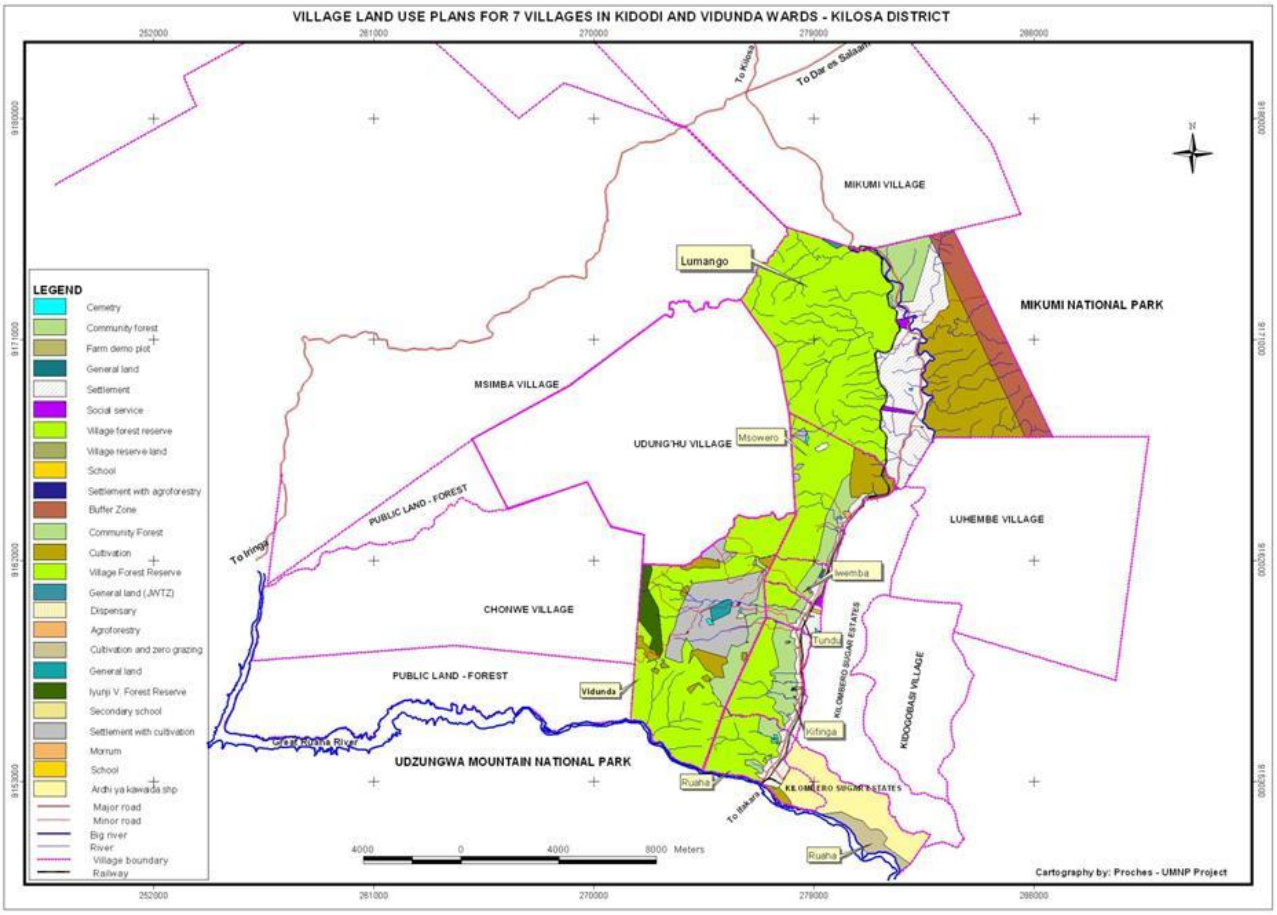

Figure 9.1: Mosaic of Land use plans for 7 villages in Kidodi Ward

Table 9.1: Overview of the area of various land uses as defined in the various villages by 2006.

Village	Total village area (ha)	Settlement (ha)	Cultivation (lowland & upland) (ha)	Woodland (ha)	Woodland with cultivation (ha)	Buffer Zone (ha)	Forest (ha)	Cultivation with Settlement (ha)	Woodland, bush with grassland (ha)	Woodland, bush, grassland with scattered cultivation (ha)	Other uses (ha)
Iwemba	326	94	0	16	0	n/a	0	0	188	18	10
Kifinga	1,014	187	68	105	184	n/a	0	0	470	0	0
Lumango	8,011	0	0	3,816		920		1,134	2,130	0	11
Msowero	1,589	97	322	230	0	n/a	0	282	651	0	7
Ruaha	1,020	162	403	0	0	n/a	0	0	219	233	4
Tundu	330	88	51	142	0	n/a	0	0	48	0	0
Vidunda	3,881	0	1,063	1,169	0	n/a	191	560	0	847	51
Sum	**16,171**	**628**	**1,907**	**5,478**	**184**	**920**	**191**	**1,976**	**3,706**	**1,098**	**83**

Table 9.2: Overview of status of village land use planning in the seven villages covered in 2006–2008.

Village, Ward	Area (km^2)	Demarcated, surveyed	Awareness raised	VLUM formed	Land use plan and by-laws[5]	Implementation of plans	Involvement in Land re-allocation process	Village Land Certificate	Individual Customary Title Deeds	Gazzetted
Iwemba Village, Kidodi Ward	3.26	YES	YES	YES	YES	YES	NO	NO	NO	NO
Kifinga Village, Kidodi Ward	10.14	YES	YES	YES	YES	YES	YES	NO	NO	NO
Lumango Village, Kidodi Ward	80.11	YES	YES	YES	YES	QUESTIONABLE	NO	NO	NO	NO
Msowero Village, Kidodi Ward	15.89	YES	YES	YES	YES	QUESTIONABLE	NO	NO	NO	NO
Ruaha Village, Kidodi Ward	10.20	YES	YES	YES	YES	YES	YES	NO	NO	NO
Tundu, Village, Kidodi Ward	3.30	YES	YES	YES	YES	YES	YES	NO	NO	NO
Vidunda Village, Vidunda Ward	38.81	YES	YES	YES	YES	QUESTIONABLE	NO	NO	NO	NO

[5] Approved at all levels.

9.3 Implementation of land use plans

The implementation of these land use plans went along with awareness creation and enforcement of land use plans by-laws. According to the Land Use Planning Act, 2007, the Village Council as a Planning authority is responsible to ensure that every villager comply with the approved land use plan. Regardless of the existing land ownership arrangements, the land owners have to use their land parcels according to the approved land use plan in his/her respective village. However, as stated by FAO (1993), the need for changes in land use must be accepted by the people involved (participatory), and there must be the political will to put the plan into effect. Fortunately, the implementations of these developed lands use plans, facilitated by the Project, were highly supported by both political and functional officers at ward, district and regional levels, although some resistance were observed due to conflict of interest among Community members and poor technical advice initially provided by district land valuar and inadequate time to facilitate the implementation process. The implementation of the land use plans in the seven villages involved identification of alternative agricultural land which was one of the proposed activities within the Community Action Plans (Community Action Plans is a part of a Village Land use plans) and subsequently part of WWF new activity to facilitate the process.

Along with land reallocation exercise more awareness on how to implement land use plans was undertaken. In collaborating with District Councils and village governments, District Land Use Management Team (PLUM) and representative from National Land Use Planning Commission held meetings with village leaders and land users for the purpose of interpreting the land management plans, by-laws and regulations for the seven developed land use plans. During the training problems related to implementation of land use plans were identified by participants and action plans developed to address them.

Due to those efforts, implementation of respective by-laws has been taking place. For example 5 people in Kifinga and 1 people in Tundu villages have been punished for charcoal making activities within village forest reserves and community forests. Each person was fined between 20,000.00 to 50,000.00 Tshs. as per existing by-laws. In Ruaha village two saw mills were confiscated and the convicts run away. Also, in Lumango village 10 people have been taken to primary court for allegations of conducting illegal activities (charcoal burning and cultivation) within village forest reserves and community forests.

9.4 Land Re-allocation Process

Land re-allocation process was one of the strategies to facilitate implementation of the developed village land use plans. It was clearly stated in the Community Action Plans in respective village land use plans (section 9.2), that the problems of degradation of Vidunda catchment was due to land scarcity and therefore villagers with land parcels on the hills have to be allocated alternative agricultural land outside their villages. The process did not mean to involve resettlement of people but just helping them to have alternative cultivation land which they would be cultivating from their current homes situated in their same villages and ward (i.e Kidodi ward, Kilosa district). It is not unusual for communities around the project area to have/hire agricultural land located far away from their homes. Being the custodian of all the villages, the Kilosa District Council spearheaded this process as it was observed to be a viable approach in facilitating villagers to cope with the agreed land uses in their respective villages.

As it was demand driven and some farmers volunteered to relinquish their farmland to be provided with alternative agricultural land elsewhere, WWF committed some funds in 2007 to facilitate this process. Allocation of alternative land has helped in rescuing the Vidunda Catchment, particularly the area adjacent to Kidatu Dam which was highly degraded. The process has also helped to address the conflict existed between the village governments and land parcels owners as some of them wanted to continue using parts of areas set aside as Village Forest Reserves if their village governments were not going to provide them with alternative lands.

Due to inadequate funds to facilitate this process, the Kilosa District Council and village governments asked for support from WWF-TPO. In exploring new lands, the project facilitated Ruaha, Kifinga and Tundu village leaders to go to the nearby villages in Kilombero and Kilosa districts to ask for farmlands for their villagers. Through this process, a total of 900 acres were secured in Kilombero District (800 acres in Mkangawalo village and 100 acres in Mchombe village). Owning farms away from residential areas is a common culture for Kidodi people and that is why the village leaders decided to acquire that land in Mchombe and Mkanagawalo villages, 150kms away from Kilosa district. The summary of the entire land reallocation process in the villages where it has taken place, showing how it came about and how it was undertaken is presented in flow chart below (Figure 9.2). However, as it is with land reallocation processes several challenges and issues cropped up during the process (section 9.6, below).

The main objective of facilitating land allocation by WWF was to restore the degraded cathment forests of Vidunda so that they continue to provide the required service for livelihoods of local communities and social economic development of the country. The immediate objective was to facilitate Ruaha, Kifinga and Tundu villagers implement their land use plans through allocation of alternative agricultural land to enable them cope with land use changes in their respect villages.

Specific objectives include:

- Facilitate acquisition of alternative farmlands to support livelihoods of farmers relinquished their land for conservation purpose.
- Facilitate creation of platforms for the Kilombero, Kilosa districts and village governments to hold discussions and negotiations with farmers accepted to be provided with alternative land including signing of agreements.
- Facilitate allocation of farmlands (4 acres each) to the farmers accepted to be provided with alternative land in Mkangawalo and Mchombe villages, Kilombero district; (the first group had a list of 172 farmers).
- Support the farmers with initial farms preparation including ploughing, harrowing and broadcasting of rice in their 4 cares plots.
- Facilitate monitoring and evaluation of the allocation process.

In support of the community move to establish alternative farm land somewhere else, WWF – TPO honoured the Kilosa District Council request of financial support amounting to Tshs. 58,269,500.00 (Tanzanian Shillings Fifty Eight Million Two Hundred Sixty Nine Thousand Five Hundred). In leveraging resources and sustaining the programme, the Kilosa District Council also contributed Tshs 12,265,818.00 from its own budget for Monitoring and evaluation.

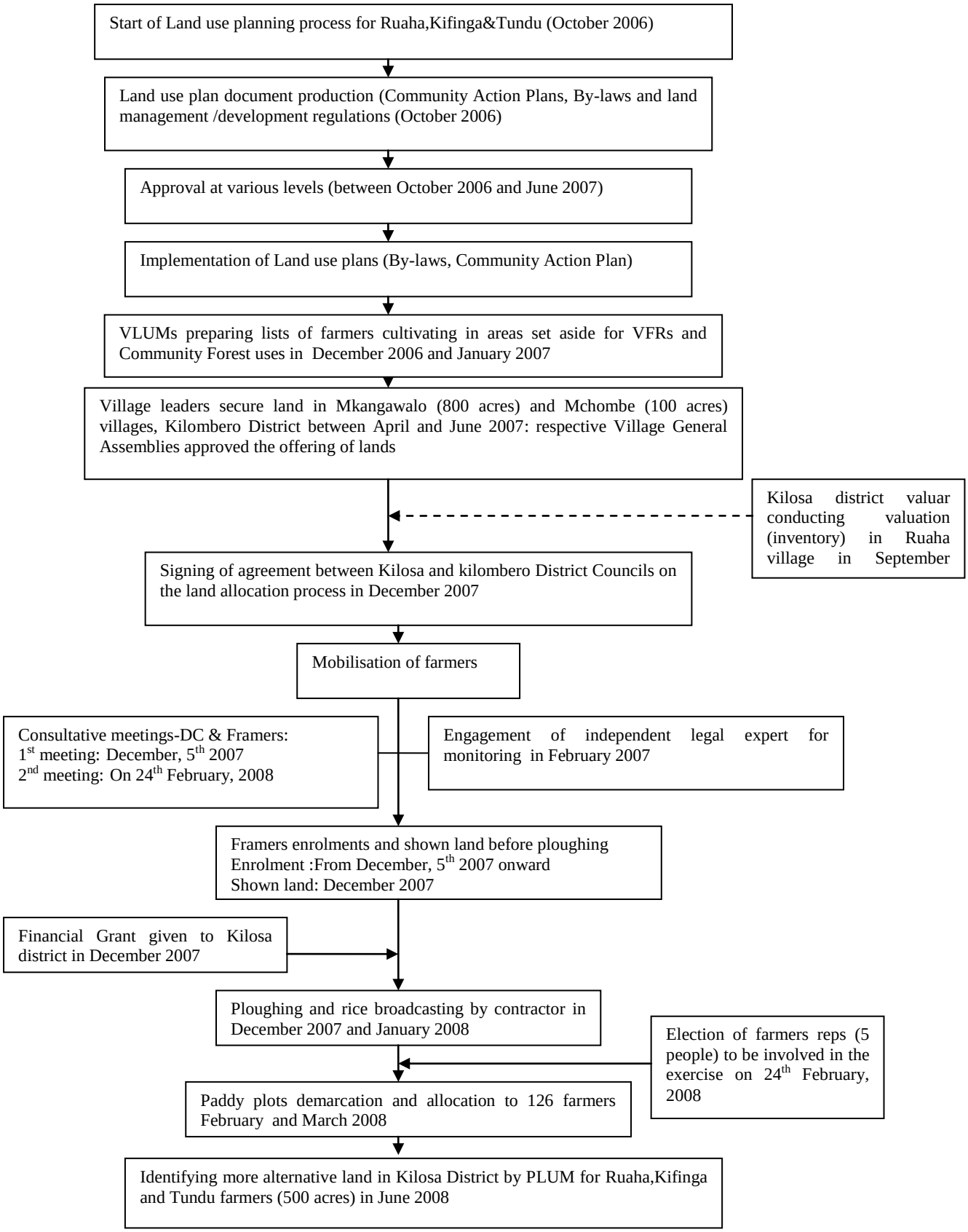

Figure 9.2: Summary of steps followed in land use planning and land re-allocation

The details of the process of facilitating the allocation of farm plots to the farmers are as follows:

Step 1: Signing of an agreement between the Kilosa and Kilombero Districts

Since the acquired land in Mkangawalo and Mchombe is under the jurisdictions of the Kilombero district, on 21st December, 2007, the two districts signed an agreement on how they will collaborate in facilitating the process and eventually handing over the whole responsibility to the Kilombero district.

Step 2: Consultative meetings conducted by the Kilosa District Commissioner and Farmers

Two meetings were conducted between the Kilosa District Commissioner and farmers of the respective areas. Several issues were discussed and deliberations were made in each meeting as discussed below:

The first meeting was conducted in December, 5th 2007 at Ruaha Social Center. The meeting was chaired by the Hon. Athuman Mdowe, the Kilosa District Commissioner (DC) and attended by 113 farmers, Mikumi Member of Parliament, the District Agricultural Development Officer (DALDO), representatives of the District Participatory Land Use Plan Team (PLUM) and village leaders from Ruaha, Kifinga and Tundu. The objective of the meeting was to clear out the confusion and misunderstanding caused by the District Lawyer and the Valuer. The District Commissioner apologised for the misinformation and requested farmers to accept what has been offered to them by the district with support of WWF. He said that according to the Village Land Act no. 5, of 1999, the villages are fully responsible to implement their land use plan and by-laws once they are approved and no compensation has to be made. WWF and the district are supporting this just to help the affected farmers to sustain their livelihoods. He therefore asked farmers who were ready to be allocated with alternative land in Mkangawalo and Mchombe to register their names to their respective village leaders. Immediately after the meeting a total of 169 farmers registered their names ready to be allocated with alternative land. While closing the meeting, the DC informed people that he will struggle and try his level best to source funds from various sources so that the farmers are supported with initial farm preparation.
The second meeting was held on 24th February, 2007. This meeting was to discuss the progress on funds secured from WWF for initial farm preparation, mode of distributing 528 acres of paddy farms and allocation logistics. The meeting was attended by 168 farmers, leaders from Ruaha, Kifinga and Tundu villages, District Agricultural Development Officer, 3 representatives of PLUM team, Kidodi Councillor, Ward Executive Officer, Mikumi Divisional Secretary and the Member of Parliament. The meeting resolved the following:

- Due to the short period of farm preparation, the meeting resolved that each farmer should be given 3 acres of paddy this season and 1 acre in the next season.
- Farmers elected five representatives to be involved in the allocation process.
- Land allocation exercise has to be done within two weeks time to enable farmers start attending their farms.
- Drainage systems and other infrastructures such as culverts water wells for drinking

water and storage facilities need to be considered for viability and sustainability of this exercise.
- Accepted farmers should sign agreements with their village governments.

Step 3: Plots demarcation and allocation process

Due to time and financial constraint to farm all 900 acres in that season, the District decided that the Mkangawalo land (800 acres) has to be allocated first. In order to adopt block farming system, the 800 acres were divided into 8 blocks namely Block R1, R2, R3, R4, R5, R6, and R7and R8. Block farming system is part of the Government's plan to improve food security in the country and the slogan is "*Fanya Morogoro kuwa Ghala la chakula la Taifa*" FAMOGATA) - means Morogoro region is a Nations' granary.

Some farm plots equivalent to 588 acres in these 8 blocks were ploughed and broadcasted with rice seeds for the farmers to have a good seedbed even for the next farming season which they would do it by themselves.

Demarcation and survey of 172 paddy plots each with 3 acres size was done by the District Surveyor together with 5 representatives of farmers elected by the farmers themselves at the second meeting held on 24th February, 2008. The Kilombero District Agricultural Officer (DALDO), Mchombe Division and Mkangawalo village Extension Officers were also involved in the exercise. This was done in order to enhance ownership of this farmland allocation process. Materials and equipment used in this exercise were pegs, measuring steel tape, sisal ropes, and a set of survey equipment.
In handing over the plots to farmers, key local leaders including the Division Secretary, Ward Executive Officer, village leaders and district staff from Kilosa were involved. The allocation exercise is in progress and 126 farmers have been handed over their plots.

Generally, the following activities were made possible and could be termed as key achievement in the entire land allocation process undertaken during this project:

(i) Seedbeds preparation to enable seedbed provide optimum environment for seed germination and plant growth even for subsequent seasons was done for 688 acres in Mkangawalo village.
(ii) A total of 588 acres out of 900 acquired in 2007 were ploughed and broadcasted with rice seeds.
(iii) 126 farmers have been handed over their plots and have harvested their crops and some of them are currently making initial preparation for the next season.

9.5 Impact of Land use Planning and Land reallocation in the project area

In facilitating land use planning and allocation of alternative agricultural land to some of the farmers whose farm land are located within Village Forest Reserves and Community Forests, the following have been noticed as major impacts in the project area:

- The main objective of facilitating land use planning and implementation by WWF was to restore the degraded catchment forests of Vidunda so that the catchment continue to provide the required service for livelihoods of local communities and social economic development of the country. The positive sign of this could now be seen in the project area because for four sampled villages (Ruaha, Kifinga, Tundu

and Iwemba) the total area regenerated is about 1,887 ha equivalent to 6.4% regeneration of originally degraded area in Vidunda catchment. The process has also helped in identification and establishment of 8 village forest reserves (6,858 ha).

- Farmers in Ruaha, Kifinga and Tundu villages (villages targeted for land reallocation) have stopped cultivation activities on the fragile steep slopes of Vidunda Mountains and regeneration is gradually taking place.
- The land allocation exercise has gained popular support from the government. The National Land Use Planning Commission, Morogoro Region and Kilosa District have been keen in making follow-up on this issue and have been providing technical support in creating awareness and educating villagers on Land use plan and by-laws implementation and various policies and legislations (for exampleVillage Land Act no. 5 of 1999, Forest Act, 2002 and The National Land Use Planning Act, 2007).
- With awareness creation, villagers have gradually started to understand the laws governing land use planning and implementation and that they are not eligible for any compensation as the land still belongs to the villages.
- The established Village Land Use Management Committees (VLUMs) are enthusiastic and well informed and therefore very important local level governance structure in implementing the developed land use plans.

9.6 Problems associated with the land planning and allocation process

(i) There are still a large number of farmers who need alternative suitable agricultural land to enable them cope with land use changes in their respective villages. This is an issue which require attention of both the district and the project so that the positive impact already achieved by the project on the management of natural resources in the area are made sustainable and long term.

(ii) A coincidence with a believed 10 years return period storm which led to destruction of many farms within the entire Kilombero valley (Ref. Daily News of April 19, 2008; Kilombero District report.) caused a significant destruction of the field given to most farmers. This created a negative impression of the process and the area itself, to most farmers who were re-allocated alternative agricultural lands in this area.

(iii) Given the floods in the area the harvest was very little and thus discouraging some farmers to develop their farm plots in Mkangawalo. The flood however was a catastrophe in almost the whole country. Nevertheless, some (very few) farmers have been report to have made an attempt to continue doing farming in their original plots which is a challenge to both the project and the district council – should they be joined by their fellows in future.

9.7 Lessons Learnt

(a) Wrong approach/methodology applied by the District Land Valuer in taking inventory of land resources on people's land parcels has been the major cause of the problem. Also wrong message conveyed to the farmers by the District Lawyer regarding the land allocation while drank distorted the good intention of the exercise. The Lawyer had misinformed villagers that they were eligible to full compensation which was not applicable for this particular case. However, to address the problem, training and meetings to provide the right interpretation of the laws were conducted for seven villages in Kidodi and Vidunda Wards and disciplinary action was taken by the District against the Lawyer.

(b) Awareness creation on Land Policy and Legislation by involving relevant organs like National Land Commission from the initial stage of land use planning is very important for enhancing people's understanding on the legitimacy as well as acquiring people's buy-in. To address this problem, in August, 2008, the National Land Commissioner sent one of his staff to train the village leaders on Land Use plan policies and Legislation including application and interpretation of the same in developing and implementing village land use plans and by-laws. The training has been very useful in clarifying some of the issues and misunderstandings which were causing tension in the three villages (Ruaha, Kifinga and Tundu).

(c) The political will extended by the Member of Parliament, Councillors, Regional Commissioner, District Authority, Forestry and Beekeeping Division, National Land Commissioner, Prime Minister's Office and some villagers has been a great opportunity for the project. The few farmers who took the matter to the higher levels have not succeeded. In all the authorities they presented their case, they were advised to consult the Village Land Act no.5, 1999 which has no any clause stating that they deserve to be compensated while the land use plan was approved by the village assembly and the ownership still belongs to the village. In actual fact it was realized that the group had some political influences and therefore was representing the interest of the opposition party.

(d) Land use planning and implementation is a long process with so many steps to be followed. Therefore enough time needs to be allocated for stakeholders to work in collaboration, decide together, learn and adapt.

(e) Choosing alternative land area to be re-allocated to people requires detailed analysis which includes analysis of whether the land is suitable for agriculture of the desired crop type, accessibility, availability of infrastructure etc. Confirmation of these key aspects will increase the confidence level of both facilitators and farmers to whether the farm reallocation process will be successful.

9.8 Conclusion and Recommendations

Land use planning and implementation is a very sensitive long term process that needs people's buy-in, political will, stakeholders' commitments and clear understanding of the governing laws by the facilitators. Since WWF had already committed to support the farmers who relinquished their farmlands for conservation purposes in the three villages (Ruaha, Kifinga and Tundu), it is inevitable that the exercise is accomplished so that all the registered farmers are allocated with farming land elsewhere.

Therefore to sustain the project benefits, it is recommended that

(a) Land use planning should be continued in other villages not covered within the project area since this is the only tool which has been identified by the government for Implementation of National Strategy for Environmental Conservation of 2006 and the activity has shown its applicability in delivering on the Project's outputs 1 and 3.
(b) Study should be conducted to carefully analyse the already identified 500 acres in Ulaya Kibaoni, Madzini and Nyameni in Kilosa District before giving them to farmers.

Assessment on the feasibility of the land for agricultural production, environmental conservation and any potential land conflict should be the focus.

(c) Since this is a pilot and the established number of farmers relinquished their farmland is yet to be exhausted, facilitation of land allocation exercise is still very important in order to make sure that all the affected farmers in the three villages are well covered. The exercise should involve studying how many farmers are on the side of being given alternative agricultural land, how many are striving for monetary compensation, how many are not interested in both and how many are not decided. All four groups must be identified and understanding of how to involve them in the land reallocation process be established.

(d) Since the District had promised to support land preparation for 126 farmers on their remaining acres (1 acre per farmer), it is important that they are supported as agreed.

(e) To conclude the exercise, the remaining farmers (389 farmers) who registered their names but have not yet been allocated with alternative land should be supported settled.

(f) A proper methodology of land reallocation exercise must be devised which has to make sure that the process is owned by the farmers (they have to prepare the action plan, assess the land etc) and the implementation action plan is developed and circulated to all stakeholders for comments before execution of the exercise.

(g) To take care of long distances where alternative land is located (Mkangwalo village) size of land offered to the farmer might be increased eg. From the current four acres to eight acres and maintain four acrea for those who will get land in relatively shorted distance (eg. 50 km). This may motivate the farmers to go and develop their land and probably may decide on own initiatives to shift and have permanent settlement into a new area.