



THE ENVIRONMENTAL COUNCIL OF ZAMBIA

*Pollution Control and Other Measures to protect Biodiversity in Lake
Tanganyika*

(RAF/92/G32)

FAMILIARISATION TOUR OF MPULUNGU

*A COMBINED SOCIO-ECONOMICS AND ENVIRONMENTAL EDUCATION TOUR
CONDUCTED FROM 2/2/99 TO 3/3/99*

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Contents

List of Acronyms	ii
Foreword	iii
Executive summary	iv
1 HIGHLIGHTS	1
1 Environmental Education Activities	1
2 Conservation and Development Committees	1
3 Activities of CDCs	2
4 National Project coordination	3
5 The team	3
6 Approach and salutations	3
2 THE TOUR IN MORE DETAIL	4
1 The Aim	4
2 Specific Objectives	4
3 Findings	4
3.1 Community Development Officer (CDO)	4
3.2 Department of Fisheries (DoF)	5
3.3 Immigration Department	7
3.4 Mpulungu District Council	7
3.5 Mpulungu Harbor Corporation Limited	8
3.6 Mr. Mugala	8
3.7 The Provincial Agricultural Co-ordination Office (PACO)	9
3.8 Police Service	9
3.9 Senior Chief Tafuna	9
3.10 Stratum 2 CDC	9
3.11 Village CDCs	10
3 CONCLUSIONS AND RECOMMENDATIONS	12
4 PROPOSED IMMEDIATE ACTIONS	14
Appendix I: Institutions and individuals visited	15
Appendix II: Itinerary	17
Appendix III: Resources	18

List of Acronyms

AMIS	Association of Micro-finance Institutions of Zambia
ANSEC	Assistant National Coordinator and National Socio-economics Coordinator
CDC	Conservation and Development Committee
CDO	Community Development Officer
DoF	Department of Fisheries
DSA	Daily Subsistence Allowance
DWASHE	District Water Sanitation Health and Education
LTBP	Lake Tanganyika Bio-diversity Project
NEEC	National Environmental Education Co-ordinator
NGO	Non Governmental Organization
PACO	Provincial Agricultural Coordinator
SEESS	Socio economics and Environmental Education Special Study
TCLO	Training and Communications Liaison Officer
TCLO	Training Communications and Liaison Officers
USD	United State of America Dollar
ZM	Zambia
ZMK	Zambian Kwacha

Foreword

This report covers the events of a visit to Mpulungu jointly undertaken by the Assistant National Coordinator/National Socio-economics Coordinator and the National Environmental Education Coordinator. This report is biased towards the socio-economics aspects. Only those Environmental Education aspects with relevance to Socio-economics are reported.

The report is presented in three parts namely highlights, tour in more detail and conclusions and recommendations.

The section on highlights presents six sub-sections. These are the ones about environmental education activities, conservation and development committees and their activities, aspects of national project coordination, an introduction of the tour team as well as the approach of the visit.

The second chapter presents the aim and specific objectives of the visit and a detailed account of the proceedings presented as findings. The comments of the socio-economics coordinator are presented in the last chapter titled conclusions and recommendations.

Three appendices are attached to the end of the report. The first one lists the institutions and individuals who the team held discussions with. The second appendix presents the itinerary of the visit while the last section deals with the resources used.

Executive summary

The environmental awareness campaigns has sensitised the local communities to the extent where they organised themselves into village and stratum conservation and development committees. A village conservation and Development Committee (CDCs) is formed at village level. Ten of such committees come together to exist as a Stratum Conservation and Development Committee. To date there are 50 village and 6 stratum conservation and development committee. Traditional leaders have endorsed the formation of committees.

The Environmental Council of Zambia and the Department of Fisheries have been backstopping the CDCs and lured participation of the Police Service, Local Councils and other interested institutions.

The basic function of the CDCs is to spearhead sustainable methods of fishing in the lake by promoting community based management of natural resources. The ultimate goal is to conserve the biodiversity and forester development.

Discussions were held with various stakeholders in the project area with a view of achieving the following objectives.

1. To monitor activities of the CDCs as a means of checking on progress
2. To consult with local communities on existing and potential alternative livelihoods to fishing, and
3. To recommend some ways of improving the activities of socio-economics.

The following are the major findings of socio-economic importance.

1. The CDCs are essential not only to this project but other community based activities such as food relief distribution, community education, sanitation and health to mention but a few. Activities of some CDCs qualify them to act focal points for community development.
2. Although the CDCs are willing to get involved in other commercial ventures for alternative livelihood, they are unable to do so due to [first and foremost] resource limitations and [second] lack of capacity.
3. Project sustainability after the GEF funding has a poor future partly due to lack of logistics by partner institutions which now depend on the project even for some of their routine activities.
4. Local communities would love to incorporate sanitation measures in their conservation activities as a way of getting rid of epidemics such as cholera, which has become endemic in the area.

1 HIGHLIGHTS

1 ENVIRONMENTAL EDUCATION ACTIVITIES

Environmental Education interventions in the Lake Tanganyika Bio-diversity Project have brought about awareness among local communities for fish conservation in the lake. Traditional leaders, including chiefs and village headmen, local councils of Kaputa and Mpulungu districts, the Police officers, Community Development Officers, Artisanal (small scale) fishermen and individuals from various walks of life now appreciate conservative fishing.

Under the guidance of the Department of Fisheries (DoF) and the Environmental Council of Zambia (ECZ), small-scale fishermen saw a need for organizing themselves into Conservation and Development Committees (CDCs).

2 CONSERVATION AND DEVELOPMENT COMMITTEES

There are two types of CDCs formed. These are the Village and Stratum CDCs. The Village CDC is the most basic and is made up of representatives of fishermen of a particular village. The Stratum CDC is the secondary committee that is constituted by representatives of at least 10 Village CDCs.

The formation of CDCs was a felt need of the local communities following environmental awareness and sensitisation campaigns by the Lake Tanganyika Bio-diversity Project (LTBP). not an imposition by the project on the small-scale fishermen.

Fishing practices in lake Tanganyika have been changing with time. The predominant scoop gear of the olden days has given way to more modern devices of gill and seine nets. This is because pressure on the lake has been rising due to a rise in fishermen population. Fish populations have therefore dwindled along the cost line and as such fishing in the interior water is the surest way of achieving reasonable catches. Interior water fishing requires more advanced methods of fishing. The more the pressure and sophisticated methods of fish extraction on the lake the more is the fish depletion rate. This in itself demands that more and more sophisticated methods be used to maintain some level of reasonable catches. Hence the emergence of wrong and environmental destructive gear [such as mosquito¹ size type of nets] especially among small-scale fishermen who cannot afford sophisticated methods of fish extraction. Yet the fact remains that increasingly more time and effort are spent now than before in order to catch the equitable sizes and quantities of fish as in the long past.

¹ The use of mosquito type nets literally extracts every thing from the lake including spawn or eggs.

The amount of time and effort spent on fishing now is does not match favourably with the catch. The quantities of fish caught have gone down with time and indications are that this trend will continue. Equally, the size of fish being caught is also reducing. This fact is very much appreciated by the elderly men and women who now compare the situations of say 1960s to those of today. It is now clear in their minds that one day even the small quantities of fish would not be caught unless more judicious fishing practices are devised to replace the old fashioned destructive extract-all methods.

Traditional rulers flanked by their headmen with equipped with the awareness information from the Environmental Council of Zambia (ECZ) and the Department of Fisheries (DoF) saw the need for their subjects to be sensitised too. With technical guidance of the ECZ and DoF, invitations to the local police, local councils, community development officers and individuals were made as early as 1997.

All these realized the need for non-destructive fishing practices and participated in mobilizing local communities to attend awareness campaign meetings. It is out of the meetings where the idea of community based environmental management was muted. As a consequence, Village CDCs and later the Stratum CDCs were formed. A provision for the formation of District CDCs is yet to be pursued.

Village CDCs draw membership from the small-scale fishermen and farmers, charcoal burners, traders, consumers, NGOs [such as churches] and government officials as and when necessary.

Stratum CDCs are comprised of members representing headmen, government officials, NGOs, fishermen and businessmen.

3 ACTIVITIES OF CDCS

The purpose for the formation of CDCs is to involve people in community based management of [chiefly] the resources of lake Tanganyika and [partly] the resources of the surrounding environment. The ultimate goal is to protect biodiversity at the same time promoting development in areas of need in the community.

In the context of the CDCs, cases of abuse are brought to the attention of the CDC Chairman. The solution is sought at Village CDC or if not the case is referred to the Stratum CDC. If the Stratum CDC cannot resolve the issue it is referred to the chief. It is worth of noting that at these stages the DoF staffs is involved.

Through the same committees, cases of security nature are reported to the local neighbourhood watch who work together with the police. Security, in the context of the lake Tanganyika communities, also includes monitoring the influx of illegal immigrants and reporting the same to relevant authorities.

On the 15th Day of January of 1998, the committees came up with an order urging fishermen, fish traders and all inhabitants of the Tabwa and Mambwe chiefdoms around lake Tanganyika to refrain from using

destructive fishing gear was made. Senior Chief Tafuna, Chief Chitimbwa, Headman Teleka and the Department of Fisheries signed the order. The order gave power to the DoF to punish the culprits on behalf of the chiefs and government. A copy of the signed order written in three languages [ciBemba, ciLungu and English] is attached as appendix IV.

4 NATIONAL PROJECT COORDINATION

On October 1 of 1998 the Assistant National Co-ordinator and National Socio-economics Co-ordinator was appointed to be the Country Project Coordinator under supervision of the National Coordinator. In January 1999, the National Environmental Education Co-ordination had to change hands because responsibilities of officers at the Environment Council of Zambia changed. A new Environmental Education Coordinator, Kwali Mfuni was appointed to replace Shadreck Yona Nsongela.

5 THE TEAM

During the training communications liaison (TCLO) workshop in Bujumbura, the Field Project Coordinator suggested that Zambia monitors the activities of the Socio-economics and Environmental Education Special studies (SEESS) in Mpulungu.

The tour was undertaken by the author of this document, Munshimbwe Chitalu (the Assistant National Coordinator and National Socio-economics Co-ordinator - ANSEC) Kwali Mfuni (the National Environmental Education Coordinator - NEEC) on 22nd February 1999. The tour lasted until 3rd March 1999 for the ANSEC and 26th February 1999 for the NEEC. The NEEC left for Kigoma [in Tanzania] to attend a Communications Skills workshop.

6 APPROACH AND SALUTATIONS

During the tour the Team visited and held discussions with the government departments in Mpulungu and Kasama and with traditional leaders, CDC members and individuals in Mpulungu. A list of institutions visited and persons met is attached as appendix I. My gratitude to all the listed people without whom this visit could not have been the success it was.

The team also hired² a movie camera for purposes of recording some of the events. The Administrative Assistant, Mr. Clement Mwelwa, was the photographer. A total of sixty minutes of recording was done. Subject to availability of resources, the videotapes could be edited and two copies of a documentary produced for submission to the National Coordinator in Zambia and the Project Coordinator in Tanzania.

² Hiring was done on the understanding that the costs would be recovered should the Project Management in Tanzania find the product useful. This was done in principal of keeping a tangible record of project activities on the ground.

2 THE TOUR IN MORE DETAIL

1 THE AIM

Effective project management is about how well it is understood [by its managers] with respect to its objectivity and the different roles of stakeholders. Specifically, the understanding of the primary beneficiaries and their environment is cardinal to successful project management.

It was therefore pertinent for the Assistant National Coordinator/Socio-economics Co-ordinator and the Environmental Education Co-ordinator to undertake a familiarization visit of the project site. It was necessary to consult with beneficiaries (local communities) as a way of fully understanding the project's social and economic contexts.

Against this presentation, the visit was made to provide a forum for exchange of information between the Socio-economics Co-ordinator, the local people and the government departments associated with the project.

2 SPECIFIC OBJECTIVES

Specifically, the objectives of the tour were twofold;

1. To monitor the activities of the conservation and development committees as a way of checking on
 - progress
 - conformity with the law
2. To consult with local communities on existing and potential alternative economic livelihoods to fishing
3. To make recommendations on ways of improving the socio-economic and environmental education activities of the project.

3 FINDINGS

3.1 Community Development Officer (CDO)

The ANSEC met with the Community Development Officer, Miss Lillian Mofya. The discussion was based on the community activities currently being undertaken in the district.

The CDO was party to the campaigns that gave birth to the CDCs. The CDO observed that the CDC are perhaps the most effective way of involving communities in conservation of natural resources and development activities.

The CDCs now form the most basic and major focal point for other activities. They are currently being used for food relief distribution. The Muzabwela committee was trained on raising nursery trees by the forestry department for purposes of tree planting activities.

The CDO observed that oral tradition has it that in years back fish catching was done with very little effort especially during the time of breeding. Although more sophisticated methods of fishing are in place now, more time and effort are spent on fishing for one to have a reasonable catch.

The CDO believes that agriculture is the best alternative to fishing. However, there is need for an effective Environmental Education campaign and appropriate training mechanism for the local communities and other stakeholders..

3.2 Department of Fisheries (DoF)

The ANSEC and NEEC had two formal meetings with the DoF staff. The first one was with Officer in Charge [Mr. Leonard Mwape) in his office. The second one involved the ANSEC and Mr. Chipulu on the lakeshore. The DoF is responsible for a number of activities taking place at the lakeshore. The DoF houses the LTBP offices and is active in Sedimentation, bio-diversity Special Studies (BIOSS), Pollution, and Socio-economics and Environmental Education Special studies (SEESS).

A discussion with the officer in charge revealed that the work in pollution is being done only to capture the aspects vital for limnology. He hoped it would be possible for the Pollution Special Studies to use these findings to investigate the pollution status of the lake further. Worth of noting is the fact that the lake is receptacle for untreated effluence from domestic homes and for the servicing of the boats and engines. Admittedly there is need for actual pollution work even in the event of this kind of study.

The meeting revealed that, Mr. E. Chipulu [the person in charge of Environmental Education activities on the lake side] has been transferred to Kasama. Mr. Chipulu was in Mpulungu at the time of this visit.

The Socio-economics and Environmental Education meetings were done informally and formally with Mr. Chipulu and Mr. Ng'andu [the so called lake contacts of LTBP]. The two have been responsible for sensitisation of local communities hence the formation of CDCs. Lately they have muted an idea of sensitising commercial fishermen with a view of mobilizing them into a Fisheries Conservation Committee.

To date 50 village CDCs and 6 Stratum CDCs have been formed. These have attended training workshops on responsibilities and community based management.

The committees have been working closely with the Police Service for security reasons and as a way of indicating seriousness. The police

also advise the meetings on the point of law relating to culprit apprehension. To date their role has been largely educative that apprehensive.

The DoF confiscates Destructive gear found on the lake in line with the fisheries act, which also empowers them to prosecute. The gear is then destroyed and the case reported to the committee. Sometimes the committees fine the culprit. The fine is kept by the treasure of the committee and is used for routine CDC activities.

The fines and contributions from members sustain the activities of the CDCs.

The CDCs have suggested several economic alternatives to fishing for which they would need loans.

Capacity for the people to engage in alternatives need to be built through structured training in technology, natural resource management, group dynamics and basic business management skills including but not restricted to basic business accounting.

Although the awareness campaigns appear to be successful, more are required to cater even for government/quasi-government departments, NGOs and schools.

Development of the CDCs is laudable. One Village CDC in Chituta has contributed to the erection of a school in the village and contributes to one teacher's salary at the same school. This activity will go on for twelve months. In addition, the committee has cooperated well with the District Water, Sanitation, and Health Education (DWASHE) in sinking boreholes to ensure clean water supply to the village.

The discussion revealed that the lake Tanganyika waters in Zambia are the shallowest in the lake of the four countries. It being this way, the same waters are preferred for fish breeding purposes. Fishes from far away zones come to breed in these waters and swim back. It is for this reason that the southern most point in the Chifunda bay is an all time no fishing zone.

3.3 Immigration Department

The immigration department denied being aware of the project activities. After explanation of the aims and objectives, they felt they would be useful in assisting the committees on immigration matters.

According to the department, they feel there are no major immigration mishaps in the area.

3.4 Mpulungu District Council

The meeting with the council was meant to appreciate the consistency of CDC actions with the Local Government Act as well as observing the importance of the LTBP to Mpulungu.

The importance of the project to Mpulungu cannot be overemphasized. The need for conservationist fishing is cardinal for sustainable incomes through fish levies. To this effect, the council took an active role in group mobilization for the formation of CDCs and were represented at the Siavonga and Luapula tours. The issue of water pollution from domestic waste is equally cardinal, and the Council will need partners for the purposes of ensuring that pollution from domestic waste is reduced.

For unknown reasons, the council was left out in follow-up activities.

The council doubts the fact that people are complying with regulations. The council is once and again consulted on issues relating to wrong gear usage and has worked closely with the DOF.

However, the council did not receive draft regulations for operations of the CDCs. As such, it is not easy to comment on compatibility with the existing by-laws.

The council admitted being aware of pollution on the lake coming from maintenance works as oil is spilled in the water and defecation. The growing number of refugees is indeed a thorn in the flesh of the council. They fear that these people could come with contagious diseases, which can spread to the rest of the people.

The council needs to continue participating in the LTBP in sensitisation of communities on conservation and development.

Problem of untreated soak-aways of effluent into the lake

3.5 Mpulungu Harbour Corporation Limited

Mpulungu Harbour Corporation was very reserved in discussing the issues of harbour pollution but admitted that it is not uncommon to observe vessels discharge the oil in the lake during serving. A claim of submission of a report on the same to the police service who, failed to act due to inadequate resignation could not be verified.

One badge was reported anchored at the harbour for more than six months. The badge has people on board. The implication of this is human waste is disposed of in the lake. The vessel, which is from one neighbouring country has no facilities for human waste disposal.

The corporation admitted that pollution exists, but it is not of serious concern even though the corporation is not making an effort to minimize or prevent further pollution.

3.6 Mr. Mugala

Mr. Mugala is a head teacher of one of the schools within Mpulungu. He has been associated with the project from the time of community sensitisation to date. He is the person that was involved in helping committees come up with some Socio-economic plans.

He observed that some people comply with the fisheries conservation by-laws because they have nothing they can do about it. Otherwise they are not convinced and see no need why they should allow themselves to suffer when there is an easy activity of just catching fish from the lake.

The implication of the statement is that there is real need for alternative production support of any form. This can be through loans for procurement of inputs and alternative economic assets to include environmental education activities for purposes of sensitisation on protection of bio-diversity, training in appropriate technology and basic micro-enterprise management skills.

3.7 The Provincial Agricultural Co-ordination Office (PACO)³

The discussion with the PACO was a lobbying process to ensure that the project is acceptable at all levels. This could prove to be vital for its success. The PACO in principal admitted to provide support to the project and requested that ties should be strengthened between his office and that of the National Co-ordinator.

3.8 Police Service

The Police service in Mpulungu is an active partner in the project and is fully aware of its activities. The service participated in last stages of sensitisation of the local communities on two aspects. These are the point of emphasis of law and that of providing security to the Environmental Education Teams from the Department of Fisheries.

Their post group formation activities have been provision of defaulting fisheries on the point of law and arrests. There has not been a case referred to the courts yet. The service feels it is vital for them continue providing this kind of service to the defaulters for time before they could commence criminal prosecutions against them

3.9 Senior Chief Tafuna

A courtesy call was made on the chief and a vote of thanks given. The Chief responded by making an assurance that what they have began will continue to be done and requested if in future he could be included in appropriate training as it comes about.

3.10 Stratum 2 CDC

This stratum Committee is comprised of representatives of six villages stretching from Chipwa to China along the lakeshore.

The committee works closely with the Village CDCs and the Police Service in enforcing fish conservation by laws. It is the experience of the committee that initial CDC work was well accepted until a negative statement about existence of committees and banning unacceptable fishing was erroneously made by the Provincial Minister. The statement caused the people to be hostile to the committee. As a result they resorted to threats of all sorts even that of use of witchcraft. In addition they withheld their contributions to the committee.

The situation is slowly improving but appears far from being normal. As such the committee sees more need for prolonged environmental education awareness campaigns to include even local politicians and

³ The visit of the PACO was not planned, it came as a result of some statement allegedly made by one politician nullifying the provisions of the Fisheries act by allowing fishing at any time with whatever method.

civic leaders. Spiritual counselling during these awareness campaigns would be essential.

It is a desire of the committee that effective fish conservation is not only about restricting fishing gear but it is also about seeking alternative activities both on the lake and the land. Engagement in water transport and farming activities were isolated as alternatives, which could act to reduce fishing pressure. The committee prefers that loans could be given to the committees as a way of sustaining their activities and that of ensuring reduced fishing pressure.

3.11 Village CDCs

Discussions were held with Ngwenya, Chilila and China Village CDCs in their respective villages. Below is a summary of major and common concerns highlighted in the discussions.

The committees have observed that from the time they started implementation of the fish conservation by-laws, the situation has drastically improved. It is rare now to see mosquito sized Kapenta on the market. This is as a result of the reduction in the use of mosquito nets for catching fish.

There was a security related problem to the operations. The committees agreed with the LTBP Mpulungu to arrange for CDC identification cards to prevent other unlawful people taking advantage and instituting fines on the suspected culprits. This exercise is yet to be done.

The CDCs are incensed by the practices of some commercial fishermen who damp fish in the lake. They claim that such practices trigger cholera outbreaks and wonder where the law is. Tens of metric tones are released in the lake each year. This year three such fish damps estimated at five (5) metric tones have been done.

The committees would like to see the protection of Inkupi, which is the Lungu pride that did not spare a white man to give a name of English Fish and other fish species such as Pamba and Imonde.

Other than conservation and protection, there appears to be need for blending conservation with sanitation. This is demonstrated by the efforts of the Chituta CDC with DWASHE. For Mpulungu central this would serve even the purpose of sustaining the activities of the CDC. It is expected to generate funds from such sanitary activities. An example is that of investing in communal fee paying toilet s run by the committees. This so cardinal to them as Mpulungu and Kaputa lakeshores have become an endemic cholera outbreak centres.

Committees observed that there could be no better empowerment than encouragement of local communities and individuals to participate in alternative economic ventures. This is proposed to take some of form small loans support for activities of environmental nature and those that reduces fishing pressure on the lake. Sited among them are;

- 1. Enhanced natural resource (trees, birds, animals) management for purposes of encouraging tourism**
- 2. Direct income generation ventures such as cafeterias, small businesses, farming and even commercial fishing**
- 3. Investment in water transportation activities**

3 CONCLUSIONS AND RECOMMENDATIONS

So far, the activities have been done in conjunction with the relevant government departments. It is therefore most likely that the activities were done in conformity with existing acts of parliament such as the Fisheries Act. However there is need to cast our net wider to include other players.

The concerns of the Local Council are genuine and there is real and urgent need for the project to consult with them on the matter relating to the local government act and the council by-laws.

CDCs are operating under very trying conditions and without a clear future. They lack both the capacity logistical support. Yet they have a lot of work to be done within the socio-economics and environmental education special studies.

In the area of environmental education there is need to continue with sensitisation of [not only] the local communities but also local politicians, traditional rulers and village headmen, various government and quasi government departments, private commercial organizations and NGOs.

Local politicians include leaders at ward, constituency, and district levels. Traditional rulers include the all the chiefs in the catchment area including [among others] Senior Chief Nsama, Senior Chief Tafuna and Chiefs Kaputa and Chitimbwa along with their headmen. The NGOs are largely churches and those that are working in environmental sector. The Zambia Revenue Authority, the Immigration Department, the Education Department (teachers), Department of Water Affairs, Department of fisheries, Commercial Fishing companies, Department of Health and Community Development all need to be involved.

In the socio-economics area, there is need for a thorough investigation in likely and existing economic alternative livelihoods through a multi-disciplinary survey of the area. This should include identifying the alternatives and subjecting them to a cost and benefit analysis. A multi-disciplinary team of five local experts would comprise of a socio-economist, rural development expert, an environmentalist and a business management expert. The out come would be a project report in form of a long term investment proposal called **Micro-enterprise Development Programme for Bio-diversity Conservation in Lake Tanganyika (MDP-Beacon)**. The proposal should also state the possible financing plan and a list of NGOs and Community Based Organizations actively operating in the area. The team would also consult with the Association of Micro-finance institution (AMIS), Micro bankers trust, Regional Micro credit Campaign Committee as a way of identifying potential supporters of the intended programme beyond this preparatory stage.

On the overall, sustainability of the project after its life span may not be achievable. The fact that all operations of the DoF depend on the project resources, makes the project vulnerable to failure should the funding source expire. Basically, there is no DoF without project funds. Specifically, activities such as pollution studies would not be sustained even if the project could sustain itself. This is because DoF who are active in pollution studies have no mandate to conduct such studies in their terms of reference. As it is, the DoF are doing this activity as a way of luring funds into their funds.

It would be prudent to involve an institution that is mandated to conduct pollution studies in the lake. The Department of Water Affairs and the National Institute for Scientific and Industrial Research (NISIR) are more competent in this area.

From the socio-economics point of view, any amount of destruction of the biota in the shallow waters of the lake will have life long negative telling effects on three livelihood of the local communities. This is because, the source of livelihood would be lost and people will have no supply of [specifically] fish proteins which fact could [eventually] lead to malnutrition and its attendant disorders.

Considering this fact all scientific findings of the special studies should be subjected to a socio-economic analysis for the purposes of translating the likely impacts of any changes in the lake biota into socio-economic implications.

4 PROPOSED IMMEDIATE ACTIONS

1. Arrange and visit Kaputa district with the same objectives indicated in this report
2. Arrange a visit to Mpulungu with partner institutions check on harbour pollution and waste dumping in the lake. The team is proposed to include representatives of the LTBP, NISIR, ECZ waste management team, Marine Department and the National Agricultural Information Services (NAIS).
3. Discuss the fish conservation by-laws passed by the CDCs with the local councils.

Appendix I: Institutions and individuals visited

1. **Mpulungu District Council**
 - J. Chewe, Chief Administrative Assistant
 - Mwilwa, Senior Administrative Assistant
2. **Zambia Police Service Department of Immigration**
 - Inspector C.M Mukwebe, Office In Charge
 - Inspector, Siamijelo, Second in command
3. **Department of Fisheries**
 - Leonard Mwape, Officer in Charge
 - E. Chipulu, Fisheries Extension Officer
 - F. Ng'andu, Fisheries Training Instructor
4. **Department of Community Development**
 - Lillian Mofya, Community Development Officer
5. **Ngwenya Village Conservation and Development Committee**
 - Jack Mazimba, Chairman
 - Mulenga Chomba
 - Rasford Sikazwe
 - Beldin Museka
6. **Chilila Village Conservation and Development Committee**
 - Duncan Kaluba, Chairman
 - Robert Nkonde
 - Paul Sinyangwe
7. **China Village Conservation and Development Committee**
 - Maxwell Simbule
 - Webster Siame
 - Justin Simbeye

8. Stratum 2 Conservation and Development Committee

- **Rodwell Chifunda, Chairman**
- **Victor Nsofu**
- **Kasenga Sunday**
- **Onzwe Nyamukolo**
- **Tonga Kasase**
- **Kabatwe Sondwa**

9. Lake Tanganyika Bio-diversity Project

- **Clement Mwelwa, Station Administrator**
- **Olivier Drieu, Regional Sedimentation Facilitator**

10. His Royal Highness Senior Chief Tafuna

11. Ministry of Agriculture, Food and Fisheries

- **Collins Nkatiko, Provincial Agricultural Coordinator**

12. Mpulungu Harbour Corporation Limited

- **George Chikwamu**

Appendix II: Itinerary

- Monday, 22/2/1999** Departed Lusaka for Mpulungu at 14:30 hours. Overnight at Mbita Rest house in Mpika.
- Tuesday, 23/2/1999** Departed Mpika for Mbala.
- Wed' day, 24/2/1999** Programme visits; LTBP Staff, Mpulungu District Council, police Service and Immigration Department, Mpulungu Harbour Corporation Limited
- Thursday, 25/2/1999** Programme visits; meeting Fisheries Department Officer in Charge, with Conservation and Development Committees, Senior Chief Tafuna.
- Friday, 26/2/1999** Preparing draft TLO work plan for Zambia Programme visits; Community Development Officer, Mr. Mugala, Department of Fisheries LTBP Environmental Education Officer, Kwali Departed for Tanzania through Kasama
- Saturday, 27/2/1999** Programme visits; Conservation and Development Committees.
- Sunday, 28/2/1999** Recess
- Monday, 1/3/1999** Departed for Kasama, met with the Provincial Agricultural Coordinator, Overnight.
- Tuesday, 2/3/1999** Departed Kasama and arrived Lusaka. End of tour.

Appendix III: Resources

A. Accountable Imprest

Description	US Dollar	ZM Kwacha
Fuel imprest	265.00	596,250.00
Staff subsistence	525.00	
Contingency	10.00	22,500
Total advance	800.00	618,750.00

B. Expenditure statement

(i) DSA disbursements

Job title (Name)	Currency	Daily rate	No. Days	Total
ANSEC (M. Chitalu)	USD	25	8	200.00
NEEC (K. Mfuni)	USD	25	5	125.00
Driver (J. Daka)	USD	25	8	200.00
Total DSA	USD		21	525.00

(ii) Fuel and others

Description	Currency	Notes	Total
Fuel	ZMK	Rate of exchange used is ZMK2,250 = USD 1.00	596,250.00
Movie films	ZMK		22,500.00
Total DSA	USD		618,750.00