

A TRAINING STRATEGY
FOR
THE LAKE TANGANYIKA BIODIVERSITY PROJECT UNDP/GEF (RAF/92/G32)

REPORT ON A CONSULTANCY VISIT:

TRAINING NEEDS ASSESSMENT

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By

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ABBREVIATIONS

CRDT	Centre for Rural Development and Training (CRDT) of the University of Wolverhampton
CRH	Centre de Recherche Hydrobiologique
DiWASHE	District Water, Sanitation and Health Education project, Mpulungu, Irish Aid Project
EE	Environmental Education
GEF	Global Environment Facility
GIS	Geographical Information Systems
IFE	Institute of Freshwater Ecology
LTBP	The Lake Tanganyika Biodiversity Project
MRAG	Marine Resources Assessment Group
NRI	Natural Resources Institute
PCU	Project Coordination Unit
PPER	Project Performance Evaluation Report
SAP	Strategic Action Plan
SLO	Scientific Liaison Officer
SS	Special Study
TAFIRI	Tanzania Fisheries Research Institute
T&C	Training and Communications
TNA	Training Needs Assessment
TOT	Training of Trainers
TOR	Terms of Reference
UNDP	United Nations Development Programme

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1 SUMMARY OF MAIN RECOMMENDATIONS FOR THE LTBP TRAINING STRATEGY

For an effective training strategy which is focused on the fulfilment of the stated Project Goal and Objectives, it is recommended that:

- 1.1 future training directly contribute towards the achievement of the Project Goal and Objectives. Applications with training objectives that do not clearly relate to the overall Project Goal and Objectives should be rejected (Para. 5.1.3 and 5.4);
- 1.2 in order to coordinate all training activities a Regional Training and Communications Facilitator be employed for the remaining duration of the LTBP (Para. 5.3.2);
- 1.3 country Training Liaison Officers be appointed from amongst present project associates to ensure that the Training and Communications Facilitator is able to keep adequately in touch with all countries (Para 5.3.3);
- 1.4 the Management of Training structure as set out in Fig. 4 be adopted and facilitated by the LTBP Project Management as soon as possible so that the training Strategy can be implemented as a matter of urgency (Para.5.3.5);
- 1.5 in order to ensure that future training is well integrated with the Project's priorities, the Steering Committee agree on and use a specific definition of training, such as the one given in 2.3.2.1 (Para. 5.1.5);
- 1.6 the following priorities for training be adopted and used when planning and implementing future training (Para. 5.4). Priority training is that which:
 - 1.6.1 enhances communications within the LTBP Team and between Key Stakeholders. Thus regional workshops between stakeholder groups of one type, and national workshops between several stakeholder groups, where experiences are shared and management actions are planned, should be seen as a priority. Short courses and workshops on training and communication skills will also contribute to this priority.
 - 1.6.2 encourages confidence and competence in participants to carry out their daily work. This means that training will likely be practical and short term in nature, with participants selected on the basis that they will be able to use their learning in their daily life and be provided with follow-up support to ensure that they are able to do so.
 - 1.6.3 enables research (SS) teams to be able to complete the research cycle. The technical and research teams need to look at their research in a broad way to gain a concept of why they are carrying it out and how the results might be significantly used in Lake management.

- 1.6.4 enables research to be translated into policy and management activities. This translation of scientific findings must be conducted by the researchers together with the Socio-economic and EE team in order to build a meaningful awareness programme for Primary Stakeholders and decision makers and to build an environmental education policy and strategy which includes realistic activities.
 - 1.6.5 helps the establishment of a core group of people who will be working at the lakeshore in each country and who will feel responsible for the management of the Lake and the sustainability of its biodiversity. Workshops and Short Courses of Training of Trainers will ensure a multiplier effect and the fostering of key partners at all levels who have the capacity to act without external direction.
 - 1.6.6 encourages the participation of Primary Stakeholders in the process of Lake management. This includes ensuring that village committees are appropriately formed and that agencies working with them have an understanding of participation and negotiation. This also means ensuring that all groups of Primary Stakeholders are included in the SAP process.
 - 1.6.7 provides knowledge and understanding of Lake issues. There is an urgent need to inform and involve the key stakeholders in the LTBP project and SAP since they cannot be expected to be committed to sustainable management of the Lake unless they are aware of the way that the Lake works and the way in which their actions may affect it.
- 1.7 as the budgeting exercise has not been completed for this strategy the Training and Communications Facilitator investigates budgeting possibilities as a priority on arrival in post and calls on external support if necessary to complete this exercise (Para. 5.10.3);
 - 1.8 as it was not possible to observe training being carried out by the individuals and organisations given in the List of potential Regional Training Providers, a further, more detailed institutional analysis be carried out with them incorporating the evaluation of trainers/facilitators (para. 5.7.4). This will ensure that training managers and training providers have similar expectations about the training to be planned (Para 5.8.1.2);
 - 1.9 particular attention is paid to the way in which the training providers approach training and that the needs of the LTBP are clearly expressed in terms of approach, methods, materials and content (Para .5.8.1.3) and that, as a consequence;
 - 1.10 regional institutions and individuals who are in the position of providing training for the LTBP are offered a course on Training of Trainers and Communication Skills (Para 5.7.6);

- 1.11 as the List of Potential Training Providers has shown a lack of Francophone trainers for the main training needs, further investigation be urgently undertaken to discover which institutions within the region may be able to service this need (Para. 5.8.1.5);
- 1.12 where training is needed in both Anglophone and Francophone countries it is urgently recommended that both Anglophone and Francophone trainers use a similar approach to training (Para. 5.8.1.6);
- 1.13 it is preferential, where appropriate, to hold joint training courses with two separate training sessions for Francophone and Anglophone speaking participants. This would enhance rapport-building and ensure that there is greater parity of training provision between the Francophone and Anglophone countries (Para 5.8.1.7);
- 1.14 institutions/individuals external to the Region who are able to provide appropriate Anglophone and Francophone training methodology consultancy support be identified as soon as possible so that they are able to provide continuity of service for the remainder of the project (Para 5.8.2.2);
- 1.15 the best ways to monitor and evaluate training are considered during training design and that they are carried out at suitable periods during training and after training has ended (Para. 5.9.4);
- 1.16 in order to initiate training within the Strategy as soon as possible, an interim Action Plan is adopted before the T & C Facilitator is appointed, and that once the appointment is made, the Action Plan is revised (Para. 5.11.1);
- 1.17 the logframe be revised and added to by the T & C Facilitator once they are in post and thereafter at appropriate intervals (Para. 6.1.6);
- 1.18 since the Project Goal and Objectives have changed over time, any future changes be widely communicated to project stakeholders and be taken account of in the Training Strategy by appropriate updating (Para. 2.4.1);
- 1.19 as few participants had job or task descriptions for the LTBP, future managers of training help to clarify individuals' roles within the Project to facilitate future in-depth TNAs (Para. 2.4.5);
- 1.20 actual abilities and needs of individuals for training be evaluated in further depth and followed up closely in carrying out the Training Strategy, preferably by way of setting up a staff appraisal system (Para. 2.4.6);
- 1.21 in future, training needs, training completed and other training data from all sources are recorded in a systematic way by training managers so that the collation of training data occurs in a continuous way (Para. 2.4.9);

1.22 as a way of providing important feedback and thanks for their contribution, this report be made available to all those met during the TNA. It is suggested that key stakeholders receive copies and that other stakeholders are encouraged to access copies of the report held in project offices. This will ensure that there is a wide readership for the report and will increase the likelihood of its being used (Para. 2.2.6);

2 INTRODUCTION

2.1 Background

2.1.1 The Lake Tanganyika Biodiversity Project (LTBP) is a Global Environment Facility (GEF) - funded, United Nations Development Programme (UNDP)-facilitated project which started in December 1995 and has funding until August 2000. It encompasses the four countries surrounding Lake Tanganyika, namely Burundi, Democratic Republic of Congo, Tanzania and Zambia. The Goal and Immediate Objectives (Objectives) of the LTBP can be found at Appendix I.

2.1.2 The Training Needs Assessment (TNA) consultancy took place after its recommendation by the Second Steering Committee meeting:

"The countries stressed the importance of training within the project, but several delegates were unhappy with the lack of detail or specific proposals in the current strategy. It was agreed that a fully costed programme of training based on a formal needs assessment exercise should be prepared in the immediate future" (LTBP, Lusaka, Jan 1998, p5.).

2.1.3 To this end two consultants, (Rachel Roland and Monique Trudel, "the Consultants"), from the Centre for Rural Development and Training (CRDT) of the University of Wolverhampton were employed for a seven week period. During this time they travelled around all four countries of the Lake Basin and the UK executive agencies, in order to carry out a formal Training Needs Assessment (TNA) and to build up a realistic strategy for the remaining project time. The Terms of Reference (TOR) for the Consultants can be found at Appendix II.

2.1.4 This document sets out to analyse training already undertaken, to present current training needs for LTBP and to elaborate a Training Strategy to help enable the project to achieve its Goal and Objectives.

2.1.5 The way that the document is laid out is intended to facilitate its use as a day-to-day tool. This report is intended for a wide readership and for continual use. However it does not seek to constrain and should be seen as offering a flexible framework for future training.

2.2 Approach of the Consultancy

2.2.1 The Consultants took the Project Goal and Immediate Objectives (LTBP, Project Performance Evaluation Report (PPER), 1997), as their guideline when determining training needs. Thus the eventual Strategy has sought to show how training could contribute to the overall achievement of the Project Goal and Objectives, as depicted in Figure 1.

2.2.2 In all meetings, a copy¹ of the Project Goal and Objectives was shown to the participants in order for them to better understand the context for the TNA and to allow them to recommend further training.

2.2.3 The Consultants differentiated between the ‘wants’ and ‘needs’ of the participants but actually found that most expressed wants equated to the Project’s training needs. The Consultants determined other training needs which emerged through the meetings but were unexpressed by participants.

2.2.4 A schematic diagram for carrying out a TNA can be found at Appendix III.

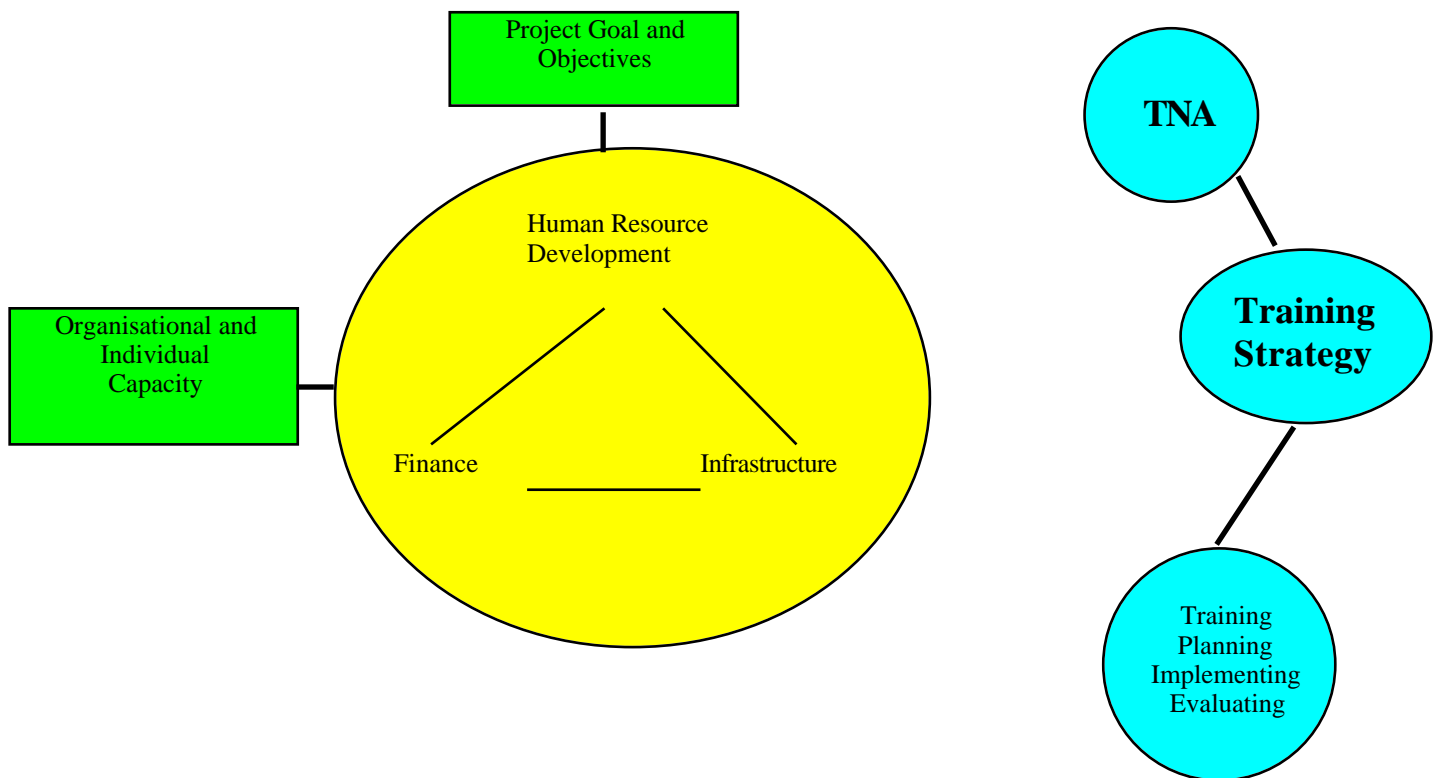


Fig. 1: The Significance of Training in Achieving the Project Goal and Objectives

2.2.5 In each country the Consultants visited both the capital city and the lakeside project sites. It was seen as crucial that visits were made to each location, especially the Francophone countries where contact had hitherto been very limited. In each location, meetings were held with a range of stakeholders²:

¹ Based on the Aims and Objectives given in the LTBP Inception Report, 1997

² STAKEHOLDERS are persons, groups or institutions with interests in a programme or project. **Primary Stakeholders** are those affected, either positively or negatively by the programme or project and who usually

- project staff;
- National Coordinators of the project;
- Lake users (fishing communities, industries, harbour authorities)³
- institutional partners and/or individuals of the project;
- members of the National Working Groups (NWG);
- other institutions and individuals who could potentially be training providers;

2.2.6 It is recommended that as a way of providing important feedback and thanks for their contribution, this report be made available to all those met during the TNA. It is suggested that key stakeholders receive copies and that other stakeholders are encouraged to access copies of the report held in project offices. This will ensure that there is a wide readership for the report and will increase the likelihood of its being used.

2.2.7 The meetings tried to establish the training needs of the people involved directly with the project⁴. However the Project Management had also expressed a commitment to finding training providers from within the region. Thus meetings with these potential trainers involved both identifying their capacities and abilities to work with the project and also their own training gaps that would need to be addressed to enable them to effectively carry out the training for the LTBP. In this way, capacity in regional institutions would be built and supported by LTBP.

2.2.8 During the meetings a variety of TNA tools were used: formal and informal semi-structured interview using a checklist of questions, diagramming and an evaluation questionnaire for those who had already participated in training on the LTBP. Indicative tools can be found at Appendix IV.

2.2.9 The questioning technique used by the Consultants was aimed to encourage participants to:

- * express themselves freely;
- * express their own training needs;
- * express their perception of training needs for the LTBP in general.

2.2.10 A full itinerary of the Consultants' meetings can be found at Appendix V and a detailed list of names and addresses of persons met can be found at Appendix VI.

2.3 Training in the Context of the LTBP

live in or near the resource in question and who have limited choices or options; **Secondary Stakeholders** are intermediaries in the change process, can be affected, either positively or negatively, involved or excluded groups. **Key Stakeholders** are those who can significantly influence, or are important to the success of the programme or project.

³ Lake users met. Burundi: industry; Congo: none; Tanzania & Zambia: Fishing communities, harbour authorities (See Appendix V - Itinerary, and Appendix VI, Contact Names and Addresses.

⁴ There are different categories of project workers: international staff: the Project Coordinator and Scientific Liaison Officer, employed by GEF; administrative local LTBP staff; Special Study Coordinators who are internationally contracted part time to the project, as are National Special Study Coordinators; consultants, both national and international who are employed as needed; the host of people who carry out project work as part of their day to day activities (e.g. Government Departments such as Fisheries, Wildlife, Community Development). These people constitute the Field Team (See Para. 2.3.1).

2.3.1 Within the context of the LTBP the purpose of training is to help:

a) *Field Team members*

- undertake their work more effectively;
- build up and maintain links within and between all the aspects of the project.

b) *All stakeholders, that is both Primary and Secondary*

- be aware of the biodiversity issues of the Lake;
- feel more motivated and involved to achieve the Project Goal and Objectives;
- participate in such a way that they may more effectively carry out their roles as managers of the Lake Tanganyika basin.

Figure 2 seeks to illustrate the links which should occur between the stakeholders involved in the project.

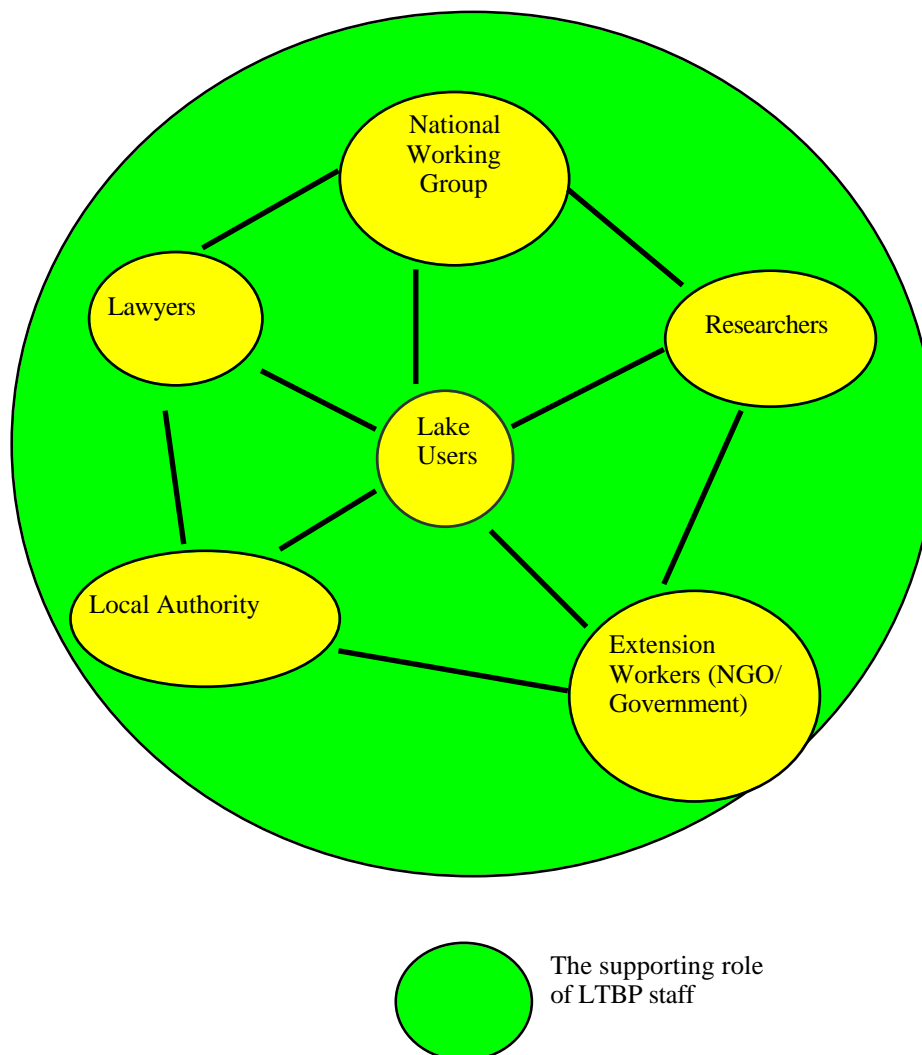


Fig. 2 The Links between Stakeholders in LTBP

2.3.2 *Definition of Training*

2.3.2.1 This report has used a broad understanding of training. The following may be regarded as forms of training which fit into a single definition of training.

Training in the LTBP context is:

** an activity or a series of activities during which a combination of knowledge, skills and attitudes may be shared and developed*

Training can be:

- * both formal or non-formal, certificated or non-certificated, learning and teaching activities*
- * that which happens at a discrete time when participants are brought together (Course, Visit, Workshop, Conference) and/or*
- * guided individual learning that is on-going in time (On-the-Job).*

2.3.2.2 A learning and teaching activity may take place with an identified trainer teaching knowledge, skills and attitudes. This kind of training is most usually to strengthen capacity for day to day work. However workshops where the Field Team and/or stakeholders are themselves exchanging experiences and expertise, facilitated by an appropriate person, are equally training activities. In this type of training, participants have the supported opportunity to widen their views and understanding of all the

Workshops

- *encourage communications*
- * set up and support communication processes*

issues and the links between them. In addition, this type of 'training' event encourages communications between stakeholders in the project and can be used to set up and support the communication processes which are crucial for the sustainable management of the Lake basin.

2.3.2.3 Education in the context of LTBP has a broader remit than Training. Education encompasses a life-long process where knowledge, skills and attitudes should combine to build up an individual's confidence and abilities for the responsible utilisation of their environment.

2.3.2.4 Training and environmental education have to occur across all the Objectives of the project and with all stakeholders. Therefore they cannot be confined to either single objectives or to particular

Training to achieve Project Goal:

- * vital to use training, communication and education to forge links between objectives and stakeholders*

stakeholders. Indeed training, education and communication are vital in forging the links between the objectives which will contribute to the successful achievement of the Project Goal.

2.3.2.5 In this way, training, education and communication can not be separated out

and in the subsequent needs identified, they are strongly woven together.

2.4 **Limitations of the TNA.**

There were some limitations in the consultancy which impact upon the Training Strategy.

2.4.1 The Project Goal and Objectives have changed over time, and perhaps as a consequence of this, many participants in the TNA had different perceptions of what the project is trying to achieve. However, this Training Strategy is based upon the current edition of the Immediate Objectives and Outputs (PPER, 1997). Should the Goal and Objectives change again, it is recommended that the Training Strategy be updated appropriately.

2.4.2 The logistics of travelling around the four countries, the complexity of the LTBP, the fact that the project activities are mostly carried out by the Field Teams who therefore have other duties to perform, together with the number of people who needed to be consulted, meant that time was very short for each location. Three days was the maximum number of office working days spent in any one place (Mpulungu, Kigoma, Bujumbura, Kinshasa).

2.4.3 The limitation of the transport links between countries and the amount of travel necessary meant that:

- a) it was not possible to meet everyone whom it was desirable to consult with;
- b) there was less time to go deeply into discussion with those who were met about their individual needs and perceptions.

2.4.4 There are few LTBP-employed staff members and thus the range of stakeholders known to them was mainly limited to partner institutions carrying out project activities. These were Secondary Stakeholders. It entailed some time and effort to ensure that meetings were held with Primary Stakeholders. The time spent with Primary Stakeholders was far less than that spent with Secondary Stakeholders and thus Primary Stakeholder needs may not be identified so accurately in the Training Strategy.

2.4.5 In the TNA scheme it is noted that reference should be made to the job descriptions of participants who are being assessed. This is so that individuals' roles within the project can normally be related to project goals and objectives and the most appropriate training can be identified. In the case of the LTBP, few participants had such descriptions. It is recommended that future managers of training on the LTBP help to clarify individuals' roles within the Project to facilitate future in-depth TNAs.

2.4.6 An especial limitation was that it was impossible to evaluate, by observation or triangulation, the actual abilities and needs of individuals given the above conditions. This was due both to lack of time but also due to the lack of a long-term and on-going management structure being in place within the project team and seconding agencies with a commitment to staff Appraisal and Development. It is therefore recommended that actual abilities and needs of individuals for training be evaluated in further depth and followed up closely in carrying out the Training Strategy, preferably by way of setting up a staff appraisal system.

Limitations of Consultancy

** no opportunity to observe participants and on-going training programmes*

** impossible to evaluate actual abilities and needs of individuals*

Major limitation of Training Strategy:
** only 2 years of funding*

2.4.7 In addition there was no opportunity to observe any on-going training programme in the training institutions visited. Therefore the

Consultants were unable to assess the institutions' abilities to both effectively run the programmes they advertise and to design effective tailor-made training.

2.4.8 To review the reports and documents referring to previous training and to training needs, it was necessary to sort through a great deal of literature. Although this was a necessary activity given the lack of training records, it is considered that, had this work been previously collated, the Consultants' time could more usefully have been employed in pursuing the other TORs.

2.4.9 It is recommended that in future, training needs, training completed and other training data from all sources are recorded in a systematic way by training managers so that the collation of training data occurs in a continuous way. It is only by keeping central records that training will be effectively monitored from the perspective of geographical parity, gender, stakeholder groups, etc.

2.4.10 It is regrettable that the institutional analyses, the TNA, the training review and the Training Strategy were not undertaken in the earlier stages of the project. Thus the major limitation of a Training Strategy designed at this stage is that there are only just over two years left of funding! Therefore this Strategy must focus, not on training desirable for all round capacity building, but just on the priorities which are achievable and which will directly lead to the fulfilment of the Project Objectives.

3 REVIEW OF PREVIOUS TRAINING

3.1 Review of Training-To-Date

3.1.1 In order to build a strategy the first step was to analyse the previous training that has occurred on the LTBP. Therefore an extensive document review was undertaken and a bibliography can be found at Appendix VII.

3.1.2 In addition the meetings with stakeholders gave the Consultants an opportunity to clarify how effective past training had been, whether there had been any follow-up (if appropriate) and whether further training needs have emerged since the completion of training. A list of training already undertaken on the LTBP can be found at Appendix VIII.

3.1.3 Training already undertaken has only addressed Project Objectives 3 and 5, Environmental Education (EE)/Training and Special Studies (SS). Objective 5 has received most attention and the training itself has been knowledge and skills oriented. However the Consultants' evaluation of the skills training indicates that it is incomplete and has not been planned in a systematic way to support the realisation of the Objective. Yet no follow-ups have occurred to ensure that the training can be effectively put into practice. These views are reinforced in the evaluations of some of the previous training undertaken. These can be found summarised at Appendix IX.

3.1.4 In analysis, significant needs emerges for future training. It is important both to make sure that scientific training integrates all the stages in the research cycle and to ensure that those being trained are immediately able to put that training into practice in their work. This may mean that further support is needed after the completion of initial formal training (On-the-Job training). In turn this indicates the importance of designing training and selecting participants so that the maximum benefit occurs for the Project from capacity built in staff.

Training To date
** knowledge and skills oriented*
** incomplete, no follow up*

Significance shown of:
** designing training*
** selecting participants for maximum Project benefit*

Future Needs shown up:
** scientific training completes research cycle*
** participants able to put training into practice at work*

A Training Strategy should:
**address all Project Objectives*
** cover all locations and sectors*

3.1.5 Training has not occurred evenly in all four countries or across all sectors. There are training gaps that the Project has not be able to tackle because of its lack of vision of training to date.

3.1.6 Without a Strategy to ensure that all sectors and Objectives are addressed, it is likely that training will continue to be patchy, non-strategic and further embed present inequalities of access, distribution and opportunity. Thus the Strategy urgently needs to address all the

Objectives, and cover all locations and sectors to enable the Project Goal to be achieved.

3.2 Review of Previous Training Needs Assessments

3.2.1 The TORs for the Consultants specifically asked for a review of the three previous TNA consultancies. A table indicating a summary of the findings of Moreau (1997), Garnett (1997) and Willoughby (1997) can be found at Appendix X. As with 3.1 above, the main needs identified were connected with Objective 5 for scientific training, and with some needs identified for Objective 3, Environmental Education. There was a limited indication of a need for training to support institutional strengthening but this fundamental aspect was not stressed or explored in any action plans.

3.2.2 The approach of the previous TNAs was incomplete in relation to geography and sector. The training needs were identified based upon meetings with very few of the limited range of stakeholders who were or should be involved with the Project. There was no attempt to plan training for parity across the countries or the sectors involved in the LTBP. This shortcoming was a feature of concentrating on specific issues rather than the Project Goal and Objectives. Instead of searching for the individuals and institutions within the Region who could and should be involved and supported in the LTBP, the shortcoming was a response to searching for training needs that could be met by predetermined training partners

(research and academic oriented).

3.2.3 At the Second Steering Committee meeting, "...the need for PhD training", was questioned and there was an request for, "urgent attention" to be "focused on a capacity building needs assessment, rather than merely apportioning numbers to courses" (LTBP, Jan, 1998, p5).

3.2.4 The previous TNAs identified training which tended towards the formal and the long-term (PhD and MSc). These courses were mainly to be taken overseas, but there was no evidence to suggest that the recommendations of the previous TNAs were implemented. With the LTBP set to end in August 2000, there is now little time left for the project to start to implement these.

3.2.5 Another aspect of these studies was the lack of cost comparison between short and long term training, local, regional and international training, Nor were there comparisons between what different types of training could achieve in terms of added value for the project.

3.2.6 A compelling reason to look further than these analyses is that the training identified did not clearly show how, as called for in 3.2.3, it would lead to increased capacity within the region's institutions.

3.3 Training Needs Identified through Reading Project Reports and Documents

3.3.1 There have been many internal reports written over the life of the LTBP. These documents were mainly project progress reports, the annual Project Performance Evaluation Reports (PPER) and consultancy reports, connected to the SS. A review of these documents showed that several training needs had been identified. A summary of these training needs can be found at Appendix XI.

3.3.2 Analysis showed that few complimentary activities were identified to address these training needs and in most cases no training providers were identified. Most of the training has not taken place. Some useful indications of where the attention to training should be placed can be found at Appendix XI.

The main Training Needs identified

connected to

* Objective 5- "Scientific Training"

* Objective 3 "Environmental Education".

Significant aspects

* *geographically and sectorally incomplete*

* *concentrated on specific issues*

* *interviewed formal institutions*

* *identified formal, long-term (PhD/MSc) & overseas training*

* *no comparison of long vs. short term training costs*

* *no evaluation of training objectives for project benefit*

From LTBP reports

A broader view of training emerges, a need for communication skills, training of trainers and translation of research findings into management actions

4 TRAINING NEEDS IN THE LTBP

4.1 Stakeholders Consulted

Over a period of 40 days the Consultants met with over 150 stakeholders to discuss the Training Needs of the LTBP. Almost unanimously these people recognised that in the time left for the project the most effective training would be that implemented locally and of short duration.

Stakeholders consulted

project staff
National Coordinators of the project
Lake Users (fishing communities, industries, harbour authorities)
institutional partners and/or individuals of the project
members of the National Working Committees (where possible)
institutions and individuals who could potentially be training providers.

4.2 Training Needs Identified

4.2.1 Introduction

From the meetings a wide range of training needs has been identified for the LTBP. Some of the needs are specific to certain levels of project stakeholders or to individual countries. Despite the dangers of holding meetings where ‘wish lists’ may be taken to be ‘*The*’ official needs, it is significant that perceived training needs were similar across the four countries. A breakdown of the perceived training needs for each country of the LTBP can be found in Appendix XIIa-d.

4.2.2 Major Training Needs

Of greatest importance are the challenging range of general skills and attitudes required for facilitating the management and communications changes that are necessary if the LTBP is to move forward towards sustainable management of Lake Tanganyika. Improved knowledge, attitudes and practices in relation to the following are required throughout the relevant stakeholders in all four countries. A summary of the major training needs by training type can be found at Appendix XIII and are elaborated below.

4.2.2.1 Training of Trainers (TOT) and Communication Skills

This project is based upon an assumption that a great many different stakeholders are able to effectively communicate with each other; sharing, learning and passing on information and skills which lead to planning, management and some behavioural and activity change at the international, national and lakeshore levels. To date this has not occurred comprehensively or effectively and a first need is therefore to improve training, facilitation and communication skills for a wide range of key stakeholders. These people include in all countries: special study (SS) coordinators; SS team members; members of NGOs working with lake users; such as Environmental Educationalists and some key lake users. A flexible programme needs to be designed in order to allow the following skills to be built up:

- * basic principles of communications and participation;
- * training, workshop and meeting design;
- * participatory methods for effectively implementing training, workshops and meetings;
- * resources production for courses, workshops and meetings;
- * design of training follow-up, including how to assess and support participants/learners.

4.2.2.2 *Building a nest of Core Teams*

There is a clear need to know what is happening on the Lake shore and to make sure that the SS research objectives are related to each other and are trying to respond to the objectives of the project. In order to achieve Project Goal and Objectives, all the Secondary Stakeholders recognised the importance of building up a feeling of indigenous ownership and of working to develop and implement actions in partnership with the Lake users and local authorities responsible for the implementation of management of the Lake. However visioning the process and encouraging Primary and Secondary Stakeholders to participate is a complex matter.

To facilitate this as an on-going process a structure of communications needs to be set up. This should have the aim of building a nest of Core Teams whose roles and responsibilities are clearly defined to provide the needed continuity (and independence of LTBP in the long term) for coordinating project activities with reference to the Project Goal and Objectives. To date some of these Core Teams are incipient, such as in Mpulungu and others exist but could achieve more with some initial direction.

It is recommended that the following nest of Core Teams be encouraged by initially holding a regional workshop for them which includes learning and practising teamworking skills, exchanging approaches and updating each other with the research results and developments from the other Project Objectives, from the beginning of the project. This first step of coordination would provide the sense of partnership and Team building for LTBP.

LEVEL	CORE TEAM MEMBERS	INDICATIVE RESPONSIBILITIES
Local	Implementing NGOs, key Lake users, LTBP Facilitators/Liaison Officers ⁵ , National and local SS Coordinators	Feed needs and information into National Core Team and coordinate local project activities
National	National Working Group (NWG), National SS Coordinators, local SS Coordinators	Local realities, needs and information fed into Strategic Action Planning (SAP) process
Regional	Steering Committee	SAP process coordinated and crystallised

4.2.2.3 *Project and Conflict Management Skills*

During conversation and through observation of some project proposal objectives and criteria for success clear needs emerged for project and conflict management training, especially for implementing NGOs, Government authorities and for researchers. The following are examples of this need:

* In Burundi, one active NGO had not thought about Environmental Issues when

⁵ See 5.3.3-4 Training and Communications Liaison Officers

agreeing to support and oversee members' income generating activities. In Uvira's NGO community there was much repetition and little coordination of activities.

- * In TAFIRI and Zambia's Fisheries and Wildlife Departments, the hope was expressed of writing proposals for further funding of relevant research.
- * At NWG level there is a need for proposal writing skills for making larger scale funding available for Lake Tanganyika activities for the long term.
- * Along the lake shore, many Wildlife and Fisheries Department staff find that their jobs seem to be fundamentally incompatible with making a good rapport amongst the local population.

A number of short courses and workshops for different sectors and levels of stakeholders will help to fill this training gap.

4.2.2.4 *Study Tours and Visits*

SS teams in the four countries felt cut off from one another's activities and methods. Fishing communities were eager to swap experiences and skills with one another both to widen their own horizons and also to ensure that they were not going to be asked to drop certain fishing practices whilst their neighbours were still using them. In Tanzania, one NGO takes school children on field trips to a nearby National Park, which involves travel on the Lake. It should easily be possible to introduce a field trip to the Lake to help children to understand its significance.

A Tanzanian fisherman commented: "We only see WaRundi fishermen on the Lake when we are in competition. We know they use different methods from us. We would like to talk with them in a place where they are not our [commercial] enemies"

4.2.2.5 *Lake Tanganyika's Environmental Issues*

In all four countries there was found to be great ignorance of the concept of biodiversity and environmental issues; of Lake Tanganyika and its global significance and of the likely impacts of certain behaviours on the Lake.

The key stakeholders recognised that they had a need of basic knowledge and understanding of Biodiversity and Lake issues in order to play an active role in the time left for the project and to continue in the future. The Lake users also need to better understand the issues before choosing appropriate alternatives in their daily practices.

NGO and local partners who would play the role of educating (EE) and helping these communities to come up with alternatives for the sustainable management of the

Lake need also to be aware of the real issues. Without this basic understanding it is difficult to build long term approaches for changes of practices and attitudes. With such understanding, participants will be able to prepare a strategy and activities corresponding to the reality and priorities of action.

4.2.2.6 *Translating Scientific Findings and Local Realities into Management plans and activities*

EE should be seen as a tool for the translation of scientific findings into an environmental strategy for different target groups, for developing specific materials and using all media available (both modern and traditional, e.g. TV and drama groups).

In addition, scientists asked for training that will allow them to translate their findings into management and education policies and practices for the general public and for decision makers. Effective Local and National Core Teams will be essential to enable these activities.

The priority that emerges from this statement is that a huge effort must be made in educating not only youths and school children but local communities and decision-makers as well.

4.2.2.7 *Developing case studies*

In order to facilitate the above effort, TOT and materials production by EE implementors must take place. TOT educators and EE implementors will also need to develop a number of case studies to use in order to spark off discussion and to use as the basis for action plans.

In addition, schools and universities, through local EE clubs and trainers and with support from curriculum developers, should raise the profile of the Lake by introducing some learning material, perhaps in the form of Case studies, into the existing curricula.

4.2.2.8 *Alternative Fishing Practices and Income Generating Activities and how to manage them*

A broad need of fishing communities is to have alternatives for managing their lives in such a way that they are participating in a process to conserve biodiversity on the Lake but also moving forwards in their life goals. Further investigation needs to be made at local level on the interests of stakeholders. Flexible training programmes for fishing communities need to be implemented based upon the results of the SS with skills of their choice on offer, and support to ensure that they are able to become self-sufficient in these skills.

It is important to note that in planning and implementing such training programmes, trainers should remember that fishing communities are not homogenous. Trainers should seek to offer the opportunity to, and actively seek to involve, different interest groups from within the community, for example:

- * women who process fish products and those who do not;
- * fishermen and men who do not regard themselves as fishermen;
- * children who attend school and those who do not.

4.2.2.9 *Role of Village Committees*

There was a particular and urgent need in Zambia. This was for a local workshop to build on the village Fishing Development Committee structures set up in fishing communities in March 1998. From meetings with villagers, it was clear that they did not understand their roles in the committees or, fundamentally, the committees' potential. The practicalities of 'participatory development' need to be put into action.

4.2.2.10 *Project Team Training*

Throughout the TNA, stakeholders were interested to read the Project Goal and Objectives. It was evident that many involved in the project did not have day to day access to a current set of these. This in turn meant that there were many different interpretations, including from those directly employed by the LTBP, of what the project is ultimately trying to achieve. The effect of this is that people have different end-points in mind for LTBP activities. There is therefore an urgent need to harmonise all these divergent views, preferably in a participatory way which reflects a range of stakeholder realities. Without this crucial vision, it is doubtful whether the Training Strategy, let alone other aspects of the project, will have much impact. A workshop designed to take account of this need could be planned and combined with the need expressed in 4.2.2.11.

4.2.2.11 *Identifying Stakeholders on LTBP*

Previous to the TNA there was a belief by Project staff that the Consultants needed to spend most of their time in the capitals visiting key Secondary Stakeholders. In fact the TNA's great strength was derived from nearly three weeks' visit to the Lake and from meeting Lake users (Primary Stakeholders). However LTBP activities to date have reflected a similar concentration on Secondary Stakeholders, mainly those involved with scientific research. Whilst this preoccupation is recognised by Project Managers and they are actively trying to redress this, the Consultants feel that this process could be helped by a workshop to identify who the Primary and Secondary Stakeholders are in the LTBP and which levels of participation are appropriate for each stakeholder group.

4.2.2.12 *Integrating all four countries into the LTBP*

A recognised need, which can only partially be addressed by the Training Strategy is that of integrating all countries equally into the Project. Whilst the security situations have hitherto caused concern in Burundi and Congo, they did not impinge upon the Consultants' security or movements. Efforts should be made to match activities in Tanzania and Zambia with activities in Burundi and Congo.

4.2.3 From reviewing all the documents and meeting the wide range of stakeholders, the Consultants have used the information to propose a realistic Training Strategy for the

remainder of the LTBP.

5 A TRAINING STRATEGY FOR LTBP

5.1 Rationale for Strategy

5.1.1 This Strategy is built on the gaps identified through document reviews and meetings and has reference to the funded time left for the LTBP. The basis of the reflections leading to the Strategy formation was, "**how can training help to achieve the Project Goal and Objectives?**"

Training Gaps, e.g.:
* *Communications,*
* *exchange of information,*
* *linkages between*
*the Project *stakeholders*
(highlighting lakeusers)

Time Table : 2 years

5.1.2 Training has been undertaken on the project, but not from an integrated perspective. It is absolutely fundamental to the success of the Project that training undertaken relates directly to the Project Goal and Objectives and that there is a parity of distribution of that training. If training continues to occur without a structure then it can only be successful in a disjointed way and will not permit progress towards the overall Goal and Objectives of the Project.

5.1.3 It is recommended that future training should directly contribute towards the achievement of the Project Goal and Objectives. Applications with training objectives that do not clearly relate to the overall Project Goal and Objectives should be rejected.

5.1.4 Part of the reason for a lack of training vision was perhaps that training as a concept was not well-defined in the Project documentation and the result has been varying views of the concept of training throughout the Project.

5.1.5 In order to ensure that future training is well integrated with the Project's priorities, it is recommended that the Steering Committee agree on and use a definition of training, such as the one given in 2.3.2.1.

5.1.6 Without a cohesive Training Strategy in the LTBP few links have been developed between the different stakeholders involved in the management of Lake Tanganyika. In addition connections between the different Project Objectives have been few, because they have hitherto been perceived as discrete issues. Without these links and connections it has been observed by the Consultants that only some of the Objectives were being addressed. Therefore the above relations and their crucial significance to the Project outputs were discussed with all those stakeholders met and have been translated into a diagram, as shown in Figure 3 below.

Training can:

* *create an appropriate culture of thinking*

* *give technical skills,*

* *build up motivation and positive intention for sustainable actions*

5.1.7 Facilitating the establishment of the above-mentioned relations is a first step, but for the links to be sustained in the long term, stakeholders need to acquire diverse knowledge, skills and attitudes to be able to push for local sustainable management of the Lake basin. Stakeholders need to feel responsible for the Lake and to be ready to play a role in its management. Training can

help in this process by creating an environment of thinking, by developing technical skills and by building up motivation and positive intention to achieve environmentally responsible actions.

5.1.8 It is hoped that this Training Strategy will be used as a flexible tool rather than a blueprint for training, where the evaluation of each training event conducted may feed in to the improvement of identifying and responding to new training needs for the benefit of the Project. This Strategy seeks to point out that training is an on-going process and its progress must be continually monitored.

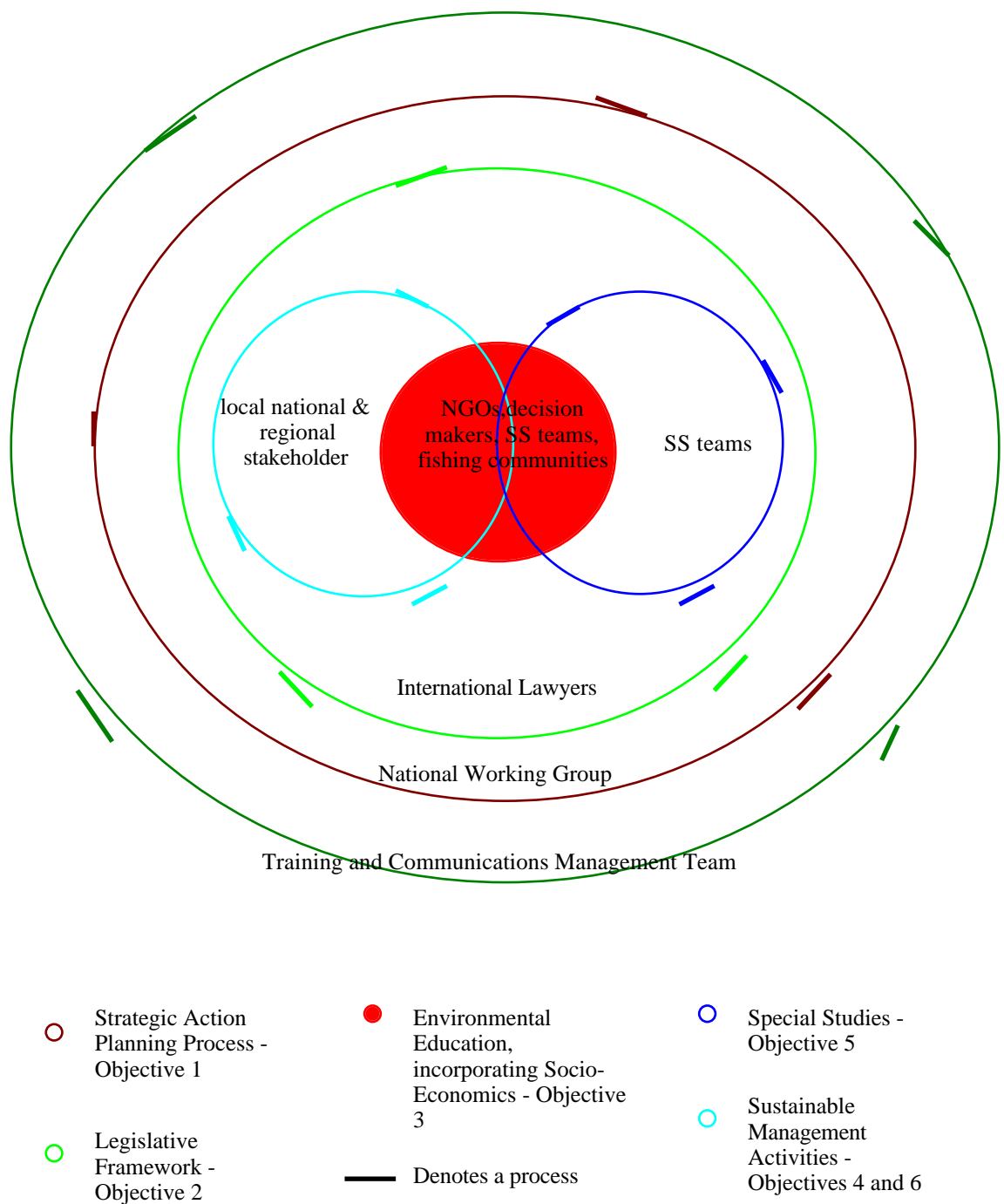


Figure 3: The Relation Between Training/Communications, Stakeholders, and the Immediate Objectives of the LTBP

5.2 Aims and Objectives of the Strategy

5.2.1 Aims of the Training Strategy

The Training Strategy will provide a framework for the identification, design, production, implementation and evaluation of training with reference to Project Goal and Objectives and agreed priorities. The Strategy aims to move towards the achievement of the Project Goal and Objectives by providing appropriate training for key stakeholders of the LTBP.

5.2.2 Objectives of the Training Strategy

By the end of the LTBP the Strategy will have provided:

- Enhancement and support of links between the key stakeholders in the LTBP
- Encouragement of practices for the sustainable management of Lake Tanganyika through support of local and Regional ownership and participation in the sustainable management of the Lake
- Effective management of Regional Training and Communications processes with reference to Lake Tanganyika.

5.3 Management of Training

5.3.1 The LTBP demands many different types of training (Para 5.6). For effective training to be flexibly and sensitively coordinated in order to produce optimum benefit for the Project as well as for the participants of training, there is a need for a full time Facilitator's post.

5.3.2 Thus it is strongly recommended that a Training and Communications Facilitator be employed for the remaining duration of the LTBP. The appropriate characteristics and the Terms of Reference for such an individual can be found at Appendix XIV.

5.3.3 The Training and Communications (T & C) Facilitator would not be the only person to have a responsibility for training within the project. It is recommended that Training Liaison Officers be appointed from amongst present project associated staff (for example, national EE coordinators).

5.3.4 The role of national Training Liaison Officers would be to keep in constant communication with the Training and Communications Facilitator and to help to coordinate training on a national basis.

5.3.5 The following diagram (Fig. 4) shows a potential structure training management. It is recommended that these links be adopted and facilitated by the LTBP Project Management as soon as possible.

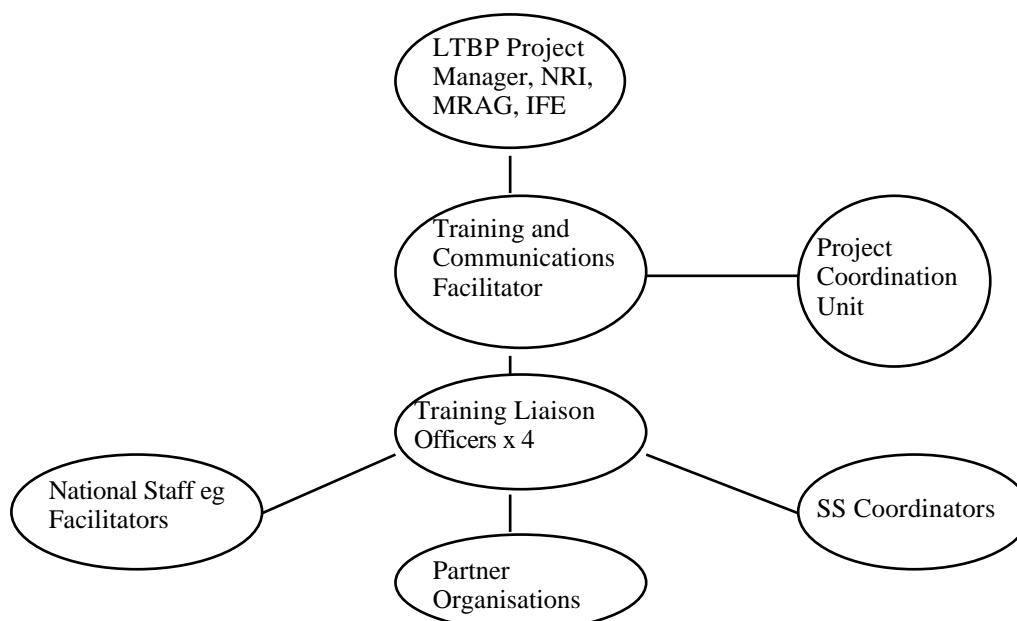


Fig. 4: Potential Structure of Training Management

5.4 Priorities for Training

5.4.1 The main training needs identified and analysed in Section 4 (Appendix XIII), together with the training principles addressed throughout Section 5 have produced a set of priorities for this Training Strategy. These are shown in Table 1 below. It is highly recommended that these be adopted and used as a guidance when planning future training for the LTBP. They are not presented in any specific order of priority.

Table 1: Priorities for Future Training in the LTBP

PRIORITY	TRAINING WHICH:
1	refers directly to the Project Goal and Objectives be regarded as a priority (see 5.1.3 Management of Training).
2	enhances communications within the LTBP Team and between Key Stakeholders. Thus regional workshops between stakeholder groups of one type, and national workshops between several stakeholder groups, where experiences are shared and management actions are planned, should be seen as a priority. Short courses and workshops on training and communication skills will also contribute to this priority.
3	provides knowledge and understanding of Lake issues. There is an urgent need to inform and involve the key stakeholders in the LTBP project and SAP since they cannot be expected to be committed to sustainable management of the Lake unless they are aware of the way that the Lake works and the way in which their actions may affect it.
4	enables research (SS) teams to be able to complete the research cycle. The technical and research teams need to look at their research in a broad way to gain a concept of why they are carrying it out and how the results might be significantly used in Lake management.
5	enables research to be translated into policy and management activities. This translation of scientific findings must be conducted by the researchers together with the Socio-economic and EE team in order to build a meaningful awareness programme for Primary Stakeholders and decision makers and to build an environmental education policy and strategy which includes realistic activities.
6	helps the establishment of a core group of people who will be working at the lakeshore in each country and who will feel responsible for the management of the Lake and the sustainability of its biodiversity. Workshops and Short Courses of Training of Trainers will ensure a multiplier effect and the

	fostering of key partners at all levels who have the capacity to act without external direction.
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7	encourages the participation of Primary Stakeholders in the process of Lake management. This includes ensuring that village committees are appropriately formed and that agencies working with them have an understanding of participation and negotiation. This also means ensuring that all groups of Primary Stakeholders are included in the SAP process.
8	encourages confidence and competence in participants to carry out their daily work. This means that training will likely be practical and short term in nature, with participants selected on the basis that they will be able to use their learning in their daily life and be provided with follow-up support to ensure that they are able to do so.

5.4.2 Attention should be paid to the possibility of applications being made for training which is not considered to be a priority. To date there are some commitments which, though laudable activities in themselves, do not fall under the priorities for training. The Nyanza project is one example of this. For the future, applications for training within the LTBP (for example the IW Learn Project) should be carefully screened for relevance to the above priorities and not judged against the availability of funding alone.

5.5 Appropriate Approaches to Training

5.5.1 Training on the LTBP should be based upon what the participants need to be able to do to more effectively carry out their work towards the Project Goal and Objectives (Priority 8, Para 5.4). This implies that an accurate TNA has already been carried out and that the target group, its abilities and interests, have also been identified. A scheme for carrying out a TNA was suggested earlier and can be found at Appendix III.

5.5.2 In order to institute a systematic analysis of training needs and to be able to plan training accurately, it is recommended that managers of training become familiar with and endeavour to use the scheme for carrying out a TNA when planning training activities.

5.5.3 It emerged from both scientists and educators during the TNA that they really wanted the opportunity to learn by practically ‘doing’, that is by being actively involved in their learning and by having the opportunity to reflect upon their own practices. This approach is different to traditional ways of learning, which tend to be more trainer-centred with non-negotiable study units. Didactic methods do not always allow time for reflection, group discussion or reference to personal experience. Participants need to have support for their ensuing activities so that they can build up their confidence and competence.

5.5.4 In order to respond to the requests of stakeholders, which could lead to improved motivation, confidence, competence and thus feelings of ownership and readiness to participate and make decisions regarding management of Lake Tanganyika, it is recommended that the approach to training taken is one of Learning by Doing.

5.5.5 Implicit in this way of learning is the importance of follow-up support. This could occur in a programme of On-The-Job Training and perhaps further discrete training or workshops. Section 5.9 covers this aspect more fully.

5.6 Appropriate Types of Training for LTBP

The relative advantages and disadvantages of each type of training that could be used in the Strategy can be seen in Table 2 below.

Table 2: Types of Training in the Strategy and their Relative Advantages

Type of Training	Advantages (+)/ Disadvantages (-)	Examples of Training Needs Addressed	Target Group
Short course - courses last from a few days up to 3 months. Venue required with appropriate facilities and accommodation. Emphasis on learning by doing.	+ Brings people together in a venue away from work; intensive. - Difficult to find the time. Often expensive.	Training of Trainers, Communications skills, Management skills, Technical training.	Educators (Extension Workers, Environmental Educators, etc..), Scientists, NGOs.
Seminar - one to three days. Emphasis on dissemination and discussion.	+ Useful for information exchange. - Often just talking shops! Don't produce actionable outputs.	Reporting results, exchanging information.	All stakeholders, Scientists.
Workshop - a day to a few weeks. Can be informal, with no ceremony. Emphasis on working and producing.	+ Specifically to produce materials and action plans. May be combined with material for learning. Useful for creating rapport between different groups. - Can be expensive.	Exchanging information and building up action plan. Some production of material and experimentation/ modification.	Educators, Scientists, Lawyers.
Conference and special events one to five days. Emphasis on dissemination and discussion.	+ Putting over special points and making contacts. - Special events not to be over-used as they lose appeal. Conferences often restrict participation by Primary Stakeholders.	Exchange of scientific experiences. World Environment Day and publicity event. Building links between different stakeholder and locations.	Scientists, General Public, Policy makers.
Study visits/Tours - a half day to a month. Emphasis on exchanging experiences. Informal.	+ Opportunity for seeing the realities of others. Can build up links between different groups - Expensive.	Exchanging real experiences, Demonstrations of approaches and techniques.	School children, Scientists, Fishing communities, Policy Makers.
On the Job Training. Emphasis on one-to-one building of confidence and competence.	+ Very important for rounding off more formal training. Can be used as guided learning. Can be used in conjunction with monitoring, evaluation and appraisal to chart development of individuals. - Often not carried out. Partially carried out.	Competence and confidence in day to day work. Opportunity provided for supported experimentation with recent learning, Encourages analysis of independent thinking.	Field Team Scientists, Technicians.
MSc	+ In-depth learning. - Very expensive. Benefits accrue over long term. Danger of losing personnel upon completion.	Currently one MSc. Useful for changing culture of thinking and acquiring detailed technical and analytical skills.	Scientists, Policy makers, Extensionists.

5.7 Appropriate Training Methods

5.7.1 Through past training on LTBP, stakeholders have recognised that if the methods used

in their training encourage active participation, they will have a better chance to put into practice the knowledge and skills that they acquire. Interactive and participatory methods include the following:

- * Group discussion;
- * Role play;
- * Drama;
- * Demonstration and supported practice;
- * Visits.
- * Case studies;
- * Simulation games;
- * Mentoring and coaching;
- * Guided Field work;

5.7.2 Interactive training can respond to the real needs of participants because it is more flexible. In addition it allows people who already have experiences and expertise to share this and it is found to animate and motivate participants in their future practices and thus to encourage them to take ownership of the lake management process.

Training for Motivation

Fishing communities have expressed that they feel they have no alternatives to their present lifestyles and do not understand why they should have to change their practices. Training in the impacts their practices have on fish stocks and training in alternative income generating activities could change these feelings

5.7.3 The communication skills required for interactive training involve the facilitator or trainer listening to and valuing the experiences of the participants. Thus training is not just about transferring knowledge or skills but also about helping people to gain confidence in their own perceptions and to feel secure in changing attitudes (and then practices) which can improve their work or the management of the Lake.

5.7.4 Therefore although the Consultants have not thoroughly evaluated the training methods used so far in training on LTBP, for future training it is recommended that participatory methods are used and that the skills of the trainers/facilitators are evaluated beforehand.

5.7.5 The above methods require trainers and facilitators to have experience of participatory training. In addition, the complimentary communication skills are essential in order that the appropriate approach is taken to the training.

5.7.6 Therefore it is recommended that institutions and individuals who are in the position of providing training for the LTBP are offered a course on Training of Trainers and Communication Skills.

5.7.7 The mixture of training methods used in any one training event will depend upon the target group and the training need. The above recommendations are not meant to be restrictive but to provide guidelines as to how best to achieve the learning that the project seeks.

5.8 Training Providers for the LTBP

5.8.1 Regional Training Providers

5.8.1.1 The list of potential providers of training for the LTBP can be found at Appendix XV, together with a list of their training needs. This list concentrates on people/organisations who already have useful skills. If they are contracted the project will encourage and contribute to the strengthening

and capacity building of these individuals/organisations. The list is not exhaustive and does not attempt to give an overall picture of the nest⁶ of trainer-trainers which needs to be formed and supported, or the overall skills needed for each partner institution to be effective training providers.

Training Providers are People/organisations
*who already have useful skills.
If they are contracted:
need for strengthening and capacity building of these individuals/organisations*

5.8.1.2 As it was not possible to observe training being carried out by the individuals and organisations given in the List of Potential Training Providers, it is recommended that a further, more detailed institutional analysis be carried out with them as soon as possible. This will ensure that training managers and training providers have similar expectations about the training to be planned.

5.8.1.3 In addition, it is recommended that particular attention is paid to the way in which the training providers approach training and that the needs of the LTBP are clearly expressed in terms of approach, outcomes, methods, materials and content.

5.8.1.4 The appropriate follow-up to training, how it should be undertaken and who should manage this should be identified at the training planning stage as training providers may be the most appropriate agencies to carry this out.

5.8.1.5 The List of Potential Training Providers lacks Francophone trainers for the main training needs. It is recommended that further investigation be undertaken urgently to discover which institutions within the Region may be able to service this need. Potential solutions may be to look in Francophone West Africa where a number of well-reputed training organisations exist.

5.8.1.6 Where training is needed in both Anglophone and Francophone countries it is urgently recommended that both Anglophone and Francophone trainers use a similar approach to training.

5.8.1.7 It is preferential, where appropriate, to hold joint training courses with two separate training sessions for Francophone and Anglophone speaking participants. This would enhance rapport-building and ensure that there is greater parity of training provision between the Francophone and Anglophone countries.

5.8.2 *Trainers External to the Region*

5.8.2.1 Although this Strategy is designed to build the capacity of regional and local training institutions as much as possible, it will be necessary to have initial outside support in various training activities. Specific needs for external support are detailed in Table 3.

⁶ Just as the Core Teams are nested, there is a need for a nest of Trainer trainers, starting with those who train trainer trainers (such as the University of Wolverhampton's CRDT), the Trainers of Trainers (e.g. In-Service Training Centre) and the trainers themselves (Environmental Educators, Extension workers, etc.)

Table 3: The Need for External Training Consultants to Support Regional Training Initiatives

Circumstances	Training Need	External Resources Needed
T & C Facilitator set up the coordination system and start activities.	Training of Trainers/ TNA Support for linkages .	Training consultant/s to train and support.
Regional training providers to ensure that they are able to implement appropriate approaches to training and are able to design and deliver tailor-made programmes which address combined training needs.	Design, produce and run the courses together. Example: Training of Trainers, Communication, Conflict Management, Project Management, EE Workshop facilitation	Specialist trainers in these fields - both Anglophone and Francophone.
Facilitation of field support and on-the-job training.		SS specialists Extension specialists Environmental Educationalists.
Technical training for the SS teams.	Diving Pollution Limnology Data analysis Report writing Translation of reports for wider access.	SS specialists Technical report writers Extensionists.

5.8.2.2 If outside support is to be enlisted the importance of Francophone and Anglophone trainers and facilitators who are conversant with the training needs, the project and the project area and who are able to work as a team cannot be understated. It is therefore recommended that institutions/individuals who are able to provide appropriate Anglophone and Francophone support be identified as soon as possible so that they are able to provide some continuity of service for the remainder of the project.

5.9 Training Evaluation and Follow-Up

5.9.1 After planning and carrying out training, training has to be followed up. The effectiveness of training can not be known if it is allowed to be a discrete activity which has no further consequence in the project. Training follow-up starts with monitoring and assessment during a training event and post-event evaluation and may lead to further training for the same participants or to training for different participants. In addition, the same training for different participants may be improved by appropriate evaluation of previous training.

Fisheries Department and CRH staff
1997 participants on dive training, have not been assessed since the course. They need some follow- up, both to evaluate their present skills and to identify further training needs.

5.9.2 Evaluation involves following up the training with visits to the participant/s to observe how they are putting the training into practice and to determine the participant/s' perceptions of how the training has changed their practice. Training

evaluation can be carried out effectively within a programme of On-The -Job Training, which will ensure that skills learned are embedded in confident, competent practice.

5.9.3 Evaluation is a way of summarising the success of the training and findings are fed into the design of the next training events to take place. The design of future training depends upon the way that evaluation is carried out. If the views of past participants are sought and listened to carefully, there is more likely to be a realistic evaluation achieved and this will lead more constructively to designing the next training to take place. If a staff appraisal system exists, the results of monitoring and evaluation should be fed into it. If a staff appraisal system does not exist, then it is suggested, at least for LTBP PCU staff, that one is set up.

5.9.4 It is recommended that the best ways to monitor and evaluate training is considered during training design and that they are carried out at suitable periods during training and after training has ended.

5.10 Cost Effectiveness of Training

5.10.1 It has not been possible to cost out all training activities. as Regional Training Insitutions did not always provide training costs.

5.10.2 Table 4 compares examples of the costs of different Types of Training

Table 4 Examples of Typical Costs with Different Types of Training Provision

Type of Training	Location	Institution	Length of Training	Approximate Cost/person
Short Course Training of Trainers	UK	CRDT, University of Wolverhampton	3 months	Fees plus accommodation US\$ 9,460
Palynology training and practice	USA	University of Arizona	12 months	Fees, travel, accommodation, US\$ 50,000
Short Course: Training of trainers	Zambia	In-Service Training Centre Trust (ISTC)	1 month	Fees plus accommodation US\$ 1,950 (local person) US\$ 2,550 (foreigner)
Workshop to exchange information	Lakeshore	Facilitated by LTBP staff or external/regional facilitator	3 days	Travel allowance plus seating allowance plus facilitators fees
Village coordination meeting	Lake Basin	Facilitated by local extension worker/national EE Coordinator	1 day	Cost of transport, local allowances

5.10.3 As the budgeting exercise has not been completed for this Strategy it is recommended that the Training and Communications Facilitator investigates budgeting possibilities as one of their first activities when in post.

5.10.4 Attention should be paid to the possibility of splitting the costs of an activity between the training budget and other budget lines. For example, 3 months of training

followed by project activities should not all be paid out from the training budget. Conversely visits by SS leaders which contain some days of on-the-job training could apply to have some funds covered by the training budget.

5.11 Training Action Plan

5.11.1 Training and associated activities within the Strategy must start as soon as possible. Therefore it is recommended that an interim Action Plan is adopted before the T & C Facilitator is appointed, and that once the appointment is made, the Action Plan is revised. A proposed Interim Action Plan can be found at Appendix XVI.

5.11.2 As soon as T & C Facilitator is in post, the training regarding TOT, including: Communication skills production of EE material should be put in place based on the suggested action plan.

5.11.3 The training events proposed are from the priorities in 5.4.1 It is envisaged that they will be held at Lakeside LTBP stations or in capital cities within the region. It is preferable to bring external consultants into the region to facilitate the initial process than to hold training events outside the region. This should be seen as a direct benefit to institutional capacity building within the region.

5.11.4 The Action Plan has not included training outside the region because of the implied objective of the LTBP to support regional capacity building. However if there are specific overseas training needs, such as for Geographical Information Systems (GIS) training, then these should be appraised for overall cost effectiveness and benefit to the LTBP. The cost effectiveness of training can be improved if there is a multiplier effect of the results of training, such as the training of others or the production of realistic, and implementable action plans.

5.12 Training Logical Framework

5.12.1 The Training Strategy can be summed up in a Training Logical Framework (logframe). This logframe can be found at Appendix XVIII.

5.12.2 This log. frame may be used a guiding tool to ensure that training takes place in relation to the LTBP Goal and Objectives. However it is not intended to be fixed. It is recommended that the logframe be revised and added to by the T & C Facilitator once they are in post and thereafter at appropriate intervals.

6 CONCLUSIONS

6.1 Since the inception of the LTBP the absence of a training strategy and a limited vision of training has had a significant negative impact in the way that project activities have been undertaken.

6.2 At this stage, with just over two years left to run it is essential that the LTBP Management team are able to draw a line under past activities. It is hoped that they are able to put their full weight behind making the most of the Training Strategy laid out in this report in order to achieve greater cohesivity of project activities through training.

6.3 It is therefore hoped that the Steering Committee Meeting in August 1998 will ratify this Training Strategy and/or suggest amendments to it and that the activities contained within it may begin as soon as possible thereafter. With two years left, directed training may then have a positive effect on the final Project Outcomes.

THE GOAL AND OBJECTIVES OF THE LTBP

POLLUTION CONTROL AND OTHER MEASURES TO PROTECT BIODIVERSITY IN LAKE TANGANYIKA (PPER, October, 1997)

PROJECT GOAL

"The goal of the project is the protection of biodiversity in Lake Tanganyika. This will be achieved via the project purpose which is to create a co-ordinated approach to the sustainable management of Lake Tanganyika. This in turn will be accomplished by increasing institutional capacity within the riparian states to monitor and manage threats to the lake".

(P.6)

PROJECT OBJECTIVES

Immediate objective 1

Establish a regional long-term management programme for pollution control, conservation and maintenance of biodiversity in Lake Tanganyika.

Immediate objective 2

Formulate a regional legal framework for co-operative management of the lake environment.

Immediate objective 3

Establish a programme of environmental education and training for Lake Tanganyika and its basin.

Immediate objective 4

Establish tested mechanisms for regional co-ordination in conservation management of the Lake Tanganyika Basin.

Immediate objective 5

In order to produce a full Strategic Plan for long-term application, some specific studies need to be undertaken. These special studies will also add to the understanding of the lake as a whole and, in some cases, provide the baseline and framework for long-term research and monitoring programmes.

Immediate objective 6

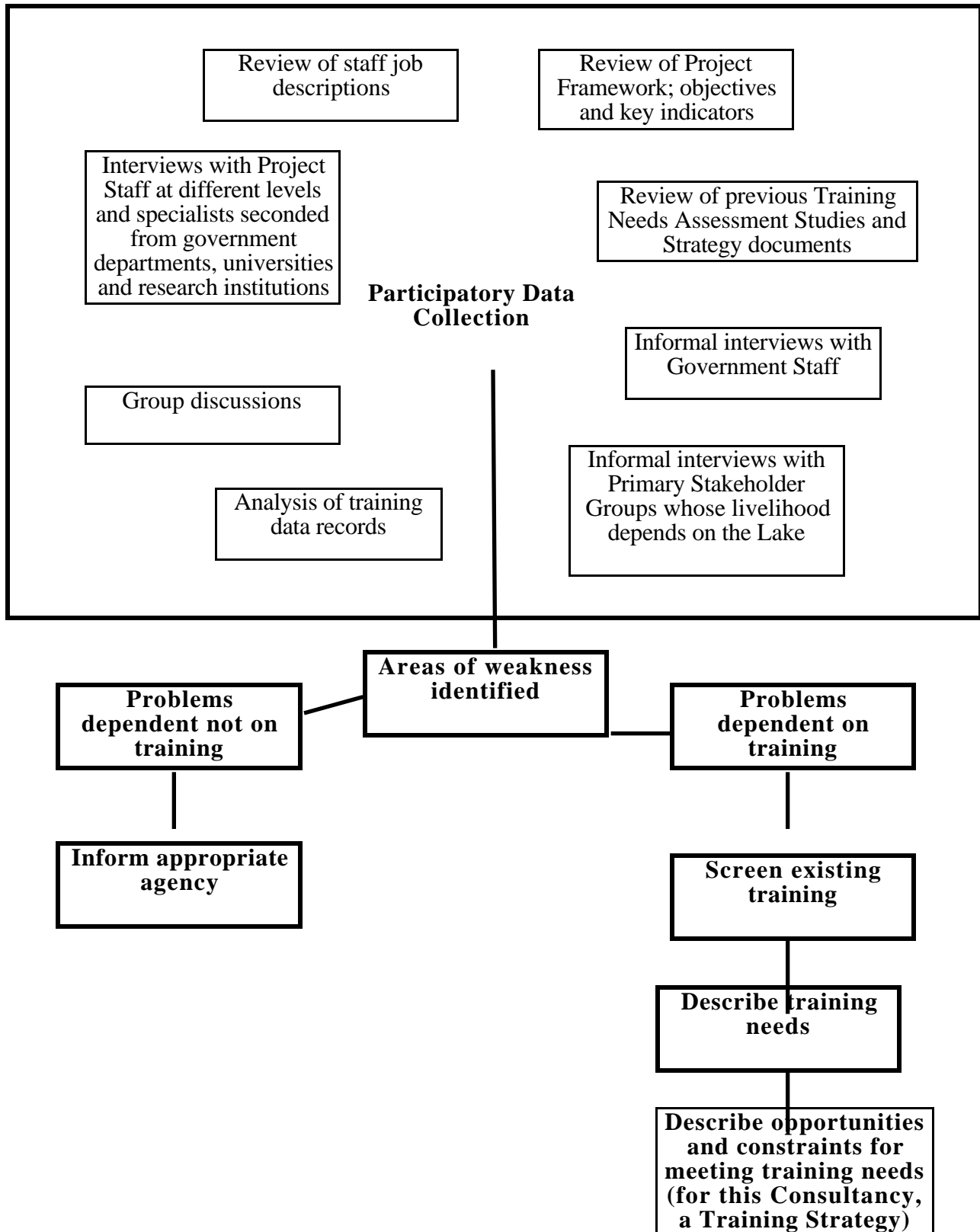
The implementation and sustainability of the Lake Tanganyika Strategic Plan and incorporated environmental management proposals.

(P.6)

CONSULTANTS' TERMS OF REFERENCE

- 1 Review needs assessment documents and training reports produced to date (notably Garnett, Moreau and Willoughby).
- 2 Seek the views of the UK-based special study leaders and UK institutions regarding scientific, technical and other training needs.
- 3 Visit all four countries of the region (Burundi, Congo, Tanzania and Zambia) and to obtain the views of the project National Co-ordinators and other relevant persons with regard to national training needs. The four countries should prioritise these needs.
- 4 Determine cost effectiveness of presenting different types of training, the options for delivery (e.g. workshops presented in region Vs those given overseas) at different locations (in-country, in region, in Africa and overseas).
- 5 Draft a new training strategy that provides an integrated programme of activities to meet the identified training needs of the four countries for the remainder of the project within the constraints of the available budget.
- 6 Present an interim report of the work to the Project Co-ordinator in Dar-Es-Salaam at the end of the field visits.
- 7 Submit a final report to the project management within four weeks of return from the field visits.

A Schematic Diagram for Carrying out a TNA



Appendix IV

INDICATIVE CHECKLIST OF TOOLS USED IN MEETINGS WITH STAKEHOLDERS

These questions will differ depending on target group:

General

- What does your work involve?
- If you have to learn something new, how do you prefer to learn?
- What do you do well in your tasks/job with LTBP?
- What could you do better?
- Probe for training related problems

Project Goal and Objectives

- What do the project Goal and Objectives mean to you?
- How do you think that the Project Goal and Objectives could best be achieved (show Goal and Objectives)?
- What role do you see yourself as having in order to help achieve these aims and objectives? Present? Future?
- What linkages are necessary between the different groups of people involved in LTBP to achieve the Goal and Objectives.

Training

- What is your understanding of activities which could be described as ‘training;’?

Training participated in

- Have you already participated in training sponsored by LTBP?
- What/where/subject? (fill in form)
- Were the outcomes of the training useful for your work?
- Were you able to implement the training in your daily work?
- How could you learn more effectively?
- What kind of complimentary support did you receive to ensure that you were able to implement your learning once you were back at work?

- Did the training improve the way you carry out your work? How?/Why not/Which tasks??
- Have you ever received training elsewhere that you consider has been helpful to your present duties concerning LTBP?

Training others

- Are you required in your job description to train anyone else in the project/outside the project?
- Have you ever had the opportunity to train anyone else in what you have learned - either in training you have received or in the skills that you have?
- If you had the opportunity to pass on what you know/can do/ have learned through training, how would you feel about that?
- Is there anything that you feel could be done to make you comfortable to train others?

Linkages and Communications with others

- In order to carry out your job, who in the project do you communicate with? (map this)?
- Who else do you communicate with (give information to/receive information from) in the project?
- Do you have a link with the people in the other three lake countries who perform your tasks?
- How does this link take place?
- Could it be improved in any way?
- Which ways?
- In your opinion are these links enough in order to achieve the project aims and objectives?
- In order to achieve sustainability of biodiversity in Lake Tanganyika, what other linkages do you think are important?
- Do you know of any uninvolved groups of people who should be involved in achieving the Project Goal and Objectives?
- Who are they?
- What level of involvement do they need to have? (Informed/, consulted, collaborative, decision-making)

- In your opinion could training help them to become effective/more effective?
- What kind of training do you consider to be most helpful for them?
- How do you think that training should take place between the four countries in order to achieve maximum exchanges and communications
- In your opinion what are the training priorities for the LTBP to be sustainable?

TRAINING FOLLOW UP FORM

Name of Trainee/participant

Current post of trainee/participant

Title of Event

Location

Training Leader

Training sponsored by

Start date of Event

Length of event

Number of participants on the event

Male

Female

From which institutions/countries did the other participants come?

Major topics covered

Training methods employed

Value of event for present job (circle)

Very valuable

Valuable

Of little value

Not valuable

Any comments

Were you able to implement your learning on return to your job?

Comments on how the event/post event support could be improved

Would you recommend this training to a colleague in the future? Yes/No (circle)

Why?

Any other comments

Appendix V

CONSULTANTS' ITINERARY

May 18th - July 3rd, 1998

- May 17 Monique Trudel depart Montreal for London
- May 18 : Arrival Monique Trudel in London, meeting Monique and Rachel.
16h00 MRAG: Vicky Cowan, project administrator for Legal, Fisheries and Biodiversity studies and Ian Payne, director.
Thames Consular for leaving MT Burundi visa application form
- May 19 NRI
Meetings with: John Rogers, UK manager;
Vino Graffham, assistant to UK manager;
Nicholas Hodgson, Natural Resources Planner ;
Nick Willoughby, Senior Scientific Officer (LTBP ex Training Officer);
Meeting with Graeme Patterson, Sedimentation Special Studies Leader;
Review of LTBP documents.
- May 20 Review of LTBP documents
Travel from Chatham to London
Meeting in London with Vicky Cowan, MRAG; Paul Vare, EE consultant
- May 21 Travel from Chatham to Walsall
Meeting with Philip Dearden (Head of CRDT) Kath Garbett
Preparation of mission
- May 22 CRDT
Walsall- preparation of mission
- May 23 Travel to Dar es Salaam - arrival 22h30
- May 24 9h30 LTBP- Dar es Salaam, meeting with Andrew Menz, Project Coordinator
PM: Review of LTBP documents.
- May 25 8h00 LTBP: meeting with Andy Menz and Victoria Chale, Project Assistant;
9h00 University of Dar es Salaam, Institute of Resource Assessment: Elieho K. Shishira, director and Claude G.M. Mung'ong'o, Sociologist and Socio Economic SS coordinator;
14h00 Curriculum Development Institute: Stephen Mwinuka;
Evening meeting with Nicholas Hodgson.
- May 26 8h00 Tanzania Gender networking Programme: Christina Warioba ;
9h00 UNDP: Sylvester Sisila, Assistant Resident Representative ;
10h00 Wildlife Conservation Society of Tanzania: Paul Y. Nnyiti, Conservation Officer;
12h00 LTBP: SAP workshop: introduction to National Working Group for SAP process;
15h00 VSO: James Langdon , Programme Officer; Alisson Scott, Field Director;

- 16h00 WWF-Tanzania Environmental Education Programme Mary Shuma, Coordinator.
- May 27 Fly to Lusaka arrival 11.30 hrs
14h00 Meeting with Geoff Lulemba, Consultant with Denams;
Buy ticket to Kasama
Continue document review
- May 28 9h00 National Parks and Wildlife Service: Charles Phiri, Research Officer;
11h00 Environmental Council of Zambia: J.S. Phiri, National Coordinator;
12h30 IUCN Office (every body in meetings)
14h00 Curriculum Development Institute: Arnold Chengo, Coordinator of Basic Education Sector Investment Programme.
15h30 University of Zambia : Geography Department, Dr Henry Sichingabula, National Sediment SS Coordinator
- May 29 9h00 UNDP: Amos Muchanga, Programme Analyst
10h20 Wildlife & Environmental Conservation Society of Zambia: Mr Mwape Sichilongo, Director
11h30 WWF-Zambian Environmental Education Project: George Muwowo, Team leader, Teacher Trainer & Material Developer; Justin K. Lupele, Education Material Developer; Jonathan C. Chisaka, Community Education officer; Hamish Aitchison, Senior Education Officer, WWF-UK
14h30 Fisheries Department :Dr. Mvula, Economist
15h20 ISTC In-Service Training Centre: Mungule Chokoye, Controller of Programmes.
16h30 British Council : Paul Clementson, Education Programme Officer.
- May 30 Saturday, update review of documents, report writing
- May 31 19h30 Sunday report writing. Meeting with S. Y. Nsongela, National ee Coordinator, Environmental Council of Zambia.
- June 1 Fly to Kasama and road travel to Mpulungu
19h00 Meeting with Martin Pearce, LTBP - MPU Station Coordinator.
Evening meeting with Dr P. Chipungu, Consultant for Denams Consultancy and Mlotha Damaseke, Researcher.
- June 2 9h00 Mr L Mwape, Mr R. Sinyinza, Fisheries Research Officers
J.W Mtonga, Principal Fisheries Technician, E Chupulu, Fisheries Technician, F. Ng' andu, Fisheries Training Instructor. Fisheries Department Officers
- 10h00 Mr Mwilwa, Council Secretary, P J Sikazwe, Council Chairman
11h00 Mr Chilowela Ulungu Wane chairman, Mr Chifunda, Senior Headman Niamukolo village
14h00 Mr B. Chansa, Sumbu Fishing Development Committee
Mr Chilowela and Mr Luchembe, secretary drama group "Lake Tanganyika Drama group"
- June 3 DiWASHE Tour, village's visits and discussion with core team
Mr Mugala chairman Washe Committee
Mrs Florence Mwale, acting director of District Health Services
Mr Kumwenda, Wildlife Officer

Ms Jacinta, Irish Aid Coordinator
Mr Mwanza, Chongololo Club
Mr Chizu, headman of Muzabwela village

Village of Chipwa, D. kalolo, secretary of the Village Conservation and Development Committee
Village of Chitili , K. Chifunda, Chairman ; L. Mwimanzi, Treasurer
Village of Chisanza B, Mr Nanyangwe, Headwoman
Village of Kawe, village of Kasakumulwa (4 persons)
Departure 8h00, return 19h00

- June 4 8h00 Mr S. Chola & Mr W Lombe, Lake Tanganyika Drama Group
 9h30 Senior Chief Tafuna & 4 accompanying officials
 11h00 S. Mutema, manager of Mpulungu fisheries Co
 12h00 Mpulungu Harbour Corporation Ltd. Mr. F. F. Bowa, Acting
 Managing Director & Mr. G. Chikwama, operation manager
 PM Update reading documents and writing, LTBP office
- June 5 8h30 Charles Nyrenga, Forestry Department, Mpulungu
 11h00 Nici Wiltshire, Research Assistant
 Tony Bailey Watts, Pollution SS Coordinator
 Boat trip to Kigoma, leave at 16h00
- June 6 MV Liemba, update info and informal meetings with marine team
- June 7 MV Liemba, arrival at Kigoma at 19h00, meeting with Kelly West
- June 8 8h00 Dr Nkotagu, Prof of Geology, University of Dar es Salaam, Guest
 Lecturer at Nyansa Training
 9h00 Mr Tarimo, NEEC, Dar es Salaam
 10h00 Mr Baboucar Sarr, UNDP Liaison Officer, Great Lake Programmes
 14h00 Beatrice Marwa, EE and fisheries officer , Fisheries department
 17h30 Kelly West, LTBP scientific Liaison officer, Kigoma
- June 9 9h00 Tacare NGO, Jane Goodall Fondation, Georges Strunden, Project
 Director
 11h00 Mr Danny Fanveli Mhalu, Regional Agriculture & Livestock
 Development Officer & Mr Magige, Regional Land Use Planner.
 12h00 Tacare NGO, Soil Conservation team: Mr Kashula, Mr Ntabo, A.
 Kingu, M. Sanze
 14h00 Mr Mchumbuzi J., TRC Maintenance Manager
 18h00 Gaspard Ntakimazi, University of Burundi, Professor and Translator
 at Nyanza Project
 20h30 Kamalebo Mukungilwa, Mbemba Mawula, Borauzima Safari Pascal,
 from Uvira Hydrobiological Research Centre, CRH
- June 10 9h00 Fisheries department Mr Kweka, District Fisheries Officer
 10h00 Mr Chitamwebwa, Director of TAFIRI, Kigoma Office
 11h00 meeting with 10 fishermen from 2 villages: Ujiji and Katonga
 15h20 update meeting with Kelly West
 16h30 Jerod Clabaugh, Logistics Officer, Web Site and Newsletter Editor
- June 11 8h15 Prof Chale, Pollution Special Studies, scientific liaison officer
 13h40 Fly to Nairobi by Committee for the International Red Cross flight

- Arrival Nairobi 16h00
Update-writing evening
- June 12 9h30 Pick up ticket Kenya Airways Nairobi-Bujumbura
15h00 Kenya Airways flight : Nairobi- Bujumbura
16h00 Arrival in Bujumbura, meeting with Mamert Maboneza, Bujumbura Office Manager
- June 13 10h00 ODEB Ngo, Antoine Kinyomvyi
11h00 Gabriel Hakizimana, National Pollution SS Coordinator
12h00 meeting with Mamert Maboneza, LTBP office
Update writing
- June 14 AM: update writing report
15h00 meeting with Benoit Nzigidahera, Biodiversity SS member
- June 15 9h00 Rénovat Baragengana, Dept. Director "études du milieu et systèmes de production" Institut des sciences agronomiques du Burundi ISABU.
Gahungu Tharcisse, ingénieur chimiste, ISABU Lab
10h30 Mbonigaba Cyprien, directeur général du Plan, Mme Godeline Nibayubahe, directeur de l'administration et financement des projets, M. Niyonzima, cadre chargé de l'environnement, M. Claver Nkundanabake, chargé du secteur rural
PM update information and writing, LTBP office
- June 16 7h30 M. Kayengayenge Étienne, Directeur général de l'aménagement du Territoire et de l'Environnement
8h30 M. Louis Marie Nindorera, président association des Jeunes JAMAA
10h00 Mme Cécile Gakima, directeur technique du projet Population Environnement, INECN, Mr Damien Nindorera, conseiller juridique, INECN
11h00 M. Gaspard Bukwema, professeur d'Écologie & Botanique, Université du Burundi, ISA Institut supérieur d'Agriculture.
14h00 M. Jean-Berchmans Manirakiza, Directeur général de l'INECN, Institut National pour l'Environnement et la Conservation de la Nature.
15h00 M. Ignace Mboninyibuka, Directeur Technique, Office National Pharmaceutique ONAPHA
16h00 M. Louis Nduwimana, Programme analyste, UNDP
- June 17 8h00 Travel to Uvira by road
Meeting with Dr Nshombo at the Burundi Border
11h00 Arrival to Uvira
11h30 Meeting with CRH scientific team : Mulindwa N'siaula, scientific director ; Mwendanababo Hkila M., chief of Documentation and Information division; Bashonga Bishobibiri Alexis , Programme, evaluation and managing division (scientist and diver for LTBP) ; Mwenyenmali Banamwezi, assistant scientist, department of hydrobiology, Muzumani Risasi, research assistant, Biology department (BIOSS for LTBP) ; Kitungano Gérard, research assistant socio economic and fisheries economy department (socio-economy SS for LTBP) ; Kwetuenda Menga, research and Limnology (sedimentation and pollution SS for LTBP) ; Tshibangu Kalala, chief of Hygrobioly department, (pollution SS for LTBP) ; Kukiye Buda, scientist and diver (BIOSS for LTBP) ; Kwibe Assani, research

tecnician for fishery economy department (socio economy and fishing practices for LTBP) ; Biaya Kalonji, research technician for fishery economy department (socio economy and fishing practices for LTBP) ; Amundala Shekani, scientist and diver for LTBP ; Dr Mboko S. Keita, scientist and diver for LTBP ; and Dr Nshombo Muderhwa, DG, Biodiversity and environmental education for LTBP

14h30 CADIC (Centre d'Action pour le Développement Durable et Intégré dans les Communautés), Elongo Swedi, DG

15h40 NOPTA (Nouvelles Orientations Pour la Pêche au lac Tanganyika), Mushengezi Mwene Bineke, director and team

17h45 SADAP Ngo, Ir Fataki Mastaki Vincent; Kanigi Mulume Elia

18h15 CVAPE (Centre de vulgarisation agricole et protection de l'environnement), Ir Jimmy Shekahogo Lwangezi; Mbotwa Namihaba

- June 18 8h00 Travel by road Uvira to Bukavu (via Rwanda)
12h30 Arrival in Bukavu
Buy tickets : Bukavu to Goma and Goma-Kinshasa
15h00 Prof. Dr Kaningini Mwenyimali Boniface, Institute Supérieur d'Éducation
- June 19 6h30 Travel to Bukavu airport , Departure Bukavu-Goma 8h20
14h30 Departure Goma-Kinshasa
19h00 Arrival Kinshasa- Hotel Inter continental
- June 20 Kinshasa, meeting with Nshombo and Report writing
June 21 Report writing
- June 22 8h30 UNDP, Mathieu Ciowela
9h30 Mady Amule, National coordinator LTBP
11h30 Joseph Bula-Bula, Délégué Général adjoint ICCN
12h30 Prosper Barumawaki, Secrétaire Général de la Recherche Scientifique et Technologique, Ministère de l'Éducation
Update and report writing
- June 23 9h00 Mathieu Ciowela, UNDP and Nshombo
10h00 Prof. Jonas Nagahuedi Mbongu -Sodi, coordonnateur National de la Biodiversité et DGA à l'Institut des Jardins Zoologiques et Botaniques du Congo, M. Kabatunyi
11h00 Mme Gina Kusaka -Kitund, Journaliste à l'Émission Karibu-environnement, Télévision nationale RDC
12h00 Mady Amule, Coordonateur national; Mme Mbombo - Mangangi Godé, Juriste ; M. Matanda - Kafunda Maurice, chef de service CIECNT, Ministère de l'environnement
12h30 Ngwamah Kwakombe, administrateur à l'INERA, Institut national pour l'étude et la recherche agronomiques
14h30 Prof. Lumande Kasali, Secrétaire Général de l'Enseignement Supérieur, Ministère de l'Éducation
18h30 Prof Nagahuedi Mbongu -Sodi
- June 24 8h30 M. Kikoni Mapamushiciang, ingénieur Technicien en Foresterie, chargé de la documentation au Comité Interministériel de coordination chargé du suivi et de la mise en œuvre des décisions de la CNUED, Ministère de l'environnement

9h30 Prof. Jean-Baptiste Bungisabo ma Manzudu, Ichthyologiste, vice-doyen de la Faculté des Sciences, Université de Kinshasa

11h00 M. François Kandolo wa Kashala, Directeur Général, M. Alphonse Nzembele- Kasongo, conseiller chargé de la gestion commerciale, Centre de Perfectionnement aux Techniques de Développement CEPETEDE

12h00 Prof. Lumande Kasali, Secrétaire Général de l'Enseignement Supérieur, Ministère de l'Éducation

16h30 Mathieu Ciowela, adjoint au Représentant Résident, PNUD

23h30 Départ pour l'aéroport Kinshasa vers Nairobi (départ 02h00)

- June 25 Arrival Nairobi 7h30
Report writing
- June 26 Report writing
Debriefing with Andy Menz, LTBP Coordinator
- June 27 Report writing
22h30 Fly to UK
- June 28 10h30 arrival in UK
- June 29-July1 Writing report and Presentation
- July 2 Travel to NRI
14h00 Make Presentation to LTBP Management Committee
Travel to London
- July 3 16h00 M Trudel depart for Montreal

Appendix VI

CONTACT NAMES AND ADDRESSES

1. TANZANIA

Name	Organization	Address	Date of contact
Andrew Menz, Coordinator Victoria Chale, project assistant	Lake Tanganyika Biodiversity Project (LTBP)	P.O.Box 5956 Dar es Salaam Tel : 255 (0) 51 118201 Fax: 118202 Email : ltbpdsm@twiga.com	May 24
Elieho K. Shishira, Director, Claude G.M. Mung'ong'o, sociologist and Socio- Economic SS coordinator	University of Dar-es- Salaam, Institute of Resource Assessment (IRA)	PO box 35097 Dar es Salaam Tel 255-51 410144 Fax 410 393 Email: ira@ira.udsm.ac.tz	May 25
Stephen Mwinuka	Curriculum Development Institute		May 25
Christina Warioba	Tanzania Gender networking Programme (TGNP)	P.O.Box 8921 Dar es Salaam Tel : 255 51 118030 Fax : 22971 Email : tagnet@tagnet.udsm.ac.tz	May 26
Sylvester Sisila, Assistant Resident Representative	United Nations Development Programme (UNDP)	P.O. Box 9182 Dar es Salaam Tel 255 51 112799 Fax 113272 Email: sylvester.sisila@undp.org	May 26
Paul Y. Nnyiti, Conservation Officer	Wildlife Conservation Society of Tanzania (WCST)	PO Box 70919 Dar es Salaam Tel: 112518 Fax : 112496	May 26
James Langdon Programme Officer, Alisson Scott, Field Director	Voluntary Services Overseas (VSO)		May 26
Mary Shuma, Ee Coordinator	World Wildlife Fund (WWF)-Tanzania Environmental Education Programme	P.O.Box 63117 Tel 255 51 75346 Fax 75535 Email : wwftpo@raha.com	May 26

Kelly West, Scientific Liaison Officer	LTBP	P.O.Box 90 Kigoma Tel: 0695 2992 Fax 0695 2993	June 7
Dr Nkotagu, Prof. of Geology	University of Dar-es-Salaam		June 8
Mr Tarimo, National EE Coordinator	National Environmental Mangement Council	Dar es Salaam	June 8
Mr Baboucarr Sarr, liaison Officer, Great Lake programmes	UNDP	P.O.Box 125 Kigoma Tel: 255 695 3765 Fax: 255 695 3415 Email: baboucarr.sarr@undp.org	June 8
Beatrice Marwa, EE and Fisheries Officer	Fisheries Department		June 8
Georges Strunden, TACARE Project Director	Jane Goodall Fondation (JGF), Tanganyika Catchment, Reforestation and Education (TACARE)	P.O.Box 11 82 Kigoma Tel/fax: 695 4446	June 9
Danny Fanueli Mhalu, Regional Agriculture & Livestock Officer ; Magige V.M, Regional Land Use Planner	Ministry of Agriculture	P.O.Box 107 Kigoma Tel: 0695 2159 Fax: 4205	June 9
Mr Mchumbuzi J., Maintenance manager	Tanzania Railway Corporation (TRC)	Kigoma	June 9
Mr Kweka, District Fisheries Officer	Natural Resource & Tourism Ministry, Fisheries Department	Kigoma	June 10
Mr Chitamwebwa, Director	Tanzanian Fisheries Research Institute (TAFIRI)	Kigoma	June 10
Jerod Clabaugh, Logistics Officer	LTBP	P.O.Box 90 Kigoma Tel: 0695 2992 Fax 0695 2993 Email: ltbp@twiga.com	June 10
Prof. Chale, National Pollution Special Studies Coordinator,	LTBP	LTBP station, Kigoma	June 11

1. ZAMBIA

Name	Organization	Address	Date of Contact
Jeff Lulemba,	Denams Environmental Services	P.O.Box 32750 Lusaka Tel: 260 1 295549 Fax 1224060	May 27
Charles Phiri, Research Officer	National Parks and Wildlife Service	Private Bag 1 Chilanga Tel : 278323 Fax 278244	May 28
James S. Phiri, LTBP National Coordinator;	Environmental Council of Zambia (ECZ)	P.O.Box 35131 Lusaka Tel : 260 1 254130 Fax : 254 164 Email: Jsphiri@zamnet.zm	May 28
Arnold Chengo, coordinator of Basic education sector investment programme.	Curriculum Development Institute, Ministry of Education	Lusaka	May 28
Dr Henry Sichingabula, National Sediment Special Studies Coordinator	University of Zambia : Geography Department	P.O.Box 32379 Lusaka Tel : 1-213221 Email: hsichingabula@natsci.unza.zm	May 28
Amos Muchanga , Programme Analyst	UNDP	P.O.Box 31966 Lusaka Tel: 260 1 250800 Fax : 253805 Email: amos.muchanga@undp.zm	May 29
Mr Mwape Sichilongo, Director	Wildlife & Environmental Conservation Society of Zambia :(WECSZ)	P.O. Box 30255 Lusaka	May 29
George Muwowo, Team leader, Justin K. Lupele, Education Material Developer ; Jonathan C. Chisaka, Community Education Officer ; Hamish Aitchison, Senior Education Officer	WWF-Zambian Environmental Education Project WWF-UK	P.O.Box 50551 Lusaka Tel : 01 227249 Fax 01 227249 Email: wwf-zeep@zamnet.zm Panda House, Weyside park Godalming, Surrey GU7 1XR, UK Tel: 44 0 1483 426444 Fax: 1483 426409	May 29
Dr. Mvula, Economist	Fisheries Department	Private Bag 1 Chilanga	May 29
Mungule Chokoye , Controller Of	In-Service Training Centre (ISTC)	P.O.Box 310201 Lusaka	

Programmes		Tel: 224615 Fax: 281941 Email: istc@zamnet.zm	
Paul Clementson , Programme Education Officer	British Council	Lusaka	May 29
S. Y. Nsongela, NEEC	Environmental Council of Zambia	P.O.Box 35131 Lusaka Tel : 260 1 254130 Fax : 254 164	May 31
Martin Pearce, Office Manager	LTBP - MPU Station Mpulungu (MPU)	P.O.Box 55/private Bag 1 Mpulungu Tel/fax: 260 4 455045	June 1
Dr P. Chipungu,	Denams Environmental Services	P.O.Box 32750 Lusaka Tel: 260 1 295549 Fax 1224060	June 1
Mlotha Damaseke, Researcher.		Lusaka	June 1
Mr L Mwape, Mr R. Sinyinza, Fisheries Research Officers ; J.W Mtonga, E Chupulu, fisheries technicians ; F. Ng' andu, Fisheries Training Instructor	Fisheries Department	Mpulungu	June 2
Mr Mwilwa, Council Secretary,	Council of Mpulungu		June 2
Mr Chilowela, Chairman	Ulungu Wane Association		June 2
Mr B. Chansa,	Sumbu Fishing Development Committee		June 2
Mr S. Chola, Mr W Lombe,	Lake Tanganyika Drama Group		June 4
Senior Chief Tafuna			June 4
S. Mutema, manager	Mpulungu fisheries Co		June 4
Mr. F. F. Bowa, Acting Managing Director & Mr. G. Chikwama, Operations Manager	Mpulungu Harbour Corporation Ltd	P.O.Box 420138 Mpulungu Tel: 455075 Fax: 04 455172	June 4
Charles Nyrenga,	Forestry Department	Mpulungu	June 5
Tony Bailey Watts, Pollution Special Studies Coordinator Nici Wiltshire, Research Assistant	Institute of Freshwater Ecology	Bush Estate, Penicuik Midlothian EH26 OQB, UK Tel: 44 0 131 445 4343 Fax 131 445 3943 Email: A.Bailey-	June 5

		Watts@ife.ac.uk	
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3. BURUNDI

Name	Organization	Address	Date of contact
Mamert Maboneza, Office Manager, Administrative Assistant	LTBP	P.O.Box Bujumbura Tel 257 219960 Fax 257 219961 Email: ltbpbuja@cbinf.com	June 12
Antoine Kinyomvyi, President	Organisation de Développement et Environnement du Burundi (ODEB)	Bujumbura Tel: 225333 Fax: 228681	June 13
Gabriel Hakizimana, LTBP National Pollution SS Coordinator	Institut National pour l'Environnement et la Conservation de la Nature (INECN)	Bujumbura Tel: 257 234426 Email:inecnblt@cbinf .com	June 13
Benoît Nzigidahera, Biodiversity Special Study member	INECN	Gitega	June 14
Rénovat Baragengana, Dept. Director "études du milieu et systèmes de production" Gahungu Tharcisse, ingénieur chimiste	Institut des sciences agronomiques du Burundi (ISABU)	Telex 51447 Bujumbura Tel: 21 3279 Fax 257 22 2598	June 15
Mbonigaba Cyprien, directeur général du Plan, Mme Godeline Nibayubahe, directeur de l'administration et financement des projets, M. Niyonzima, cadre chargé de l'environnement, M. Claver Nkundanabake, chargé du secteur rural	Ministère du Plan		June 15
Kayengayenge Étienne, Directeur général de l'aménagement du Territoire et de l'Environnement	Ministère de l'Aménagement du Territoire et de l'Environnement	BP 2847 Bujumbura Tel: 23 3257 Fax 257 21 1080	June 16
Louis Marie Nindorera, président	Association des Jeunes JAMAA	BP 180 Bujumbura Tel: 257 235271 Fax: 257 220004 Email: iteka@cbinf.com	June 16

Cécile Gakima, directeur technique du projet Population Environnement	INECN	BP 56 Gitega Tel: 040 2075 Fax 27 6026	June 16
Damien Nindorera, conseiller juridique	INECN	BP 56 Gitega Tel: 040 2075 Fax 27 6026 Email: inecnblt@cbinf.com	June 16
Gaspard Bukwema, professeur d'Écologie & Botanique	Université du Burundi, Institut Supérieur d'Agriculture (ISA)	ISA Gitega Tel/fax: 27 6005	June 16
Jean-Berchmans Manirakiza, Directeur général de l'INECN,	INECN	BP 2757 Bujumbura BP 56 Gitega Tel: 257 27 6026 Fax: 257 27 6026	June 16
Ignace Mboninyibuka, Directeur Technique	Office National Pharmaceutique (ONAPHA)	P.O.Box 2380 Bujumbura Tel: 224175 Fax 257 223849	June 16
Louis Nduwimana, Programme analyste	UNDP	BP 1490 Bujumbura Tel: 257 223135 Fax 257 225850	June 16
Ntakimazi Gaspard	Université du Burundi	Bujumbura	June 9
Nahayo Arthur, dept. De Biologie	Université du Burundi		June 11
Bugirimana Célestin, dept. De Chimie	Université du Burundi		June 11
Hakizimana Terence, Dept d'Agronomie	Université du Burundi		June 11

4. RÉPUBLIQUE DÉMOCRATIQUE DU CONGO

Name	Organization	Address	Date of Contact
Nshombo Mudherwa, directeur général, et équipe du Centre *voir itinéraire	Centre de Recherche en Hydrobiologie (CRH)	BP 254 Bujumbura CRH/Uvira Fax 257 292701	June 17
Kamalebo Mukungilwa , chercheur Mbemba Mawula, Borauzima Safari Pascal	Centre de recherche en hydrobiologie CRH	BP 254 Bujumbura CRH/Uvira Fax 257 292701	June 9
Elongo Swedi, DG	Centre d'Action pour le Développement Durable et Intégré dans les Communautés. (CADIC)	CADIC/Uvira BP 6306 Bujumbura Burundi Or BP 956 Kigoma Tanzania	June 17
Mushengezi Mwene Bineke, directeur général et équipe	Nouvelles Orientations Pour la Pêche au lac Tanganyika. (NOPTA)	NOPTA/Uvira BP 6166 Bujumbura Burundi	June 17
Fataki Mastaki Vincent ; Kanigi Mulume Elia	Services d'appui au développement agro-pastoral. (SADAP)	SADAP/Uvira BP 3618 Bujumbura Burundi	June 17
Jimmy Shekahogo Lwangezi ; Mbotwa Namihaba	Centre de vulgarisation agricole et protection de l'environnement (CVAPE)	Uvira	June 17
Nshombo Emmanuel, directeur de programme	Centre d'études et d'actions sociales (CENEAS)	CENEAS/Uvira BP 1440 Bukavu	June 17
Kaningini Mwenyimali Boniface, Dr et professeur de biologie	Université de Bukavu Institut supérieur Pédagogique	BP 854 Bukavu Et BP 203 Cyangugu Rwanda	June 18
Mathieu Ciowela, Adjoint au Représentant Résident	UNDP	UNDP BP 7248 Kinshasa 1, DRC Tel 001 407 956 3781 243 12 8801450 Email: mathieu.ciowela.k@undp.org	June 22, 23,24
Mady Amule National coordinator	Ministère de l'environnement et Conservation de la Nature	BP 12348 Kinshasa 1. RDC	June 22
Joseph Bula-Bula Délégué Général adjoint	Institut Congolais pour la Conservation de la Nature (ICCN)	BP 10 862 Kinshasa-Gombe Tel : 880 4242	June 22

Prosper Barumawaki Secrétaire Général	Ministère de l'Éducation Nationale Recherche scientifique et Technologique	BP 5429 Kinshasa	June 22
Jonas Nagahuedi Mbongu - Sodi, Professeur Université de Kinshasa, Coordinateur National de la Biodiversité	Institut des Jardins Zoologiques et Botaniques du Congo	35 ave. Comité Urbain Gombe - Kinshasa Tel: 243 12 33748 Fax: 8843675	June 23
Gina Kusaka -Kitund Journaliste	Émission Karibu- environnement, Télévision nationale République Démocratique du Congo (RDC)	8 ^e étage local 815 Kinshasa Tel: 60556 Telcel: 58092	June 23
Mme Mbombo - Mangangi Godé, Juriste ;	Ministère de l'environnement	BP 12348 Kinshasa 1. RDC	June 23
Prof. Lumande Kasali, secrétaire général	Enseignement Supérieur Ministère de l'Éducation		June 23
Ngwamah Kwakombe, administrateur	Institut national pour l'étude et la recherche agronomiques (INERA)	BP 2037 Kinshasa 1 RDC Tel 33332 Télex: 21164 UNDP	June 23
Kikoni Mapamushiciang, ingénieur Technicien en Foresterie	Ministère de l'environnement	BP 12348 Kinshasa 1. RDC	June 24
Prof. Jean-Baptiste Bungisabo Ichthyologiste, vice- doyen	Faculté des Sciences, Université de Kinshasa	BP 190 Kinshasa	June 24
M. François Kandolo wa Kashala, Directeur Général	Centre de Perfectionnement aux Techniques de Développement (CEPETEDE)	BP 989 Kinshasa Télécel: 46208 Tél: 22340-27095	June 24

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Meetings with FAO and other contracts. Jan.1995

Appendix VIII

TRAINING UNDERTAKEN TO DATE ON LTBP (including previous Training Needs Assessments)

DATE	TARGET GROUP/S	PARTICIPANTS	TITLE OF TRAINING	TRAINING LOCATION	TRAINING LEADER	PROJ. OBJECTIVE ADDRESSED
Jan 97	-		TNA*	Mainly Tanzania	Sharon Garnett	Training, general
Jan-Feb 97	-local officials		PRA Training Workshop & Practice (extractive)	Mpulungu & villages	Philip Townsely	4
April 97			TNA*	Mainly Kinshasa, DR Congo	Jacques Moreau	Training general
On the job	FPSS team and fishers	Tz x 6, Zam x 5	Fishing Practices	Mpulungu & Kigoma	Philip Petit	5
6-8/5/97	Local stakeholders	80 local stakeholders	Local stakeholders workshop	Zambia: Mpulungu	Shadreck Nsongela & Chipungu	3
05/06/97	?	Nsongela Tarimo (NEEC)	Awareness to Actions Environmental Education methods	ICCE, UK	Paul Vare, ICCE	3
9/97	On the job				Dr Chale	
		Ms Emma Msaky	Pollen analyses	University of Arizona	Dr Andrew Cohen	
1 day	Drama group		Drama group training	Mpulungu	Paul Vare, ICCE	3
09.97	Wildlife fisheries CRH officials	Tz x 3, Bur x 4 DR Congo x 4 Zam x 4	Dive Training & Underwater survey	Kigoma	Frontier x 3 trainers	5

*

06-09/97	local officials and some pr. stakeholders	?	PRA Workshops	Kigoma /Rukwa	Steve Evison Claude Mong'ongo	3
09/97	Workshop attendees	11 Tz 7 Za	GIS intro	Kigoma	John Rutter	5?
10/97	Anglophone Scientists	11 Tz 7 Za	Joint SS Technical Training Workshop	Kigoma	Allison, Bailey-Watts, Bills, Duck Martins, Patterson and West	5 pollution, Sedimentaion and Biodiversity
?10-11/97	?	National	SE/EE Workshop	Kigoma	?	4 SE/EE 3
Nov 97	Nat Met training schools	5 tanzanians instructors	NOAA satellite daya capture & analisis	Kigoma	Rupert Loftie NRI	5?
3 days, Jan 98	Village Headmen	Za		Mpulungu	Nsongela Chupungu	3, 6
30 Jan	Local drama group			Lakeshore	Nsongela	3
April/May 98		Regional countries) (4	SE/EE workshop	?Mpulungu?	Nsongela Damaseke	4,3
June/July 1998	BIOSS	Francophone	BIOSS and follow-up to Dive training	Bujumbura	D Vos, Gashagaza (2 weeks each) , Martens, West E Allison (3 weeks)	5
	BIOSS	Anglophone parks staff,	Dive and Underwater Survey training	Zambia, Tanzania		
On-going	?	?	Exchange of experience among field teams - regionally	Sedimentation ? only		5
?	Database researchers	? x 3	How to do literature searches and how to bild databases			5

To be set, 1998/9	BIOSS teams	BIOSS dive Teams + terrestrial support	Taxonomic Training for Biodiversity Monitoring	Cruise of Congo Coast	SIAL Team	5
	BIOSS team	4 regional scientists		Belgium	Royal Belgian Institute of Natural Sciences	5
ongoing	Pollution	Field team	on-the-job	Burundi Tanzania Zambia	N/W Chale	5
ongoing	sedimentation	Field team	on-the-job	Tanzania	Nkotagu	5
ongoing	sedimentation	Field team	on-the-job	Zambian	Sichingabula	5
ongoing	BIOSS	Field team	on-the-job	Burundi	Ntakamazi	5
	BIOSS	Field team	on-the-job	Congo	Mboko	5
	Pollution	Field team	on-the-job	Burundi	Gabriel Hakizimana	5

EVALUATIONS OF PREVIOUS TRAINING

TRAINING FOLLOW UP FORM

Name of Trainee/participant Current post of trainee/participant

x2 Fisheries Research Officers

Title of Event Location

Field and Lab. Methods Training Workshop Kigoma, Tanzania

Training Leader Training sponsored by

**Chris Foxall,
Tony Bailey-Watts
Rob Duck LTBP**

Start date of Event Length of event

22.09.97 2 weeks

Number of participants on the event Male Female

28	25	3
9	8	1

From which institutions/countries did the other participants come?

**Tanzania - Water Affairs, Wild life, Bureau of Standards
Zambia - Fisheries, Water Affairs, Wildlife**

Major topics covered

**Sampling in Biodiveristy, pollution and sediments
Analysis of samples, composition of sediments, granulometry**

Training methods employed

Class, laboratory and practical, guided field work

Value of event for present job (circle)

**Very valuable
(x1)**

**Valuable
(x1)**

Were you able to implement your learning on return to your job?

Yes (x2)

Comments on how the event/post event support could be improved

- 1) **More details on the subjects covered**
- 2) **Training event indadequate. Post event support could be improved by more detailed short courses and working with specialised consultants in the special studies especially in interpretation of results**

Would you recommend this training to a colleague in the future? **Yes/No** (highlighted x 2)

Why?

**It gives a beginning point
It gives baic knowledge in sediments**

Any other comments

- 1) **When selecting participants, select those who will be able to make use of what they have learnt once back to their place of work**
- 2) **Training very indadeuate. Does not meet most of what we are required to do in the field. There must be different levels of training according to levels of professional/academic standards. LTBP “training” does not discriminate standards of education and levels of understanding.**

TRAINING FOLLOW UP FORM

Name of Trainee/participant Current post of trainee/participant

x1 National EE Coordinator

Title of Event Location

Awareness to Action UK (ICCE)

Training Leader Training sponsored by

Paul Vare LTBP

Start date of Event Length of event

15 Sept 6 weeks

Number of participants on the event Male Female

15 11 4

From which institutions/countries did the other participants come?

Africa and the Caribbean

Major topics covered

PRA, Log. frame, consensus building, presentation

Training methods employed

Discussion, lectures, visits

Value of event for present job (circle)

Very valuable

Were you able to implement your learning on return to your job?

Yes, eg PRA

Comments on how the event/post event support could be improved

I need more training on Environmental Education

Would you recommend this training to a colleague in the future? **Yes**/No (highlighted)

Why?

It is useful in day to day EE work

Any other comments

More EE course is required

SUMMARY OF FINDINGS FROM PREVIOUS TRAINING NEEDS ASSESSMENTS

Reviews of Garnett, (1997), Moreau (1997) and Willoughby (1997) and training they called for

Training Type/ Training Need	Target Group/s	Potential Training Providers	Location	Objective addressed (interpreted)	Recommendations of authors
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Higher Degrees

PhD	Special studies researchers	UK/France in partnership with local institution	In-country	5	Not many, start any ASAP and do research around the Lake
PhD & MSc	1 x Burundi 2 x Tanzania 2 x D R Congo 1 x Zambia	Partnership between INP Toulouse and local university. Msc at INP	Research at lake shore, sandwich with European institution,	5	Strong individual demand
MSc	High calibre staff		In-country/ lakeside	5	Full time research preferred
MSc		NYANZA International Waters Learn		5	Contact with others active in similar scientific/educational work

Institutional Strengthening

Universities	MSc students and courses	?	in-country	5	Single institution should be identified, personnel and information services provided by consultants
Local capacity and institutions	Regional organisations (Tanzania)		In-country On-the-Job Regional/OS workshops and	?	

			courses		
Non-University	Top management and planners from government and technical institutes - Senior personnel		in-country short courses	? All others/1?	Supplement plans for scientific and technical support with training activities at institutional level for non-Special studies staff Detailed appraisal of institutional needs within the region.

Short term training courses - Special Studies

International Law	Lawyers	MRAG	DSM/Lusaka	2	2 weeks
Management of National Parks	Park Managers and Chief Wardens	MRAG	Mweka College	4, 6	
Writing of Scientific Papers				5	
	?	Visiting scientists		5, 4	High priority involving simple technologies in French and English
Analytical procedures	Lab technicians	Food and drug lab personnel, Arusha?	Zambia	5	1 week
	Technicians		majority at lakeshore at 4 project sites	5	More to be proposed as ongoing needs are identified
Training on ID methods for BIOSS	BIOSS French and English speaking		Kigoma	5	
Pollution Exploitation of fish stocks Pollution fishing practices eutrophication sedimentation	Tanzanian Scientists and Zambia	(TAFIRI, Kigoma regional water Dept., UCLAS - Ardhi, and Env. Engineering UniDSM, Tanzania Pesticide Inst)	In-country On-the-Job Regional/OS workshops and courses	5	
Dive Training	Various within 4 countries		Zambia	5	
Limnological sampling, chemical and biological lab. Methods			Kigoma, TAFIRI	5	Organise ASAP

Limnology - field and lab work	12 LTBP participants yearly	Kigoma	NYANZA Project	5	Tap into this, 6-8 weeks. This is on-going.
Sedimentation Fishing practices exploitation of fish stocks translocation of fish	D R Congolese and Burundi Scientists		In-country On-the-Job Regional/OS workshops and courses	5	
Sample data handling	16 researcher (x 4 from each country)	Graeme Patterson/SLO?	TAFIRI	5	14-22 August, 1997
River monitoring	Regional	French and English instructor	Zambia	5	1 week. French and English
GIS - system operations	TAFIRI staff		Kigoma	4, 5	ENSAT
GIS - - system operations	Regional			4, 5	ENSAT
Follow-up GIS	Regional		DSM	4	Lusaka based K Matheson (English) and JP Lacombe and M Kaemmerer, ENSAT
Training of trainers	Trainers (TAFIRI, Kigoma regional water Dep.t, UCLAS - Ardhi, and Env. Engineering UniDSM, Tanzania Pesticide Inst)		Main training location	Mainly 5 (inferred)	Do this just before any of the scientific courses. Try to use local institution Build evaluation and follow up into courses

Short Term Training Courses: EE

PRA	Regional			3	2 weeks
EE: training on Media use, setting up EE units, scientific training of EE NGOs	lake users, government officers not already involved, NGO staff members who deal or want to deal with environment protection		In-field: Burundi: Rumonge; Tz: Matanga; Congo: Kalemie; Zambia: Mpulungu	3	View in restrictive sense of providing information on ecological situation on lake, threats to livelihoods and helping people adopt sustainable ways of using the lake. Create EE Unit with A/V aids
EE	Training Trainers	WWF	In-country (Tanzania)	3	WWF have good experience with school curriculum (Min Ed and Centre for Curr. Devt and courses for Journalists on Env.

					Reporting).
EE Visions to Visuals	NEECs	ICCE	UK	3	May-June 1997. This did happen September - Oct, 1997
EE training workshop		ICCE	In-country- Kigoma?	3	April 1997 - Did this happen?

Conferences & Workshops

International law	Policy makers,			2	Workshop took place, February, 1998
International; Law for Lake Tanganyika	Other stakeholders			2	
Design of local EE training		ICCE/local trainers	Tanzania, Congo, Zambia	3	May 1997 - did it happen? Where?
Implementation of local EE training workshops		ICCE/local trainers	Tanzania, Congo, Zambia	3	June 19997 - did it happen? Where?
EE	riparian communities, Zaire, Burundi	NGOs and media		3	
Follow-up of local EE training workshops	?	ICCE/Local trainer	Tanzania, Congo, Zambia	3	Did this happen in Congo and Zambia
Attendance at workshops and conferences	Associated organisations			5	Funds made available for regional staff to go to relevant Africa-based conferences and workshops + State of the Lake Conference
AFRICAGIS '97	?		Botswana	?	
Interstate Lakes and Rivers of Africa Symposium			Nairobi		15-19 December 1997

Miscellaneous training - identified without details

Regular meetings and dissemination of information

	NGOs with School teachers and children			3, 4, 6	Regular meetings and dissemination of information like posters, radio, etc (as above organisations)
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Training meetings	local coordinators	ICCE UK	Tanzania, Congo and Zambia	3	January 1998
Monitoring/ Training		ICCE/UK	Tanzania, Zambia	3	July 1998

On-the-job professional training of staff

	Associated organisations related to project in Burundi/Zaire			1,	
Monitoring mission		ICCE/Local trainers	Tanzania, Congo and Zambia	3	August, 1997

Consultancy to universities for curriculum development		Consultants from Link institutions - France: INSAT, UK?	USM, UNZA, Uni. Kinshasa, Uni. Burundi		September 1997
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Data analysis/study fellowships

	Project staff active in collecting materials	US, UK or European institution with appropriate facilities	up to 3 months in US/European institution	5	Longer should be considered if necessary
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LTBP TRAINING NEEDS, IDENTIFIED IN LTBP REPORTS/DOCUMENTS

Training Need	Target Group/s	Comments	Reference
Project management		ISTC - Lusaka?	
Communication skills		ISTC - Lusaka	
Identification of stakeholders	All project personnel - country coordinators of SS and SS study leaders, reps of different local groupings local officials,	ISTC - Lusaka	
Community empowerment/planning	SS personnel and local primary stakeholders		
Need for exchange within region for underwater		Cape MacClear, Malawi and Mafia Island, R. Tz.	Fishing practice documents
Training of Trainers: participatory approaches to facilitation and training and presentation	National EE coordinators, Zambia, Tanzania	ISTC? WWF? Maybe in partnership. Maybe with Curriculum Development support for first run-through, Zambia and Tanzania	Nsongela, 1997
Translating research findings into realistic management activities			PPER 1997
Translating reports into different languages			PPER 1997
More needs to encourage ownership of EE.			Prog Rep. No. 8

Need to improve communications between capital and lake shore			Prog Rep. No. 8
Emphasis too much on scientific skills			PPER, 1997
Links basic investigative work and EE		Establish room display where you could find literature and facilities (AIEMS?) Posters and organising work experience schemes for senior science for school leavers in conjunction with teaching staff	PPER, 1997 Pollution Special Studies
Biodiversity training		Use Francophone trainers whose skills in fish id. etc. are v. good. Encouraged as model of Institutional Building in the region	PPER, 1997
Top up training for GIS data collection and analysis			PPER, 1997
TOT of other field staff	TANAPA terrestrial park staff on L. Tanganyika	Previously trained TANAPA staff active in BLOSS.	Townsley, 1997
management skills for participatory management and upgrading of staff. for improved coordination between Nat. Parks & Wildlife Services and Dept. Fisheries	TANAPA and Nsumbu National Park staff	More involvement in local stakeholder in establishing the protected areas including direct involvement in the special studies activities Experiential learning by doing on the job	PPER, 1997, Townsley, 1997
Involvement of key staff in the SAP process			PPER, 1997

Planning an environmental Education programme			Quan, 1996 (interpretation of his conclusions)
Need for Project regional information officer	To coordinate with Government departments and NGOs and stakeholders regionally.		Quan, 08/1996
Some work required on non-formal and vocational training and mass media activities.			Quan, 08/1996
EE Materials production training	WWF, WCSZ, WCST	WWF, WCSZ	Quan, 11/1996
Develop multinational core teams of trainers in the various sectors of the project			PPER, 1997
Commercial fisheries to understand need to close fisheries & work with local fishermen.			Vare & Nsongela, 1997
Train harbour authorities on E issues and avoidance of oil spills			Vare & Nsongela, 1997
Information exchange and flow process: this is in Zambia and Tanzania too	Harbour authorities, National Working Groups, fishing communities, local school teachers, commercial fisheries, other national institutions		Mung'ong'o, 1998, Vare & Nsongela, 1997
Basic EE, basic NGO management	Home grown NGOs basic expertise		Mung'ong'o, 1998

English & report writing skills			Vicki Cowan, personal communication
Support to understand context around FPSS	FPSS, Kigoma		Vicki Cowan, personal communication
Computer training in spreadsheets and Word processing, Databases for BIOSS	FPSS Kigoma, BIOSS, Bujumbura	Bahati, SLO Admin. Assistant + MRAG Francophone	Vicki Cowan, personal communication
Communication - field teams able to explain wider context to communities, the specific aims of their SS and their current state of knowledge about the resource. Eventually to give seminars to more and more important people.			Vicki Cowan, personal communication
Train trainers		TACARE? Check out?	Vicki Cowan, personal communication
Planners capable of taking forward the SAP process.		Nick - learn by doing	Vicki Cowan, personal communication
Promote regional cooperation to manage the Lake sustainably	Those involved with SAP (National Working Groups?), all countries	Facilitator and workshop Workshop to look at process, to link activities to objectives and exchange information	inferred from legal studies

Palynology - analysis and interpretation of sedimentation	Emma Msaky - Gaspard Bikwemu?	6 months to a year at Uni. Arizona - \$50,000 committed	Graeme Patterson, personal communication
Isotope analysis	Hudson Nkotagu	8 weeks at Uni. Arizona - \$8,000 proposed	Graeme Patterson, personal communication
Regional workshop on river monitoring	Henry Sichingabula to host and others involved to attend, including from UK Hydrological Dept.	Need a Francophone counterpart for hosting eg Tharcisse Songore and or Mathias Sebahene	Graeme Patterson, personal communication
Techniques of studying impact of sediment on nutrient cycling.	Evariste Nzeyimana,	Ongoing. Free Uni. Brussels - \$7,000 committed	Graeme Patterson, personal communication
Msc - subject?	David Chuba	Uni. Dublin - \$45,000 proposed	Graeme Patterson, personal communication
Parallel sedimentary training for Francophone country as for Anglophone			Graeme Patterson, personal communication

LTBP TRAINING NEEDS, IDENTIFIED THROUGH MEETINGS WITH STAKEHOLDERS**BURUNDI**

TYPE OF TRAINING	TRAINING NEED	TARGET GROUP	PROJECT OBJECTIVE ADDRESSED
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Workshops

Regional	Harmonise views/bring people together over different issues,	Scientists and decision-makers	1, 4, 6
Regional	Coordinate information and activities for the Lake and management planning	Scientific institutions and Gov. and NGOs	1, 4, 6
Regional	Guidelines for project planning and proposals	INECN Ministries	1, 4, 6
Regional	Links with what's happening elsewhere	SS teams	1, 5, 4, 6
National	Link scientists and educators	Scientists, technicians, media	1, 3, 4, 6
Regional	Water rights	Lawyers	2
Regional	Negotiation issues	Lawyers	2
Regional	Environmental law	Lawyers	2
Regional	Environmental Impact Issues	Lawyers	2
Regional	Environmental issues & pollution	Lawyers	2
Regional and National	Production of Media materials for Environmental issues, using A/V aids, media and radio - sensitisation of decision makers	Journalists and Educators	3
Series of Workshops	Environmental issues, awareness especially dangers of net types	Commerce, Govt officials INECN NGOs SS teams Universities	3
	Environmental issues eg why certain nets are banned Fishing practices	Fishermen Uneducated people	3, 6

	Link agricultural problems with Environmental issues	ISABU, & Extension workers with INECN & Extension workers	3, 4, 6
Stakeholder workshop/ Seminar	Exchanging information and action planning	Lake users, decision-makers, Uvira Scientists Importers Industrialists	4, 6
Setting up workshop followed by regular meetings	A core team working together and training on Lake Issues	Multidisciplinary scientists	4, 5, 6
	Translate findings into extension points so it is available to extensionists	Scientists and 'technicians' (EWs)	4, 5, 6
Regional workshop	Coordinate all research on pollution management	Pollution SS team	5,
Workshops	Support to National Working Group	NWG	5
Stakeholder workshop	Stakeholders to be more involved in process	National Coordinators and major stakeholders	6, 5, 3

Short Courses -

Regional	Management skills conflict management, personnel management and proposal writing	NGOs	1, 3, 6
Regional	Communication skills -	All research teams	1, 5, 4, 6
	EE material production	ODEB, EE educators	3
	EE - how to involve youth club activities with communities	ODEB, youth clubs	3
	Community Development techniques to help the environment	CD officers EE Educators	3, 6
	Environmental management including data collection and indicators for managers	EE Educators	3, 6

	Training of Trainers - EE	Uni. Lecturers, Scientists, Extension workers, NGOs, secondary & primary teachers	3, 4, 5, 6
	EE approaches - ie communication skills and TOT	ODEB Jamaa volunteers	3, 4, 5, 6
	Training of Trainers on Agro-chemistry	Extension workers (technicians)	3, 6
	Extension approaches for local people	Extension workers (people who use materials produced by AV centre)	3, 6
	Use of fertilisers	Farmers	3, 6
	Agroforestry	Technicians (EWs)	3, 6
	Environmental issues - global vision of	Lawyers, Pilots, industry, Managers Administrators, local population, Journalists	3, 2
2-3 months	Specific training Data collection and interpretation	INECN scientific staff multi-disciplinary	5
	Strengthen knowledge about pollution and sedimentation	SS team	5
3 months outside	Analysis of sediments and pesticide residues	ISABU scientists	5
	Diving - more	Scientists and technicians	5
	Fish diseases and Aquatic ecosystem	Biologists , Fisheries dept.	5
	Link pollution to fish characteristics	SS teams more people from Fisheries	5
	Fish farming, virology and Water analysis	Scientists	5
Local and regional S/C Study tour	New technologies for fishing practices	Lake users	6

Visits and Study Tours

Visits within region	Environmental issues - global vision of Issues about the Lake	ODEB Jamaa volunteers SOS Youth (pupils)	3
Local and regional S/C Study tour	New technologies for fishing practices	Lake users	6

On-The-Job Training

One month -? O-T-J with short workshop?	Integrating material about the Lake into existing courses	Instructors	3, 4, 6
	Environmental issues	Educators	3, 6

Conferences and Special Events

	EE: Situation analysis and statement on Environmental issues, biodiversity, pollutants and their impacts on fish, migration ad characteristics, etc.	Decision-makers; Managers People	3, 6
Journee de reflection'	Exchange of views	Decision-makers	4
Information and Reflection Days	Awareness of the Lake	Each interest group separately	

LTBP TRAINING NEEDS, IDENTIFIED THROUGH MEETINGS WITH STAKEHOLDERS

DEMOCRATIC REPUBLIC OF CONGO

TYPE OF TRAINING	TRAINING NEED	TARGET GROUP	PROJECT OBJECTIVE ADDRESSED
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Higher Degrees

MSc	Use SS as starter	CRH staff	5
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Workshops

	Communication skills	Everyone	1, 2, 3, 4, 5, 6
Stakeholder workshop	Understand Lake Tanganyika legislation	All stakeholders	2
	Approaches to involve/educate population (EE)	NGOs, Fisheries Dept, Scientists	3, 5, 4, 6
	Understanding of biodiversity	NGOs and Fisheries Dept, CRH	3, 5, 6
	Coordination and harmonisation of all studies	CRH	5
Regional workshop	Link up with scientific experience	SS teams and other scientists	5
	Awareness of Environmental Issues	Decision-makers NGOs	3
	Fishing practices and alternatives	CRH, NGOs (CADIC)	3, 6
	Effective NGO coordination body- rules- procedures	NGOs in Uvira	4
	Anti soil erosion techniques	CADIC	3, 6
	Long term formation of structure to become intermediaries between researchers and lake users	Intermediaries (Extension workers)	4
	How to implement laws	EWs/Technicians	6

	Translating information for transferring and link between SS and Socio-economics	SS teams and NGOs CRH, Fishermen's associations, Chef de plage, Local authorities, marine security	5, 3, 4, 6
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Short Courses

	Training of Trainers	All NGOs and Fisheries Dept, CRH staff, Chef de Plage Scientists	3, 4, 6
	Material production eg newsletter with comic strips and contests and for different target groups,	EE NGOs	3
	Project Management	All NGOs	4
	Basic training in methodology	CRH	5
	Research methodology and techniques and linkages between teams and biodiversity issues	Field Teams and Scientists	5
	Computer training	CRH staff	5
	Pollution - global view	CRH staff	5
	Follow on to dive course for interpretation and report writing	CRH staff	5

Visits and Study Tours

	Changing experiences	NOPTA, those working with fishing communities	4
Study tour/visit	Fishing community exchange	Fishing community and organisers	6

LTBP TRAINING NEEDS, IDENTIFIED THROUGH MEETINGS WITH STAKEHOLDERS

TANZANIA

TYPE OF TRAINING	TRAINING NEED	TARGET GROUP	PROJECT OBJECTIVE ADDRESSED
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Workshop

	Communication skills including to improve communications between departments	Govt departments Fisheries Officers	1, 2, 3, 4, 5, 6
Awareness training and planning workshops	Working together/teambuilding/ coordination of activities	Extension workers, local authorities, NGOs (TACARE), TAFIRI & Fisheries Dept, SS teams	1, 3, 4, 5, 6
Workshops	Planning	local and district officials	1, 3, 4, 5, 6
	Land use planning		1, 3, 6
Regional	Civil society – how to organise ?		1
Workshop	Develop case study material about the Lake	Uni. staff - regionally	1?, 3?
	Training on how to produce newsletters and Web site	Project officers	1?
Regional and National	Understanding environmental issues and EE approaches regarding the Lake	Local govt, councillors Local NGOS, Village leaders and traditional chiefs, Wildlife Dept.	3
Facilitation and Support for meetings	Harmonise laws and build a network (already under process on safety and rates but not pollution control)	Regional harbours & top politicians	1, 2
Series, 2 or 3/year	TOT on EE/Biodiversity, including approaches in relationship to Target groups , conflict management and materials production for Lake information	Regional EE teams, TANAPA, EE Centre (Kigoma, UNDP/ TACARE)	3

	How EE can be effectively used ?	Regional teachers, Curriculum Developers NGOs	3, 1, 4
	Conflict Management	TANAPA, Villagers, Decision-makers, fishermen, Fisheries Officers	3, 4, 6
	Facilitating communities to be 'visible' and integrated into the project – with the confidence to manage and solve their own problems	Communities, Village leaders, NGOs, District staff	3, 6
	Training for diversification into cash crops	Extend to fishermen from other community sections	3, 6
	Credit awareness and use	Extend to fishermen from other community sections	3, 6
Practical workshops	Testing translated advice to ensure its usefulness	SS researchers and Core team	3, 6
	Gender issues in planning and EE	Core teams, planners, National Working Group, SS teams	3, 5, 6
Seminars and regional , District	Exchange individual's expertise and build up environmental information	Core Team	3
	Making maximum use of events like WED to promote follow up programmes	Tarimo & other EE coordinators	3
	Planning for Action	Core EE team (as exists now)	3
Regional	Encourage formation of associations	Fishermen	3, 6
	Follow-up World Environment Days by formation of action committees and ensuing activities	Village committees, EE coordinators	3
	Soil conservation	Farmers	3, 6
	Fishing practices:, Fish processing; Alternative practices	Fishermen, Fisheries Officers; Fish processors (women)	3, 6
	Develop aquatic safaris to run in conjunction with TACARE school visit programme	TANAPA/ TACARE, Educators	3
	To set up a regional organisation to coordinate district level activities	District and village Government, NGO	3, 4, 6

	Link management to research Translating research ; . Negotiating agreements ; Management Plans	TANESCO, Govt. officials and Industries	4, 6
	Ratify community-based bye-laws	District officials, village rep. Core team	3, 6

Short Courses

National	Communication skills TOT	WWF, Core Team, TAFIRI staff and Community, Development officers Fisheries officers, Decision-makers	1, 2, 3, 4, 5, 6
	GIS - understanding, competence and converting into management practices	Institute of Ardhi or IGEBU	1, 4, 5
Short course up to 3 months formal course	What is EE? Broad context and approaches	NGO staff, NEEC, educator and other extension workers	3
	Put EE, which is written into syllabus, into practice in schools: approach and methodology	Teachers, round lake District, Ed. Officers	3
	Management and business awareness	Folk Development College Principal	3, 6
	Agro forestry Training	TACARE Team, extension workers	3, 6
	Librarian training	Librarian	1?

On the Job Training

	Support for local management groups		3, 6
	Creating and editing interactive newsletter	Jerod, counterpart	1?
	Build up a core team – choice of and teambuilding skills		3, 6
	Put EE, which is written into syllabus, into practice in schools: approach and methodology	Teachers, round lake District, Ed. Officers	3

Conferences and Special Events

	Network with other EE groups	TAASISI and other EE groups	3, 1, 4
Regular meetings	SAP process involve local communities	National Working Group,	5

		Harbour authorities	
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Visits and Study Tours

	Exchange experiences and other EE NGOS and building case studies	TACARE Team	3,
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LTBP TRAINING NEEDS, IDENTIFIED THROUGH MEETINGS WITH STAKEHOLDERS

ZAMBIA

TYPE OF TRAINING	TRAINING NEED	TARGET GROUP	PROJECT OBJECTIVE ADDRESSED
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Higher Degrees

BSc/MSc	Communications	?	1
BSc/MSc	Water Management Policy	Water Affairs officials	4, 6

Workshops

	Planning	Council and area leaders	4, 6
	Links between people and projects sections and fisheries and LTBP	Everyone local	1, 3, 4, 6
Local planning workshop	Clarify roles and responsibilities within project at local level & giving one especially appointed person coordinating role Clarify roles and responsibilities within project		1, 6, 3
Regional	Integrate data with other results and set up dissemination process	All SS teams, Fisheries companies	1, 3, 4
	Alternative fishing practices, including changing net making practices	Core team, communities	3, 6
	How to identify projects in the communities to link schools and communities	teachers	3, 6
	Gender training	WWF/ZEEP and EE implementors	3, 6

	Links between scientific knowledge and traditional beliefs	SS teams and Core teams, Ulungu Wane	3, 6
	Ways to use the drama groups		3
	Publicity training	Tanganyika Drama groups and others	3
	Design and production of materials EE	non-school NGOs	3,
	Consolidate what has already been done-with villages	Committees and EE/core team	3, 6
	Communications skills and TOT on how to run committees	Core teams, Village committees	3, 6
1-2 days'	Pollution understanding	Port and clients	3, 4,
	How to use radio more for EE at the lakeshore	radio journalists & programmers	3
Festival	Have an arts festival to swap experiences	Regional drama groups	3
	Preparation of material about lakeshore for public awareness		3,
Regional	Playwriting for environmental training and education	Drama groups	3
	Report writing	SS teams	5
	How to be involved in the SAP	Commercial fishing companies	5
	Development of case study materials from research findings	University lecturers teaching environment & hydro-biology	5, 1, 3, 4
	Meet other SS teams to exchange approaches, methodologies and results	Regional SS teams	5, 1, 4, 6
	Strengthening linkages between Lusaka based institutions and small, local institutions	National Working Group, Local Institutions	5, 6
	Fish processing and other skills	fishing communities	6, 3
	Income generation activities Beekeeping, goats, boat building	fishing communities	6

Short Courses

Short course and follow up support	Communication skills	Park scouts, Biologists, CBOs, Teachers, Local authorities, Local	1, 3, 3, 4, 5, 6
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		communities, Core teams	
	Project Planning and management skills	Park scouts Wildlife staff, Biologists, CBOs, Teachers, Researchers, Local authorities, Communities	1, 3, 4,6
	Strategic planning	WWF/ZEEP	1, 3, 6
	Coordination skills	Community Development Officer, Mpulungu	1, 3, 6
	Fisheries Management	Fisheries officers	3, 6
	Project proposal design and management Training of Trainers	WWF/ZEEP	1, 3, 6
	Conflict Management skills	Park scouts, Biologists, CBOs Teachers	4, 6
	Presentation skills	Park scouts Biologists, CBOs Teachers	3, 6
	Environmental Education issues	Schools, Teachers, NGOs, Local women's groups	3, 6
	Environmental Education and involving communities	Schools, Teachers, NGOs	3, 6
	Support against deforestation systems		3, 6
	Training of Trainers on EE	teachers and other interest groups	3
	Training of Trainers	Local institutions, Fishing Dept, EE, Core Teams	3, 4, 6
	Mechanisms for verifying information	Field Officers	4, 6

Study Tours/Visits

Exchange visit	Meetings between local committee leaders	Village and strata committees	3, 4, 6
	Fishing communities on Fishing Practices	Fishing communities	3,6

On-The-Job and follow-up Support

Curriculum Development	Update agricultural training schools' curricula	Agricultural schools' instructors	1, 4
	How to interpret results and to complete the research cycle		1, 3, 4
follow up to short course	Project Planning and management skills	Park scouts Wildlife staff, Biologists, CBOs, Teachers, Researchers, Local authorities, Communities	1, 3, 6
follow up to short course	Conflict Management skills	Park scouts, Biologists, CBOs, Teachers	3, 6
follow-up to short course	Presentation skills	Park scouts Biologists, CBOs Teachers	3, 6
follow-up	Visit village before writing plays and then TOT on EE	Drama groups	3
	Translating data into useable management recommendations	All SS teams	4, 6
Follow up	EE/village work already started,	Core teams, Village and strata committees, Pull in the fisheries	3, 6
On-going	Monitoring processes of individuals' progress	Management	4, 6
On-the-Job	Follow-up technical training to help put last year's Limnological course into practice	SS technical staff	5
On-the-Job	Technical skills in BIOSS and Sedimentation	SS teams involved and consultants	5
Coaching	How to use On-the-Job (OTJ) training	H Sichingabula	5

Conferences and Special Events

Sponsorship event with workshop	Encourage funding for small fishing enterprises	Fisheries Companies and Harbour authority	3, 6
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SUMMARY OF MAIN TRAINING NEEDS BY TRAINING TYPES

1. **KEY STAKEHOLDERS:** LTBP staff, Scientists, NGO, National committees, Authorities.
 By the end, this group could become Core Teams at regional, national and local level

TYPE OF TRAINING	NEEDS	TARGET GROUP
Short Courses 1.1	Training Of Trainers : Communication Skills Programme design Training methods - Training resources Presentation skills	Wide range of stakeholders with communication and education or training responsibilities plus potential training providers
1.2.	Project and Conflict management : Project planning, Participatory management & techniques Proposal writing Assessment & evaluation	Wide range of stakeholders including EE trainers, NGOs, village committees, Wildlife and Parks staff
Workshops 1.3.	Lake issues : knowledge & understanding : Biodiversity: Environmental issues : Danger of fishing practices Impact of Lake policy (Legislation)	Local government, NGOs,village leaders & traditional chiefs, wildlife dep. (Users of the Lake)

1.4.	EE: EE : concept & approaches Lake issues- awareness	Commerce ; Government; IECN, NGO, SS
1.5.	Coordination of activities Networking Exchange of Information, - Improving communication between Gov. & departments & project section	Scientists; NGOs Governments, Industrials, local population, scouts, wildlife staff, Teachers, SS teams
1.6	Building links Between scientists, socio-economic and educators Exchanges expertise's	SS team, educators, NGOs SE Team
1.7	Understanding each others' legislation	Lawyers Decision makers, Educators
Conferences, Seminars, 1.8.	Coordination of activities & Information exchange Integration of key stakeholder in the project and SAP process	National working group, LTBP coordination Unit, NGOs Government staff and community, development officers, fisheries, decision makers
Study Tours & Visits 1.9	Exchange expertise & experiences, exchange individual expertise	Core team, SS and Primary Stakeholders

2 SCIENTIFIC

TYPE OF TRAINING	NEEDS	TARGET GROUP
Short Courses 2. 1.	Scientific skills Aquatic ecosystem (use SS as a starter for MSc) Fish Taxonomy Fish diseases linked to pollution	BIOSS Team SS Teams
2.2	Pollution Sedimentation	SS Teams
2. 3.	GIS- understanding, competence and converting into management practices	Institute of Ardhi, Link with FAO and UN projects
2.4.	Lake Tanganyika Legislation: laws, rights, negotiation issues, water issues, environmental impacts issues.	SS Team + EE + extension workers
2.5.	Follow up previous training: Limnology, Diving, etc	IGEBU,
Regional Workshop 2.6.	Technical skills Harmonise methodology, approaches Complete research cycle (Data collection & interpretation, analyse, interpret results) Report writing	SS Team in the Region
2.7.	How to use On-The-Job Training	SS Coordinators
2. 8.	Integrate data with other SS results; link up with scientific results, experiences, set up dissemination	SS team, Fisheries, Companies,

2.9.	Translate findings into management & action : Translate research into awareness, PRA, Training of Trainers Approaches to involve and educate population (EE) & ensure future feedback	SS team, SE & EE SS team, SE, EE, NGO + extension workers
National Workshops 2.10.	Case Study development Develop case study (to be integrate into schools curricula, university & teacher training)	SS team, Educator, Curriculum development officer
Study Tours/Visits 2. 11.	Exchange approaches, methodology and results	SS team
On-The-Job (OTJ) 2. 12	How to interpret results & complete research cycle	SS team

3. LAKE USERS

TYPE OF TRAINING	NEEDS	TARGET GROUP
Workshop 3.1	Environmental issues Concept of Biodiversity Pollution (Global view) Legislation - ratify community-based bye-laws	User of the lakes, NGO, Industries; Lakeshore population ; Authorities : government and traditional
3.2	Project management Support to National Working Group	NWG, Key stakeholders
3.4	Networking on pollution Control	Harbour authorities, politicians, User of the Lake
3.3	Management activities Fishing practices - new technologies - alternatives Impact of Fishing Practices Income generating activities - agriculture versus environmental issues Pollution control activities, Anti-erosion activities	Lake users, Communities, EE
3.4	Credit & Loans	NGOs, Authorities, local committees and associations
Conference and Special Events 3.5	Improving integration of Primary Stakeholders in the SAP process :	National Working Group, Harbour and local Authorities, Village Committee representatives, NGO representatives

4 EDUCATORS /EXTENSION WORKERS

Short course 4.1	Lake issues Biodiversity, Overall of Environmental issues, Lake Tanganyika issues & impacts	EE stakeholders, NGOs, EE Team
4.2	Environmental Education Concept/definition Methodology and approaches for : Decision makers, Communities and schools Follow up to special events (world environment day) Management skills, conflict management, personal, & writing proposal, play writing, etc.	EE team, NGOs
4.3	Media How to use radio/TV How to use Drama group, play writing, etc How to start a Newsletters/Web site How to edit and diffuse writing and audio material How to develop aquatic safari	EE team, NGO, Drama group EE, TACARE, TANAPA
4.4	How to build upon Special Events Activities for schools - how to involve youth club , How to link scientific knowledge & traditional beliefs How can EE be used effectively	EE team, teachers, NGOs, Curriculum Developer
4.5	Training of Trainers Approaches Using material for different Target group	NGOs - EE, extension workers
4.6	Production of material Methodology Production of specific material per Target group How to produce low cost material : visual aids , preparation of material about lakeshore for public awareness, etc	EE team for (methods) Stakeholders on production of specific material in response to needs. EE team + Stakeholders
4.7	Production of Media materials	Journalists, EE, NGOs

4.8	How to build case studies Translate scientific findings in EE	SS Team, EE team
4.9	How to run committees and Activities in communities for sustainable development. (Agriculture, credit, etc.)	EE team, NGOs, Teachers, youth
4.10	Coordination and Networking Facilitating communities to be visible and integrated in the project.	Communities, village leaders, NGOs, EE district staff, SS team, Drama group
Study Tour / Visits 4.11	Exchanging experiences and expertise on Fishing practices	NGOs working with local communities Fishing communities' exchange
4.12	Networking with other NGO Groups	TASISI, EE group, TACARE
On the Job Training 4.13	Working with fishing communities to improve confidence and competence in new fishing techniques and alternative income generation	EE Team, Extension workers

TRAINING STRATEGY ACTION PLAN

PRIORITY	TYPE OF TRAINING	ACTIVITY	TARGET GROUP	RESOURCES	TIME TABLE
1	1.1 Regional Workshop	Briefing of Liaison Officers Training Management Structure Basic TNA	Training and Communications Liaison Officers	Training and Communications Facilitator, External consultant	December 1998
2	2.1 Regional workshop	Harmonise methodology, approaches Integrate data with other results Link up results Report writing	SS team	SS Facilitator LTBP coordination Unit	Oct. 98 Kigoma
2	2.2 Regional workshop	T&C Communication activities Build up Strategy and Annual Action Plan	T&C Liaison officer	T&C Facilitator External T&C consultant	Dec. 98 Bujumbura
2	2.3 Regional Seminar	Exchange info & improve communication Building up a Core Team	SS team & Stakeholders, NGOs T&C Liaison officers	T&C Facilitator LTBP PCU, External Facilitator P. Chipungu	Mid Dec. 98 Bujumbura
2	2.4 Regional Study Tour / Visits	Exchange expertise & experiences	SS Team	T&C Facilitator SS facilitator	Jan 99
2	2.5 National (LTBP Stations) Study Tour / Visits	Exchange expertise & experiences	SS & key stakeholders	T&C Facilitator SS facilitator	Ongoing 99 2/year / country
3	3.1 National workshops at Lake sites	Biodiversity, Environmental issues, danger of fishing practices Impact of Policies	NGO (WWF, ODEB, CADIC, JAMAA), SE & EE Team	T&C Facilitator LTBP scientific Liaison Officer Prof. Nagahuedi	Jan 99

3	3.1 Series of national Short courses	Aquatic ecosystem; Fish taxonomy ; Data collection & interpretation	SS Teams	National resource people	Feb 99
3	3.2 Short or perhaps long term course	GIS - build up regional capacity	Chosen collaborating institutions	FAO/UNDP ?	ASAP
3	3.3 Regional Short Course	Pollution / Sedimentation -advanced skills of interpretation. report-writing	SS Teams	Dr. Chale, G. Hakizimana	Late 1998
3	3.4 Regional Workshop	Lake Tanganyika legislation	Lawyers	IUCN (Bonn, Germany)	Late 1998
4	4.1 Regional Workshop	Integrate data with other results	SS team		Mid 99
4	4.2 Regional Workshop	Develop case study : methodology	SE&EE team NGO	Prof. Kaningini	May 99
4	4.3 National Workshop	Develop local case study	Key Stakeholders User of the Lake	WWF	July 99
5	5.1 Regional Short Courses	Training of Trainers Communication skills Environmental Education Programme design Training methods Presentation skills Assessment and Evaluation Participation	SS Team, SE & EE Team, NGO , WWF ODEB, CADIC T&C officers	T&C facilitator External Training provider	Feb 99
5	5.2 Regional workshop	Environmental Education Concept / definition Methodology and approaches	EE Team NGOs Drama Group, Media	T&C Facilitator External EE Training Provider	Jan 99.
5	5.3 National Short Courses	Communication skills Environmental Education Training methods Presentation skills Assessment and Evaluation	NGOs & key Stakeholders at Local Level Media Drama Group	SE & EE Facilitator & coordinator T&C officers WWF, ODEB, CADIC	1999
6	6.1 Regional or National Short Course/s	Project Management skills	Chosen NGO partners		

6	6.2 Workshop	Support to National working group (NWG)	Key stakeholders NWG	ISTC	
6	6.3 Workshop	Management activities Fishing practices Alternatives practices, Pollution control, etc	Lakeshore stakeholders Communities EE partner	TACARE- WWF ODEB Prof Kaningini	Mid -99
7	6.1 Local workshop (Zambia)	Roles of village Fishing Development Committees	Village committees	EE Coordinators	ASAP
8	On the Job Training	Ongoing, & follow up of, training How to design and carry out one-to-one training, How to appraise staff and determine further training	Consultants Training Providers SS Facilitator	Tony Bailey- Watts	

POTENTIAL REGIONAL TRAINING PROVIDERS FOR LTBP

POTENTIAL TRAINERS/ RESOURCE PEOPLE (NAME AND ADDRESS)	USEFUL SKILLS	POTENTIAL TRAINING INTERVENTIONS	COMMENTS
Claude G.M. Mung'ong'o, Sociologist and SESS Coordinator	Socio-Economist researcher PRA	Help in formation of core teams	Not much time for this. Probably needs TOT & facilitation skills himself
Steve Mwinuka Curriculum Development Institute	Curriculum Development in EE	Helping teachers to put EE in the curriculum into practice in the classroom	Would need to be part of a team. Needs TOT workshop (subtle)
Mary Shuma WWF-Tanzania Environmental Education Programme	EE skills in materials production for: teacher trainers, School inspectors and examination officers; schools; Communities (faith groups and village governments); media. Has a professional EE core Team who can do training	Would be ideal candidates to work on EE approaches and Environmental issues	Could work in partnership with WWF Zambia for instance. Needs: Would like Communication skills and TOT. If asked to train, want enough notice and to know target group details so they can prepare for adequately
Dr Nkotagu SS Sedimentation Tanzania Coordinator	Sediment sampling and hydrogeology. On-the-job training University lecturer	On-the-job training and monitoring in all round research skills for scientists and data collection and analysis skills for lab. and research technicians Integrate findings and lake information in university teaching	Already has done some work with villagers (ad hoc) Needs: acknowledgement of training role in TORs
Mr Tarimo EE Tanzania Coordinator	Environmental education	Follow up to WED Be in WWF training of key trainers in EE	Needs to plan activities to be consistent Needs: TOT; More on EE himself; Conflict management, project planning and management; acknowledgement of training role in TORs
Beatrice Marwa Fishing Practices Tanzania Coordinator	Works with communities and fisherfolk Communication skills	Use in training of Core Team in fishing practices; Support to Core Team working in villages	Energetic. Good for collaborative work in village and district level work, and on National Working Group

			<u>Needs:</u> More breadth/depth on environmental issues, TOT, Conflict management, project planning and management, alternative fishing practices
TACARE Team	Supporting and educating communities to better look after their environment. Implementing credit scheme Have village peer educators	Work with villagers; Training scientists on approaches to work with villagers, How to run credit schemes	Village working Core Team. <u>Needs:</u> TOT; biodiversity and environmental issues; results of research and other scientific findings; regional exchanges of experience
Dr Chale SS Pollution Tz Coordinator	Pollution On-the-job all round research training	On-the-job training and monitoring in all round research skills for scientists and data collection and analysis skills for lab. and research technicians	<u>Needs:</u> acknowledgement of training role in TORs
Dr Patrick Chipungu SE Zambia Coordinator	Socio-economist (with NR background)	Support to Core Team foundation and activities	
Training Centre for Development Cooperation P O Box 254 No. 1 Usa River Road, ARUSHA Tel: 057-4098		Communication skills and Training of Trainers	Not met, but should be contacted as they have a good reputation as trainers.
Shadreck Nsongela EE Zambia Coordinator		Support to Core Teams foundation and activities	<u>Needs:</u> TOT

Mr Ng'andu	Some training skills Core team worker (Knows alot of people)	Support to Core Team formation	Quite enthusiastic and knows a lot of people. <u>Needs:</u> TOT urgently; clarification of role in project; exchange of experiences
Mwape Sichilongo , director Wildlife & Environmental Conservation Society of Zambia	EE Clubs (Chongololo) in schools EE Materials including newsletter: Chongololo Some outreach skills	EE approaches, Environmental Issues, study groups, use of drama/music	Could work in partnership with WWF trainers in EE, eg in materials production sessions <u>Needs:</u> TOT skills
George Muwowo, Justin K. Lupele, Jonathan C. Chisaka , WWF-Zambian Environmental Education Project (WWFZEEP)	<i>Between the team:</i> EE outreach and community work including PRA EE materials production and VIPP; Community based learning and participatory approaches	EE approaches, TOT on EE, conflict management Participatory approaches and PRA	Professional people, but with little time. Could be used to train up other trainers and to work with WWF Tz/Kenya? <u>Needs:</u> TOT; Conflict management; Project & strategic management and planning, writing project proposals, etc.
Mungule Chokoye , In-Service Training Centre (ISTC)	TOT Project management Participatory Techniques in Rural Development Visualisation of participatory programmes (VIPP) Some technical training like fish farming and credit management	TOT Project Management Facilitators for regional and country meetings? Facilitators for helping to form Core teams? Conflict management?	Could be extremely useful, although not cheap and rely on many associates whose actual training skills are not known. therefore an external consultant to work on their first contracted course. Professional and worth training up if necessary. <u>Needs:</u> TOT for all trainers? Conflict Management? Facilitation skills?
Sarah Longwe and Roy Clarke	?Gender training ? Management training	Training the trainers in this list?	No contact made but have good reputations

Tony Bailey-Watts and Nici Wiltshire	On-The-Job training commitment	Use to train other special studies leaders and country SS coordinators on how to do On-The-Job training	Not in his Terms of Reference of course, but he has a clear understanding of this <u>Needs</u> : his agreement and <u>Acknowledgement</u> in TORs?
Mr Chola and Mr Chilowela Lake Tanganyika Drama Group	Use of drama to convey messages	TOT on use of drama in villages to express needs and sort out problems, not just to convey messages to/from outsiders	Could be used effectively in Zambia but two factions in the group need to resolve differences. <u>Needs</u> : Effective play-writing for education, more on Env. issues and EE TOT
Antoine Kinymoyi and ODEB	Do EE with people (mainly Env. health); Run Secondary school Env. Clubs Run Club seminars	Translation of scientific work into extension points; Support action planning with lakeside communities/lake users	Could do training in partnership with CADIC <u>Needs</u> : Global vision of environment; EE approaches; Exchange of experiences; Management training;
Gabriel Hakizimana SS Pollution Burundi Coordinator	Pollution Good vision of coordination for all stakeholders	Help co-ordinate pollution management plan	
Prof. Gaspard Ntakimazi SS Sedimentation Coordinator	Training research teams	On-The-Job training	<u>Needs</u> Acknowledgement in the TORs
ISABU - audio-visual aids lab	Films for influential stakeholders	Films for influential stakeholders	A bit rigid <u>Needs</u> : Environmental issues training; advanced journalistic communication skills

Louis Marie Nindorera and Jamaa Volunteers	Small scale income generating activities coordinators; Volunteers have to be very motivated (proven); Manage credit schemes; skills include: creativity, peacemaking; leadership, management and support for young, disaffected people	Work with young and out of school on EE issues; Integrate environmental issues into projects that they fund Conflict management with other groups; Share ideas on Income generating and credit schemes	Active Group <u>Needs:</u> Environmental Issues; TOT; Management; formal conflict management
Gaspard Bikwemu	Good vision and understanding of need for coordination and sustainable management	Facilitator for workshops for different stakeholders	
Swedi Elongo, CADIC	Work with lakeside communities; Good resources centre for Environmental issues;	Trainers of NGOs in EE methods and techniques; Coordinate the EE activities of Uvira NGOs	Working NGO with good infrastructure. <u>Needs:</u> TOT; materials; project planning and management; Coordination with other Uvira NGOs
Prof Boniface Kaningini Univ. Bukavu, Institute Supérieur Pédagogique and NGO for fishermen	Fish biologist Working with communities Fishing practices; Fisherpeople to organise themselves/have confidence to change	Scientists in communication skills and TOT with lakeside communities; Translation of scientific materials to extension points Fishing communities in fishing practices and alternatives	Very committed. <u>Needs:</u> increase team; all for TOT and communication skills; exchange of experiences with other scientists and NGOs working with lakes/lake people; more on EE himself and for his team
Prof Nagahuedi Mbongu-Sodi	Biodiversity national planner Project planning	Biodiversity for Scientists, NGOs, various decision-makers Facilitation of workshops	<u>Needs:</u> time!

Mme Gina Kusaka-Kutund	Environmental film making	Make film about the Lake TOT for journalists/media in environmental journalism	Could be very useful for video film making but would probably need project finance Needs: Environmental issues broad training; TOT
Sylvie Wabbes Candotti Programme Officer WWF POBox 62440 NAIROBI Email: wwfearpro@arcc.or.ke Deborah Snelson Regional Representative for Bisidi Yalolo WWF/ICCN Environmental Education in Virunga	Working with communities in North Kivu, including vulgarisation, alternative sources of income, soil erosion and reforestation		Should be contacted regarding a link. Could be a partnership possibility for them to train LTBP an LTBP to train their extensionists in certain skills
Prof Lumande Kasali Secetaire General	Environmental management	Environmental Issues and management for decision-makers and NGOs	
FRANCOPHONE trainers eg CESA0, Burkina Faso, ECOFAC, Gabon, UICN Central and West Africa Bara Guey (IIED rep)		For Community management TOT Communication skills Project management	Notable by their absence. There is a need to identify these in West Africa.

<p>NAIROBI: Various of: World Neighbours (Elkanah...) Ford Foundation (Nick Menzies) DELTA Oxfam UK (Adam Leach) African Conservation Centre (Helen Gichohi, Tel: 22-45-69)</p>	<p>A mixture of: TOT Communication skills Training for Transformation Resource sharing planning and activities</p>	<p>TOT Communication skills Project management Parks management Sharing resources With various target groups Facilitation</p>	<p>These organisations have not been contacted but they do reputedly have the skills and experience mentioned. It is recommended that these are followed up more closely.</p>
<p>Kenya Wildlife Services Training Centre Meet Elizabeth Amayo, Training and Development Manager POBox 40241 NAIROBI Fax 501752 Email: kws@users.africaonline.co.ke</p>	<p>A mixture of Environmental Education and approaches for working with communities? Management and development training</p>		<p>Not met but should be contacted. Have had a great deal of institutional strengthening by another GEF project. And should have a wealth of experience about parks management and communities around the parks boundaries</p>

SPECIMEN

**CHARACTERISTICS AND TERMS OF REFERENCE FOR:
A REGIONAL TRAINING AND COMMUNICATIONS FACILITATOR**

RATIONALE

The LTBP is a Regional project with many management, educational, technical and research facets and demanding of a great variety of different skills in order that individual project objectives are met. In addition the management objectives require a set of management and coordination skills from key stakeholders in order to achieve the Project Goal. These require that links are made between sectors and stakeholders and that the processes to facilitate these links are created and supported, in a participatory way. Thus to encourage communications and environmental education and to identify on-going training needs, organise and follow up the subsequent training, have become tasks that require full time attention. It is therefore proposed to employ, for the remaining duration of the LTBP, a Training and Communications Facilitator.

CHARACTERISTICS

The person employed for this post should have a mixture of the following characteristics in order to be effective in post. The post will be given equal opportunities and candidates with the appropriate skills and experience are encouraged to apply. The post should be filled by November.

Qualifications/and or experience background:

- * Degree-level
- * Natural resources
- * Training or teaching
- * Environmental education and/or community based development work.

Essential skills

- * Excellent communication and interpersonal skills
- * Bilingual in English and French - a working knowledge of Kiswahili and willingness to learn is a distinct advantage
- * Self-starter and proven motivation to achieve in challenging circumstances
- * Training of trainers skills, including training programme design, preparation of materials, implementing, monitoring and evaluation
- * Proven techniques/methods of environmental education/ community based education including materials production
- * Facilitation and support skills, including an understanding of motivation
- * Participatory approach to work
- * Teambuilding and proven teamworking skills
- * Training needs assessment
- * Availability to travel widely
- * Proven report-writing skills.

JOB DESCRIPTION

The T & C Facilitator will:

- 1 work at policy, management and executive levels, reporting through the Project Coordinator (PC) at PCU, Dar-Es-Salaam to the Project Manger in NRI and contributing quarterly reports, in order to execute the Project's Training Strategy. The T & C Facilitator should regard the Training Strategy as a starting point and be able to adapt and enhance this as necessary and after consultation with the PC;
- 2 prepare and maintain the training budget;
- 3 be responsible for the forming and coordinating of a regional team of 4 Liaison Officers (suggested to be members of the present team), based in each of the 4 countries, including the maintenance of regular communications and frequent visits throughout the region;
- 4 train the Liaison Officers in core skills such as Training of Trainers and Environmental Education techniques, Training Needs Assessment skills and Facilitation skills;
- 5 identify on-going training needs for addressing each and all of the Project Objectives and identify/design suitable training programmes to build up individual and organisational capacity so that the Project Objectives are appropriately addressed;
- 6 identify suitable training institutions/trainers and ensure that they have the requisite skills and approaches for the project to benefit from their interventions;
- 7 be responsible for the identification and evaluation of cooperating and collaborating institutions and for drawing up any resulting training needs, as in 3 above;
- 8 be responsible for ensuring that skills transfer occurs during visits by consultants where this is appropriate, e.g. by overseeing the training elements written into their Terms of Reference;
- 9 give regular and interactive contributions to the Project Newsletter.

INDICATIVE TRAINING STRATEGY LOGICAL FRAMEWORK

NARRATIVE SUMMARY	MEASURABLE INDICTORS	MEANS OF VERIFICATION	CRITICAL CONDITIONS
<p>GOAL Regionally coordinated sustainable management of the biodiversity of Lake Tanganyika</p>			<p>Project Management continue to regard the importance of Training and Communications as crucial aspect to achievement of Project Goals and Objectives</p>
<p>PURPOSE Movement towards the achievement of LTBP Goal and Objectives through provision of appropriate training for key stakeholders</p>	<p>All training objectives related to Project Goal and Objectives and undertaken according to agreed Training Priorities with appropriate trainers</p> <p>Trained stakeholders coordinating with other independently of LTBP directives and working competently and confidently</p>	<p>PPER Training Programme Reports Training Budget Staff appraisal reports</p> <p>Interview with personnel Project Reports Papers published</p>	<p>Project Management adopt and follow Training Strategy</p> <p>Trained Stakeholders working in LTBP using skills they have learned/enhanced through training provided</p> <p>Staff appraisal reports in existence for LTBP associated staff</p>
<p>OUTPUTS 1. Regional Training and Communication process effectively managed</p>	<p>Positive reactions from involved stakeholders with an agreed and operating training management structure</p> <p>T & C Management structure supported and working</p>	<p>PPER Training and Communication Facilitator' Reports</p>	

2. Links between key stakeholders enhanced and supported	Core team of Stakeholders in regular contact and involved in activities which further the Project Goal and Objectives	List of members and responsibilities Reports of meetings and communication activities	
3. Increased local and Regional ownership and increased participation in the sustainable management of Lake Tanganyika	Training Activities occurring in accordance with the Training Priorities and with parity across the Project Objectives and involving a range of women and men, primary and secondary stakeholders		

Output 1. Regional Training and Communication process effectively managed			
ACTIVITIES 1.1 The creation of a Training and Communication (T & C) Facilitator position	INPUTS/RESOURCES 1.1 Recommendation to employ T & C Facilitator ratified by Steering Committee/Project Managers	Steering Committee/Project Managers ratify	T&C well trained and able to train 1 Liaison officer per country
1.2 Employ appropriate T & C Facilitator	1.2 One, preferably Regional full time member of LTBP staff in post by December 1998	Job Advertisement Terms of Reference Transcripts of interviews	
1.3 Choose and agree 4 Country T & C Liaison Officers from amongst stakeholders presently working with LTBP	1.3 Four part time Liaison Officers in post by December 1998	Altered Job descriptions of chosen Officers	

1.4 Briefing of Liaison Officers Training Management Structure Basic TNA	Training and Communications Facilitator, External consultant	Consultants' Report. Quarterly Report	
<p>1.5 Implement Priority T & C Management activities with external support where necessary</p> <p>1.5.1 Overview of Budget conducted and annual budget planned in conjunction with Project Coordinator;</p> <p>1.5.2 Regional training institutions analysed for capacity and cost,</p> <p>1.5.3 Priority training participants have undergone TNA for type of, and suitability for, training</p> <p>1.5.4 Training institutions supported by T & C Facilitator/external consultant with programme design</p> <p>1.5.5 Annual Training plan produced and agreed by Project Management</p>	<p>T&C Facilitator Project Coordination Unit External T&C consultant T & C Liaison Officers Project Coordinator T&C Facilitator By January 1999</p> <p>T & C Facilitator 3 weeks By January 1999</p> <p>By March 1999 On-going during visits approx. 3 hours per person</p> <p>External Training Management Consultant, T&C Facilitator</p> <p>February 1999</p>	<p>Communication with Project Coordinator</p> <p>Training and Communications Quarterly reports</p> <p>Quarterly Report Institutional Analysis Report</p> <p>TNA Report</p> <p>Consultant's Report Quarterly Report</p> <p>Annual Training Plan</p>	

Output 2: Links between key stakeholders enhanced and supported			
<p>ACTIVITIES</p> <p>2.1 Create a "Core team" (Institution, Government, local authorities, NGO, Association of Lake Users, SS-Team)</p> <p>2.1.1 Identify Stakeholders to be in the Core team</p> <p>2.1.2 Elaboration of Task and responsibility for each stakeholder</p>	<p>Nest of Regional, National and Local Core Teams developed and active in coordinating project activities</p> <p>Workshop with facilitator</p>	<p>National Core team per country</p> <p>Task and Responsibility List of Tasks per member</p>	<p>Involvement and availability of a team working and considering LTBP as their responsibility</p>
<p>2.2 Harmonise approaches to Special Studies</p> <p>2.2.1 Hold Regional workshop/s with scientists from collaborating institutions for pollution, sedimentation, biodiversity and fishing practices</p> <p>2.2.2 SS team active</p>	<p>SS Facilitators LTBP Coordination Unit</p>	<p>Workshop report</p> <p>Research reports</p>	
<p>2.3 Series of Workshops for Exchanging information and build up action, preparation of material Experimentation and evaluation</p>	<p>SS Facilitators LTBP Coordination Unit</p>	<p>Workshop Report</p>	

2.4 SS Teams exchange expertise and experiences through regional study tour	SS Facilitators	Study Tour Report	
2.5 SS Teams meet with Key stakeholders to exchange experiences through study tour	SS Facilitators		
2.5 Fishing communities' representatives go on study tour to exchange experiences with other villages	SE/EE and Fishing Practices Coordinators	Transcripts of village comments and evaluations and actions to be followed-up Report	

Output 3: Increased local and Regional ownership and increased participation in the sustainable management of Lake Tanganyika			
ACTIVITIES 3 Long Term EE & Training programme		Annual EE & Training programme	
3.1 Series of Short courses on Training of trainers Communication skills Scientific and technical skills Management skills			Annual Training Action plan well prepared and participants informed on time
3.2 Series of Seminars, conferences & special events to build up links between stakeholders Informed general public and specific target group such as decision makers	World Environment Day 1999 Days of the ' Fish' SS teams and facilitators and coordinators		

3.3 Series of Study Tours and Visits for: Exchange of expertise, experiences, demonstrations of approaches and techniques	Prof. Kaningini 4 x 1 week		
3.4 A programme of On-going support planned and put into practice to build up confidence and competence in day to day work		Individual SS Coordinator Reports Staff appraisal records	
3.5 Translating scientific findings into management	Development of material for different target group management activities ;	Activities related to management of the lake	EE team well trained and able to produce low cost material per Target Group.
3.6 Legislation related to Lake issues		Legislation written	

3.7 Hold national workshops at lake sites on Biodiversity, Environmental issues, danger of fishing practices Impact of Policies	T&C Facilitator LTBP scientific Liaison Officer Prof. Nagahuedi		
3.8 Hold series of national workshops on aquatic ecosystem; Fish taxonomy ; Data collection & interpretation	National resource people		
3.9 Select participants for short courses in GIS	FAO/UNDP ?		
3.10 Hold regional short course on Pollution / Sedimentation - advanced skills of interpretation. report-writing	Dr. Chale, Gabriel Hakizimana		
3.11 Hold regional workshop on Lake Tanganyika legislation	IUCN (Bonn, Germany)		
3.12 Hold regional workshop Develop case study : methodology	Prof. Kaningini		
3.13 Hold regional workshop Develop local case study	WWF		
3.14 Hold regional short courses in Training of Trainers and communication skills	T&C facilitator External Training provider		
3.15 Environmental Education Concept / definition Methodology and approaches	T&C Facilitator External EE Training Provider		

3.16 Communication skills Environmental Education Training methods Presentation skills Assessment and Evaluation	SE & EE Facilitator & coordinator T&C officers WWF, ODEB, CADIC		
3.17 Project Management skills	ISTC External Training Methodology Consultant 1 week		
3.18 Support to National working group (NWG)	ISTC Nick Hodgson		
3.19 Management activities Fishing practices Alternatives practices, Pollution control, etc	TACARE- WWF ODEB Prof Kaningini Several local workshops x 2-3 days	Reports	
3.20 Roles of village Fishing Development Committees	EE Coordinators 1 day per zone + follow-up after 1 week + follow-up after 1 month		
3.21 Ongoing, & follow up of, training How to design and carry out one-to-one training, How to appraise staff and determine further training	Tony Bailey-Watts T&C Facilitator	Coordinators' and T & C Facilitators' reports	