Small Grants to NGOs/CBOs
for Enhancement of Community Capacities
in the Environmental Protection and Natural Resources Management
in Areas around the Kafue and West Lunga National Parks

ZMB10/00084433

Terminal Evaluation Report

2nd Draft (before Validation Meeting)

Fish feeding time at Kapidi B Fish Pond

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Lusaka, 22nd October, 2015

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Acronyms

ACF	Agricutural Consultative Forum
BWZ	BirdWatch Zambia
CA	Conservation Agriculture
CBNRM	Community Based Natural Resources Management
CBO	Community-based Organisation
CRB	Community Resource Board
DSG Project	Danish Small Grant Project (Small Grants to NGOs/CBOs for Enhancement of Community Capacities in the Environmental Protection and Natural Resource Management in Areas around the Kafue and West Lunga National Parks)
EEE project	Environmental Education and Enforcement Project
FGD	Focus Group Discussion
GEF	Global Environmental Facility
GEF SGP	Global Environmrental Facility - Small Grants Program
GEF V	Strengthening Management Effectiveness and Generating Multiple Environmental Benefits within and around the Greater Kafue National Park and West Lunga National Park in Zambia
GMA	Game Managment Area
GRI	Game Rangers International
IBA	Important Bird Area
IGA	Income Generating Activity
ILO	International Labour Organisation
KNP	Kafue National Park
M&E	Monitoring & Evaluation
MLNREP	Ministry of Lands, Natural Resources and Environmental Protection
MoLGH	Ministry of Local Government and Housing
NGO	Non-governmental Organisation
NSC	National Steering Committee
POP	Persistent Organic Pollutant
PRA	Participatory Rural Appraisal
SAPU	Special Anti-poaching Unit
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
VAG	Village Action Group
VS	Village Scout
ZAWA	Zambia Wildlife Authority
ZCBNRMF	Zambia Community Based Natural Resources Management Forum

EXECUTIVE SUMMARY

1. Brief description of project

The main problem the project seeks to address is the vicious circle of environmental degradation and high poverty levels.

The project goal is: Improved biodiversity, environmental protection and reduced poverty levels among communities in GMAs surrounding the Kafue and West Lunga National Parks.

The project objective is: To bring about sound management of natural resources at the community level and contribute to poverty reduction among communities in areas surrounding the Kafue and West Lunga National Parks.

The project was funded by the Danish Government under GEF Small Grants Project and implemented by four NGOs under the overall responsibility of the Government of Zambia and UNDP.

The project was implemented during 2014 in Kasonso-Busanga GMA of Kafue National Park and Chibwika Ntambu GMA of West Lunga National Park; it had the following components:

Support to fish farming in both GMAs; ZCBNRM was involved in both GMAs while BWZ was only involved in Chibwika-Ntambu. This project was implemented in close cooperation with government staff at district and field level.

Support to beekeeping in both GMAs; ZCBNRM was involved in both GMAs while BWZ was only involved in Chibwika-Ntambu. This project was initially started in close cooperation with government staff at district and field level, but at a later stage a private consultant was engaged for training and implementation, with the continuous involvement of field staff.

After the closure of the project in December 2014, UNDP took the initiative, during the first half of 2015, to support some communities with more fish ponds and beehives. As the project had come to a close by the time fish ponds had been dug and beehives had been installed, no external performance monitoring has taken place.

Support to CA was implemented by ACF in all the 5 VAGs of Kasonso-Busanga GMA only, in the form of agro-forestry and legume intercropping. This was done in close cooperation with government staff at district and field level.

Support to Environmental Education was given by GRI and conducted by teachers in 10 schools in Kasonso-Busanga GMA and support to Law Enforcement was implemented by the project manager, ZAWA staff and Village Scouts (VSs) at Kabanga Gate.

Training in bio-diversity monitoring was give to ZAWA staff in the West Lunga and Lukwakwa IBAs and actual monitoring was implemented.

The project assisted Mufumbwe and Limulunga District Councils with the drafting of community by-laws for GMAs, through consultations with the CRBs.

2. Purpose and Context of the Evaluation

The purpose of the Terminal Evaluation was to examine the performance of the project, from its inception, towards achievements of its goal and objectives and make recommendations for future replication and scale-up efforts on protection of biodiversity through effective protected areas management approaches.
The recommendations are of particular interest for the GEF V project which will cover all the GMAs of Kafue and West Lunga National Parks.
The evaluation is also aimed at providing stakeholders at international, national and local levels with independent views of the Project's performance and lessons.

3. Findings

Project Identification and Formulation

The projects fell within 4 focal areas of GEF SGP: conservation of biodiversity, climate change, land degradation & sustainable forest management, and capacity building. Fish farming, beekeeping and conservation farming were chosen as alternative (i.e. sustainable, environmentally friendly) livelihood projects, based on baseline surveys; also implemented were environmental education, law enforcement, drafting of community by-laws and bio-diversity monitoring

Results

The results of the project were evaluated during field visits through collection of quantitative and qualitative from the beneficiaries about what had been achieved and in which way, in addition to interviews and literature review.

Major findings were that:

All the projects that were planned to be started did so during the project period (2014) but many projects could not be completed during that year and were still unfinished during the evaluation in October 2015

Project specific findings:

- 103 of the 117 dug fish ponds were sampled and out of those 44 (43%) had dried up, mainly those in the GMA north west of KNP. The reason for this could be unprecedented drying of streams and/or inadequate siting
- Of the 196 sampled beehives, only 43 (22%) were occupied for a variety of reasons: poor siting, poor vertical positioning of hives (near the ground?, in the trees?) and poor design and construction
- Most of the transplanted leguminous trees in agro-forestry did not survive transplanting at the beginning of the rains because of a dry spell; Musangu did better than Moringa
- The Environmental Education project was successfully implemented in 10 schools, but it was not continued during 2015 without donor support
- The Law Enforcement Projects continued because GRI has other donor support
- The community by-laws for both GMAs were drafted but not yet approved by one of the Councils and the MoLGH
- Biodiversity monitoring started in West Lunga and Lukwakwa IBA and actually continued without project assistance

General findings:

- Gender has not been taken into consideration in the activities of any of the projects
- Climate change has not been mainstreamed in any of the project activities
- Dependency syndrome: During the evaluation field visits a general lack of ownership of projects was observed. There were however considerable differences between the community groups
- Cooperation with government staff was not always optimal, leading to some staff being critical of the project.
- Three of the four NGOs are based in Lusaka leading to high overhead costs and long travelling times at the expense of actual project activities.
- The project period of one year was too short and did not cover the ideal season for natural resource activities / farming
- Projects were identified and prioritised based on surveys; this is insufficient to get the specific development priorities from specific communities

It was generally found that the project scored highest on *relevance* as regards the GEF SGP focal areas but also as regards their relevance for the local people. *Effectiveness* came second because of well executed projects in environmental education, law enforcement, community by-laws and biodiversity monitoring. Were the project did not do so well is in *efficiency* (centralised management, in-completed projects in fish farming, beekeeping and agro-forestry), *impact* (a one year off-season project is too short) and *sustainability* (no gender, no climate change and the dependency syndrome).

4. Recommendations

General recommendations emphasise that the project duration needs to more than one year to cover more than one season, that proper PRAs need to be done at community level to identify and prioritise projects, that climate change and gender have to be mainstreamed, that project management has to be decentralised and that people have to bring in some of their own resources in projects from the start to avoid the dependency syndrome.

Project specific recommendations emphasise the quality assurance of beehive procurement, fish pond siting and transplanting agro-forestry trees. The Environmental Education Programme (EEP) needs to be integrated into the government syllabi, ZAWA has to agree with GRI that they will become responsible for law enforcement once the KNP generates enough funds from tourism, that the approval and operationalisation of community by-laws is urgent, and that bio-diversity monitoring is essential and should become part of ZAWA and VS patrols.

5. Lessons learned

In a positive sense:

It has been a good idea to have a one year project (DSG project) preceding a longer project of the same nature (GEF V).

Positive aspects of the DSG Project:

- Many projects have started despite the short period of time, although not all of them could be completed within the year
- Communities have developed skills to implement projects for sustainable livelihoods
- A number of NGOs have gained (more) specific project experience in GMAs

- A certain degree of initiative and contribution to the project by the community is crucial for its sustainability

In a negative sense:
The non implementation of a gender policy may have led to some women and men not getting the benefits they deserve from this project.
The fact that climate change was not mainstreamed in the projects may have led to some projects not being adaptation projects and therefore not sustainable.
Some lack of clarity or transparency in the degree of involvement of government staff may have led to some dissatisfaction of government staff which may affect their involvement in future projects.
The fact that most projects could not be properly completed during the prescribed project period may have led to beneficiaries not being able to fully appreciate the projects and this may have led to a certain level of scepticism towards these projects.

I. INTRODUCTION

Purpose of the evaluation

1. The purpose of the Terminal Evaluation was to examine the performance of the project, from its inception, towards achievements of its goal and objectives and make recommendations for future replication and scale-up efforts on protection of biodiversity through effective protected areas management approaches.
   The recommendations are of particular interest for the GEF V project which will cover all the GMAs of Kafue and West Lunga National Parks.
   The evaluation is also aimed at providing stakeholders at international, national and local levels with independent views of the Project's performance and lessons.

Methodology of the evaluation

2. Collection and Analysis of Secondary Data through desk reviews of documents that have been made available to the consultant by UNDP. See **Annex 3** for a list of consulted documents.

3. Collection and Analysis of Primary Data through interviews, and field visits to project sites, followed by focus group discussion (FGDs) with project beneficiaries. Use was made of local facilitators to translate the discussion in the local language.
   See **Annex 2** for the Itinerary of all the Interviews and Field Visits.

4. Interviews were held with the project managers of the 4 NGOs involved in the projects. These interviews were held after reviewing project documents and before going in the field and they were again held after returning from the field to verify / triangulate observations made in the field.
   Interviews were also held with the project manager of the GEF V project before and after the field visits, because of the importance of this evaluation for the GEF V project.
   Furthermore, interviews were held with the relevant government officials in Mufumbwe and Mwinilunga District to understand their involvement in the project and hear their opinion on how the project was managed and what the impact has been on the beneficiaries.

5. Field visits were made to project sites in 4 of the 5 VAGs in the Kasonso-Busanga GMA and 7 of the 12 VAGs in the Chibwika-Ntambu GMA.
   All the field visits are described, and illustrated with pictures, in **Annex 4**: Report of Field Visits.
   The field visits were conducted as follows:
   - Visit to the project site with 3 women and 3 men of the VAG. When visiting the project site, the participants were asked to give the strengths and weaknesses of the project from start to finish. Quantitative data were collected by the consultant on the gender composition of the project group members, on project characteristics like number of hives occupied by bees, number of fish ponds holding water and survival rates of transplanted trees in the agro-forestry program
   - Return from the project site for a FGD; those inviting people for the meeting were asked to ensure at least 50% attendance by women

- One of the women and one of the men informed the FGD what was observed and discussed during the field visit
- The meeting participants got an opportunity to ask questions, ensuring that women and men got equal opportunities to contribute
- The evaluation consultant briefed each meeting about the coming of the GEF V project.
- A gender disaggregated attendance list was prepared for each meeting and attached to the field visit reports in **Annex 4**.

II. THE PROJECT AND ITS DEVELOPMENT CONTEXT

Project start and its duration

6. In 2013 a Call for Proposals was advertised in the newspapers to which 18 NGOs responded, out of which eventually 4 were selected by the National Steering Committee: Zambia Community Based Natural Resource Management Forum (ZCBNRMF), Agricultural Consultative Forum (ACF), BirdWatch Zambia and Game Rangers International (GRI).

7. These NGOs submitted the following proposals:

NGO	Project Title	Submission Date	Proposed Starting date	Proposes Project Duration
ACF	Promoting Climate - Smart Agriculture and Sustainable Natural Resources Management in Kasonso-Busanga GMA Communities around Kafue National Park	22 April 2013	Sept 2013	1 year
BWZ	West Lunga Conservation and People-centered Support Project	19 Sept 2013	August 2013	1 year
GRI	Kasonso-Busanga GMA Environmental Education and Enforcement Project	Sept 2013	Nov 2013	1 year
ZCBNRMF	Community Capacity Building in Kasonso-Busanga GMA for Natural Resource Management	23 April 2013	Nov 2013	1 year

8. Due to delays in funding, projects did not start in 2013 but all 4 projects were implemented during 2014.

9. Some project activities were continued during 2015 under direct responsibility of UNDP. These are:
   - Digging of more fish ponds
   - Distribution of more baited beehives
   - Completion of the Ntambu Honey factory

The Problem that the project seeks to address

10. The main Problem is: The vicious circle of environmental degradation and high poverty levels[1].

11. The GEF SGP Project Document further elaborates on this problem (page 4): "As the communities become more impoverished, they tend to resort to using less sustainable practices of production and harvesting from the degrading natural endowment, thereby contributing to its further degradation. This creates a vicious circle where poverty and resource degradation increase as the mutually re-enforce each other".

12. The GEF SGP Project Document further adds: "The adverse effect of climate change to which the country is exposed is significantly affecting the natural resources. Climate-induced changes to physical and biological systems are already being felt and exerting

[1] Problem as described in the GEF SGP Project Document: "Small Grants to NGOs/CBOs for enhancement of community capacities in the environmental protection and natural resources management in areas surrounding the Kafue and West Lunga National Parks", 2nd November 2012, page 8, Project

considerable stress on the countries vulnerable sectors: agriculture & food security, wildlife, forestry, water, energy, health and infrastructure".

Goal and Objective of the project

13. The Project Goal is: Improved biodiversity, environmental protection and reduced poverty levels among communities in GMAs surrounding the Kafue and West Lunga National Parks[2].

14. The Project Objective is: To bring about sound management of natural resources at the community level and contribute to poverty reduction among communities in areas surrounding the Kafue and West Lunga National Parks[3].

Main Stakeholders

15. The *primary stakeholders* that had a role in the management of the project are the:
    - Ministry of Lands, Natural Resources and Environmental Protection
    - National Steering Committee
    - National Hosting Institution (Keepers Zambia Foundation)
    - UNDP Country Office
    - GEF Small Grants Program Headquarters
    - National Program Coordinator
    - The beneficiary communities
    - The four NGOs that implemented the projects in different parts of the 2 GMAs

16. The *secondary stakeholders* or Strategic Partners: Small grants programs, such as executed by: Civil Society Environment Fund (CSEF), DFID, JICA, NORAD, SNV, SIDA, GIZ, ADF, OXFAM, USAID and WWF.

Expected Outcomes

17. The Results Framework of the GEF SGP Project Document specifies the following Outcomes[4]:

    Outcome 1: Community-based organizations in areas surrounding the Kafue and West Lunga National Parks promote conservation of natural resources and alternative environmental friendly livelihoods

    Outcome 2: Communities in areas surrounding the Kafue and West Lunga National Parks have developed community-based mechanisms for sustainable management of natural resources and protecting the environment.

    Outcome 3: Communities and households in target areas have adopted sustainable natural resources management

[2] Goal as described in the GEF SGP Project Document, page 10, Results Framework
[3] Objective as described in the GEF SGP Project Document, page 8, Project
[4] As described in the GEF SGP Project Document, page 10, Results Framework

III. FINDINGS AND CONCLUSIONS

Project Identification

18. GEF SGP projects have to fall within its 6 focal areas: conservation of biological diversity, climate change, land degradation & sustainable forest management, international waters, elimination of persistent organic pollutants (POPs) and capacity building[5].

19. The Project Proposals of the four selected NGOs fell under the following GEF SGP focal areas, as illustrated in Fig. 1 below.

Fig 1: The Focal Areas of the 4 NGOs under the Project

	The Focal Areas of the 4 NGOs under the DSG Project			
GEF SGP Focal Areas	**ZCBNRMF**	**BWZ**	**ACF**	**GRI**
Conservation of Biodiversity		√		√
Climate Change			√	
Land Degradation and Sustainable Forest Management				√
International Waters				
Elimination of Persistent Organic Pollutants				
Capacity Building	√			√

20. During February 2014 a Baseline Study was done in 4 VAGs of the Kasonso-Busanga GMA and during March 2014 an Assessment of Alternative Livelihoods was undertaken in both GMAs. These surveys were considered to have identified agriculture, beekeeping and fish farming as suitable activities to be promoted. Thus the NGOs received grants to promote these initiatives[6]. Prior to these surveys, Field Facilitators were trained in basic data collection methods.
This led to a situation whereby all the VAGs in both GMAs implemented fish farming and beekeeping projects while all the VAGs in Kasonso-Busanga GMA had agro-forestry projects as an important component of Conservation Agriculture or Climate-smart Agriculture.

Project Formulation

21. The NGOs that were recruited in October 2013 received training / orientation in natural resource management and promotion of alternative livelihoods during November 2013. During that training they ensured that their programs were coordinated in cases where they were going to work in the same area. Based on their original work plans and budgets, the NGOs received their first budget allocation of 50% before the end of 2013.

22. After the Baseline Study and the Assessment of Alternative Livelihoods in February and March 2014 respectively, more detailed, and often joint, work plans were prepared for agro-forestry, beekeeping and fish farming.

[5] Source: GEF SGP Project Document, page 5, and GEF SGP Project Proposal Format
[6] Source: UNDP/GRZ Terminal Report, February 2015, page 10

Project Implementation

23. Implementation started in January 2014, after 50% of the grants was received by the NGOs in December 2013.
    Initially the NGOs were introduced by NSC members to traditional leaders and the communities in the CRBs and their VAGs and to civic leaders at the district and provincial level. Inception workshops were held with CRBs and with individual VAGs in both GMAs.
    Community representatives were trained as trainers in fish farming and beekeeping and they were expected to train 5 farmers each on return from the training workshops.

    By the time the terminal evaluation took place the following projects had been implemented:

24. Support to fish farming in both GMAs; ZCBNRMF was involved in both GMAs while BWZ was only involved in Chibwika-Ntambu. This project was implemented in close cooperation with government staff at district and field level. After the closure of the project in December 2014, UNDP took the initiative, during the first half of 2015, to support some communities with digging of more fish ponds. As the project had come to a close by the time the fish ponds had been dug and stocked (end 2014), no external monitoring of fish pond performance has taken place.

25. Support to beekeeping in both GMAs; ZCBNRMF was involved in both GMAs while BWZ was only involved in Chibwika-Ntambu. This project was initially started in close cooperation with government staff at district and field level, but at a later stage a private consultant was engaged for training and implementation, with the continuous involvement of field staff. After the closure of the project in December 2014, UNDP took the initiative, during the first half of 2015, to support some communities with more beehives. As the project had come to a close by the time beehives had been installed (end 2014), no external monitoring of beehive performance has taken place.

26. Support to CA was implemented by ACF in all the 5 VAGs of Kasonso-Busanga GMA only, in the form of agro-forestry and legume intercropping. This was done in close cooperation with government staff at district and field level.

27. Support to Environmental Education was given by GRI and conducted by teachers in 10 schools in Kasonso-Busanga GMA; support to Law Enforcement was implemented by the project manager, ZAWA staff and VSs at Kabanga Gate, coordinated by the SAPU at Kafue Hook Bridge

28. Training in and implementation of bio-diversity monitoring was give to ZAWA staff in the West Lunga and Lukwakwa IBAs

29. The project assisted Mufumbwe and Limulunga District Councils with the drafting of community by-laws, through consultation with the CRBs.

30. Fig 2 describes which projects were implemented, by which organisation and in which of the 2 GMAs.

Fig 2: Project Activities Implemented

Project Activities by NGOs, Government, UNDP and Consultants in both GMAs	LEGEND:		**KB** = Kasonso-Busanga GMA **CN** = Chabwika - Ntambu GMA				
	2014					2014 - 2015	2015
	ZCBNRMF	BWZ	ACF	GRI	GRZ	Consultants	UNDP
General							
Training of NGOs	KB/CN					KB/CN	
Orientation Workshops in 3 Districts & all VAGs	KB/CN						
Baseline Survey	KB						
Assessment of Alternative Livelihoods	KB/CN						
Identification of Sustainable Agricultural Production Technologies			KB/CN				
Training of Field Facilitators	KB/CN						
Support to Fish Farming							
Training beneficiaries (ToT)	KB/CN	CN			KB/CN		
Siting ponds	KB/CN	CN			KB/CN		KB
Digging	KB/CN	CN					KB
Fingerlings	KB/CN	CN			KB/CN		KB
Performance of fish ponds (water? fish?)						KB/CN	
Support to Beekeeping							
Training beneficiaries (ToT)	KB/CN	CN			KB/CN	KB/CN	
Identifying suitable locations	KB/CN	CN				KB/CN	KB/CN
Procurement of hives	KB/CN	CN					KB/CN
Placing & baiting hives	KB/CN	CN					KB/CN
Hive performance						KB/CN	
Support to construction of Ntambu Honey Factory						CN	CN
Support to Conservation Farming							
Agroforestry							
Training of beneficiaries (ToT)			KB				
Nursery management			KB				
Transplantation of trees			KB				
Performance of transplanted trees						KB	
Conservation Farming (CF)							
Training in and awareness creation of CF			KB				
Intercropping with legumes			KB				
Environmental Education & Enforcement							
Environmental Education				KB	KB		
Law Enforcement				KB	KB		
Training in and Implementation of Bio-diversity Monitoring							
Implemented in West Lunga & Lukwakwa IBAs		CN					
Development of Community By-laws							
By-laws drafted	KB/CN				KB/CN		
By-laws Approved by Council	KB				KB		
By-laws not yet Approved by MLGH	KB/CN				KB/CN		

Results

32. The results of the project were evaluated during the field visits through collection of quantitative and qualitative information from the beneficiaries about what had been achieved and in which way, in addition to interviews and literature review.

QUANTITATIVE DATA

33. Fig 3 gives information about processes and impacts that can be expressed in frequencies and percentages. This information was gained through direct observation and through information provided by beneficiaries, in case there was no opportunity or time for direct observation.

Fig 3: Quantitative data on processes and outcomes

Quantitative Data Collected during the Field Visits to a Sample of Fishfarming and Beekeeping Projects

	GENDER DISAGGREGATED DATA						FISH PONDS					BEEHIVES		
									labour payment per pond					
Kasonso-Busanga GMA	**Fish Ponds**		**Beekeeping**		**FGD**		**dug**	**dry**	**K500**	**K1000**	**K0**	**placed**	**occupied**	
VAGs	**F**	**M**	**F**	**M**	**F**	**M**								
Mushima	0	11	0	11	23	15	8	0	0	0	8	35	10	
Lalafuta West	no data		4	6	0	0	20	18	20	0	0	5	2	
Lalafuta East	10	2	8	8	0	0	1	0	0	0	1	16	7	
Kaminzekezeke	5	5	3	4	10	11	33	20	0	30	3	40	4	
Musomwenji (interview)	10	4	9	10	n/a		2	0	0	0	2	60	10	
Sub-total	**25**	**22**	**24**	**39**	**33**	**26**	**64**	**38**	**20**	**30**	**14**	**156**	**33**	
Percentage	**53%**		**38%**		**56%**			**59%**	**31%**	**47%**	**22%**		**21%**	
Chibwika -Ntambu GMA	**Fish Ponds**		**Beekeeping**		**FGD**		**dug**	**dry**	**K500**	**K1000**	**K0**	**placed**	**occupied**	***notes***
Chibwika	**F**	**M**	**F**	**M**	**F**	**M**								
Chiwoma	3	9	15	24	23	23	6	0	0	0	6	*(39)*	no data	***1)***
Muwosi	15	5	20	10	4	10	8	0	0	0	8	*(30)*	n/a	***2)***
Kangaya	7	5	7	8	19	18	7	6	0	0	7	*(0)*	n/a	***3)***
Ntambu														
Ndona	1	9	not visited		3	6	10	0	0	8	2	not visited		
Kasanjiko	not visited		8	16	7	6	not visited					40	10	
Kapidi	17	16	not visited		10	7	8	0	0	8	0	not visited		
Sub-total	**43**	**44**	**50**	**58**	**66**	**70**	**39**	**6**	**0**	**16**	**23**	**40**	**10**	
Percentage	**49%**		**46%**		**49%**			**15%**	**0%**	**41%**	**59%**		**25%**	
	Fish Ponds		**Beekeeping**		**FGD**		**dug**	**dry**	**K500**	**K1000**	**K0**	**placed**	**occupied**	
	F	**M**	**F**	**M**	**F**	**M**								
TOTAL for both GMAs	**68**	**66**	**74**	**97**	**99**	**96**	***103***	**44**	**20**	**46**	**37**	***196***	**43**	***4) & 5)***
PERCENTAGE	**51%**		**43%**		**51%**			**43%**	**19%**	**45%**	**36%**		**22%**	

Notes: *1) 39 hives were spread over a wide area, so it was not possible to determine occupancy*

2) 30 hives were received last year but were not installed

3) All the hives got burned

4) 1062 hives were distributed by the project till mid 2015 (source: UNDP report); for 196 hives (i.e. 18% of all 1062 beehives) evaluation data were collected from the community and direct observations were made on part of these hives

5) 117 fish ponds were dug with project support till mid 2015 (source: UNDP report); for 103 ponds (i.e. 88% of all 117 fishponds) evaluation data were collected from the community and direct observations were made on part of these ponds

Gender

34. Gender disaggregated data show that there is a good balance between female and male beneficiaries on average in both the fish farming groups as well the beekeeping groups. However, of the 9 visited fish farming groups, 3 are male dominated (of which 1 is exclusively male), 3 are female dominated and 3 are gender balanced. Of the 9 visited beekeeping groups, 3 are male dominated, 1 is female dominated and 5 are gender balanced.

35. The composition of the FGDs was also well gender balanced, probably partly due to the fact that the consultant asked the facilitators to ensure that there would be a 50/50 representation of men and women in the FGDs.

36. The GEF SGP Project Proposal Formats have section 1.8. on Gender Mainstreaming. Thus all four NGOs committed themselves to gender mainstreaming through such principles as equal opportunities for women and men, increase women's participation in projects, use the ILO guidelines on gender mainstreaming and gender sensitive M&E and reporting.

37. There is however very little evidence of a proactive approach towards gender mainstreaming in the projects:

    In the project quarterly reports and other reports there is sporadic gender segregation of information:

- ACF mentions gender composition of trained farmers (48% women, 52 % men); in their project evaluation report they only gender segregate data twice: on knowledge of CA and on project beneficiaries; their survey on sustainable agricultural production techniques is not gender specific.
- ZCBNRMF in their 3rd quarterly report mention the gender composition of some of the fish pond groups; in the Baseline Report data are gender segregated in 6 of the 16 variables; the composition of VAG meetings preparing the Community by-laws an overall gender composition of 28% women and 72% men is mentioned; the Report on Assessment of Livelihoods disaggregates gender only for data of 4 out of 50 issues assessed; of the 50 people trained in fish farming, 17 are women and 33 are men; and of the 52 people trained in beekeeping,17 are women and 35 are men
- BWZ does not analyse the gender composition of their beekeeping and fish farming groups, but mention the fact that certain projects, like poultry, are for women only.
- GRI does not gender segregate data in any of their reports.

38. As both terminal reports (from the Project Technical Coordinator and UNDP) are based on project quarterly reports that hardly address gender issues, it is not surprising that these terminal reports did not address gender issues and did not gender segregate information related to project outcomes and output, i.e. relating to the gender of beneficiaries.

Fish Farming

39. With further reference to Figure 3 above, the following can be said on the performance of the fish farming projects. The performance of fish ponds was evaluated in 10 VAGs where information on 103 completed fish ponds was collected. This information was partly obtained from direct observations and partly from information provided by fish

farming groups/individuals. The sample of 103 fish pond constitutes 88% of the 117 fishponds completed.

40. Of the 103 sampled fish ponds, 45% were paid K1000 per pond for digging, 19% were paid K500 for digging, while 37% were not paid. Most of the payments were done in Kasonso-Busanga GMA. These payments were initiated by UNDP towards the end and after the project (in 2015) in order to speed up the completion of fish ponds by FHHs[7].

41. Of the 103 sampled fish ponds, 44 (i.e. 43%) had dried up; 38 (out of 64 dug) dry fish ponds were found in 2 VAGs of Kasonso-Busanga GMA while only 6 (out of 39 dug) dry fish ponds were found in one VAG in Chibwika-Ntambu GMA.

42. Drying up of water ponds, especially in Kasonso-Busanga GMA, may be partly due to the fact that some farmers mentioned that this year streams are drying up which were previously considered perennial, and partly due to inadequate siting methods.

Beekeeping

43. Again with reference to Figure 3 above, the following can be said on the performance of the beekeeping projects. The performance of beehives was evaluated in 6 VAGs where information on 196 placed beehives was collected. This information was partly obtained from direct observations and partly from information provided by beekeeping groups/individuals. The sample of 196 placed beehives constitutes 22% of the 1062 beehives distributed by the project. This sample is much smaller than the one for fish ponds, because beehives are found over much larger and often inaccessible areas and could thus only be visited to a limited extend.

44. Of the 196 sampled beehives, only 43 (i.e. 22%) were occupied; there was little difference in the occupation rate between the 2 GMAs.

45. Low occupancy rates of hives could be due to a combination of factors, such as[8]:

- Positioning of the hives in unsuitable areas
- Positioning of the hives on stands, instead of hanging them (at different levels) in trees
- Lids that are poorly constructed and are therefore allowing leakage of rainwater in the hives
- Hive lids that are covered with plastic sheeting that deteriorates quickly and causes leakage if not replaced
- Iron sheet lids with no insulation, resulting in temperatures too high for bees
- Top bars with insufficient incisions for baits
- Different width of top-bars, not fulfilling the prescribed width of 32 mm[9]

[7] UNDP Mission Report, 15-19 September 2014, states on page 2: *"It has become a challenge particularly for women and FHHs' groups to provide adequate labour, particularly for the digging of the fish ponds"*
[8] Refer to Anne 3 for pictures of the various types of project-procured beehives
[9] Personal communication with Bob Malichi, beekeeping consultant for the project

- Different lengths of top-bars, resulting in some falling into the hives
- Poor finishing of top-bars resulting in irregular positioning in the hive
- Top-bars that are designed to rest on the edge of the hive, resulting in improper closure of the lid
- Entrance for the bees in the bottom corner of the hive and not, as recommended[10], the bottom centre
- Reluctance / incapacity of the owners to make, even small, adjustments to the hives where necessary

46. The above observed design & construction problems indicate that there has been inadequate quality control before the hives were released into the field by the responsible NGOs

[10] Personal communication with Bob Malichi, beekeeping consultant for the project

QUALITATIVE DATA

Agro-forestry

47. ACF supported the establishment of nurseries for Moringa and Musangu trees (in Kasonso-Busanga GMA only), both legumes that can improve soil fertility through nitrogen fixation and soil structure through decomposition of their leaves. Musangu (Acacia albida) has the added advantage that it drops its leaves at the beginning of the rainy season, remains without leaves during the rains, so that intercropping is easy, and it is green during the dry season.

48. As the evaluation visit was out of season for the nurseries, only direct observations could be made on a small sample of transplanted trees in fields for rain fed crops. These rainy season upland fields in NW Province are usually several kilometres away from the dry season lowland villages and it is often seen that people create temporary shelters near their upland fields. The visited fields were belonging to individual households.

49. The field observations showed that mainly the Musangu trees had survived the transplantation, although probably at a less than 50% survival rate. Moringa had a much lower survival rate than Musangu. The field owners indicated that there was a drought after transplanting at the beginning of the rainy season. In most cases no proper planting stations were prepared around the trees in order to conserve water and prevent fires from burning the trees. Some trees were planted on existing ridges and others were planted in existing furrows which was not conducive for the survival rate.

50. The farmers were aware that trees in agro-forestry systems contribute to soil fertility through dropping their leaves, but the nitrogen fixing capacity of the roots does not seem to be known or understood. They were aware that these trees will only have a positive impact on crop production after a few years.

51. Evidence that watering the trees makes a big difference was shown by a farmer who's watered trees in his village were about 2 meters high, while trees planted at the same time in a nearby field were at the most 50 cm high, while others had withered and died.

Environmental Education and Law Enforcement (EEE)

52. The EEE project has been implemented by GRI who have a permanent presence at Kafue Hook Bridge (Special Anti Poaching Unit - SAPU) and at other ZAWA camps in and around Kafue National Park. The project site at Kabanga Gate was visited, where it was seen that the new office block is nearing completion, and 4 staff houses have been completed.
    An interview with the project manager and a ZAWA wildlife police officer gave evidence of the efficient operations of the law enforcement activities.

At Kabanga Gate the village scouts get a monthly project allowance of K600 cash on top of the irregularly paid K 600 salary from ZAWA. At Shongwa Camp, where there is no project support, the village scouts only get their ZAWA paid salary which they have to collect from a bank in Kasempa at their own cost.

53. The strength of GRI is, as compared to the other 3 NGOs in the DSG project, that they already (and intend to continue to) have a permanent presence in and around the KNP and that they work through ZAWA and through VSs.

54. The future of law enforcement will depend on how well the KNP will be restocked to have enough tourism (photo- and hunting safaris) for the CRBs to pay the village scouts. Currently the village scouts are paid by ZAWA where the CRBs don't have the income to do so.

55. The EEP has been implemented in 10 schools in Kasonso-Busanga GMA through a Guide for Teachers and a Workbook for pupils provided by GRI[11]. Three schools were visited for the evaluation, of which 2 schools indicated that they finished the program during 2014 but that there has been no continuation during 2015. At one other school the teacher stated that she had not been able to complete the program because of commitments to other duties. The general impression given by the teachers is that the program was well liked by the pupils and that pupils were actively participating.

Training in and Implementation of Biodiversity Monitoring

56. Biodiversity monitoring was done in June and November 2014 in the West Lunga and Lukwakwa IBA, which is in the southern part of the park and the GMA immediately to the west of it. This IBA hosts about 417 bird species of which 100 are migratory. For the purpose of monitoring, 8 transects were set up, 3 in the woodland of about 5 km long and 5 on the Lunga and Kabompo rivers of 10 - 20 km long.

57. The project trained 4 ZAWA Scouts in biodiversity monitoring and they have been integrating the monitoring into their patrol activities. BWZ has been receiving filled in IBA monitoring forms from these scouts at regular intervals, even after the completion of the project.
There was no opportunity to visit this project during the evaluation, therefore above information is obtained from reports and from interviews with BWZ staff.

Development of Community By-laws for GMAs

58. Mufumbwe Council has approved the by-laws and submitted them to the MoLGH, while Mwinilunga Council has not yet approved the by-laws according to the Council Secretary.

[11] GRI, Muzovu Awareness Project, Conservation Education Guide 2015 and Learner's Activity Booklet 2015

GENERAL OBSERVATIONS

Dependency syndrome

59. During the field visits a general lack of ownership of projects was observed and this was always discussed in the field as well as in the FGDs. There were however considerable differences between the groups, where some were showing high degrees of self-reliance while others kept on referring to further project support. It was often observed that even minor actions were not taken by the community because they were expecting the project to give them further assistance.

    Examples of project dependency are:
    - not hanging bee hives in trees because of lack of wire, while there was evidence that it was better to do so for better occupancy rates
    - not making small adjustments to beehives (heat insulation of the lid, waterproofing the lid, improving the top-bars) despite the fact that the need for and nature of these improvements were known to the communities
    - not protecting hive stands from ants and fire
    - not fencing fish ponds while it was considered necessary by the owners to do so
    - not watering transplanted trees when there was a dry spell after transplanting (agro-forestry program)

60. People didn't always seem to realise that the project was over at the time of the evaluation visit and they at times said that the project had made promises that were not followed up and they were still waiting for.

Local Capacity Building

61. Efforts were made to have some equipment, like beehives, made by the local community, especially in case of constructing beehives. However the quality of locally produced beehives was below standard and the rate of production was too slow for the short duration of the project.

Cooperation with Government staff

62. In the fish farming and beekeeping projects, government staff at district level were used in different degrees and different ways. In beekeeping projects, use was mostly made of a private beekeeping consultant while in fish farming the training of farmers and the siting of ponds was often done by staff from other districts. In agro-forestry, consistent use was made of the district government staff at district and field level.
    All projects made, as much as possible, use of locally available agricultural extension staff.

Centralised project management

63. Efficiency of project implementation was hampered by the fact that 3 of the 4 NGOs had their headquarters in Lusaka. This resulted in high overheads, especially relating to transport costs and relatively long travelling times at the expense of spending time and resources on project activities.

Seasonality of projects

64. Projects relating to natural resource management would ideally start in the dry season, which is the right time for tree nursery preparation, preparing fields for conservation farming, digging fish ponds during low water tables, preparing beehives for distribution & baiting and, last but not least, having access to the project area.

65. But the project started in January 2014 in the middle of the rainy season, while field activities only started mid 2014. This meant that projects materialised by the end of 2014, such as beehives placed & baited, fishponds dug & stocked and trees transplanted. The results/outcomes of these interventions could not be assessed by the projects themselves because they closed by the end of 2014. Outputs and outcomes were thus assessed only during the terminal evaluation.
Please note that ACF did their own internal evaluation in the field during the first week of March 2015, while GRI has been continuously on the ground since the end of their DSG project support.

Project Identification & Prioritisation

66. Three of the main project activities, beekeeping, fish farming and conservation agriculture (with agro-forestry and legume intercropping) were identified through a baseline and a alternative livelihoods survey. There was no form of community level appraisal to determine and prioritise community specific constraints and interventions.

Climate Change

67. The GEF SGP Project Document states that the adverse effect of climate change to which the country is exposed is significantly affecting the natural resources. The project on conservation agriculture was specifically selected to address climate change adaptation and mitigation, but climate change was not mainstreamed in the projects.

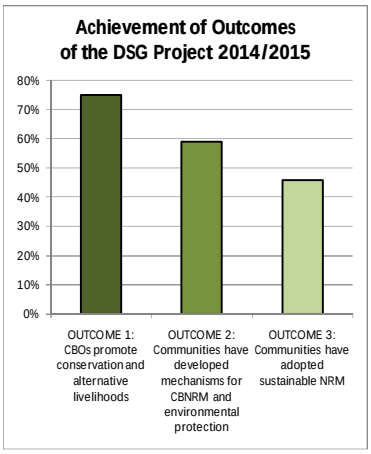
DATA ANALYSIS

Results of the Evaluation compared with the GEF SGP Results Framework

68. A comparison has been made between the results observed during the evaluation and the results expected in the GEF SGP Results Framework. Fig 5 on the next page shows

the details of the scoring exercise and the graph of Fig 4 shows the scores for each of the 3 project outcomes.

Fig 4: Achievement of Outcomes



The graph shows that the project has performed satisfactorily in terms of promoting conservation and alternative livelihoods (Outcome 1).
Its performance becomes average when it comes to developing of actual mechanisms for CBNRM and environmental protection (Outcome 2).
And where more still needs to be done is in terms of adoption of sustainable natural resource management (Outcome 3).
This is what has been achieved in one year. A longer project would have raised the performance over time and the coming of GEF V is likely to result in a more positive picture.

Fig 5: Scoring of Evaluation Results as compared with GEF SGP Results Framework

Results of the Terminal Evaluation as compared with the GEF SGP Results Framework		% Score
Outcome 1: Community-based organizations in areas surrounding the Kafue and West Lunga National Parks promote conservation of natural resources and alternative environmental friendly livelihoods		**76%**
Indicator 1.1: *# of community based projects for environmental protection and natural resources managment that have been implemented*	*projects have started but many not yet completed (e.g. dry fish ponds, empty hives)*	**40%**
Indicator 1.2: *# of households that have benefitted from community based projects initiated through the small grants*	*as some project have not yet been completed, households have not yet benefitted*	**40%**
Output 1.1: A coordination framework of Civil Society Organizations(CSO`s) focusing on environmental protection and natural resources management in target communities developed		**100%**
Indicator 1.1.1: *Number of CSOs that have signed MOUs for a coordinated approach to environmental protection*	All 4 selected NGOs have signed MoUs	100%
Output 1.2: CSOs and Community-Based Organizations (CBO`s) in target communities equipped with skills for protecting the environment and natural resources.		**100%**
Indicator 1.2.1: *# of CSOs and CBOs in targeted communities that have been trained by the project*	*Communities in all VAGs have been trained*	100%
Output 1.3: CSOs and CBOs in target communities provided with resources for implementing community-based natural resources management and environmental protection projects.		**100%**
Indicator 1.3.1: *# of proposals for the CBNRM and environmental protection initiatives that have been submitted to the Small Grants Programme for funding*	*All 4 selected NGOs have submitted proposals which have been funded*	100%
Outcome 2: Communities in areas surrounding the Kafue and West Lunga National Parks have developed community-based mechanisms for sustainable management of natural resources and protecting the environment.		**59%**
Indicator 2.1: *% of reduction in indices of illegal logging*	no information	
Indicator 2.2: *% of reduction in indices of poaching in targeted areas*	GRI patrols	**50%**
Indicator 2.3: *% of reduction in indices of illegal charcoal burning in targeted areas*	no information	
Indicator 2.4: *# of functional community natural resources management boards that have been established*	All CRB and VAGs are functional in the project area	**100%**
Output 2.1: Community-based natural resources management structures established in target communities		**100%**
Indicator 2.1.1: # of CBNRM plans established in targeted areas	all VAGs have plans for projects	100%
Indicator 2.1.2: # of CBNRM committees established in targeted areas	both GMAs have CRB and VAGs	100%
Output 2.2: Communities in target areas have developed mechanisms for implementing community-based natural resources management plans and enforcing by-laws		**45%**
Indicator 2.2.1: *Ha of degraded land that has been planted with appropriate species*	less than 50% of transplanted trees survived	40%
Indicator 2.2.2: *# of herbariums established in targeted areas as demonstration sites*	no information	
Indicator 2.2.3: *# of cases of violations of CBNRM by-laws that have been reported to relevant authorities*	by-laws drafted but not yet approved; village scouts operational but not very effective	50%
Output 2.3: Communities in target areas participating in public/private partnerships (PPPs) for natural resources management		**0%**
Indicator 2.3.1: *Number of community based natural resources management committees participating in PPPS for natural resources management*	not yet implemented	0%
Outcome 3: Communities and households in target areas have adopted sustainable natural resources management		**46%**
Indicator 3.1: *# of new environmentally friendly technologies that have been introduced in the targeted communities*	technologies have been introduced but not yet effective	**40%**
Indicator 3.2: *# of households that have adopted alternative livelihoods promoted by the project*	technologies have been introduced but only few households have started benefitting	**40%**
Output 3.1: Communities surrounding the Kafue and West Lunga National Parks have introduced and scaled up environmentally friendly production technologies and practices		**70%**
Indicator 3.1.1: *# of households that have been trained on new production technologies and farming practices*	households in all VAGs have been trained	100%
Indicator 3.1.2: *Number of households that have starter packs of technologies and tools/equipment for promoted production*	starter packs and tools have been given but only partly effectively used	40%
Output 3.2: Communities surrounding the Kafue and West Lunga National Parks have adopted alternative environmentally friendly Income Generating Activities		**35%**
Indicator 3.2.1: *# of households trained in entrepreneurship and business management skills*	Training done, but little evidence in the field of these skills; no written business plans	30%
Indicator 3.2.2: *# of households that have received support (equipment, materials and finance) for establishment of alternative IGAs*	Inputs for IGAs supplied but few IGAs are functional	40%

Evaluation findings arranged along the lines of the evaluation criteria

The evaluation criteria are as per the Terms of Reference: effectiveness, efficiency, relevance, impact & sustainability

69. The project scores highest on relevance as it implemented projects that are relevant to achieving the objectives of GEF SGP (see also Fig 5 above) and also because it was observed that the communities in the field expect these projects to be a responsible way of managing the environment, while also improving their livelihoods through cash income and improved agricultural productivity.

70. The next highest score is on effectiveness, mainly due to the projects well implemented by GRI in environmental education and law enforcement. Also the Biodiversity Monitoring project implemented by BWZ scores high, especially because monitoring records are still being submitted to BWZ by the trained ZAWA scouts.

71. Where the project does not score well is on efficiency, mainly due to a lot of resources being spent on beehives, digging fishponds and transplanting trees, which however resulted in too many dry ponds, too many empty hives and too many trees that dried up after transplanting. A further contributing factor to inefficiency is the high-overhead costs of NGOs operating from centralised positions in Lusaka, not including GRI which operates from the centre of KNP

72. Where the project does not score well is on impact, not very surprising for a "one year off-season" project in natural resource management and protection. Most projects could not be brought to an end during 2014, the actual year of implementation. Some emergency measures were put in place by UNDP after the end of the project (the first half of 2015) to ensure that at least some additional fish ponds were dug and more beehives were distributed, while also the honey factory in Ntambu was completed.

73. And finally, the project does not score well on sustainability for a number of reasons.
If *climate change* is not considered in natural resource management projects there is a risk that projects are not climate change adaptation projects or they may even contribute to climate change through increased GHG emissions. That risk has to be assessed to ensure that the projects are sustainable in the context of already experienced climate variability as well as future climate change.
If *gender* is not considered, there is a chance that women do not benefit the way they deserve which may lead to inequity in project benefits which will result in lack of sustainability from the point of few of women. The same reasoning also applies to men.
Furthermore there was a commonly observed phenomenon of *"dependency syndrome",* evidenced by some communities still waiting for the project do things for them which they could do easily themselves. Such an attitude is often caused by insufficient contributions from the community right from the start of the project, resulting in lack of ownership.

Recommendations

General Recommendations

Project start and duration

74. Projects in natural resource management cannot be completed in one year, even when started during the right part of the season. Any such project should be at least for 2 years so that the impact of what has been started in the first year can be measured in the year(s) to follow: e.g. what is being done with the honey and fish sold at the end of the first year and what happens to the transplanted trees?

75. If such a natural resource management project has to be done in one year, like the DSG project, it has to start in the middle of the dry season, as that is the right time to prepare fish ponds, beehives and tree nurseries.

Project identification and prioritisation

76. Projects cannot be identified and prioritised through surveys only. Surveys can be done to determine the baseline, but identification and prioritisation of projects needs to be done through participatory appraisal processes in the community, where specific problems and opportunities are identified and the most suitable interventions are prioritised for that particular community

Climate Change

77. In any project dealing with natural resource management, climate change has to be integrated right from the start. There should be climate change awareness creation and training of project and government staff in climate change issues where necessary. Gender sensitive climate risk assessments should be done in the early stages, relating to climate risks experienced thus far as well as relating to future climate risk scenarios.

78. Every GEF SGP Project Proposal Form needs to include a section on how the project will deal with climate change: What is the outcome of the gender sensitive climate risk assessment? Does the project help the community to adapt to climate change? Does the project mitigate climate change?[12]

Gender

79. Gender strategies outlined in the GEF SGP Project Proposal Form should be implemented. The need for equal participation of men and women should be a pre-condition for each project and where necessary women should be given preferential assistance where it is clear that they have been disadvantaged. All project surveys

[12] GEF is a financial mechanism of the UNFCCC; it provides finances to developing countries

should disaggregate data and information by gender to identify constraints and opportunities that are specific for women and men, and progress and final reports should disaggregate data and information by gender to show that their gender strategies have been implemented (or not).

Project Management by NGOs

80. Any future project of this nature which is going to use NGOs to implement (part of) the project activities, should emphasise that well qualified staff need to be based as close to the project area as possible and feasible. This to avoid high overhead costs and long travelling times that should have been directly spent on project activities.

Dependency Syndrome

81. Certain levels of dependency on project support are likely to be there in most projects but much can be done to reduce it to an acceptable level. It is recommended that community contributions should be voluntary in the early stages of project implementation after which project support can be given once the community has shown its commitment. To pay for labour for digging fish ponds is likely (but not always, as seen in the field) leading to a dependency syndrome and is therefore not recommended.

82. The project should make clear from the start where and when its support starts and ends. In this way it will be clear for the community what and what not they can expect from the project and what their own contributions are supposed to be.

Project Specific Recommendations

Fish Farming

83. The main problem observed with the fish ponds was that 36% of the fish ponds dried up, predominantly in Kasonso-Busanga GMA. It is therefore crucial that in any follow-up projects of this nature the siting of fish ponds has to be done properly.
Aspects to consider are:
    - The local knowledge of people is very important, but when it comes to climate change it will not be enough. They will have detailed knowledge of the climate variability they have experienced in the past, but they need assistance in foreseeing what climate change may mean for their area in the future
    - More comprehensive hydrological surveys may be necessary to determine the suitability of an area for fish farming, taking surface as well as ground water into consideration. Such surveys should be done by engineers who are also aware of future climate change risks and can determine the sensitivity of the hydrology of a particular area to climate change.

Beekeeping

84. The main problem with the beekeeping project was the low estimated occupancy rate of 22%. For the current project and for any new projects, the following recommendations are important:
    - The procurement of modern beehives (if modern beehives are to be introduced) has to be done professionally. Beehives that have already been tried and tested, in the project area or similar areas, should be preferred. Beekeeping expertise should be sought if that expertise is not with the organisation that does the procurement.
    - Beehives should be made as close to the project area as possible, this to create local employment, make the hives as cheap as possible and make future repairs and maintenance easier
    - Suitability assessments of beehive / apiary locations should be done professionally with due consideration of local experience
    - Professional advise should be obtained on the vertical positioning of the beehives (stands near the ground?, hanging in trees near the ground?, hanging in trees higher up?) and corrections should be made timely if there are problems with these positions
    - If hives still have design or construction problems, corrections should be made immediately by the owners, or by the project if need be

Agro-forestry

85. Where agro-forestry projects will be done on plots of households or individuals, the setting up and management of nurseries should be done by households or individuals as well, rather than in groups

86. To reduce dependency on seed supply from outside (e.g. government departments), local seed banks for trees should be set up as soon as feasible

87. Due care should be given to trees after transplanting; sites where water is not available should be avoided or special provisions should be made for watering, if necessary with project assistance. Once the seedlings are established at the beginning of the first rainy season, there is no further need for watering in the years after.

Environmental Education

88. The Environmental Education Guide provided by GRI should be integrated in the relevant existing syllabi for schools in the GMAs in such a way that there is no extra work load for the teachers

Law Enforcement

89. The Law Enforcement activities will only be sustained when a stabilised ecosystem in the park and surrounding areas generates enough revenue for ZAWA and the CRBs,

through hunting and photo safaris, to take over the activities now funded by GRI. There has to be a MoU between ZAWA and GRI that such a hand-over will be done when the situation allows.

Community by-laws for GMAs

90. There is need to make follow-ups with Mwinilunga District Council on the approval process of these by-laws and with the MoLGH on the approval of the by-laws submitted by Mufumbwe District Council. It is necessary for any similar projects (e.g. GEF V) to follow this example of creating by-laws through proper community consultation in districts that have GMAs within their boundaries. These by-laws will at community level reinforce the law enforcement activities done by ZAWA and Village Scouts.

Bio-diversity Monitoring

91. Biodiversity monitoring should be considered as standard practice during patrols of ZAWA and Village Scouts. It should be easy to integrate it in the normal record keeping procedures for patrols without any extra costs or work load. Biodiversity monitoring will give crucial information on the state of the environment in and around the park especially when it is done over longer periods of time.

IV LESSONS LEARNT

In a positive sense:

92. It has been a good idea to have a one year project (DSG project) preceding a longer project of the same nature (GEF V) because certain shortcomings or even mistakes of the small project will not be repeated (assumedly) in the big project while other positive achievements of the small project will likely be sustained in the big project.

93. Positive aspects of the DSG Project:
    - Many projects started despite the short period of time, although not all of them could be completed
    - Communities have developed skills for projects in sustainable livelihoods
    - A number of NGOs have gained (more) specific project experience in GMAs which will be of use for management of future environmental management and protection projects in similar areas
    - Various degrees of involvement in and ownership of projects by the community has been observed and it has been learned that a certain degree of initiative, contribution to and responsibility for the project by the community is crucial for its sustainability

In a negative sense:

94. The non implementation of a gender policy could have led to some women and men not getting the benefits they deserve from this project.

95. The fact that climate change was not mainstreamed in the projects (except for conservation agriculture) may have led to some projects not being adaptation projects to climate change but rather development projects that may not be sustainable in the long run (of climate change). It is also not known at this stage if certain projects or components of projects could either mitigate climate change or contribute to it.

96. Some lack of clarity or transparency in the degree of involvement of government staff may have led to some degree of dissatisfaction of government staff which may affect their involvement in future projects.

97. The fact that most projects could not be properly completed during the prescribed project period may have led to beneficiaries not being able to fully appreciate the projects because of not having seen the end result of the project as yet (maturity time for trees in agro-forestry, dry fish ponds, not yet having harvested fish, many modern beehives empty, etc); this may have led to a certain level of scepticism towards these projects.

Annexes

Annex 1: Terms of Reference

REPUBLIC OF ZAMBIA

Empowered lives. Resilient nations.

ZAMBIA

Terms of Reference for the Terminal Evaluation
Small Grants to NGOs/CBOs for Enhancement of Community Capacities in the Environmental Protection and Natural Resources Management in Areas around the Kafue and West Lunga National Parks ZMB10/00084433

1.0 Background and Context

The development challenge facing Zambia is to reduce extreme poverty, which is chronic and affects more than 40% of the population. As a multi-dimensional issue, poverty is a reflection of inadequacies or underperformance in various sectors of the political and social economy. In the case of environmental protection and natural resources management, poverty is regarded as both a consequence of environmental degradation and a cause of it. While the rural population in Zambia depends directly on natural resources (such as land, water, forests and wildlife) for livelihoods, the management of these natural endowments has been less than adequate at all levels from the national to the community (as manifested in the current rate of forest degradation which stands at 250,000-300,000 per ha/yr ; shifting/ slash and burn agriculture practiced by most small scale farmers, over fishing and illegal hunting). With the resultant degradation and depletion of the natural resource base which in turn has made communities livelihood strategies become much more challenging, especially for women who (have double roles of production and home care) are now forced to spend more of their energies and efforts travelling longer distances to farmlands, fetch fuel wood, collect water, and other forest products. Moreover, as they become more impoverished, communities tend to resort to using less sustainable practices of production and harvesting from the degrading natural endowment thereby contributing to its further degradation. This creates a vicious spiral where both poverty and resource degradation increase as they mutually re-enforce each other. In addition, environmental degradation, by virtue of its underlying biological and physical systems, is incremental and a non-linear process.

Government has recognized the linkage between poverty and natural resources degradation and it is committed to reverse this trend and it is revising the policies in forestry and wildlife to ensure that the management of resources is done jointly by local communities. While there are policies reforms taking place there is need also to strengthen the capacities at the community level for management of the natural resources. The approach of the project was to pilot community based natural resources management (CBNRM) in two Game Management Areas (GMAs): Kasonso-Busanga and Chibwika-Ntambo. Four Non-Governmental Organisations (NGOs) were engaged to implement The CBNRM approach which had four facets: orienting the community in

resource management; promoting livelihoods; law enforcement by communities and environment education in schools.

2.0 Purpose, Objectives and Target Audience

2.1 Purpose

The purpose of the Terminal Evaluation is to examine the performance of the project, from its inception, towards achievements of its goal and objectives and make recommendations for future replication and scale-up efforts on protection of biodiversity through effective protected areas management approaches. The evaluation is also aimed at providing stakeholders at international, national and local levels with independent views of the Project's performance and lessons.

2.2 Objectives of the Terminal Evaluation

The specific objectives contributing to the overall purpose of the evaluation are:

1. To provide an in-depth and independent assessment of progress, or lack of, towards the achievements of stated objectives and results;
2. Draw and document lessons learnt and best practices from the project and make recommendations for future replication and scale-up of project activities in management of protected areas.

2.3 Target Audience

The findings of the evaluation are targeted at all stakeholders of the Project. The primary targets include the Government of the Republic of Zambia (GRZ), namely MLNREP, UNDP, Civil Society Organizations and communities living near or in protected areas. Secondary targets include supporting/donor organizations and cooperating partners focusing on natural resources management, especially those that focus on protection of biodiversity.

3.0 Scope of the Evaluation

The Terminal Evaluation will focus on the entire duration of the project. It will compare planned against actual results at Impact, Outcome and Output levels in conformity to UNDP evaluation standards. It will cover the achievement of goals and objectives and their associated results at National, Sector and Local levels namely; Kasonso-Busanga and Chibwika-Ntambo GMAs.

The evaluation will extract lessons learned, document best practices, address key cross-cutting themes and how they have been integrated into the Project, diagnose and analyze issues to formulate actionable recommendations to inform future policy, legal and programme scale-up activities.

The evaluation will follow UNDP guidelines and procedures by at a minimum, addressing the following aspects:

Effectiveness: The extent to which the project achieved satisfactory progress towards its stated goal, objectives and results. This assessment should be extended to the appropriateness, evaluability and measurability of the results framework and its associated indicators. It should outline factors beyond the control of executing and implementing agencies that may have affected the attainment of results.

Efficiency: An assessment of whether the effects are being achieved at an acceptable cost, compared with alternative approaches of accomplishing the same objectives. It should include an assessment of appropriateness and effectiveness of the design and institutional arrangements of the project, and value for money in relation to attained results.

Relevance: An assessment of whether: the project is the appropriate solution to the problem; the project objectives were relevant and the value of the project to sector priorities and needs. The evaluation is also expected to assess the relevance of the project within the local, national, regional and global context.

Impact: An assessment of the difference the project has made to beneficiaries who include the Zambian Government, communities and households/individuals. Focus should also be placed on medium to long-term intended or unintended; positive and negative; micro or macro transformational changes and results in institutions and communities. This focus should also be on the state of bio-diversity and natural resources in supported pilot sites and the extent to which project benefits have been experienced outside the context of project design and the multiplier effects.

Sustainability: An assessment of whether the activities initiated by the project are likely to continue after the funding comes to end. This should include an assessment of the acceptance and ownership of the Project by beneficiary institutions and communities.

2.0 Evaluation Methodology

The evaluation will be expected to apply appropriate and scientifically compelling approaches to increase the validity of the findings. This will build on an existing pool of policy, programme development and monitoring information that has accumulated through-out the life of the project. The evaluation methods will include, but will not be limited to the following provided they are agreed at the inception phase:

- Desk review of existing documents and materials; (see Annex 1)
- Interviews with staff and representatives of key stakeholders NGOs/CSOs and private organizations in the sector, execution and implementing agencies/institutions (UNDP and MLNREP), and beneficiary institutions, organizations, communities and individuals;
- Focus group discussions and widely adaptable group meeting strategies such as stakeholder meetings and workshops whenever applicable and acceptable;
- Field visits to selected Project sites which should be as representative of the Projects scope as possible; and

The review will be carried out in accordance in UNDP evaluation principles that together emphasize the need for: Independence, Credibility, Utility, Impartiality, Transparency, Disclosure, Ethics, and Participation.

The UNDP evaluation Guidelines can be accessed and down loaded at:

http://web.undp.org/evaluation/guidance.shtml#handbook

5.0 Deliverables of the Evaluation

The main products of the evaluation should include, at a minimum, the following:

1. **Inception Report:** The evaluator will be expected to produce an inception report that will provide details of the proposed methodology and tools, and a plan of activities to be conducted along with their costs.

2. **Draft Evaluation Report** and **a PowerPoint presentation**: The evaluator will produce and present a draft Evaluation Report to a validation meeting. In this draft report, the evaluator will be expected to present the key findings of the evaluation and receive comments, corrections and other submissions from stakeholders present during the validation meeting for consideration in the finalization of the report.

   From time to time during the course of the assignment, the evaluator may be requested to submit preliminary reports to the quality assurance team that will be set up to support the Programme Manager with reviewing the methodology, tools and products. This is a useful mechanism to ensure that the evaluator is closely guided throughout the evaluation and provide oversight support to the Programme Manager to uphold the ethical requirements of evaluations.

3. **Final Evaluation Report:** After incorporating comments from the reviews and validation meeting, the evaluator will be expected to submit five (5) original copies and final Microsoft Word and PDF versions of the final report. Any other applications used to analyze the data and products associated with the assignment such as datasets, analysis plans, transcripts, collation and aggregation tables, e.t.c. will also be expected to be submitted in soft copy.

The evaluation report should be logically structured, contain evidence-based findings, conclusions, lessons and actionable recommendations. At a minimum, the report should follow the outline in Annex 2 but the evaluator is encouraged to be creative.

6.0 Evaluation Consultant

The consultant should have expertise in Community Based Natural Resources Management (CBNRM). The consultant will be responsible for overall quality of the report, technical assessments and any other responsibilities assigned by based on the agreed evaluation plan with the quality assurance team. The specific academic, skills and experiential requirements are as follows:

- S/he should be in possession of an M.Sc. (a higher qualification will be an added advantage) in Natural Resources Management or related fields such as biology, anthropology or development studies with over 10 years work experience in Southern Africa on protected areas management; economic use of natural resources, integrated planning and project monitoring and evaluation, CBNRM;
- At least three years experience working at policy level on natural resources

management or completion of three assignments providing inputs into policy dialogue on natural resource management and nature based tourism
- At least three years experience working in Protected Areas planning or completion of at least three assignments providing inputs into above plans.
- At least five (5) years in-country work experience on natural resources management (experiences on protected areas management will be an added advantage);
- Good understanding of Zambia's economic and social characteristics
- Experience with UN supported programmes/projects will be an added advantage.
- Excellent analytical and writing skills
- Fluency in English is essential

7.0 Management Arrangements

The Programme Manager at UNDP will be responsible for the day to day management of the evaluation and will be responsible for putting in place all the logistics for the evaluation. These will include setting up meetings and interviews with stakeholders, and putting in place travel logistics.

The above programme management staff will be supported by quality assurance team comprising of evaluation and natural resource management experts in key stakeholder organisations. The quality assurance team will guide the consultants during the entry meeting, review and approve the inception report, interim, draft and final evaluation reports. Quality assurance in this regard also extends to upholding UNDP evaluation principles.

The consultant will be expected to carry out duties according to the contract and TORs.

8.0 Timeline

The evaluation is scheduled to start in July 2015 and continue for a period of 20 working days.

9.0 Remuneration

The daily rate for consultancy fees will depend on the level of education and experience of each individual evaluator. Consultants are expected to explicitly indicate their daily rates when applying for this evaluation. Payments will be made in local currency at prevailing UN exchange rates. The evaluator will receive the payments in the following installments:

- 20% upon presentation and acceptance of Inception Report;
- 50% upon presentation of draft Report to a stakeholder Validation Meeting and
- 30% upon submission and acceptance of final report based on UNDP standards.

10. Annexes

Annex 1: Documents to be reviewed
Annex 2: Evaluation Report Format
Annex 3: Proposed schedule of activities and consultancy days

ANNEX 1: DOCUMENTS TO BE REVIEWED

- Project Document;
- Project quarterly progress reports;
- NEX project audit reports;
- Minutes of Steering Committee meetings;
- Combined Delivery Reports;
- Annual Workplans;

ANNEX 2: SAMPLE OUTLINE OF EVALUATION REPORT

Table of Contents
Acronyms

Executive summary (4 Pages Maximum)

- Brief description of project
- Context and purpose of the evaluation
- Findings, conclusions, recommendations and lessons learned

Introduction

- Purpose of the evaluation
- Key issues addressed
- Methodology of the evaluation
- Structure of the evaluation report

The Project and its development context

- Project start and its duration
- Problems that the project seek to address
- Goal and objectives of the project
- Main Stakeholders
- Expected Results

Findings and Conclusions

Findings of the evaluation organised along the lines of the evaluation criteria. Key areas to be reported on are as follows:

Project formulation

Implementation approach, Country ownership, Stakeholder participation, Replication approach, Cost-effectiveness, UNDP comparative advantage, Linkages between project and other interventions within the sector, Results framework and indicators, and Management arrangements

Implementation

Financial Planning, Monitoring and evaluation, Execution and implementation modalities, Management by the UNDP country office, Coordination and operational issues, and Rating of project implementation.

Results

Attainment of objectives (including a summary table with overall rating of progress towards objective and each of the outcomes. Sustainability (with rating) and contribution to upgrading systems and skills in beneficiary institutions at all levels

Recommendations

- Corrective actions for the design, implementation, monitoring and evaluation of future related projects
- Actions to follow up or reinforce initial benefits from the project
- Proposals for future directions in reclassification and conservation plans, and policies

Lessons learned

- Best and worst practices in addressing issues relating to relevance, performance and success

Annexes

i) ToR
ii) List of persons interviewed
iii) Summary of field visits
iv) List of documents reviewed
v) Data Collection Tools used during the evaluation

ANNEX 4: PROPOSED SCHEDULE OF ACTIVITIES AND CONSULTANCY DAYS

S/N	Evaluation Activity	Local
1	Literature Review & Preparation of Inception Report (Including development of data collection tools & field checklists)	1 Days
2	Presentation and submission of Inception Report	-
3	Finalisation & submission of Inception Report based on review comments	1 Day
4	Field Data Collection (UNDP, NGOs, Government)	1 Days
5	Field visits to demonstration sites (Chibwika-Ntambu and Kasonso-Busanga)	9 Days
6	Data Analysis & Interpretation & Preparation of the Draft Report and distribution to stakeholders (with a meeting to discuss the preliminary report with the Quality Assurance Team)	5 Days
7	Stakeholder Validation Meeting	1 Day
8	Finalisation & submission of the final report	2 Days
Total: Consultancy period 29 days		**20 Days**

Annex 2: Itinerary

Itinerary of Interviews & Field Visits for the Terminal Evaluation of the DSG Project																															
	September 2015							October 2015																							
	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t										
	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13										
Interviews																															
NGO management																															
Aka Mukelabai, ZCBNRM Forum			x																x											
Joseph Mbinji, Agricultural Consultative Forum				x														x												
Mwape Sichilongo - BirdWatch (Z)																				x										
Sport Beattie, Game Rangers International (GRI)																	x													
Kasonso - Busanga GMA																															
Hangandu, Mufumbwe District Forestry Officer						x																									
Alisinda Nawa, Mufumbwe District Council Secretary + DC???						x																									
Rex Chalata, Mufumbwe District Fisheries Officer						x																									
Kamuti Simushi, Area Warden for ZAWA, Kasempa-Lunga							x																								
Chief Mushima Mubambe (courtesy call)							x																								
Samson Chimusha, Chairperson Musomwenji VAG										x																					
Chibwika - Ntambu GMA																															
Bwalya Ponga, Mwinilunga District Agricultural Coordinator														x																	
Chimuka Chifue, Mwinilunga District Fisheries Technical Officer														x																	
Katongo Mwela, Mwinilunga District Forestry Technician														x																	
L. Mfulamwansa, Mwinilunga District Council Secretary														x																	
L. Mwewa, Mwinilunga District Planner														x																	
Mangalilo, Mwinilunga District Commisioner														x																	
Mafelomale, Mwinilunga Physical Planner														x																	
Kelvin Mkandawire, Chinga Lufwino, Chaona Phiri - BirdWatch (Z)																				x										
Others																															
Flavian Mupemo, DSG Project Technical Coordinator	x																														
Mwiya Simbotwe, Project Manager UNDP GEF V					x													x												
Bob Malichi, Beekeeping Consultant															x															

Field Visits to VAGs			**Legend:**	**F**=Fish Ponds						**B**=Beekeeping						**AF**=Agro-Forestry								
	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t			**F**	**B**	**AF**
	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	Total		**9**	**9**	**4**
Kasonso - Busanga GMA																									
Mushima VAG							x																**1**	**1**	**1**
Lalafuta-West VAG								x															**1**	**1**	**1**
Lalafuta-East VAG								x															**1**	**1**	**1**
Kaminzekezeke VAG									x														**1**	**1**	**1**
Chibwika GMA																									
Chiwoma VAG												x											**1**	**1**	
Muwosi VAG													x										**1**	**1**	
Kangaya VAG													x										**1**	**1**	
Ntambu GMA																									
Ntambu VAG (Honey Factory)															x									**1**	
Ndona GMA															x								**1**		
Kasanjiko GMA																x								**1**	
Kapidi GMA																x							**1**		

GRI Projects	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t
Field Visits	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13
Kabanga Gate					x															
Shongwa Gate (control group)																				
Interviews																				
Peter Kyailusa, Environmental Education Teacher, Njenga Primary School							x													
Precious Moonga, Environmental Education Teacher, Kaminzekezeke Prim Sch									x											
Misheck Kashimoto, Environmental Education Teacher, Kalongelo Prim Sch									x											

Annex 3**: List of documents reviewed**

1. **GEF SGP Project Document**: "Small grants to NGOs/CBOs for enhancement of community capacities in the environmental protection and natural resources management in areas surrounding the Kafue and West Lunga National Parks", 2nd November 2012

2. **GEF SGP Project Proposals of all the 4 NGOs**, prepared between April and September 2013

3. **Project Inception, Progress and Final Reports of all 4 NGOs**

NGO	**Inception**	**Q1 - 2014**	**Q2 - 2014**	**Q3 - 2014**	**Q4 - 2014**	**2015**
BWZ		+	+	+		
GRI - Environmental Education & Enforcement Project	Draft Inception Report Dec 2013 - Feb 2014		March - May 2014			Terminal Narrative and Financial Report, Nov 2013 - Dec 2014
GRI - Support to Busanga APU		+	+	+		
ZCBNRMF		+		+		
ACF		Nov 2013 - Febr 2014	+	+	+	Evaluation Report (March 2015)

4. BirdWatch Zambia - Internal Field Reports

- Training and Biodiversity Monitoring - West Lunga and Lukwakwa IBA, June 2014
- Fish Farming Training, Fish Pond Construction and Women's Village Poultry Enterprise, 25 June - 5 July 2014
- Bee-keeping and Fish Farming Materials Delivered, 8th October 2014
- Biodiversity Monitoring - West Lunga and Lukwakwa IBA, 20th November 2014

5. ZCBNRM Reports:

- By-laws, Mufumbwe and Mwinilunga District Council, 2014
- Baseline Report, Kasonso Busanga GMA, March 2014
- Assessment of Alternative Livelihoods in Kasonso Busanga and Chibwika Ntambu GMAs, June 2014
- Report of the development of Community By-laws in Kasonso-Busanga and Chibwika-Ntambu GMAs, December 2014.
- Report on the Community Trainings in Fish Farming and Bee Keeping in Kasonso-Busanga and Chibwika-Ntambu GMAs, December 2014.

6. ACF Technical Report:

- Identification of Sustainable Agricultural Production Technologies and Practices in Kasonso-Busanga and Chibwika-Ntambu GMAs, Survey Report, July 2014

7. UNDP reports:

- Visits to both GMAs: 28 April - 03 May 2014; 15 - 19 September 2014; 12 - 17 January 2015
- Visit to GRI at Hook Bridge: 31 July - 01 August 2014

- 2013 and 2014 Annual Work Plan for the DSG Project
- Combined Delivery Reports by Project: Jan-Dec 2013 and Jan-Dec 2014
- Terminal Report, submitted to the Ministry of Foreign Affairs/DANIDA, February 2015
- Chibwika-Ntambu and Kasonso-Busanga GMAs, Beekeeping and Fish Farming Activities, 15th June - 4th July 2015
- Interview report for the recruitment of the honey factory staff in Ntambu, May 2015

8. Reports by Project Technical Coordinator (FKC Mupemo, Keepers Zambia Foundation):

- Status Report on the construction of a bee honey processing plant and fish farming activities in Ntambu Chiefdom in Mwinilunga District, 13 October 2014
- Project Terminal Report, January 2015

9. **Minutes of National Steering Committee Meetings**

- The First National Steering Committee Meeting, 9th October, 2013
- The Third National Steering Committee Meeting, 2nd December, 2014

10. **Audit Reports for 2013 and 2014, MKM Solutions**

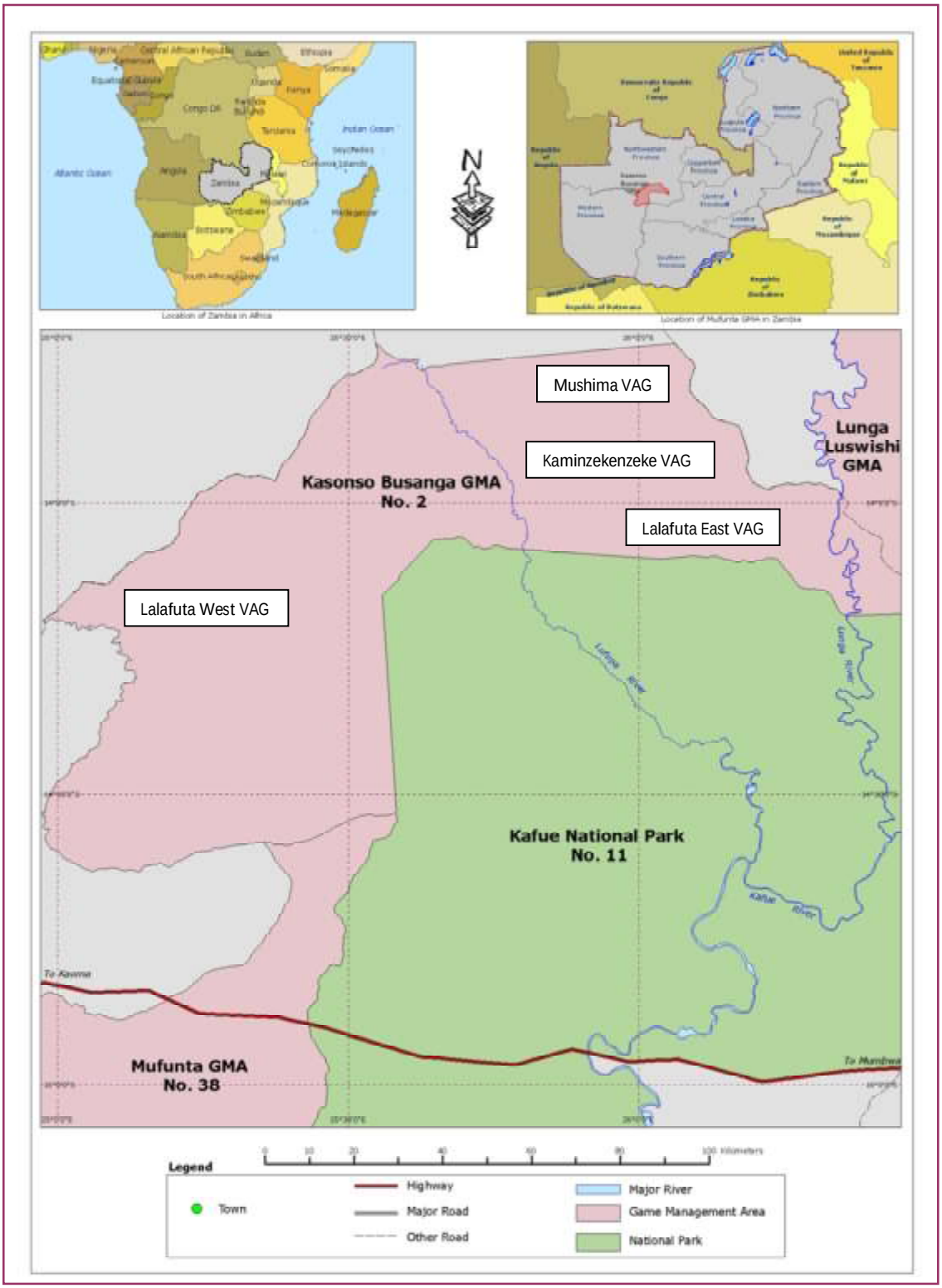
11. Various reports

- Summary Outputs of the DSG Projects in Mufumbwe and Mwinilunga Districts (no author, no date)
- Ntambu Honey Factory, Bob Malichi, not dated

Annex 4: Report of Field Visits

KASONSO-BUSANGA Game Management Area

Map of the VAGs that were visited (4 out of 5 VAGs):



Field Visit Kabanga Gate - Monday 28th September 2015

A brief meeting was held with the GRI Project Manager Mr. Rodwell Bulawayo and ZAWA Wildlife Police Officer Mr. Kifita Moda in their nearly completed office.

There are 3 groups of Village Scouts that are on duty for 20 days and go home off-duty for 10 days. GRI pays them an allowance of K600 cash after each 20 days duty. They get food rations when on duty and a bonus at the end of each year.

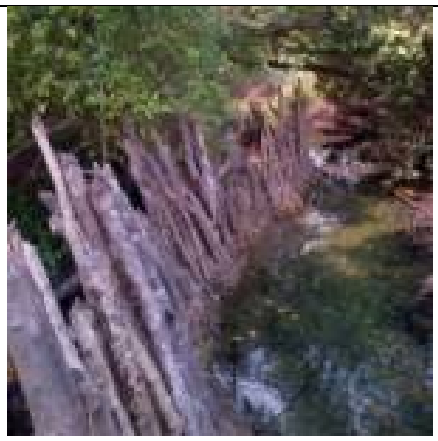
The additional K600 from ZAWA has to be collected by the Scouts from a bank in Kasempa.

The nearly completed office block and one of the 2 completed staff houses

 The Landrover used for patrols	 On our way to the camp we saw a large number of felled trees (about 100 over a stretch of 2 km) without any timber being removed. We were told by the ZAWA staff that these trees are cut to harvest caterpillars. These is an illegal activity which is also mentioned in the new community by-laws of Mufumbwe district (still to be approved by MLGH)

Field Visit Mushima VAG - Wednesday 30th September, 2015

The field visit started with a visit by 3 men and 3 women to a fish pond, apiary and agro-forestry projects and was followed by a Focus Group Discussion.

Kivuku Fish Pond - Mushima VAG	
	
Water is diverted from a perennial stream to the left into a canal to the right which leads to the fish ponds; the barrier needs a lot of maintenance (is leaking) and needs to be replaced by a more permanent structure. No efforts have been made yet to establish a permanent structure. No payments have been made to establish the ponds	The 8 fish ponds have been established and are owned by 11 men and 0 (zero) women. It was argued by the men that digging a fish pond is too heavy for women; but the women mentioned that they were not invited for the preparatory meeting for this project. The pond is well fenced with chicken wire to keep predators out.
Apiary - Mushima VAG	

 This apiary is owned be the same 11 men of the fish pond. The women mentioned that they were not invited in the planning stage of the apiary. Farmers were told by the trainers to put the hives on stands. Also traditional hives were found in the same apiary.	 The 20 hives on the stands are not occupied. The owners took the initiative to hang 15 hives in trees after which 10 hives got occupied by bees. 20 of the 35 hives remained on the stands because the owners said not to have the wires and nails to put them in the trees.
	The hives with the iron sheet covers on the lids were sometimes occupied by bees, but they often left after a few days, according to the owners because of high temperatures in the hives. No efforts had been made to insulate the iron sheet lids from the heat (planks, grass, mats, branches?)

Agro-forestry - Mushima VAG

This field is owned by one household, represented by the wife during the field visit.

Moringa (in the centre of the left picture) and Musangu (in the centre of the right picture) were planted in November 2014 and these two examples survived but many (about 50% according to the participants) seedlings (especially Moringa) were seen to have dried up because the field was too far from water sources.

Focus Group Discussion after the field visit - 30th September 2015

1. One female and one male participant were asked to give a debriefing of what had been discussed during the field visit.
2. After the debriefing, the following was observed during a plenary discussion:

- In this VAG, women were not given sufficient opportunities to participate in and take ownership of the projects
- It was a good initiative to hang some hives in the trees, but more could have been done by using their own materials (instead of complaining about the lack of materials)
- There was a good understanding of the benefits of agro-forestry (soil improvement) but not everybody was aware that the benefits only materialise after about 5 years. The planted trees are under-5s that need proper care
- Mention was made by the consultant that a new project is coming to the area (GEF V) and that it would be wise for the community to continue putting efforts and resources in continuing with the already started DSG projects to give evidence of self reliance to the new project.

Attendance List for the Focus Group Discussion of Mushima VAG Members -

(15 men, 23 women)

ATTENDANCE LIST – MUSHIMA MUBAMBE

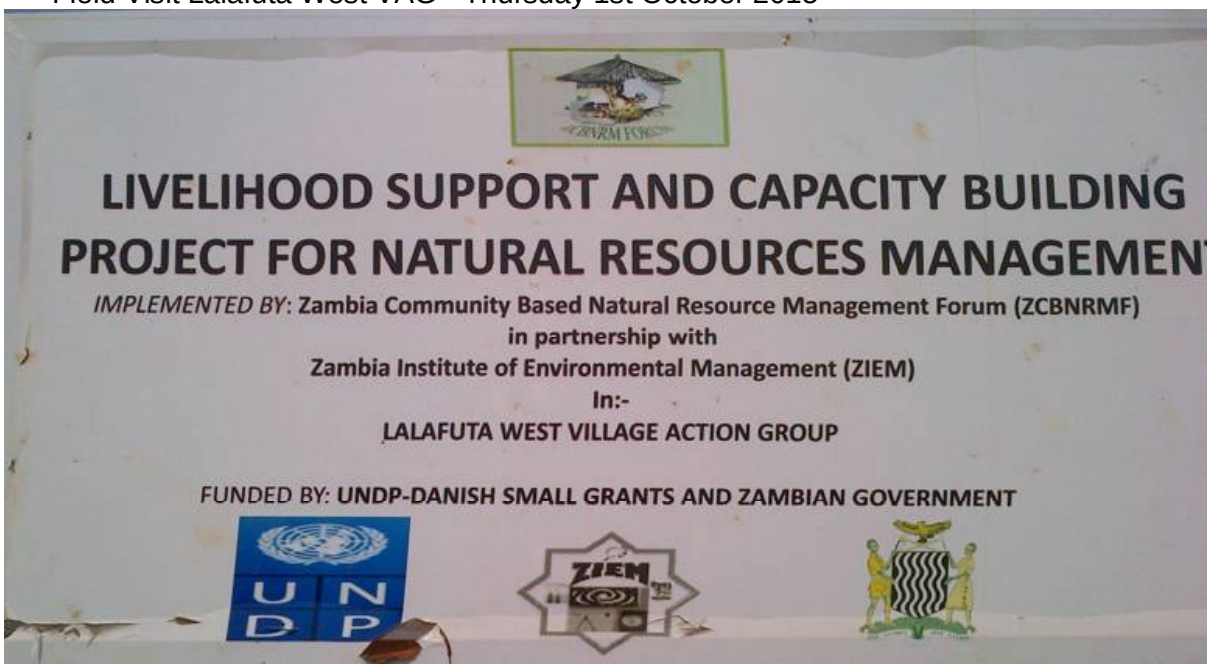
NAME	GENDER	PROJECT INVOLVED
1. BENJAMIN NYALANDE	M	FISH FARMING / BEEKEEPING
2. DELSON MUKIMA	M	AGRO FOREST
3. MISHECK SHIKOYI	M	AGRO FOREST
4. JACKSON CHOLWE	M	AGRO FOREST
5. DELSON MWABUKA	M	FISH FARMING / BEEKEEPING
6. LISTON MUNDOE	M	AGRO FOREST
7. KELVIN KAKINGWA	M	AGRO FOREST
8. GATESON KAWISHA	M	AGRO FOREST
9. SOLOMON JONI	M	FISH FARMING/BEEKEEPING
10. HAPPYSON MUSHIMA	M	FISH FARMING / AGRO FOREST
11. EDWARD KINCHILA	M	FISH FARMING / BEEKEEPING
12. JOHN MUTUMBWE	M	FISH FARMING/ BEEKEEPING
13. JOHN KIBOLE	M	AGRO FOREST
14. ESMOND SHOCHI	M	FISH FARMING/BEEKEEPING
15. VINESS KIPATELE	F	AGRO FOREST
16. MIRRIAM MUTUMBA	F	AGRO FOREST/ BEEKEEPING
17. QUEEN MUSHIMA	F	AGRO FOREST
18. BESIYA KASEPANSHI	F	AGRO FOREST
19. ETHEL MWANAMOYA	F	AGRO FOREST
20. PRISCAR JILOWA	F	AGRO FOREST
21. CATHERINE SHAMFUNDA	F	AGRO FOREST
22. ALICE MUSUNDA	F	AGRO FOREST
23. CHARITY MWANAMOYA	F	AGRO FOREST
24. EZINA KANGWU'WANE	F	AGRO FOREST
25. SHAGGY KISOMPE	F	AGRO FOREST
26. SILOMA KAPUMBA	F	AGRO FOREST
27. MEDNESS KANGAMINA	F	AGRO FOREST
28. GLADYS KAUSENGE	F	AGRO FOREST
29. EVERLYN MAYENDAYENDA	F	AGRO FOREST
30. JESTER MUYUKA	F	AGRO FOREST
31 ELITE CHEMBE	F	AGRO FOREST

M 15

F 23

32.	JOSEPHINE MUKIMWA	F	AGRO FOREST
33.	MARY MINYEH	F	AGRO FOREST
34.	MISILINI MUTUMBWE	F	AGRO FOREST
35.	ESTHER KAKINGWE	F	AGRO FOREST
36.	MIKA KELUPE	F	AGRO FOREST
37.	EDITH KAPAYA	F	AGRO FOREST
38.	VINCENT ~~CHIKALI~~ Kilule	M	FISH FARMING / BEEKEEPING

Field Visit Lalafuta West VAG - Thursday 1st October 2015



The field visit started with a brief meeting with Mr. Mate, the Agricultural Assistant, after which the apiary, the fish ponds and the agro forestry project were visited; due to a funeral in the area, a FGD could not be held.

The first four ponds dug in 2014 were sited by Fisheries Department Mufumbwe, for which people were supposed to be paid K1000 per pond, but payments were not made according to Mr. Mate (these 4 ponds were not visited)

During May and June 2015, 20 fish ponds were dug which were sited by Fisheries Department Kaoma. People were paid K500 per pond for digging. Stocking of these ponds was done too early when the silt had not yet settled down sufficiently.

This apiary only received the first lot of beehives fitted with the iron sheet lids; there are 4 women and 6 men in this group.

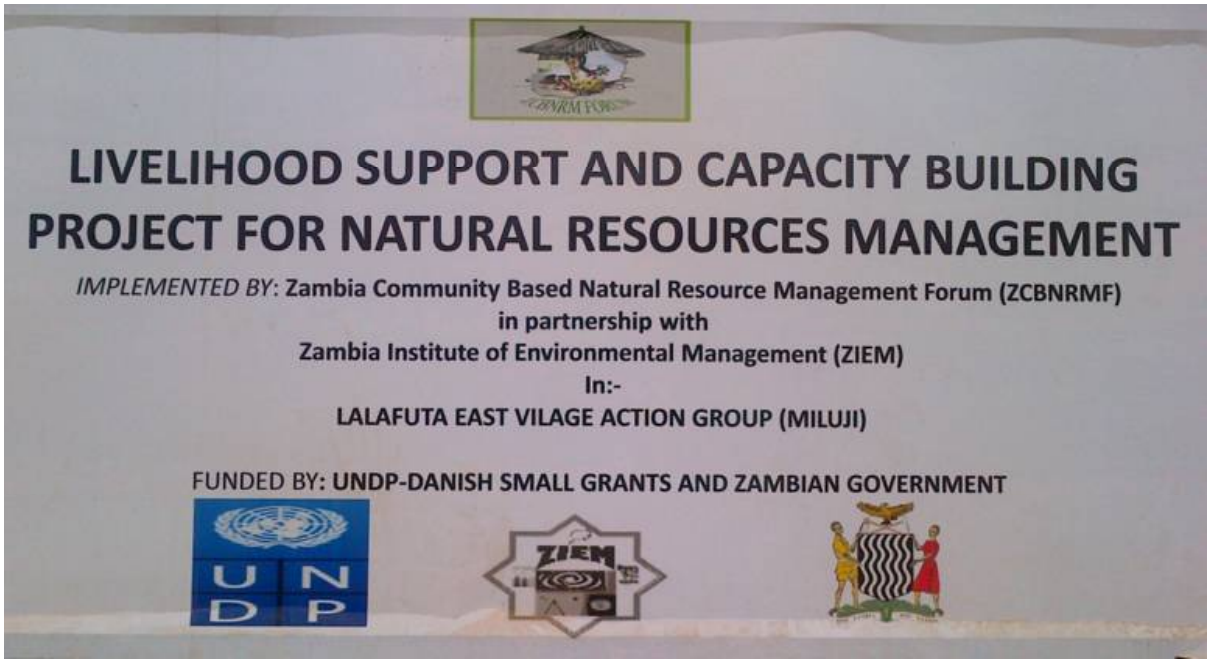
Of the 5 hives, only 2 are occupied

Mr. Binwell Kikope had some previous experience with agro-forestry. See the difference between a non-watered (top) and watered Musangu tree (Acacia albida) planted at the same time.

Seedlings trans-planted in maize fields died, but those intercropped with groundnuts did better.

<table>
<tr>
<td> 
One of the 20 fish pond dug in May/June 2015 is now drying up; no inlet pipe installed. People were paid K500 per pond for labour. Of the 20 ponds dug, only 2 do still have water.</td>
<td> 
These are fishponds on the bank of a stream supplied by seepage water from the upland; but some of them are quite shallow as can be seen from the dipstick below</td>
</tr>
<tr>
<td>  
approximately 15 cm deep</td>
<td> 
According to local farmer Mr. Richard Wamunyima, who is not the owner of these hives, bees enter these types of hives with iron sheet lids but leave again after a few days due to heat in the hive.</td>
</tr>
<tr>
<td> 
This fish pond and 2 others were dug under a different project before the DSG project started.</td>
<td> 
A 2 inch net is used to catch fish from the pond.</td>
</tr>
<tr>
<td colspan="2">The people in this VAG were mostly attending a funeral so there was no opportunity to organise an FGD</td>
</tr>
</table>

Field Visit Lalafuta East VAG - Thursday 1st October 2015



In this VAG we visited beekeepers and a fish pond. We arrived un-announced later in the afternoon so it was not possible to organise a community meeting.

This is 1 of 16 hives in this area; this one belongs to Mr. Nyambe Namasiku and is occupied. Of the 16 hives, 7 are occupied; 8 belong to men and 8 to women. Traditional bark hives are not strong but have a better occupancy rate according to Mr. Nyambe.

Note the use of bark ropes for tying the hive.

This is a Virginia tobacco nursery; in areas where tobacco is grown, the honey gets a bitter taste because of chemical pollution from agro-chemicals.

This fish pond was dug in August/September 2014 by 10 women and 2 men; the siting was done by Fisheries department Mufumbwe. Spokesperson Lutangu Nalukui does not know if the fish is big enough to sell, but the group were told to sell fish to other fish ponds that do not have fish. The group has no plan for the use of money from sale.

They were given one role of chicken wire for fencing but the role is too short, so no fencing was done.

A Musangu tree (Acacia albida) in the field of Mr. Mukelabai of Kaoti Village. The field is next to his village but he has not watered the trees.

"Accessibility" during the coming rains.....?

Field Visit to Shongwa Camp on Friday 2nd October 2015

We slept at this camp for 2 nights when visiting VAGs in Kasonso-Busanga GMA; on the morning of our departure we had a focus group discussion with the ZAWA Staff and the Village Scouts. This camp did not receive any assistance from GRI so it was a good opportunity to use Shongwa Camp as control group for the GRI support to Kabanga Gate.

This camp has an office:

and the 2 Wildlife Police Officers and 13 Village Scouts stay in the camp with their families in housing made from local material.

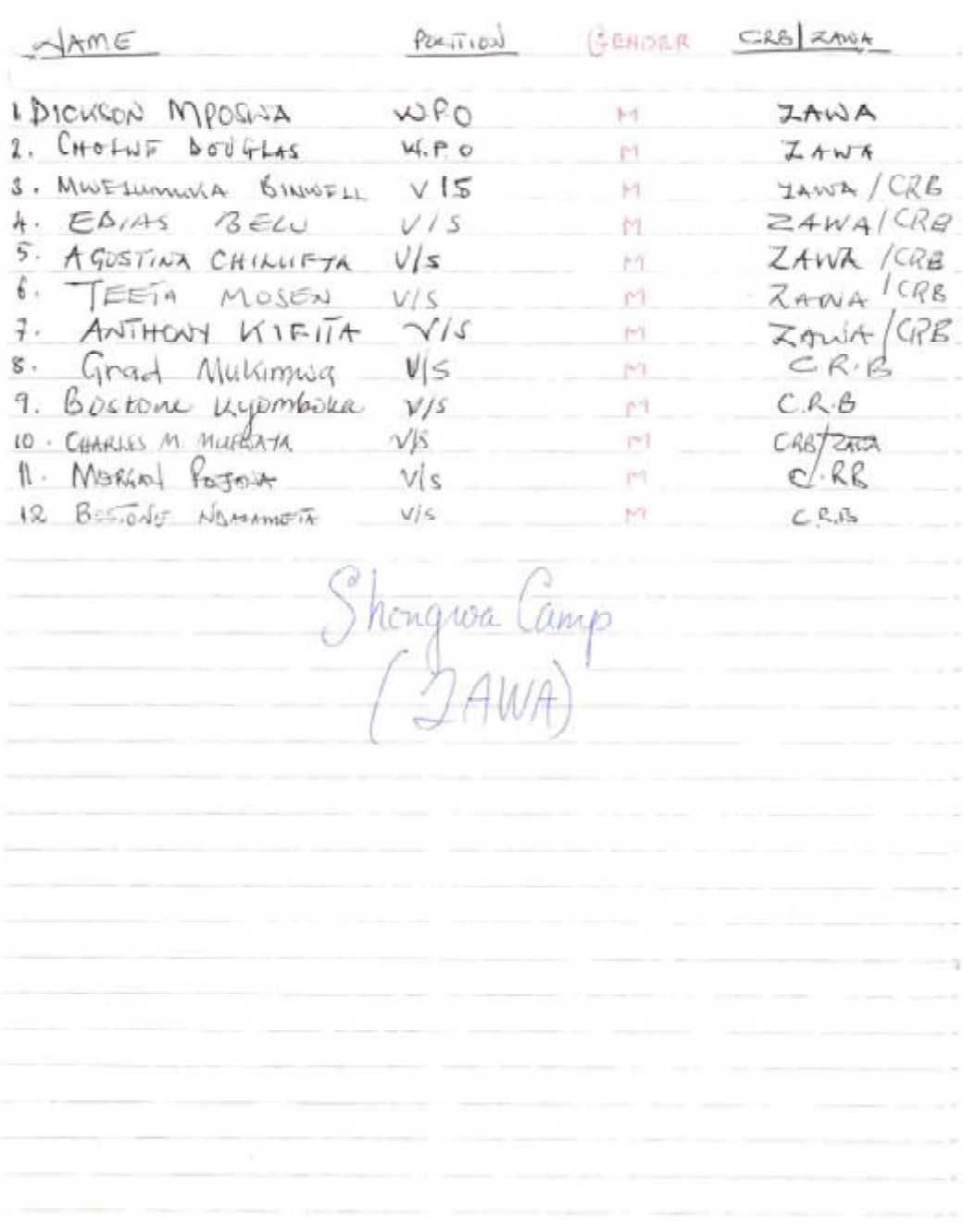
The duty of Village Scouts is law enforcement through patrols, investigations and village sweeps backed up by a search warrant from a Magistrate's Court.

Village Scouts are employed by Community Resource Boards (CRBs). They are only paid by ZAWA where CRBs do not have an income from e.g. hunting licences which is the case in Kasanso-Busanga GMA. Salary payments are currently behind by 3 months and the Village Scouts don't have protective clothing. Over the years well-performing Village Scouts have been upgraded to ZAWA Wildlife Police Officers.

CRBs were suspended in 2011 (together with Area Development Committees) and there are expectations that GEF V may support the elections of new CRBs (in November this year?).

The Village Scouts in the meeting complained about their low salaries, i.e. about K510 nett (a Wildlife Police Officer gets about K4,000). Conditions of Service for Village Scouts are uniform in the whole of Zambia, but salaries differ by CRB.

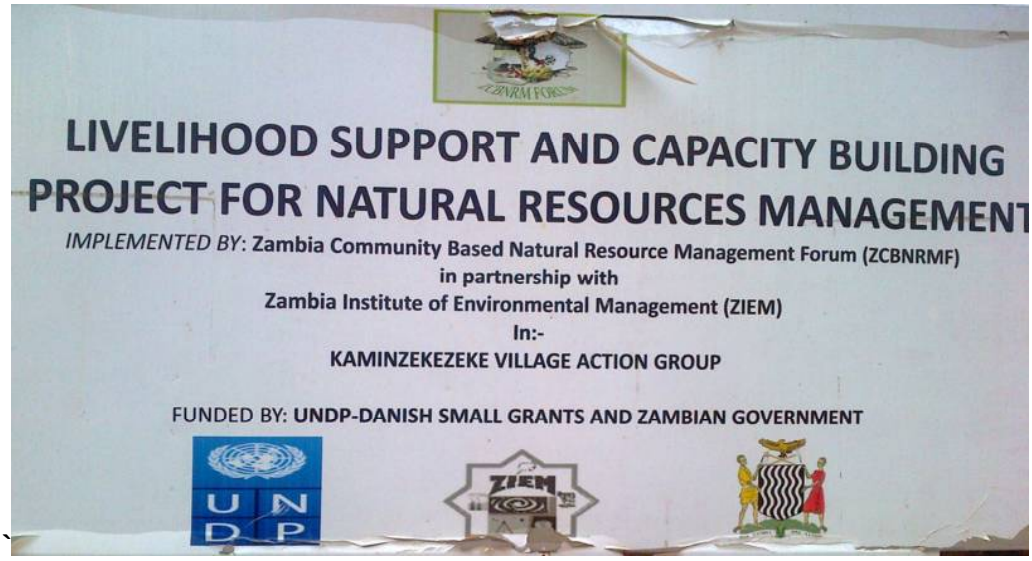
Attendance List of the FGD at Shongwa Camp



NAME	POSITION	GENDER	CRB/ZAWA
1. DICKSON MPOSWA	WPO	M	ZAWA
2. CHOLWE DOUGLAS	W.P.O	M	ZAWA
3. MWELUMUKA BINWELL	V/S	M	ZAWA / CRB
4. EDIAS BELU	V/S	M	ZAWA/CRB
5. AGUSTINA CHILUFYA	V/S	M	ZAWA /CRB
6. TEETA MOSEN	V/S	M	ZAWA /CRB
7. ANTHONY KIFITA	V/S	M	ZAWA/CRB
8. Grad Mukimwa	V/S	M	C.R.B
9. Boston Kyombeka	V/S	M	C.R.B
10. CHARLES M. MUFWATA	V/S	M	CRB/ZAWA
11. MORGAN PEJOSA	V/S	M	C.R.B
12. BESTONE NSAMAMBA	V/S	M	C.R.B

Shongwa Camp
(ZAWA)

Field Visit Kaminzekezeke VAG - Friday 2nd October 2015



This fishpond group consists of 5 women and 5 men. This pond was sited by the Fisheries Department Mufumbwe and is drying up. The stream which is feeding this pond is drying up which has never happened before. Out of the 30 fish ponds established in this VAG (for which K1000 per pond was paid for labour), 20 have dried up. Fish from drying ponds has been transferred to wet ponds.

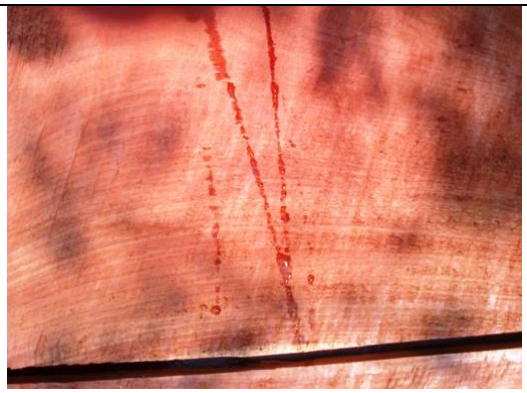
This year the group sited and constructed 3 new ponds and they will abandon all the dried up ponds.

The Fisheries Department hasn't come back to inspect the ponds.

One way of feeding fish is by throwing a small piece of anthill in the pond so that the fish can eat the termites.

Note from the Consultant: *There is need the consider current and future climate risk scenarios in siting fish ponds*

Agroforestry: Most Moringa trees (left) died after transplanting while the Musangu tree (right) proofed to be much hardier; some trees were planted on ridges, causing them to dry up more quickly than those in furrows



The plastic sheet on the lid (left) of this hive is not strong and it led water into the hive (right) after the first rains

The top bars of this hive are not fitted properly on the hive; they should be fitted flush with the top so that the lid can close properly.

The top bar of this hive has a very faint depression for putting the bait as compared to the correct one on the right from a different hive. The one on the left cannot attract bees *(personal communication with Bob Malichi)*

In this apiary there are 40 hives put on stands owned by 3 women and 4 men. Of the 40 hives there are 10 of the box model which were brought at the beginning of the project and of which only 4 were occupied; of the 30 new models (see picture above), none were occupied by bees.

After the field trip we had a FGD with VAG members during which the details of the field trip was explained by a women and a man from the group that went to the field.

Discussion topics:
The consultant commended the group for constructing 3 new ponds after other ponds dried up but further advised the beekeepers to make repairs to the hives that were not properly constructed as nobody else would come and do it for them.
The group was informed about GEF V and advised to continue implementing the projects (agro-forestry, beekeeping, fish ponds) started last your to show initiative and self reliance.

See Attendance List on the next page.

The meeting was attended by 10 women and 11 men.

KAMIZEKEZEKE VAG

ATTENDANCE LIST

NAME	GENDER	PROJECT INVOLVED
1. Osam Kgamboka	M	FIELD FACILITATOR
2. Loveness Mwiya	F	B/KEEPING
3. Janny Mwiita	F	AF/ FARMER
4. David Chipatela	M	AG/ FOREST
5. Wreckson Mulumba	M	B/KEEPER
6. Christopher Kashendi	M	B/KEEPER.
7. Willy Kabelenga	M	F/ FARMER.
8. Givaline Sekya	F	AG/ FOREST
9. Juisy Kashimoto	F	F/ FARMER.
10. Amos Walawala	M	B/KEEPER.
11. ~~Mo~~Ireen Jimwaya	F	F/FARMER.
12. Lidia Semu	F	B/KEEPER.
13. Irene Mundia	F	F/ Farmer
14. Yodinah Nyama	M	B/KEEPER.
15. Edna ~~Nadeshi~~ Nawashi	F.	F/ FARMER.
16. Happy Kafeta	M.	B/KEEPER.
17. Jameson Zakaria	M	AG/ FOREST.
18. Martin Ngayenga	M.	B/KEEPER.
19. Jwaipher Andafili	F	AGRO FORESTRY
20. Violet Mwala	F	AGRO FORESTRY
21. Ackim Malokota	M	AGRO FORESTRY

Project Information on Musomwenji VAG from the VAG Chairperson Samson Chimusha (no field visit), Saturday 3rd October 2015

Fish Farming:
There are 2 functional ponds, one owned by a group of 10 women and 3 men, the other one by 1 individual male

Beekeeping:
40 box hives and 20 Kabompo hives were distributed.

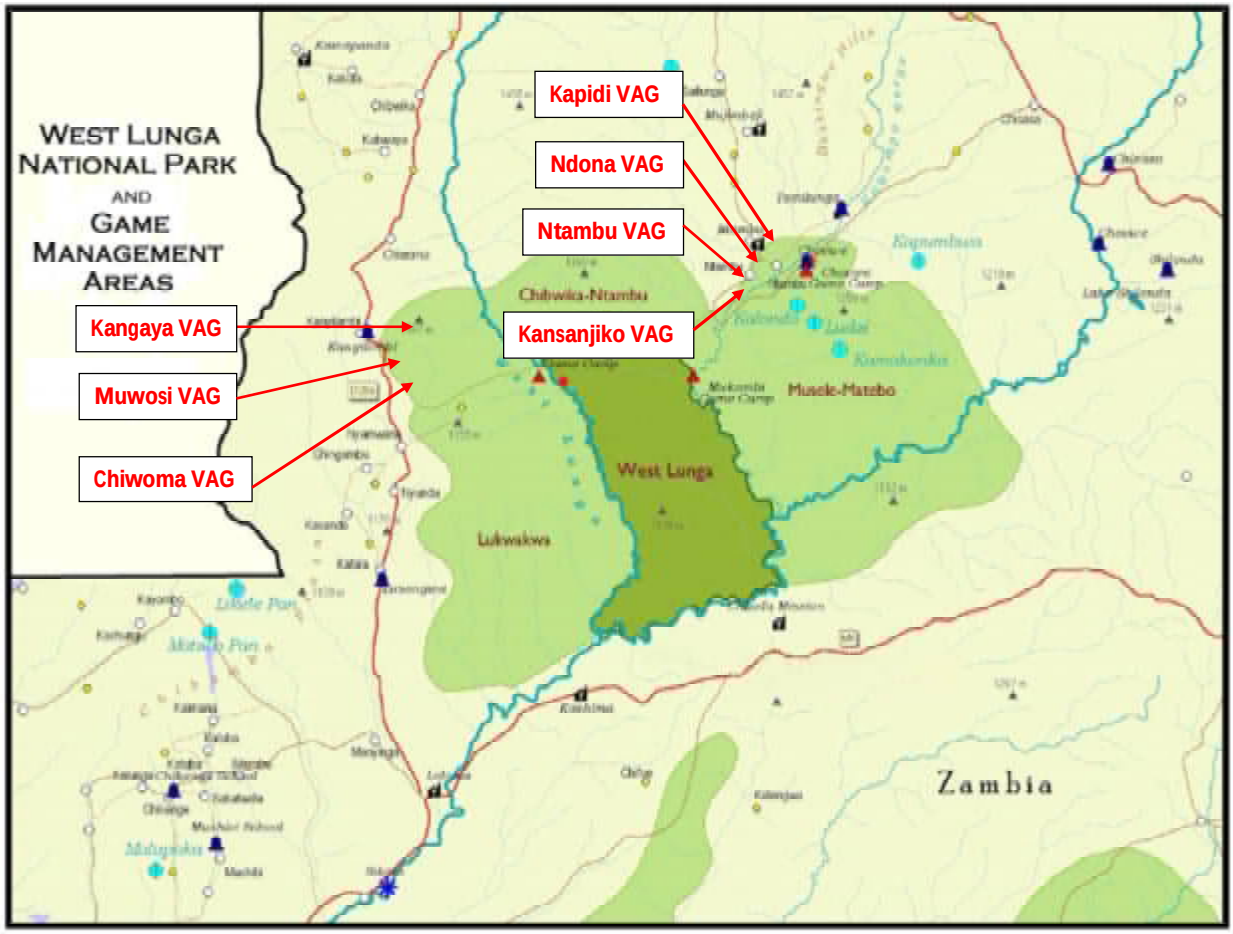
Box hives:
15 hives were given to a group of 5 women and 5 men. Of these 15 hives only three are occupied; others were only occupied for a week and then vacated, probably due to high temperature caused by iron sheet on lid

25 box hives and 20 Kabompo hives were given to 9 individuals (i.e. 5 hives each); these were 4 women and 5 men. Of these 45 hives only 7 are occupied.

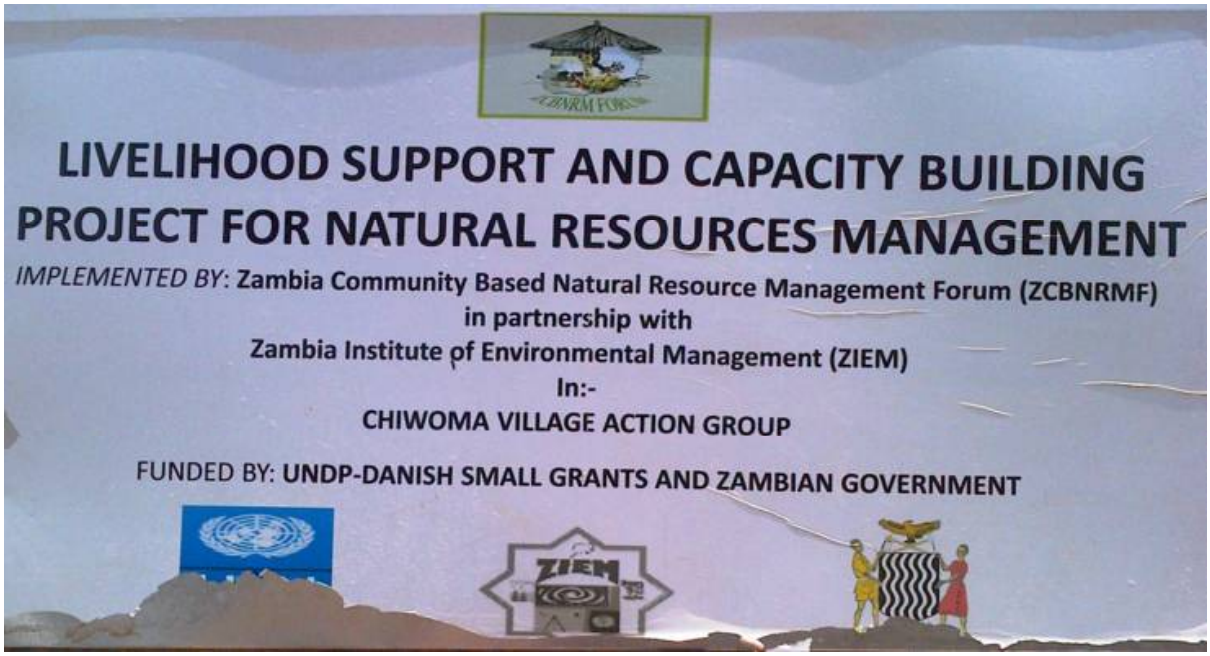
Agroforestry:
The minority of transplanted trees survived; Musangu did better than Moringa

CHIBWIKA - NTAMBU Game Management Area

The Map shows the VAGs visited in Chibwika-Ntambu (7 out of 12 VAGs)



Field Visit to Chiwoma VAG - Monday 5th October 2015



The hives of Niswaso beekeepers are about 10 km from their homes; there are 15 women owning 1 hive each and 24 men owning 1 hive each, not put in an apiary but in individual trees

Traditional hives are always kept in the same area where modern hives are introduced.
The group was concerned about marketing their honey when they start producing beyond own consumption.
They proposed that it was better if hives were produced by local carpenters.

Simukwazi Fish Ponds has 6 ponds owned by a

The women in the group mentioned that they are

group of 3 women and 9 men; 3 were dug in August last year while 3 were dug between July and September this year.

The group was not paid for digging but they were paid for fencing for some ponds. The owner of the first pond in the picture has fenced his garden but not his pond - he still expects assistance to fence his pond.

capable of climbing trees to service beehives but they need protective clothing, like overalls, to do that.

Note the small sticks in this pond; they provide an escape route for fish chased by larger predators like monitor lizards.

The group sold some fish, but they do not keep any records and have not received any business training (they estimated the sales at K200 which was used for paying school fees)

This stream has not dried up according to the group; they have put small dams in the stream to capture and guide the water flow.

Some ponds dried up and fish was transferred from the drying to the wet ponds.

At the start of the FGD after the field visit, the women and the men gave an account of what was discussed in the field.

Issues that were brought up by the meeting:
They need more assistance for beekeeping, such as: protective clothing, timber for making their own hives, market for honey, and
for fish ponds, such as: fencing ponds and market for fish.

During the discussion it was emphasised that the group should, where possible, take initiatives to address the above mentioned issues. They were informed by the consultant about the coming of GEF V and that evidence of self-reliance would make it more likely to receive support from GEF V.

See attendance list below; the FGD was attended by 23 women and 23 men.

CHIWOMA VAG MEETING

	NAME		Sex	F Fish Pools / B Bee Keepers
29	Betty	Kaumba	F	B
30	Redness	Makahinya	F	B
31	Sedy	Kanayi	F	B
32	Agella	Sengeleti	F	B / F
33	Ridia	Kasaka	F	B
34	Lizia	Kantumoya	F	B
35	Fridah	Kapaipi	F	B
36	Meldah	Kabinda	F	B
37	Johan	Kawanga	M	B / F
38	Joy	Kaloza	F	F
39	Mirriam	Kaloza	F	F / B
40	Sedy	Kalungiya	F	B
41	Precious	Samuneti	F	F
42	Sara	Mutuma	F	B
43	Mujinga	Chinyama	F	B
44	Patrical	Kaloza	F	F
45	FELIX	Masamba	M	F
46	John	Sengeleti	M	
47				

23 M

23 F

Field Visit to Muwosi VAG - Tuesday 6th October 2015

This is an earth dam in a stream to store water for the Nyakasanda Fish Ponds. The group has 20 members of which 15 women and 5 men who have all contributed to digging 8 ponds and they are still digging the 9th pond (see bottom right). They still intend to put fences around their ponds.

This group went for the fish farming training after which they had no further assistance from the project. They sited the pond themselves, dug with their own tools and got breeding fish from other ponds in the area (October 2014). This group shows no sign of any dependency syndrome.

They have not captured any fish yet but once they do they will use the money to by fish food and where possible pay school fees for their children.

The group showed us the area where the apiary is supposed to be. We only found stands being eaten by ants.

30 hives (made in Manyinga) were given to the group in September 2014 and one year later they are still kept in the village. The group stated that they don't want to put the hives on stands and that they don't have wires to put them in trees.

These hives have lids of iron sheet only, without any wood. These hives have proven to be too hot for bees.

The beekeepers group exists of 20 women (13 married, 7 single) and 10 men (9 married, 1 single); they own the 30 hives as a group.

<table>
<tr>
<td> 

Note that women are sitting on the back-bench and needed to be urged to participate in the discussion.</td>
<td>During the focus group discussion the women and men explained what was discussed during the field visit.

In the discussion it was emphasised that the fish pond group had done very well, despite not receiving any external assistance.

It was agreed that the beekeepers would make a provision for insulating the hive lids from the heat and hang the hives in the trees.

In this group the coming of GEF V was mentioned. It was emphasised by the consultant that the group should become active in beekeeping in preparation for this new project.</td>
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<tr>
<td colspan="2">The FGD was attended by 4 women and 10 men; see attendance list below.</td>
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06/10/2015

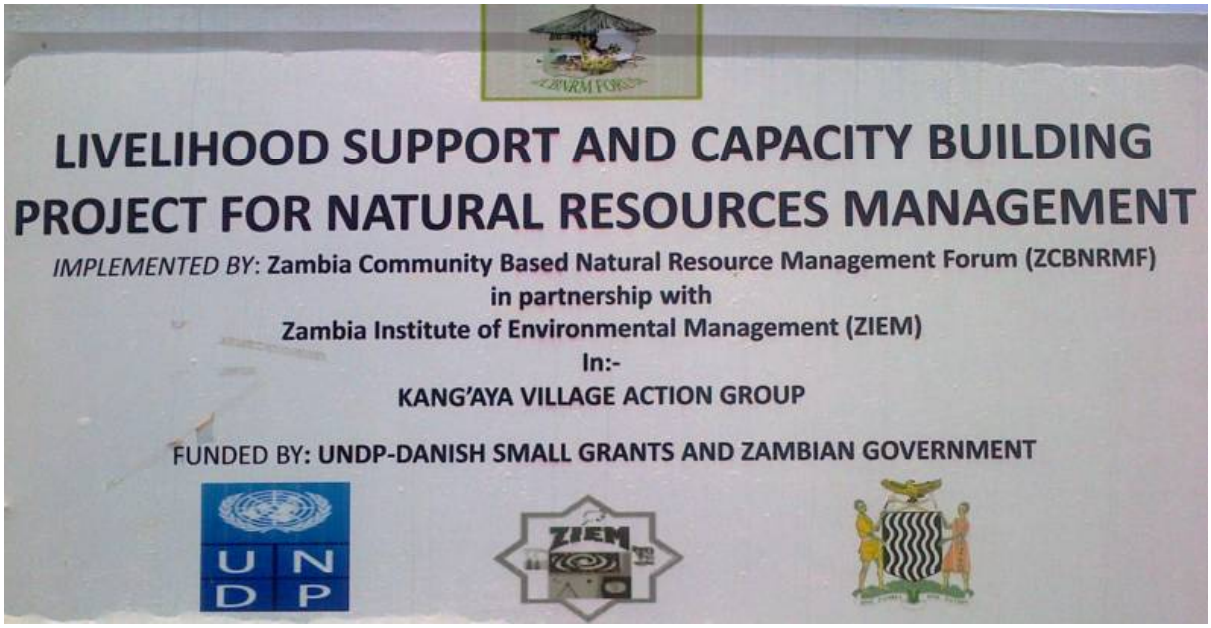
Murozi VAG meeting (women gone for work)

Name		m or F	F(ish) pond B(ecology)
CHITOKI	Christopher.	M	B
DIKOMBA	CHARLES	M	F
SOYALA	JELARD	M	B
LAINI	EVANCE	M	B
LAINI	JACKSON	M	B
CHISASA	TOM	M	B
KAZOMBA	KABANDA	M	B
CHIBINDA	CHRISTINE	F	F & B
KYUPA	MIRRIAM	F	B
KAZOMBA	MARTHA	F	B & F
KAPESA	MORGAN	M	F
SAMAKAYI	FELIX	M	B
KAMINA	SELESTINA	F	B
LUFUPA	CHRISSY	M	B

10 M

4 F

Field Visit to Kang'aya VAG - Tuesday 6th October 2015



A group of 7 women and 8 men got hives which were put on stands. The stands got eaten by ants and the hives got burnt. They didn't put firebreaks as taught by their trainers.

A group of 7 women and 5 men did dig 7 fish ponds of which 6 dried and only one remained with water. According to the members the stream has been more dry this year than ever before. Digging was done in August 2014 and fingerlings were supplied in September 2014. All the fish from the drying ponds was transferred to the only remaining wet pond.

They were not paid by the project for digging.

It was mentioned by the consultant that the GEF V project would make follow-ups to their projects to assess if further support should be given.

The meeting was informed about the field visit findings by one of the women and one of the men who went in the field.

The main concern raised was the low water table in the stream feeding the fish ponds. It was suggested that there would be need for a permanent dam in the stream to conserve water for the ponds. An earth dam will not be strong enough as it will be washed away by rain every year. The dam would be multi-purpose for: fishponds, livestock and domestic use.

The meeting also proposed to combine the fish ponds with the rearing of small livestock (pigs, goats, ducks) to produce manure for fish feed.

The FGD was attended by 19 women and 18 men; see attendance list below.

Kangaya VAG Meeting 06 10 2015

Community Meeting (Fish Pond only)

Name		M or F.
1) ANDREW	KAZOMBA	M
2) CHIKUNGU	PRISTEN	M
3) WILLIAM	SAMPASA	M
4) MWANAUTA	TAVIAS	M
5) RAPHEL	CHATANVU	M
6) MARTIN	MUSHIMALI	M
7) FRANK	CHATANVU	M
8) SINGTON	MWANAUTA	M
9) MULESU	VAILET	F
10) CHIYESU	RIDIA	F
11) MELDAH	KAMWANDI	F
12) RHODAH	KALENGA	F
13) ROWICY	CHINGAMBU	F
14) NIVIA	CHINGAMBU	F
15) BETIAN	ANTWANYI	F
16) MOUREEN	CHAMUZEMBA	F
17) MARIA	MWAMBAILUNGA	F
18) VICK	NYONGOLO	F
19) ROZ	KAYETI	F
20) FROIDAH	KAZAKA	F
21) ZUZEN	KAMWANDI	F
22) DAILICY	KAZEYA	F
23) JEMIPHAR	KAYETI	F
24) KUSANA	MATILDAH	F
25) PORIPHAR	MUKUMA	M
26) SHALON	KATOMBU	F
27) VANNY	KAYETI	F

p.t.o

			Sex
28	NJONGOLO	GRETSON	m
29	JUNIORA	S. MWANAMITA	m
30	CHIPPO	SALUNGA	m
31	FILEX	CHISHINGA	m
32	JOSEPH	SONEKA	m
33	JANICE	KUSANA	f
34	JUSTIN	KAMBADI	m
35	ISAAC	SAKUTOHA	m
36	GASPEL	KAZOMBA	m
37	RICHARD	NYONGOLO	m

18 M

19 F

Field Visit to Ndona VAG - Thursday 8th October 2015

Field Visit to Ndona Fish Farm - Thursday 8th October 2015

The fish farm was visited in the morning as part of the DSG project hand-over celebrations. A demonstration was given of capturing fish from the pond, but the wrong net size was used, resulting in fish jumping over the net.

The fish farm is supplied with water by damming a small perennial stream with an earth dam, which has to be rebuilt after the rainy season.

The group consists of 9 men and 1 woman; it was stated that women can't do the heavy work of digging. Ten (10) ponds were dug of which 8 were paid for @ K1000 per pond.
The group has a verbal agreement that once they sell fish they will invest in poultry and piggery to feed the manure to the ponds.

There is a shelter for night watchmen. The group intends to shift their village to the fish farm in order to have a permanent presence.

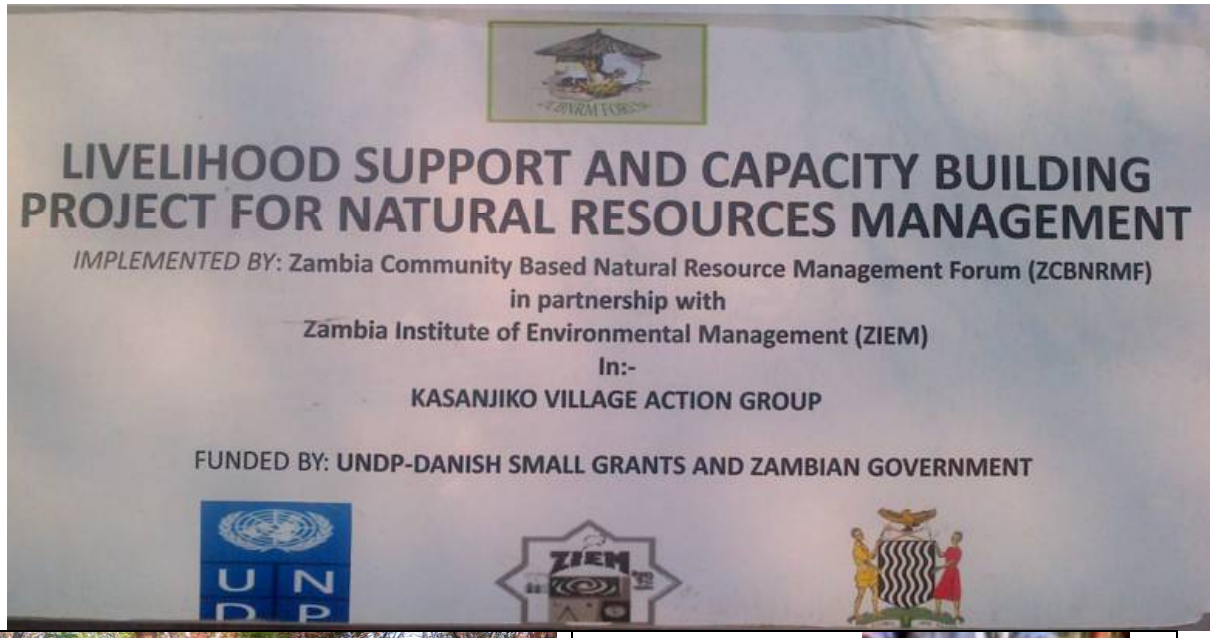
They intend to dig 1 or 2 ponds every year, even if there is no project assistance.

During the FGD the participants were informed about the issues that were discussed during the field visit.
It was emphasised during the following discussions that women should be more involved in the fish farming activities.
It was stated by the women that the project should give additional assistance to women because they are disadvantaged.
During the training workshop on fish farming, the participants were trained as trainers; but currently the trainers don't have the resources to train other people.
The consultant mentioned the coming of the GEF V project and encouraged the group to continue the determination they have shown thusfar.

NOONA FISH FARM – FGD – 08October 2015

	Name	M / F
1	Mr. Kapila Alan	M
2	Mwewulu Mutemba	M
3	Kapila Fordson	M
4	Nessy Kaswteka	F
5	Aggines Musopa	F
6	Kapila John	M
7	Sapatu Smith	M
8	Kr Kazadi paul	M
9	Br Beatrice Chumwanga	F

Field Visit to Kasanjiko VAG - 9th October 2015



This beekeepers group consists of 8 women and 16 men, although only 5 women and 8 men are active.

They received 10 hives in November 2013 from a supplier in Lusaka; the lids of iron sheet were later replaced with wooden lids by the project.

They received another 30 hives in May 2015; these were all locally made hives with wooden lids.

They did not receive any protective clothing.

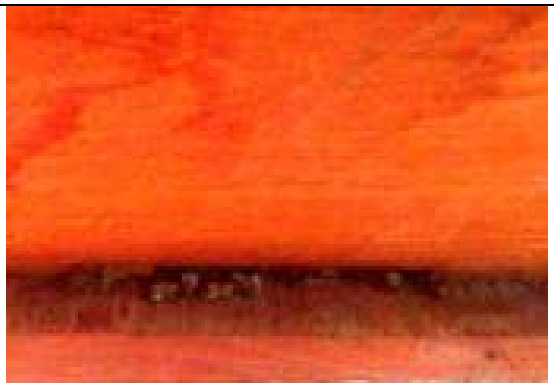
An example of the locally made wooden hives. The lids allow water to penetrate in the hive as can be seen from the water-soaked condition of the lid (at the time of the field visit the rains had already started).

The top bars of the locally made wooden hives were of different width and length and roughly fnished; bees had entered this hive but vacated as can be seen from the empty comb attached to the upside-down top bar.

For some hives the top bars were made and added later, resulting in some bars being too short.

Hives were suspended in trees by wires; some of the hives were protected from termites by plastic cups containing foam plastic soaked in ant-killer. Also note the plastic sheeting that is supposed to keep water out of the hives but already shows holes.

These top bars were added later to these hives; they have insufficient incisions for the bait to be attached to.



The entrance to an occupied hive.

Only 10 of the 40 hives in this apiary were occupied. The members of the beekeepers group intend to shift the apiary to a more suitable site.

During the FGD after the field visit it was discussed that the group could have done more to maintain and repair the hives given to them, e.g. adjusting poorly fitting top bars and getting ant killer to protect the hives.
The meeting was made aware of the new GEF V project and the need to be seen as an active group by the new project.

The meeting was attended by 7 women and 6 men. See attendance list below.

KASANINKO GROUP (Beekeeping) FGD

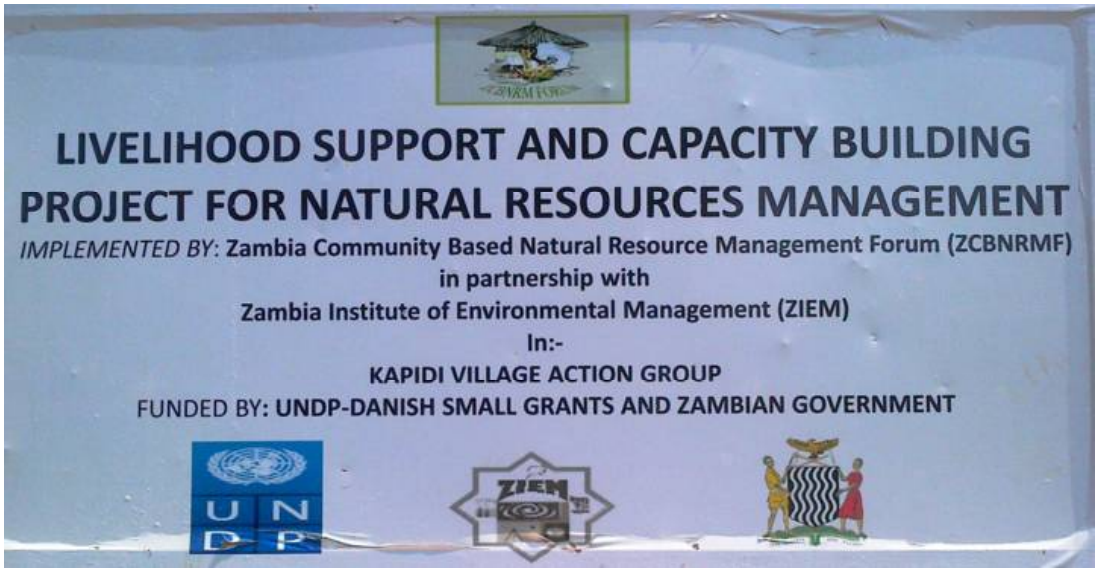
09/10/2015

Name	M or F
1. Charles Lwanga	M
2. Edith Mateyo	F
3. Lihen Kahonga	F
4. Kabelenga nesia	F
5. Deady Lwanda	F
6. Lufutanda Lwiss	F
7. NSwana Kapita	F
8. Charles Mukwetu	M
9. Enock Mukie	M
10. Rickson Kang'elu	M
11. Patricia Samuneti	F
12. Rabson Kapelebi	M
13. Rodger Lukama.	M

6 M

7 F.

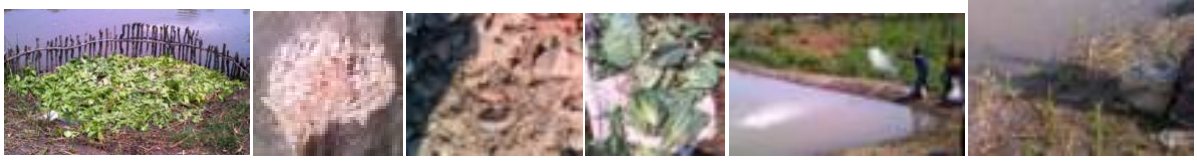
Field Visit to Kapidi B Fishpond - Friday 9th October 2015



The Kapidi B Fish Pond Group has established 8 ponds; the group consists of 17 women and 16 men. They were paid K1000 per pond for digging, between June and December 2014. The fingerlings were brought in January 2015.

A dam has been constructed with sand bags to feed the ponds with water.

There seems to be a good water supply, considering that this is the end of the dry season.



Fish are fed with a variety of feed, from left to right: leaves from local trees, maize bran mixed with soaked cassava roots, pulverised anthill with termites, outer cabbage leaves, and maize bran spread by men and women. Such a variety of feeds has not been seen in other ponds that were visited.

Wood ash is sprinkled on the ponds to kill tadpoles in other to prevent frogs invading the ponds.

The group has started digging a new pond downstream from the old ponds.

During the FGD after the field visit the group mentioned that they will use the money from fish sales for digging more ponds; they want each member of the group to have at least one pond. They also have to buy a net to start catching the fish which are now big enough to sell.

The group was informed by the consultant about the coming of the new GEF V project.

See next page for the attendance list of the FGD after the field visit; it was attended by 10 women and 7 men.

Kapiri B Fish Ponds - meeting (FGD)

Name	M or F
① Mr. Mseng'u Sam	M
② Teddy Kapokosa	M
③ Jeris Kalayi	M
④ Mpoya Kadilu	M
⑤ Fred Ngolofwana	M
⑥ Violet Kazumba	F
⑦ Sevia Kachongu	F
⑧ Mimy Kupiya	F
9 Rosemary Mukosayi	F
10 Nokia Mulimba	F
⑪ Flora Muzeya	F
12 Dorothy Chiteta	F
13 Jessy Mutondu	F
14 Phrisy Kashinga	F
15 Wiston Kaumba	M
16 Benda Mukosayi	M
17 Idah Kantumoya	F
18 Kelvin Mubeilunga	

7 M
10 F