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SOCIO-ECONOMIC SPECIAL STUDY

Report No. 13

**Socio-economic and institutional appraisal
of the Malagarasi-Luiche catchment
in Kigoma Region, Tanzania**

Dar es Salaam

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National Socio-economics Co-ordinator

**Pollution control and other measures to protect biodiversity
in Lake Tanganyika (RAF/92/G32)**

**Lutte contre la pollution et autres mesures visant à protéger
la biodiversité du lac Tanganyika (RAF/92/G32)**

<p>The Lake Tanganyika Biodiversity Project has been formulated to help the four riparian states (Burundi, Congo, Tanzania and Zambia) produce an effective and sustainable system for managing and conserving the biodiversity of Lake Tanganyika into the foreseeable future. It is funded by the Global Environmental Facility through the United Nations Development Programme.</p>	<p>Le Projet sur la Biodiversité du Lac Tanganyika a été formulé pour aider les quatre états riverains (Burundi, Congo, Tanzanie et Zambie) à élaborer un système efficace et durable pour gérer et conserver la diversité biologique du lac Tanganyika dans un avenir prévisible. Il est financé par le FEM (Fonds pour l'Environnement Mondial) par le biais du Programme des Nations Unies pour le Développement (PNUD)</p>
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Zambia: Environment Council of Zambia

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BACKGROUND

From 26 to 27 January 1998 Dr Geoff Griffith, the Socio-Economic Special Study (SESS) Co-ordinator, Dr Claude Mung'ong'o, the prospective National Socio-Economics Co-ordinator (NSEC) for Tanzania, and Mr Bartholomew Tarimo, the National Environmental Education Co-ordinator (NEEC) for Tanzania, met to review the output of the PRA exercises completed to date and assess the general status of the SESS and Environmental Education (EE) component in Tanzania. The meeting revealed that the information gathered so far on the socio-economic conditions and fishing practices of the communities living along the eastern shores of Lake Tanganyika was comprehensive and representative enough to enable the Project to begin to draw reliable conclusions and make sound generalisations. No data were, however, available to the Project on the socio-economics of the catchment areas of the lake and the institutional set-up in the Tanzanian lake basin. It was decided, therefore, that further social surveys be conducted in selected catchment areas to collect data to fill these gaps. The Districts of Kigoma Rural (Uvinza Ward), Kasulu, Sumbawanga, Mpanda and Urambo were selected based on peculiarities in economic activities (agriculture, industry, etc.), habitats (highlands, lowlands, woodlands, etc.) and type of institutions and stakeholder associations existing in the area.

The first field trip was undertaken in Kigoma Region between 8 and 27 February 1998, and incorporated the following research team:

- Dr C.G. Mung'ong'o, NSEC and Team Leader;
- Mr B.T. Tarimo, NEEC;
- Ms Beatrice Marwa, Fisheries Officer, Kigoma;
- Mr Omari Kashushu, Fisheries Officer, Kigoma; and
- Mr Hamza Mabochi, Community Development Officer, Kigoma.

FIELD REPORT: 8 - 27 FEBRUARY 1998

8th - 10th February:

Dr Mung'ong'o and Mr Tarimo travelled to Kigoma via Dodoma by road and train.

Wednesday 11 February:

Dr Mung'ong'o and Mr Tarimo reported to the SLO, Dr Kelly West, at Kigoma Station, assembled the research team and spent the day planning and preparing for the trip.

Thursday, 12th February, 1998:

The team travelled to Kasulu town. Except for two patches where the road had been slightly damaged by heavy trucks taking food and other provisions to the refugee camps, driving was fairly smooth. The team managed to reach Kasulu within three hours of leaving Kigoma. The team spent the afternoon settling in and making preparations for the following day's work.

Friday, 13th February, 1998:

The team paid a courtesy call to the District Executive Director (DED) for Kasulu District, Mr Nyamugali. After introductory talks, Mr Nyamugali called in his District Natural Resources Officer, Mr Ngosi, and the District Planning Officer, Mr Mburusi, who briefed the team on the efforts of the District in environmental conservation. Apparently, the refugee problem in the District had put into focus the problem of environmental degradation in the area. The departmental heads in the District had thus constituted themselves into a District Environment Task Force whose task is to monitor the environmental impacts of various socio-economic activities and co-ordinate the efforts of various institutions, especially NGOs and other development agencies in the District, in environmental conservation. One outcome of this co-ordinated effort is a PRA exercise recently undertaken in all villages in the District. Data from this exercise are still being analysed and are, therefore, not accessible to the team. However, the end result of this exercise is expected to be an Integrated Rural Development Programme the implementation of which it is hoped will be financed by the Austrian Government and NORAD.

After the meeting with the DED and his two officials the team split up, with each member visiting one of the relevant departments at the District headquarters. In the process the following departments were visited and interviewed: District Natural Resources Office (incorporating Wildlife, Forestry, Fisheries and Beekeeping sections), Department of Health, Department of Agriculture & Livestock, Department of Community Development, and the Department of Water. Two main observations were made during these visits:

- a) All the departments lack basic resources to perform their duties well. Recent retrenchments have reduced the manpower of some departments to their barest minimum. Departments such as Natural Resources and Agriculture & Livestock which have to constantly monitor and control natural resource use and help develop the agricultural system through extension services have had their field staff reduced by as much as 60%. Moreover, they have no transport to enable them to reach their areas of operation. Departments such as Health and Water now depend on transport facilities provided by donor agencies and/or international NGOs working in the District. Nevertheless, some departments cannot even maintain such vehicles due to lack of recurrent funds.

- b) The Project is little known in the District. Some of the interviewees associated it with the activities of TACARE, while others did not know anything at all about the Project. One man thought it was Keith Bannister's project as the respondent had met Keith on some other business some time back. Generally, the visit by the team proved to be good publicity for the Project.

14th - 15th February, 1998:

The team visited Buhoro and Munyegera villages in the Highland Zone where the three main rivers (Malagarasi, Ruchugi and Luiche) which feed into Lake Tanganyika originate. The agricultural system in the two villages is settled. Because of poor red soils, however, people keep cattle not only as a means of accumulating wealth and insurance for bad times, but as a vital complement to crop production as people cope primarily with soil infertility by using farmyard manure. The importance of livestock in the study area cannot, therefore, be overemphasised. However, overstocking is a problem leading to visible soil compaction and/or erosion in all villages visited.

The team also visited Ruhita village in the Intermediate Zone. The agricultural system here is mainly based on shifting cultivation. More than two thirds of the land here has been cleared from the natural *miombo* woodland. There is relatively little integration of livestock keeping and crop production, as historically cattle mortality due to the tsetse fly prohibited livestock keeping. Use of inorganic fertilisers is also very minimal as they are unaffordable following the removal of government subsidies. Furthermore, access to extension services is very limited as observed above. Consequently, more land is cleared farther into the *miombo* woodlands, increasing deforestation.

All the three villages visited during the two days show a close adherence to the formal organisational structure. They all had 25-member Village Councils (VCs) organised into three executive committees, namely Finance & Planning (FP), Security & Defence (SD), and Community Development & Social Services (CDSS). There are, however, minor differences as regards the type and number of sub-committees which are constituted in each village. For example, while the VC in Buhoro had sub-committees on Community Discipline and Basic Health constituted under the CDSS Committee, Ruhita and Munyegera villages had sub-committees on Community Discipline and Arbitration under the CDSS Committee. Such differences are of particular interest to LTBP, as they demonstrate that villages are able to create new institutions under the umbrella of the VC to cater for special local organisational requirements such as environmental management and/or conservation.

Nevertheless, popular participation in the socio-political life seemed to be generally low in the three villages. For example, while the village leaders interviewed in all the villages reported that VC meetings were held regularly as required by the Local Government (District Authorities) Act of 1982, these allegations were not corroborated by some of the ordinary villagers we talked to. Neither could minutes of recent meetings be produced in any of the villages visited to support the leaders' assertions. Furthermore, the problems of lack of experience and confidence necessary to play an effective representative role have unfortunately been a major setback to people's representation in these villages. This situation is particularly serious for women's representation; any of them are hardly articulate enough to effectively represent their fellow women.

16th - 17th February, 1998:

The team visited five NGOs which are operating in the District and have offices in Kasulu. The NGOs visited included international institutions such as *CARE International*, *Africare Tanzania*, and *Christian Outreach*. These are international relief and development agencies who came into Kasulu and Kigoma Districts to serve Congolese and Burundian refugees, refugee affected areas, returnees, and children. They are currently operating as UNHCR implementing partners in refugee community services such as education, health, care of vulnerable people, etc. Recently most of these institutions have opted to extend their activities to include local development issues such as environmental conservation and rehabilitation and capacity building in local health and education infrastructure and services. *Africare Tanzania* are also extending their activities into the financing and co-ordination of the establishment of small scale income generating activities/enterprises (e.g. dairy cattle raising) by local groups.

The team also visited two local NGOs. These were the Rural Services Programme of Tanzania (RUSERP) and the Diocese of Western Tanzania (DWT). RUSERP is a Trust Fund set up in 1995 in Karagwe to respond to "all problems related to the alleviation of poverty, rehabilitation of both rural people and the surrounding environment, rural development and relief services." RUSERP moved into Kasulu in 1997 and is currently operating as an implementing partner of UNHCR in education in refugee camps, distribution of food, and training of trainers in improved stoves, afforestation, environmental education, small scale entrepreneurship and general community development techniques. The DWT, on the other hand, has a unit within the Diocese which offers extension services to the villages. Currently, their emphasis has been in afforestation, development of energy saving stoves, biogas, irrigation, and promotion of the use of oxen in agriculture.

A general observation made by the team during this visit is that, except for the DWT, all of the NGOs existing in the area came into Kasulu as a response to the refugee crisis in the District. Their interventions, be they infrastructural, educational, environmental, etc., have been coloured by the needs of refugees. It is only now that some of these NGOs are revising their outlook to include the surrounding communities in their activities. The team wonders whether these institutions will still have the motivation to continue working in the area should the refugee crisis end and refugee funds dry up. The home grown DWT has very enthusiastic and honest people working for it, but it lacks the funds and expertise to be effective in its interventions.

Wednesday, 18th February, 1998:

The team spent the morning compiling the data gathered and following up some of the missing information. After lunch the team travelled to Kigoma.

Thursday, 19th February, 1998:

The team spent the day drafting the Kasulu section of the report and arranging the logistics for the Uvinza trip.

Friday, 20th February, 1998:

Dr Mung'ong'o left for Dar es Salaam by air. The rest of the team travelled to Uvinza using the Kigoma-Uvinza road. The road had been badly damaged by heavy lorries and the rains that had fallen a day before made the going tedious. However, the team managed to reach Uvinza in good time, and spent the afternoon settling in and familiarising themselves with the area.

Saturday, 21st February, 1998:

The team visited the local NGO Exploit & Help Nature (EHENA), where they met Mr Kalufya, the Chairman. The NGO was established in 1997. Currently it has 15 members and aims to improve and promote the quality of education, health services, and environmental integrity in Kigoma Region. Their environmental activities are presently confined in Uvinza Ward where EHENA collaborates with RUSERP in raising seedlings and distributing them to villagers. They also offer environmental education to the villagers, especially to counter burning, which is common in the Ward. Like their counterpart DWT in Kasulu, these people lack the funds and expertise to fulfil their objectives.

Sunday, 22nd February, 1998:

The team visited the villages of Basanza and Mwamila, and met with the village leaders. The administrative structure of both villages conforms very closely to the official structure as stipulated by the Local Government (District Authorities) Act of 1982. Although Basanza has more women representatives (6) than Mwamila (4) they both suffer the weaknesses noted of the villages visited in Kasulu. Farming is the main economic activity in both these villages. Their farming system is, however, very rudimentary; sometimes they cultivate to the very banks of rivers.

The team also visited the Uvinza Women Association and talked to 8 of the 15 members. The association was instituted in 1997 and deals with, among other things, environmental conservation through the promotion of improved stoves and afforestation. They work closely with such NGOs as RUSERP and EHENA.

Monday, 23rd February, 1998:

The team visited Nyanza Salt Mines (Ltd) situated on the confluence of the rivers Malagarasi and Ruchugi. Begun in 1925, the industry currently produces around 7,000 tons of vapour dried salt per annum. The main source of energy is woodfuel, though sun drying is also undertaken during the dry season. At full capacity the thermal plant needs about 51m³ of wood per day. The residues from the burnt wood are dumped in the Malagarasi. Excess brine, some chemicals, and dirty oil are also released into the river. The impact of this pollution could not, however, be established immediately.

Tuesday, 24th February, 1998:

The team paid a courtesy call to the Uvinza Ward Executive Officer. The Executive Officer briefed the team on the institutional set-up and environmental position of the Ward. The Ward is composed of four villages, namely Uvinza, Basanza, Chakulu and Mwamila. The population of the Ward is 23,000 people, with the majority of the (62%) being female.

The team also talked to the Ward Forest Officer, Mr Kaingi, and the Ward Beekeeping Officer, Mr Mkondo on the status of forests in the area.

Wednesday, 25th February, 1998:

The team left Uvinza for Kigoma via Kasulu.

Thursday, 26th February, 1998:

The team spent the day drafting the Uvinza section of the report.

Friday, 27th February, 1998:

Mr Tarimo left Kigoma for Dar es Salaam by air.

MAJOR OBSERVATIONS

1 Agriculture

Poor red soils in the Highland Zone of Kasulu District necessitate people to keep cattle not only as a means of accumulating wealth and insurance for bad times, but as a vital complement to crop production. However, overstocking is a problem leading to visible soil compaction and/or erosion in all villages visited.

The agricultural system in the Intermediate and Lowland Zones is mainly shifting cultivation. There is relatively little integration of livestock keeping and crop production as historically cattle mortality due to the tsetse fly prohibited livestock keeping. Use of inorganic fertilisers is also very minimal due to their being unaffordable after the removal of government subsidies. Furthermore, access to extension services is very limited. More land is thus cleared farther into the *miombo* woodlands, increasing deforestation.

2 Salt making

The main source of energy for this is woodfuel, though sun drying is also used during the dry season. At full capacity the thermal plant needs about 51m³ of wood per day. The residues from the burnt wood are deposited in the Malagarasi. Excess brine, some chemicals and dirty oil are also released into the river. The impact of this pollution needs to be established.

3 Institutional set-up

3.1 Government departments

All of the departments visited lack the basic resources to perform their duties well. Recent retrenchments have reduced the manpower of some departments to the barest minimum. Departments which depend on transport facilities provided by donors and/or international NGOs cannot even maintain such vehicles due to lack of recurrent funds.

3.2 Non Governmental Organisations

Except for the DWT and EHENA all of the NGOs existing in the area came into Kasulu and Kigoma Rural Districts as a response to the refugee crisis in the District. Their interventions have thus been coloured by the needs of refugees. Some of these NGOs are currently changing their approaches to include the surrounding communities in their activities. The team wonders whether these institutions will still have the motivation to continue working in the area should the refugee crisis end and refugee funds dry up. The home grown NGOs have enthusiastic and honest people working for them, but they lack the funds and basic expertise to be effective in their interventions.

3.3 Village governments

All the villages visited adhere closely to the administrative structure as stipulated by the Local Government (District Authorities) Act of 1982. Nevertheless, popular participation in socio-political life seemed to be generally low, and meetings are not regularly held. Lack of experience and confidence necessary to play an effective representative role is a major setback to people's representation in these villages, particularly for women.

4 Perceptions of LTBP

The Project is little known in Kasulu District. Many people did not know anything at all about the Project. Although the visit by the team proved to be good publicity for the Project, there is need to put more effort in publicising the activities of the Project in the catchment.