

RAF/92/G32 - POLLUTION CONTROL AND OTHER MEASURES TO
PROTECT BIODIVERSITY IN LAKE TANGANYIKA

Final Progress Report No.17 (FINAL)

March to July 2000

Contents

1. PROJECT CO-ORDINATION UNIT	4
1.1 Project Co-ordinator and Scientific Liaison Officer	4
2. Strategic Action Plan	6
2.1 The Final TDA Workshop	6
2.2 The Final SAP Drafting Workshop	7
2.3 The Final TDA Report	7
2.4 The Final SAP Report.	8
2.5 The PDF C Grant Request	8
3. REPORTS OF SPECIAL STUDY GROUPS	10
3.1 Progress Report: April – June 2000 for "Biodiversity" Special Study and "Conservation Activities"	10
3.2 Progress Report: April – June 2000 for Fishing Practices Special Study	12
3.3 Progress Report: April – June 2000 for Legal and Institutional Component	14
3.4 Progress Report: March – June 2000 for Special Study on Sediment Discharge and Its Consequences	16
3.5 Progress Report: April – June 2000 for Special Study on Pollution and its Effects on Biodiversity.	20
3.6 Progress report: April – June 2000 for Socio-economics and Environmental Education components	21
2.6 Progress report: March – June 2000 for Training and Environmental Education Components	24
3.7 Progress Report: March – June 2000 for GIS and database management.	26

1. Project Co-ordination Unit

1.1 Project Co-ordinator and Scientific Liaison Officer

Before going further I should like to take this opportunity on behalf of the National Co-ordinators, the Scientific Liaison Officer and myself to sincerely thank all those who have worked on the Project for your valuable contributions. It has taken the efforts of over 300 managers, administrators, scientists and technicians to bring the project to a timely and successful conclusion and all concerned can take satisfaction and pride in the final outcome. Thank you.

1.1.1 Introduction

This period covered by this report has been extended from the routine quarterly coverage (March – May 2000) in order to encompass the final months of the project to end July 2000.

1.1.2 General summary

LTBP activities concluded with the 7th Meeting of the Regional Steering Committee and the 3rd and final Tripartite Review. The meetings were held concurrently on 13th July in Nairobi Kenya. The main business of the SCM concerned the formal handing over of the draft "Convention on the Sustainable Management of Lake Tanganyika: Draft Text and Commentary" to the Committee and the formulation of a strong recommendation to national governments to pursue the process toward eventual ratification of this Convention. In addition "The Strategic Action Programme for the Sustainable Management of Lake Tanganyika July 2000" was presented for signing. All delegations adopted the document and Tanzania and Zambia signed the document before departure from Nairobi. Delegations from Burundi and Congo undertook to obtain the necessary signatures on the document in time for the presentation of the PDF proposal to GEF on 27 July 2000.

The main item for the Tripartite Review was the examination of the Final Evaluation report. The evaluation took place between April 28 and May 26, 2000 and was carried out by Mr Lothar Gündling who dealt exclusively with the legal and institutional component of the project and the Team Leader, Mr Stanislaw Manikowski who dealt with all other project components. After comments from GEF the draft report was delivered to the region on 3 July 2000. The report is largely positive with such comments as "*The fact that despite remarkable obstacles the project succeeded so well, is an outstanding achievement*" and "*The overall conclusion is that the Draft Convention is a good quality document*".

They concluded that "*In summary, the project successfully realized four (of six) immediate objectives. Realization of two others was delayed directly or indirectly by insecurity prevailing in the region. The project outputs are of very high quality and of great regional importance*".

Full minutes of both meetings have been distributed.

Prior to the formal meetings in Nairobi the Project organised a half day project Presentation under the theme – "Lake Tanganyika. Investment for a Sustainable Future". The audience comprised members of the Regional Steering Committee, Directors and representatives from project affiliated institutions in the riparian states, FAO, UNOPS and representatives from international NGOs and the donor community. Unfortunately GEF were not represented. The purpose of the meeting was first, to highlight to those present the importance of Lake Tanganyika to the global community,

the governments and institutions of the riparian states and to the communities who depend on the lake for their livelihoods. Second, to draw attention to the burgeoning environmental problems that threaten the sustainability of the lakes resources. And finally to present the work of the LTBP and the priority actions that the project has identified as being necessary if the threats are to be successfully alleviated or eliminated.

A video of the lake was shown followed by a series of power point presentations by nationals from the riparian states who had been involved in the project and other project staff, giving an overview of the project its main findings and outputs. From the compliments received after the presentations it appears to have been a great success and provided a suitable finale to the Project.

Other key events that have taken place in this period are:

- The BLOSS concluded their regional wrap-up workshop to analyse their data and make recommendations to the SAP in early March.
- Environmental Education activities took place in the Francophone countries. The Congolese EE team held a set of workshops to sensitise fishermen to the general biology of the economically important fish as it pertains to the problems of overfishing and fishing with destructive gears. This was followed by a set of workshops to sensitise farmers to the problems of erosion and soil control and how these may be minimised. In Burundi, the EE team chose to sensitise natural resource managers and other branches of government as well as the general population to the biological riches of the Rusizi Reserve, which is under threat from urban pressures.
- All the Special Study regional Facilitators finished their contracts with LTBP during this period They are: Olivier Drieu (Sedimentation and Industrial Pollution), Robert Lindley (Fishing Practices), Richard Paley (Biodiversity), Karen Zwick (Socio-Economics) and Jean Paul Ledant (SAP). We are very grateful for their efforts and contributions to the project.
- The SLO spent the month of April in the UK working with special study leaders to finalise reports and outputs.
- Bujumbura, Burundi returned to UN Phase III security in late April 2000. The Scientific Liaison Officer returned to Burundi at that time.
- The French interface for the LTBP website (www.ltbp.org) was released. When all final reports, in both languages, and a proposed project synthesis document have been added to the website, the full site will be widely distributed on CD. This will be co-ordinated by NRI, UNOPS and the consultant that has been maintaining the website on behalf of the Project.
- LTBP hosted a team of film-makers from Nairobi who produced the video, "A day on The Lake" about the riches of and threats to Lake Tanganyika. The video was shown at the final meeting in Nairobi and after some editing at the request of delegates from Tanzania and Zambia, will be distributed to major stakeholders.
- All final reports have been completed and translation is underway.

2. Strategic Action Plan

2.1 The Final TDA Workshop

The final TDA workshop was scheduled to take place when the “final” conclusions of the special studies of relevance to the SAP were expected to be available.

The date of the meeting was confirmed at the January SAP Drafting Workshop and was held in Arusha from March 27 to 30.

The objectives of the meeting included:

- To present comments on the draft outline SAP document, following the revisions made in January and with reference to national consultations held prior to the workshop.
- To present the relevant conclusions of the special studies to the workshop
- To review the previous TDA and amend in the light of new information and the special studies.

The meeting agreed on amendments to the text of the draft SAP, and inserted a new section dealing with “gender equity” in the policy discussion. Written comments were provided by Zambia and DR Congo.

The special studies conclusions were presented by the facilitators and the reports were distributed, with the exception of the incomplete pollution report.

On the basis of the SS conclusions, the TDA matrix was amended. The main changes were as follows:

- The inclusion of the pelagic fisheries as a priority area of intervention – linking to the LTR programme.
- The dropping of priorities aimed at control of specific gear.
- The postponement of a decision on the priority of industrial pollution pending the conclusions of the special study
- The inclusion of a specific activity dealing with parks conservation.

With reference to the BIOSS proposal, the meeting also concluded that the project and the TDA/SAP was using a de facto Coastal Zone Management approach, and that no major changes needed to be introduced at this stage.

The workshop was attended by the following country representatives:

Burundi: Boniface Nyakageni (Directeur – INECN / Coordinateur National); Roger Kanyaru (Directeur, Departement d’Eaux, Peche et Pisciculture); Antoine Kiyuku (Directeur des Affaires Juridique a.i); Dr. Gaspard Ntakimazi (Professeur, Universite du Burundi).

DR Congo: Mady Amule (Directeur – Ministere de l’Environnement / Coordinateur National); Nshombo Mudherwa (Directeur General – CRH – Uvira); Mulimbwa Nsibula (Directeur Scientifique – CRH – Uvira); Takoy Lomema (Professeur, Universite de Kinshasa)

Tanzania: Rawson Yonazi (Assistant Director – Division of Environment / National Coordinator); Catherine Msigwa (Fisheries Officer – Fisheries Division); Hudson Nkotagu (Lecturer / Geologist – University of Dar es Salaam); Jerome Dukuduku (Hydrologist – Water Resources Dept).

Zambia: George M Chitalu (Assistant National Co-ordinator, Environmental Council of Zambia); Shadreck Nsongela (Senior Environment Impact Assessment Officer, Environmental Council of Zambia); Georgina Zulu (Senior Planning Officer – Ministry of Environment and Natural Resources); Leonard Mwape (Senior Fisheries Officer – Mpulungu)

2.2 The Final SAP Drafting Workshop

The final SAP drafting workshop took place in Lusaka from 1 May to 3 May, and was immediately followed by the Steering Committee Meeting, at which the conclusions of both the SAP and the TDA were presented and approved.

The objectives of the workshop included:

- To review the priority status of industrial pollution
- To revise the TDA to reflect priority action changes
- To review the changes in the introductory sections of the SAP
- To incorporate the TDA priority actions in the final section of the SAP
- And to present the SAP and TDA conclusions to the SCM
-

The workshop agreed on a revised prioritisation of the pollution components of the TDA. Urban and Industrial pollution were combined under a single heading and given an "immediate" priority, but with the proposed actions kept separate.

The first sections of the SAP were revised and approved. The TDA priority actions were incorporated into the SAP in the form of modified tables, giving country project components, a list of actions, stakeholders, key agencies and uncertainties.

The fisheries sections were modified to link to the LTR fisheries project proposals, and specifically to the Fisheries Framework Management Plan. The duties of the interim secretariat were also modified to emphasise their role in integrating the SAP with the LTR FFMP.

The workshop was attended by the following country representatives:

Burundi: Jerome Karimumuryango (Directeur General- INECN/ Coordinateur National); Boniface Nyakageni (Conseiller au MINATE); Gabriel Hakizimana (Coordonnateur du Volet Pollution); Dr. Gaspard Ntakimazi (Professeur, Université du Burundi).

DR Congo: Mady Amule (Directeur – Ministère de l'Environnement / Coordinateur National) Nshombo Mudherwa (Directeur General – CRH – UVIRA); Mulimbwa Nsibula (Directeur Scientifique – CRH – UVIRA); Takoy Lomema (Professeur, Université de Kinshasa).

Tanzania: W.V. Haule (Assistant Director, Fisheries Division); Hudson Nkotagu (Lecturer / Geologist – University of Dar es Salaam); Faustin Masanja (Hydrologist, Water Resources Department).

Zambia: George M Chitalu (Assistant National Co-ordinator, Environmental Council of Zambia); Shadreck Nsongela (Senior Environment Impact Assessment Officer, Environmental Council of Zambia); Georgina Zulu (Senior Planning Officer – Ministry of Environment and Natural Resources); Leonard Mwape (Senior Fisheries Officer – Mpulungu)

2.3 The Final TDA Report

The final TDA report was modified following the final TDA workshop, and subsequently completed following the final agreement on the priority of pollution as discussed at the final SAP workshop.

The report is divided into four sections. The first section provides the background to the study, and describes the project and the project structure as it relates to the preparation of the SAP, the implementation of the TDA and the relationship with the convention.

The second section describes the analytical process used in the TDA, including the process used to prioritise actions.

The third section presents the conclusions of the TDA, listing the priority concerns and the priority actions. The fourth section contains the tables listing the details of the proposed priority actions, including stakeholders, uncertainties, key agencies and resource constraints.

The TDA report has incorporated maps prepared from the project GIS.

The document is translated into French and both English and French versions will be available in PDF format on the project web site and CD.

2.4 The Final SAP Report.

The final SAP report “The First Strategic Action Programme for the Sustainable Management of Lake Tanganyika - July 2000” has been completed. The document has been translated into French.

The objective of the SAP is defined as “...the protection and conservation of the biological diversity and the sustainable use of the natural resources of Lake Tanganyika”.

The report is in five parts, starting with a description of the lake environment and the need for action. The second section records the process of consultation involved in preparing the SAP and the third section 3 proposes an interim management body for the SAP – until such a time as a permanent management body is established under a Convention.

The fourth sections describes the methodological framework that was used in the TDA to establish priority actions, and the last section proposes the programme of priority regional and national actions, addressing the four main issues of the development of a sustainable fisheries, pollution control, sediment management and habitat conservation.

The document includes summary tables from the TDA, as well as selected key maps. Both documents are available as hardcopy, with an initial run of around 50 English and 30 French copies for distribution to through the national co-ordinators and at the final SCM and donors meeting¹.

The document has been converted to PDF format and is being placed on the website/CD.

2.5 The PDF C Grant Request

At the request of GEF the project has prepared a request for a Project Development Facility Block C Grant to cover a one year detailed project component development period. Following a number of revisions, and consultation with National co-ordinators during the TDA workshop in March/April and the SAP workshop in May, a revised PDF C approach was proposed. This included minor changes to staffing with a reduced core planning team of 5 members, and increased funding for national support.

The objective of the PDF C project is to support regional and national planning teams in preparing detailed costed proposals for national and regional project components within the framework of the SAP. The project will continue to facilitate the process of public involvement in the further development of national and regional actions through a series of national consultative workshops that would be held in each country.

The PDF C project specifically includes the development of co-financing arrangements for regional and national project components through national and regional negotiation

¹ The additional English copies are for the GEF and UNDP/UNOPS.

with multilateral, bilateral, governmental and non-governmental agencies and commercial and private investors.

The grant will support a regional planning unit, and assist national planners. The Lake Tanganyika Planning Support and Co-ordination Unit will have specific duties to coordinate project development, negotiate funding and promote the ratification and signing of the Convention. The Unit will report to a regional project Steering Committee, and country Interministerial Committees will be formed and meet on an as needed basis to inform the work of the Interim Lake Management body as well as to facilitate important country political level commitment to the work of the project.

The Lake Tanganyika Planning Support and Co-ordination Unit will have a permanent office provided by the host country, Tanzania. Office equipment, a vehicle and other materials will be passed from the Phase 1 GEF project to the new office, minimising costs and delays in project start-up. The host country will cover the rent and maintenance of the office.

3. Reports of Special Study groups

3.1 Progress Report: April – June 2000 for "Biodiversity" Special Study and "Conservation Activities"

3.1.1 Overall Summary of Progress

This final reporting period began with the successful conclusion of a BIOSS working group meeting in Kigoma. Representatives from each national team met, and with guidance from Dr Eddie Allison, analysed blocks of BIOSS data, agreed the format, timetable and authorship of reports and finalised the BIOSS advice to be submitted to the SAP.

Mr Richard Paley presented the final BIOSS recommendations to the TDA meeting in April. The remainder of his contract was then spent supporting the teams' finalisation of their analysis and report writing. The list of reports is noted below under outputs and supplementary pieces of analysis continue to be completed as the final technical report is drawn together.

The final activity will be Dr Nshombo's presentation of key BIOSS outputs to one of the final LTBP meetings in July. The SLO, Dr Kelly West, and Vicki Cowan (MRAG) will support the preparation of this presentation.

Mr Paley, successfully completed his duties as BIOSS regional facilitator and has debriefed MRAG.

3.1.2 Chronology of Activities

Mar:	Completion of BIOSS Working Group meeting begun in February.
April:	Regional facilitator attends regional TDA meeting to present final BIOSS recommendations
April-May	Regional facilitator and teams continue to finalise analysis and reports
May	Mr Paley's contract ends his term as BIOSS regional facilitator and debriefs at MRAG
June-July	Finalisation of analysis and reports. Database finalisation.
July	Presentation of BIOSS results at final LTBP meeting by Dr Nshombo

3.1.3 Staffing Schedule

3.1.3.1 Burundi

Dr Gaspard NTAKIMAZI, Burundian BIOSS Co-ordinator

3.1.3.2 DR Congo

Dr Muderhwa NSHOMBO, Directeur Général, C.R.H. – Uvira

Regional Dive Team:

Burundi	Celestin	BIGIRIMANA	Kamnyosha School	Secondary PADI Advanced open water
	Terence	HAKIZIMANA	Cibitoka School	Secondary PADI Advanced open water
	Libére	NDAYISENGA	INECN – Bujumbura	BSAC-sport
	Albéric	RUGIRABIRORI	Univ Bu – Bujumbura	BSAC-sport
	Bernard	SINUNGUKA	DEPP – Bujumbura	BSAC-sport
Congo	Constantin	AMUNDALA	CRH – Uvira	BSAC-sport
	Byeragi	BAHANE	CRH – Uvira	PADI Open water
	Alexis	BASHONGA	CRH – Uvira	BSAC-sport

	Patrick Donatien Igundji	BUDA MUZUMANI WATUNA	CRH – Uvira CRH – Uvira CRH – Uvira	BSAC-sport BSAC-sport PADI Advanced open water
Tanzania	Robert Fadhili Bakari Robert	KAYANDA KIMAMBO MNAYA WAKAFUMBE	TAFIRI – Kigoma TANAPA – Gombe TANAPA – Gombe TAFIRI – Kigoma	PADI Advanced open water BSAC-sport PADI Advanced open water BSAC-sport
Zambia	Charles Maybin Reuben Robert Isaac	LUKWESA MWENDA SHAPOLA SINYINZA ZULU	DoF – Mpulungu DoF – Mpulungu DoF – Mpulungu DoF – Mpulungu DoF – Mpulungu	BSAC-sport BSAC-sport BSAC-sport PADI Open water PADI Advanced open water

3.1.3.3 International

Dr Ian Payne, MRAG Ltd, BIOSS Director
 Dr Eddie Allison, MRAG Ltd, BIOSS Co-ordinator
 Vicki Cowan, MRAG Ltd, BIOSS Management
 Richard Paley MRAG Ltd, BIOSS Facilitator
 John Pearce, Crag Jones, MRAG Ltd, BIOSS IT specialists

3.1.4 Main Outputs and Achievements

- BIOSS Working Group meeting concludes
- Final BIOSS advice to SAP issued and presented to regional TDA by Richard Paley
- Successful completion of Mr Paley’s term as BIOSS regional facilitator.
- Reports completed by end of project and issued for inclusion in the web site. Final BIOSS reports as follows:
- Final BIOSS Technical Report (Allison, E.H. *et al*, 2000).
- BIOSS Completion Report (Cowan *et al*, 2000).
- Mahale National Park, Tanzania. March/April 1999 Aquatic Survey. (Richard Paley, Dr Gaspard Ntakimazi, Dr Nshombo Muderhwa, Robert Kayanda, Bakari Mnaya, Muzumani Risasi, Robert Sinyinza, 2000).
- Nsumbu National Park, Zambia. July/August 1999 Aquatic Survey. (Richard Paley and Robert Sinyinza 2000).
- L’etat De La Diversite Biologique Dans Les Milieux Aquatiques Et Terrestres Du Delta De La Rusizi. (Ntakimazi G., Nzigidahera B., Nicayenzi F. Et West, K., 2000).
- Standing Instructions for BIOSS Field Sampling, Data Handling and Analysis. (Allison, E. H., R. G. T. Paley, and V. J. Cowan (eds.), 2000).
- An Aide-Memoire: the Convention on Biological Diversity and the Global Environment Facility. (Allison, E., 1998).
- Aquatic habitats and associated biodiversity of Kigoma area of Lake Tanganyika, Tanzania. 26p. (Darwall, W., and P. Tierney. 1998).
- Gombe Stream National Park survey report. (Tierney, P. and W. Darwall. 1998).
- Final “cleaning up” of the two BIOSS databases (taxonomic inconsistencies and analysis queries rationalised after intense period of analysis) will be complete at project close.

3.2 Progress Report: April – June 2000 for Fishing Practices Special Study

3.2.1 Overall Summary of Progress

Activities in this final period of the FPSS have centred on presenting key recommendations for the SAP to a regional gathering for the Transboundary Diagnostic Analysis and completing FPSS technical reports. Mr Lindley was able to visit Bujumbura in April, for the first time since December 1999. Discussions were held with the Burundian and Congolese FPSS teams.

The teams in each country have finalised reports on the capability of their country to undertake monitoring (presented as Annexes to a regional overview). Similarly teams have written up their situation reports of fishing practices in waters of existing terrestrial parks and these have been collated under a regional overview of the main issues. FPSS teams for each country have prepared a detailed review of the fishing practices used in their national waters. Drawing from these reports, Mr Lindley has compiled a comprehensive review of fishing practices in Lake Tanganyika. This report provides a brief overview then takes each of the practices in turn detailing their use and significance to biodiversity. We feel this volume will provide an important record of the situation regarding fishing practices in Lake Tanganyika at the turn of the Millennium and aim to circulate it widely in the region.

Mr Lindley, the FPSS regional facilitator successfully completes his duties during this reporting period and has debriefed MRAG.

3.2.2 Chronology of Activities

March	Vicki Cowan concludes mission in Kigoma, remaining work programme agreed. FPSS final advice to SAP issued after review of results and draft reports from teams.
April	Report writing by all four riparian teams. FPSS facilitator to Bujumbura.
May	FPSS regional facilitator ends contract and returns to UK for series of de-briefing sessions at MRAG.
June-July	Reports edited and prepared for inclusion on the FPSS page of LTBP's website. Mr. Antoine Kiyuku (with support from the SLO and MRAG) prepares to present an overview of FPSS to one of the final LTBP meetings in Nairobi in July

3.2.3 Staffing Schedule

Tanzanian Team

Mr Omari Kashushu (TAFIRI, Kigoma)

Mr Hamza Maboche (Community Development)

Zambian Team

Mr Leonard Mwape - Director of Mpulungu Fisheries, Department of Fisheries

Mr Whiteford Chumba – Fisheries Officer, Department of Fisheries

Mr Robert Sinyinza - Research Officer, Department of Fisheries

3.2.3.1 *Burundian Team*

Mr Antoine Kiyuku, National Co-ordinator, LTBP
Mr Bernard SINUNGUKA Univ Bu – Bujumbura

3.2.3.2 *Congolese Team*

Mr Mulimbwa, National Co-ordinator, CRH
Gear and beach survey: Mwendanababo Mkila, Muyenga Wadmbo, Milenge Mayembe
Market survey: Bahane Byeragi, Mateso Nyiringabi
Gear selectivity and species maturity: Bashongo Bishobibiri

3.2.3.3 *International team*

Dr Ian Payne, MRAG Ltd, FPSS Director
Mr Robert Lindley, MRAG Ltd, Regional Facilitator
Ms Vicki Cowan, MRAG Ltd, FPSS Co-ordinator

3.2.4 Main Outputs and Achievements

- Following reports completed and prepared for inclusion on the web site:
 - Final FPSS Advice To The Strategic Action Programme (Cowan, V. and Lindley R. (2000))
 - Fishing Gears Of Lake Tanganyika At The Turn Of The Millennium. (Lindley, R. H. 2000.)
 - Part A: Overview
 - Part B: Detailed Gear Descriptions
 - Part C: Appendices
 - A Record Of The Zambian Fishing Gears Used In Lake Tanganyika At The Turn Of The Millennium (Sinyinza, R., W. Chomba, and R. H. Lindley. 2000).
 - A Record Of The Tanzanian Fishing Gears Used In Kigoma Region Of Lake Tanganyika At The Turn Of The Millennium. (Mabochi, H. Kashushuy, O., Lindley, R.L. 2000).
 - Rapport Sur La Pratique De Peche Effectuee En Territoire d'Uvira En Republique Democratique Du Congo. (Mulimbwa, N. Byeragi, B., Mateso, N., Muyenga, W, Mwendanababo, M., Milenge, M. 2000).
 - Les Engines De Peche Traditionnel Du Nord De Burundi En 1999. (Mr Kiyuku, A., and R. H. Lindley. 2000).
 - Capabilities Of Lakeside Fisheries Institutions To Monitor And Control Lake Tanganyika's Fisheries (Regional Overview With Individual Country Reports Annexed). (Lindley, R. H. and V. Cowan (eds.) 2000).
 - Fishing In The Waters Adjoining The National Parks Bordering Lake Tanganyika (Overview With Individual Park Reports Annexed). (Lindley, R. H. (ed.). 2000).
- Regional facilitator presented FPSS advice to TDA meeting in April and discussed key findings with the delegates.
- Successful conclusion of Mr Lindley's post as regional facilitator for FPSS.

3.3 Progress Report: April – June 2000 for Legal and Institutional Component

3.3.1 Summary of Progress

This, the final quarter, began with Mr Cormac Cullinan’s presentation of the draft convention at the Steering Committee Meeting, as scheduled. The draft was well received by the meeting. Mr Cullinan also prepared a briefing paper offering several ways forward for the draft convention beyond the life of the current project. It is critical that the momentum created within this component is capitalised upon to ensure completion of the consultation process for the convention. The SCM decided on the following option from the briefing:

"The Steering Committee could accept the harmonised texts of the Convention as agreed at the Arusha workshop and forward them, together with all the substantive comments made subsequent to the Arusha workshop, to the governments of each of the four countries. The effect of this would be to leave it up to governments to decide in formal negotiations whether or not they agreed with particular comments and consequently whether the draft Convention should be amended."

As the consultation process agreed within LTBP is completed, version 4 of the draft will remain unchanged as the project closes. The legal team has been asked by the donor to complete a commentary on this draft and this work will be completed by the project’s close. This document will also address the substantive comments received from the institutions and individuals who kindly assisted development of the convention. A (bilingual) package will be prepared for the final Steering Committee meeting (July 2000) containing the draft (V4), the commentary and the “process” paper (which was described in the last progress report). This package will provide comprehensive documentation on the work completed in this component of the project and is hoped that it will facilitate future consultation and development of the Convention on the Sustainable Management of Lake Tanganyika.

The draft convention and associated documents making up the package will be available on LTBP’s website, as will the two papers presented at the first regional workshop, which marked the beginning of the regional consultation process for the convention, back in February 1998.

3.3.2 Chronology of Activities

May	Mr Cullinan attends SCM Commentary on the Convention prepared (bilingual)
May-July	Preparing of documents for inclusion on the web site, including a two page introductory page, complete with list of participants at all legal workshops (see below). Preparation of the final “legal package” for the SCM in July.

3.3.3 Current Staffing Schedule

See table on next page for complete list of workshop participants.

International

Dr Ian Payne, MRAG Ltd, Component Director

Mr Cormac Cullinan, MRAG Ltd (Legal Specialist, Anglophone)

Mr Stephen Hodgson, MRAG Ltd (Legal Specialist, Bilingual)

Ms Vicki Cowan, Component Manager

3.3.4 Main Outputs and Achievements

- Presentation of legal component at SCM in May and options for SCM.
- recommendations to riparian governments to maintain momentum for draft development.
- Commentary on Convention prepared and translated.
- “Process” document finalised.
- All relevant documents from the legal component prepared for inclusion on the web site.

Country	Name	3.3.4.1 Institution	Regional I ^a	Sub-regional ^b	Regional II ^c
Burundi	M. Benoit Bihamiriza	Ministere des Relations Exterieures et de la Cooperation de la Republique du Burundi	*	*	*
	Ir. Roger Kanyaru	Departement des Eaux, Peche et Pisciculture	*		
	Ir. Etienne Kayengeyenge	Ministere de l'Aménagement du Territoire et de l'Environnement	*		
	M. Jean Bechmans Manirakiza	Institut National pour l'Environnement et la Conservation de la Nature (NC)	*	*	
	M. Boniface Nyakageni	Institut National pour l'Environnement et la Conservation de la Nature (NC)			*
	Prof. Didace Nimpagaritse	Faculte de Droit, Universite du Burundi	*		
Democratic Republic of Congo	M. Damien Nindorera	Institut National pour l'Environnement et la Conservation de la Nature	*	*	
	Dr. Lunpungu Kalanbay	Universite de Kinshasa	*	*	*
	M. Ndembe Kumbu	Ministere des Affaires Etrangeres	*		
	Mme. Gode Mbombo-Mangangi	Ministere de l'Environnement, Conservation de la Nature et Tourisme	*		*
	M. Amule Pascal Mady	Ministere de l'Environnement, Conservation de la Nature et Tourisme (NC)	*		
	M. Ngamani Mbusu	Ministere de l'Environnement, Conservation de la Nature et Tourisme	*	*	*
Tanzania	Dr Muderhwa Nshombo	Centre de Recherche en Hydrobiologie	*		
	Mrs M Mwakwilay			*	
	Mr. Peter Kambona	CHISARA National Environment Management Council	*		
	Ms. Verdiana Macha	Attorney General's Chambers, Ministry of Justice and Constitutional Affairs	*	*	*
	Ms. Alicia Bosensera Magabe	National Environment Management Council	*		
	Mr. Andy Ackim Mwandembwa	Ministry of Foreign Affairs and International Cooperation	*		
Zambia	Mr. Rawson Piniel Yonazi	Vice President's Office, Environment Division (NC)	*	*	
	Ms Hawa S Msham	Assistant NC, Environment Division		*	
	Ms Alice Chinguwile	Ministry of Natural Resources and Tourism		*	
	Mr Rajabu	National Environment Management Council			*
	Mr. Hangoma Gordon Mudenda	Ministry of Agriculture Food and Fisheries	*		
	Mr. Aven Muvwende	Environmental Council of Zambia	*		
	Mr. James Simoko Phiri	Environmental Council of Zambia	*		
	Mrs Chanda J. Lubasi Punabantu	Ministry of Legal Affairs	*	*	*
	Mr. Davy Siame	Ministry of Environment and Natural Resources, Planning and Information Dept	*		
LTBP	Mr George M Chitalu	Assistant NC, ECZ		*	*
	Ms Irene Mbewe	Legal counsel		*	
	Mr Aswell B. Chisanga	Legal counsel, ECZ			*
	Mr. Cormac Cullinan	EnAct International, for MRAG	*	*	*
LTBP	Mr. Stephen Hodgson	EnAct International, for MRAG	*	*	*
	Ms. Vicki Cowan	MRAG	*		
	Dr Andy Menz	LTBP Project Co-ordinator	*		

3.4 Progress Report: March – June 2000 for Special Study on Sediment Discharge and Its Consequences

3.4.1 Overall Summary of Progress

A later version of the report 'Sedimentation Special Study - summary of findings for the Strategic Action Programme (SAP)' was produced by Graeme Patterson in early March for discussion at the TDA meeting (28 – 30 March) and the final version was completed in April for the final SAP meeting (1 – 3 May). This document summarises all the findings available and recommendations made by the SedSS participants.

^a February, 1998 (Lusaka)

^b Anglophone: August, 1999 (Dar Es Salaam). Francophone: September, 1999 (Arusha)

^c November, 1999 (Arusha)

Olivier Drew presented at the TDA meeting the key findings of the SedSS and the recommendations of the SedSS to the SAP.

By the end of the period all SedSS technical reports have been completed and are available on the project web site. A final SedSS overview will be completed by end of June and will also be posted on the project web site as well as being more widely circulated.

Zambia : Dr Sichingabula (National Sedimentation Special Study Co-ordinator for Zambia, UNZA) has completed successfully the compilation of an annex report (for data collected during the 5 month extension period since August 1999) attached to the Zambian Sedimentation final report. The equipment provided by the project to UNZA and the Water Affairs team has been handed over to Dr Sichingabula (UNZA, Geography Department) at the end of this quarter for safe keeping.

Regarding the transfer of the gauge readers from LTBP to the Water Affairs Department, Olivier Drew was informed by Mr Mwansa (Provincial Water Engineer, Kasama) that no decision has been made yet due to financial constraints and the reorganisation of the Water Affairs Department. In an attempt to speed up this slow process, Mr N'gambi (Water Affairs Department, Kasama) was asked to visit and inspect the hydrometric stations around Mpulungu area and to produce a report for the Water Affairs Department Headquarters.

During the first part of this quarter, the SedSS team at Department of Fisheries, Mpulungu has completed their work on suspended matters and granulometry analysis and impacts of sediments on biota (especially invertebrates). In the second part of the quarter, Mr Sinyinza produced a draft of final report of the work carried out by the team.

Ian Donohue (student under Dr Ken Irvine's supervision, University of Dublin, Ireland) visited Mpulungu for a 5 week period during this quarter and carried out experimental studies jointly with the Fisheries Department using the aquaria facility set up by the project.

The monitoring of the field experiment site (off Mbita island) was carried out on behalf of the project until end of March. Then as some external funding has been secured by various research institutions already involved in the project, a work programme has been discussed with 2 divers from the Department of Fisheries for the monitoring of the site to continue beyond the life of this project.

Burundi : DGGM - IGEBU teams have successfully completed the final version of the final report for Burundi during this quarter.

Some additional hydrological data analysis were produced by the IGEBU team and were then incorporated in the final version of the final report which was completed by the end of May and then put on the project web site early in June.

There seems every likelihood the IGEBU will continue to monitor the Burundian rivers at sites established by the project

Tanzania : During this quarter, Dr Nkotagu (National Sedimentation Special Study Co-ordinator for Tanzania, University of Dar es Salaam) has completed and submitted the draft of the Tanzanian final report. The final version of the report has been produced and put on the project web site.

Dr Nkotagu travelled to Kigoma at the end of this quarter to collect the equipment put in place during this study, to meet with Mr Mpyalimi (officer in charge of Water Department, Kigoma) and Mr Dettomax (Warden in charge of Gombe National Park)

and to finalise the river monitoring programme under the responsibility of the national institutions.

DR Congo : As the security situation around Uvira permitted field work during the whole of this quarter, the SedSS team at CRH Uvira have completed field work at the end of March as planned. Early March, Bombi Kakogozo (National Sedimentation Special Study Co-ordinator for Dr Congo) travelled to Kigoma to meet with Olivier Drew to review the work done and discuss the preparation of the draft of the final report

In the second part of the quarter, the team concentrated their efforts in the completing laboratory analysis of the samples and the production of the final report. The first draft was produced by the end of March and the final version was successfully completed by the end of May. The final report for Dr Congo was then put on the project web site early June.

The team have expressed their interest and willingness to go on with the monitoring of the 3 rivers studied during the life of the project.

3.4.2 Chronology of Activities

3 – 23 March : Olivier Drew travelled to Kigoma to meet Kakogozo (CRH, Uvira, DR Congo) to review the work done in Dr Congo and discussed the preparation of the Congolese final report, and then to discuss with SLO and other facilitators the key findings of the special studies and the recommendations to the SAP.

6 – 13 March : Kakogozo travelled to Kigoma to meet Olivier Drew.

27 – 30 March : Olivier Drew attended the TDA meeting in Arusha

31 March : End of SedSS field work programme in Mpulungu and DR Congo.

18 – 19 April : Mr N'gambi (Water Affairs, Kasamsa) inspected the hydrometric stations around Mpulungu to produce a report to push the transfer of the gauge readers from LTBP to the Water Affairs Department.

20 April – 3 May : Olivier Drew on leave.

End of April : IGEBU team completed successfully the additional work on hydrological data analysis for incorporation in the SedSS final report for Burundi.

16 – 19 May : Dr Menz visited Mpulungu station (various issues especially regarding Mpulungu station closure)

20 – 27 May : Olivier Drew travelled to Bujumbura to meet Kakogozo and especially the Pollution teams from Burundi and DR Congo.

End of May : Nkotagu travelled to Kigoma region to collect equipment provided by the project and discuss the river monitoring programme with the national institutions involved.

31 May : Official closure of LTBP Station in Mpulungu, Zambia.

31 May : End of Olivier Drew's contract with the project.

12-13 June : Olivier Drew travels to NRI UK to assist with report finalisation.

3.4.3 Staffing Schedule

At the end of the period no staff other than the SS co-ordinator (G. Patterson) are still active under the project. His input will continue till the end of the project including the donor meeting in July 2000. His responsibility will continue beyond that period in regard to maintenance and publicity of the project and the SS

3.5 Progress Report: April – June 2000 for Special Study on Pollution and its Effects on Biodiversity.

A full report from the Special Study coordinator was unfortunately not submitted owing to ill health. Below is a summary of the key events that brought this Special Study to a satisfactory conclusion.

3.5.1 Overall Summary of Progress

- The industrial pollution inventory, database and reports were finalised.
- All pollution technical reports completed and posted on the project Website.
- Completion of final report on future Pollution monitoring programme
- Preparation for presentation of results to country delegations and donors in Nairobi, July 2000.

3.5.2 Staffing Schedule

In Burundi: Mr Hakizimana, Mrs Aline Irimbere (INECN), Ms Consolate Musanisoni and Mr Wilondja Kamalebo.

In Uvira, DRoC: Dr Tshibangu Kalala (PSS Co-ordinator in Congo) and Mukungilwa Kamalebo, Mbemba Mavula, Bwebwa Diamani, Kangele Bin Kazembe, Mbilize Ndalozi (Boatsman) and Wilondja (Driver).

In Kigoma, Tanzania: Dr Chale (PSS Co-ordinator in Tanzania) and Ms Lyoba, D (50% of her time), Messrs Lyoba, Mfilinge, Muhoza (90%), Tegulilwa, Kadula (80%), Wakafumbe (75%).

In Mpulungu, Zambia: Messrs Mwape, Chimanga, Kaweme, Makassa and Zulu. Messrs Sinyinza, Shapola and others contributing to the Biodiversity and Sediment Pollution Special Studies are associated with the PSS for the purposes of synchronising sampling activities

3.6 Progress report: April – June 2000 for Socio-economics and Environmental Education components

3.6.1 Overall Summary of Progress

This quarter saw the completion of fieldwork, and an enormous amount of report writing. All eleven site reports from the 1999-2000 work phase were completed, and drafts of the final national reports submitted by the NSECs and their national teams. The SESS recommendations to the SAP were drafted and presented at the TDA meeting in Arusha in March, and in late May/early June the SESS Co-ordinator and Facilitator met in Kigoma to finalise these, to edit and produce the SESS Report Series, and to write their final Special Study Report. Finally, the SESS page on the Project website and electronic archives were updated, to conclude the Special Study.

Burundi

The NSEC and her team completed their site reports (Gatumba, Kibenga, and Kinindo), and in May/June the NSEC visited Kigoma to work on the final national report with the SESS Co-ordinator and Facilitator: a final draft is expected soon. Although constrained by insecurity, the team has produced some excellent information on livelihoods in the peri-urban zone around Bujumbura city, which provides an important contrast to the more rural sites studied in the other three countries.

Congo

The NSEC and his team completed their site reports (Kigongo, Kilomoni, and Makobola), and in May the NSEC visited Kigoma to work on his final national report with the SESS Facilitator. Working under often extremely arduous conditions, the team is to be congratulated on the unique picture they have provided of the survival strategies of communities in flux in these difficult times.

Tanzania

The NSEC completed the site report for Sunuka and his final national report, and submitted electronic copies of the work done in the early years of the Project for publication on the website. The Tanzanian team has produced the largest body of work, covering both the lakeshore and the wider catchment in the interior of the country, and the final national report synthesising all of these data is an important document.

Zambia

In March the Zambian team completed their fieldwork in Kapoko, a predominantly farming village near Mpulungu. The NSEC and his team completed preliminary drafts/summaries of the site reports for Lupiri and Munshi, in Kaputa District, and Kabyolwe and Kapoko, in Mpulungu District, and the NSEC completed his final national report. The Zambian team has forged strong institutional links, including with the EE component of the Project, and has collected a large body of detailed information at the household level. It is hoped that further analysis of these data will

be completed by the relevant national institutions to maximise their usefulness to planners and development partners.

3.6.2 Chronology of Activities

12 – 17 March	Data collection in Kapoko, Mpulungu District, Zambia
27 – 30 March	TDA meeting Arusha, presentation of preliminary SESS results
22 – 25 May	Visit of Gérard Kitungano, Congolese NSEC, to Kigoma
29 May – 1 June	Visit of Dr Oda Sindayizeruka, Burundian NSEC, to Kigoma
29 May – 8 June	Visit of Dr Kate Meadows, SESS Co-ordinator, to Kigoma

3.6.3 Staffing Schedule

The national teams in each of the four riparian nations are made up of officials from relevant government departments, national universities and research institutions, and local NGOs, and are primarily lakeshore based. During this last phase, the report writing work was primarily undertaken by the NSECs and their senior staff.

Burundi

Dr Oda Sindayizeruka	CURDES	NSEC
Dr Sr Christine Ngendakuriyo	CURDES	
M Sc Prudence Ndayishimiye	CURDES	
M Mattias Kinezero	CURDES	
M Ferdinand Bararuzunza	CURDES	

Congo

M Gerard Kitungano	CRH	NSEC
M Mukirania Muke	CRH	

Tanzania

Dr Claude Mung'ong'o	IRA	NSEC
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Zambia

Mr George Mushimbwe Chitalu	ECZ	NSEC
Mr Frighton Ng'andu	DoF	Survey Co-ordinator
Mrs Lillian Mofya	DoCD	
Mr Aliani Mulagala	DoE	

International

Dr Kate Meadows	NRI	SESS Co-ordinator
Ms Karen Zwick	LTBP	SESS Facilitator

3.6.4 Main Outputs and Achievements

- Completion of fieldwork (Zambia)
- Analysis of field data in all four countries

- Final drafts of site reports from all four countries
- Drafts of final national reports from all four countries
- SESS recommendations to the SAP drafted and presented
- Final editing and production of The SESS Report Series by the SESS Co-ordinator and Facilitator
- Final SESS report completed
- SESS page on the Project website and electronic archives updated.
- Publication of the Burundi final national report, (to be completed)

2.6 Progress report: March – June 2000 for Training and Environmental Education Components

2.6.1 Overall summary of progress

Over the past quarter all four national teams have completed their work for Training, Education and Communications (TEC) programmes. These have concentrated on activities at the Lakeshore. A great progress has been made by the country teams and it is a pity that the project is ending just as the TECC process has built a momentum that cannot easily be followed up. One of the main lessons learned this Quarter is that, working with the appropriate level of staff, it is possible for social and scientific people to work together, to adapt language and scientific lessons and to enthuse communities to work towards their own security of livelihood and the conservation of the Lake (DR Congo).

A final Report on the Training, Education and Communication activities, together with comprehensive recommendations for the future, is forthcoming.

2.6.2 Chronology of activities

13-16 March	Workshop for Fishing Practices, R D Congo
29 March - 2 April	Workshop for Farming Practices, R D Congo
3 - 13 April	Follow-up seminars along lakeshore and dissemination of EE materials, Tanzania
19 April	Meeting with Mpulungu District authorities to clarify village committee structure, Zambia
25-26 April	Journees de Reflection, Burundi
2 - 9 May	Follow-up Field visits to fishing villages R D Congo,
10-17 May	Follow-up Field Visits to Farmers, R D Congo
23 May - 3 June	TECC Zambia visit Mpulungu field station
25 May - 1 June	VCDC Training of 15 Stratum 2 and 3 villages and 1 village from Stratum 4.
05 June	World Environmental Day activities, Burundi
March-May	Congo Radio Programmes on Fishing Practices and Sustainable Agriculture

2.6.3 Staffing schedule

The national teams in each of the four riparian nations are made up of officials from relevant government departments, Institutions, and local NGOs, and are primarily lakeshore based. The international consultants are from the Centre for Rural Development and Training of the University of Wolverhampton.

Burundi

Mme Cecile Gakima	INECN	TECC
Mme Felississima Nzomahabonimana	INECN	Lake shore contact person

Congo

Mr Assumani Kimanuka	CADIC	TECC
Mr Ireng Bahizire	NOPTA	

Tanzania

Mr Bartholomew Tarimo	NEMC	TECC
Mr F Mfanga	TACARE	
Mr Frederick Malisa	TANAPA	

Zambia

Ms Kwali Mfuni	ECZ	TECC
Mr Frighton Ng'andu	DoF	Lakeshore contact person
Mr George Munshimbwe Chitalu	ECZ	
Mrs Mulutula	DoE	
Mr Chipulu	DoF	
Mr Mugala	DoE	

International

Ms Rachel Roland	CRDT	Training Coordinator
Ms Monique Trudel	CRDT	Environmental Education Coordinator

2.6.4 Main outputs and achievements

Burundi

- Production of 2 posters enhanced from original designs by January Workshop participants
- Meeting with decision makers over Rusizi National Park during 2 days of reflection.
- One report on Journee de Reflection by National TECC.

D.R Congo

- 2 Workshops held in 14 fishing villages and beaches and 9 farming villages for different fishing and farming level decision-makers and associations, by TECC NGOs and CRH SS teams
- Follow-up meetings held in 14 fishing beaches and 9 villages and farming villages by workshop participants for their peers with enthusiastic response.
- Facilitator follow-up visits to same villages to support what has been done by peer groups and met with 9 Associations of potential future partners.
- Follow up support by series of radio programmes to wider audience (from beginning of workshops up to end of field visits, on items of interest from within the workshop programme and from the LTBP Special Studies). A request has been made for more radio programmes to be held up to the end of this year.
- 2 reports: one for 2 workshops and one for follow-up field visits and recommendations for the future of the project by national TECC team.

Tanzania

- Production of 2 posters enhanced from original designs by January Workshop participants.
- Dissemination of 2 posters in 6 villages along the lake shore (with accompanying seminar on their proper use).
- 2 reports detailing activities in January and April, 2000 by National TECC.

Zambia

- Agreement reached by Mpulungu district authorities on the organisation and structure of village committees.
- VCDC training sessions in 15 villages in Strata 2, 3, 4
- Two reports: one for Village Committee structure meeting and one for Feb workshops. One more report awaited. Reports by national TECC and team.

3.7 Progress Report: March – June 2000 for GIS and database management.

3.7.1 Overall Summary of Progress

Most of the outputs for the GIS component were completed by the last quarter. Some additional datasets were added in this quarter and the final transfer of the PC to the region is planned for July. The hand over of the system to the Metadatabase manager is still planned before project end.

Several maps were created for the Strategic Action Programme (SAP) report.

3.7.1.1 Datasets

- Further assistance has been given in the development of the General Pollution Inventory database.
- Documentation of several sedimentation datasets has been achieved, including sample potential erosion data from Sedimentation Special Study report number 4.

3.7.2 Chronology of Activities

April - creation of maps for SAP

May - Documentation of sedimentation datasets

Proposed:

June - transfer of PC and metadatabase responsibility to MINATE, Burundi

3.7.3 Staffing Schedule

UK (NRI)

Alan Mills, Geographer; GIS developer

Anne Jackson, Data liaison officer

Valerie Obsomer, GIS specialist and trainer

Rupert Loftie – LARST co-ordinator

3.7.4 Main Outputs and Achievements

1. Documentation of sedimentation datasets
2. Creation of maps for SAP