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EVALUATION AND OVERSIGHT UNIT

GLOBAL ENVIRONMENT FACILITY/UNITED NATIONS ENVIRONMENT
PROGRAMME PROJECT GF 2200-97-43

UNITED REPUBLIC OF TANZANIA: ENABLING ACTIVITIES FOR THE
PREPARATION OF THE INITIAL NATIONAL COMMUNICATION
RELATING TO THE UNITED NATIONS FRAMEWORK
CONVENTION ON CLIMATE CHANGE

FINAL EVALUATION REPORT

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EXECUTIVE SUMMARY

1. The United Republic of Tanzania has demonstrated keen interest in contributing to global reduction of greenhouse gas emissions by participating actively in many climate change activities. The economy of the United Republic of Tanzania has since 1986 been undergoing restructuring from a centralized and State-controlled economy to a market-oriented one. Agriculture is the most important economic activity, supplying both food and raw materials.

2. Prior to the Global Environmental Facility (GEF) Enabling Activity Project, the United Republic of Tanzania had been involved in climate change activities supported by the United States Country Studies Programme (USCSP) and the United Nations Environment Programme (UNEP). Other climate change studies were supported by the German Agency for Technical Cooperation (GTZ) and the Danish International Development Agency (DANIDA) through the UNEP Collaborating Centre on Energy and Environment (UNEP/CCEE). These studies later provided the basis for the GEF Enabling Activity Project. The objective of the project was to enable the United Republic of Tanzania to fulfill its obligations under the United Nations Framework Convention on Climate Change (UNFCCC) as required by articles 4.1 and 12.4 of the Convention regarding the preparation of the Initial National Communication Project.

3. This evaluation looks at various issues such as the institutional framework, project management and coordination that were employed to facilitate the implementation of the GEF Enabling Activity Project. The project was executed under the auspices of CEST in collaboration with the National Climate Change Committee (NCCC). The Division of Environment, under the Vice-President's Office, also played a role in the implementation.

4. The evaluation also looks at the various activities of the project. The project was divided into nine activities whose output was synthesized to produce the Initial National Communication Project. The project activities were as follows:

Activity 1: Establishment of the project management and national study team

Output: Organizational structure for starting the project

Activity 2: Preparation of greenhouse gas inventories

Output: An inventory of greenhouse gases

Activity 3: Programme to assess climate change and its adverse impacts

Output: Identification and assessment of mitigation options

Activity 4: Policy options for monitoring systems and response strategies for impacts

Output: Comprehensive vulnerability assessment for various sectors

Activity 5: Policy framework for implementing adaptation measures and response strategies

Output: Identification and assessment of adaptation options

Activity 6: Building capacity to integrate climate change concerns into planning

Output: Enhanced capacity of the national development planners and policy and decision makers to integrate climate change concerns into planning

Activity 7: Programmes related to sustainable development, research, public awareness, etc

Output: Public awareness at all levels

Activity 8: Provision of other relevant information

Output: Adequate information on UNFCCC obligations

Activity 9: Preparation of the National Communication

Output: Initial National Communication to be submitted to the UNFCCC secretariat

5. The project was executed by CEEST, a non-governmental organization, in collaboration with the National Climate Change Committee. The project was monitored through quarterly progress reports submitted to UNEP by CEEST. Two stakeholders' workshops (green-house gas inventory and vulnerability and adaptation assessments) were held for the dissemination of the results.

6. The quality of the studies produced under the GEF Enabling Activity Project of the Republic of Tanzania was good despite the fact that some members of the national study team did not receive any training. UNEP also found that the quality of the technical reports was good and did not need any external input.

7. The GEF Enabling Activity Project of the United Republic of Tanzania identified the following as special needs in the area of climate change:

- (a) Human resource development through short and medium-term training in climate change studies;
- (b) Refining models to make them user friendly and to suit national needs;
- (c) Training in climate change modeling and integrating this with socio- economic and meteorological issues;
- (d) Strengthening of CEEST and relevant government organizations;
- (e) Strengthening of technological management capacities;
- (f) Establishment and strengthening of linkages between research and development institutions, academia and productive sector activities;
- (g) Identification of reliable and appropriate financing mechanisms for technological innovation and investment in technology; and
- (h) Strengthening of national capacity to manage technological change.

8. The recommendations from this evaluation are as follows:

- (a) There should be realistic time frames to take into account local factors that affect the timely implementation of the project;
- (b) Methodologies to be adopted in the studies should be familiar to members of the national study team. If not, arrangements for training should be made before the project commences;
- (c) Awareness of climate change issues is critical for policy and key decision makers for the successful implementation of UNFCCC. The Government should mobilize funds and carry out climate change awareness campaigns for the general public;
- (d) The National Action Plan should be integrated into the development process of the country to ensure the success of the implementation;
- (e) There is need to build capacity in the Division of Environment and the Bureau of Statistics for

collection of data on activities;

- (f) With regard to green-house gas abatement, the following are recommended:
 - (i) Capacity-building in data management and modelling;
 - (ii) Reduction of the rigidity of land-use and forestry models so that they could be adapted to developing country needs;
 - (iii) Training on multi-criteria analysis of the mitigation options in order to link them with macroeconomic factors such as the gross domestic product (GDP), employment, rural development and sustainability.

(g) There is an urgent need for capacity-building and sustaining of relevant institutions in vulnerability and adaptation assessments. Mechanisms should be worked out for training the various members of staff and retaining them.

I. BACKGROUND

9. The United Republic of Tanzania, like many other countries, made a commitment at the United Nations Conference on Environment and Development of June 1992 to contribute to the global reduction of greenhouse gas emissions as a way of promoting sustainable development. It became a signatory to UNFCCC in 1992 and ratified it in April 1996. It has been a keen participant in various forums on climate change. In 1997, it played a pivotal role at the Third Conference of the Parties negotiations that led to the adoption of the Kyoto Protocol. It chaired the Group of 77 and China and spoke on behalf of the group.

10. The country has several statutes that govern resource exploitation and use in the various sectors of the national economy. The national environmental policy adopted in 1997 serves as a framework for implementing both the mitigation and adaptation response measures. It has, since 1986, been undergoing restructuring of its economy from a centralized and State-controlled economy towards a market oriented one. Agriculture is the most important sector of the economy of the United Republic of Tanzania, supplying food and raw materials. It is followed by manufacturing, mining and transport.

A. Previous climate change studies before the GEF enabling activity

11. The United Republic of Tanzania has carried out a number of studies to fulfill her obligations under UNFCCC. These include the following studies undertaken since 1993:

- (a) Development of the inventory of sources and sinks of green-house gas emissions supported by UNEP and USCSP between 1993 and 1994;
- (b) Technological, policy and other options for the mitigation of green-house gas in the United Republic of Tanzania supported by GTZ and USCSP between 1994 and 1996;
- (c) Assessment of vulnerability and adaptation to climate change impacts in Tanzania supported by USCSP between 1994 and 1996;
- (d) Development of the National Action Plan supported by the Government of the United States between 1996 and 1998;
- (e) Climate Change Mitigation in Southern Africa Phase 1 was financed by GTZ assisted by UNEP/CCEE;
- (f) Climate Change Mitigation in Southern Africa Phase 2 was supported by DANIDA and implemented by CEEST in collaboration with UNEP/CCEE; and

(g) The enabling activities for the Preparation of Initial National Communication Project were started in December 1997 and completed in July 2000.

12. The objective of USCSP was mainly to enhance capacity-building in the areas of green-house gas inventory, mitigation analysis and vulnerability and adaptation assessments. The GEF Enabling Activity Project built on the past and ongoing studies to enable the United Republic of Tanzania to develop consolidated and authoritative national reports. The project had a wide representation of experts from various government ministries, departments and non-governmental organizations. The various studies were peer reviewed by renowned experts in the relevant fields. Table 1 below shows the sectors studied and institutional representation.

Table 1: Sectors studied and institutional representation

SECTOR	INSTITUTION
Agriculture	Ministry of Agriculture and Livestock Development
Forestry	CEEST and the Division of Forestry and Bee Keeping
Livestock and grasslands	Ministry of Agriculture and Livestock Development
Coastal resources	Institute of Marine Science, Zanzibar
Wildlife and biodiversity	Ministry of Agriculture and Livestock Development
Water resources	Ministry of Water

13. USCSP began in 1994 and was completed in 1996. Its study reports provided useful input into the GEF Enabling Activities Study on the Initial National Communication. The Climate Change Mitigation in Southern Africa Phase 1 study identified cost-effective technological and non-technological options for green-house gas mitigation during the 1994-1995 period. These studies have ranked a number of mitigation options in energy, industry, agriculture, land-use and forestry sectors. They will help in the formulation of policies and procedures to minimize emissions within the economic endeavors of the country.

14. The Climate Change Mitigation in Southern Africa Phase 2 focused on land-use, agriculture and forestry sectors and examined the mitigation potential and the cost of protecting the natural carbon stocks (forestry) and increasing the sink by afforestation.

B. Objectives of the Global Environment Facility enabling activity project

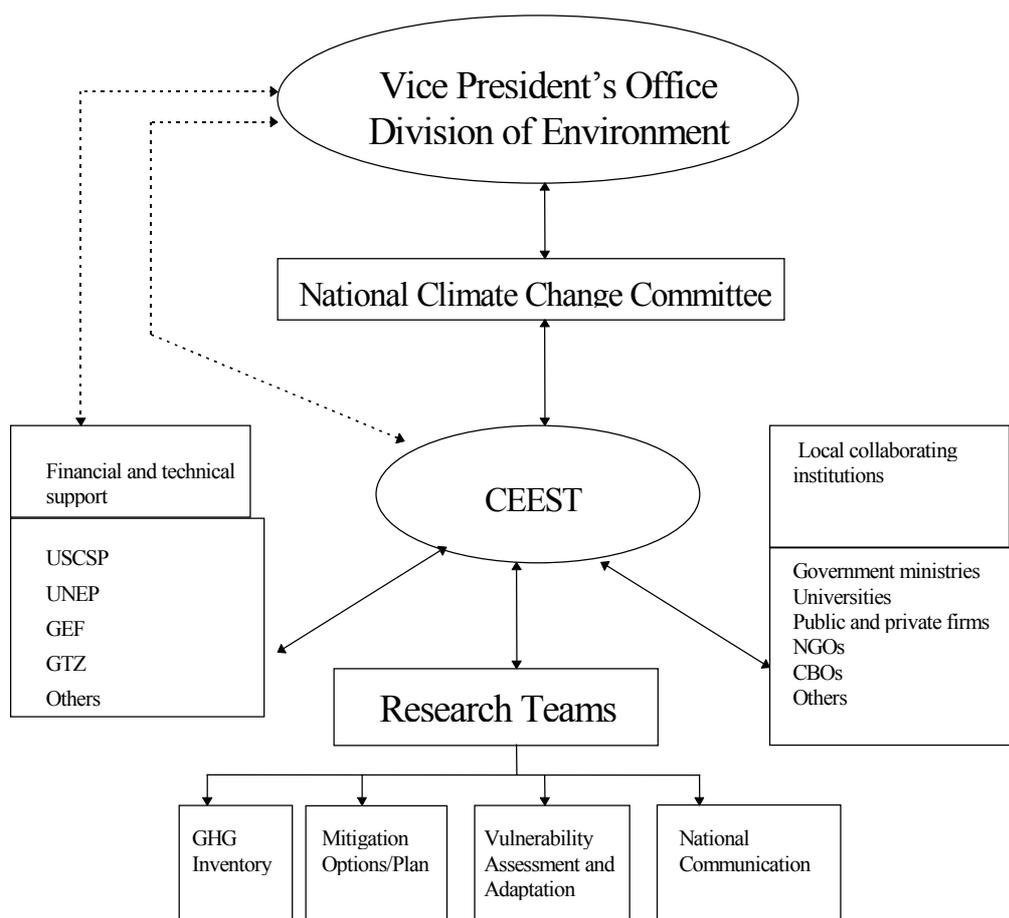
15. The objective of this project was to enable the United Republic of Tanzania to fulfill its

commitments and obligations as required by articles 4.1 and 12.1 of the Convention, especially the preparation of and reporting of its Initial National Communication based on the guidelines recommended by the Second Conference of the Parties. The project was scheduled to run for 24 months starting in August 1997 and ending in July 1999. The first disbursement of project funds was received in early September 1997. Due, however, to the process of setting up the national study team and the project management team, the preparation of contracts for the consultants and so on, the project commenced in December 1997 and was completed in July 2000, lasting a total of 32 months. The final draft Initial National Communication is ready and awaiting government endorsement before submission to the UNFCCC Secretariat.

C. Institutional framework, project management and coordination

16. The Division of Environment, under the Office of the Vice-President, is the national focal point for all matters relating to the environment. It acts as a link between the Government of the United Republic of Tanzania and UNFCCC. The GEF Enabling Activity project was executed by CEEST in collaboration with the National Climate Change Committee (NCCC). The organizational structure below illustrates the institutional structure under which the project was implemented. Figure 1 shows the organizational structure of the GEF Enabling Activity Project.

Figure 1: The organizational structure of the project



17. As a GEF implementing agency, UNEP, through the Atmosphere Unit, provided the following advisory and technical assistance to the project:

- (a) Technical literature and models including Intergovernmental Panel on Climate Change (IPCC) material;
- (b) Technical comments on country sector reports;
- (c) Drafted agenda for technical workshops;
- (d) Assisted the country expert on vulnerability assessment and adaptation by closely working with him to prepare technical presentation on the subject;
- (e) Invited country teams to participate in several technical workshops and training programmes organized by UNEP on green-house gas inventory preparation, abatement analysis, vulnerability assessments and adaptation.

18. CEEST is a non-governmental organization whose mission is to develop and sustain expertise and capacity for independent policy analysis, research and information dissemination in the fields of energy, environment, water and sanitation and natural resource management. CEEST collaborates with a number of local and international institutions and agencies. The institutional arrangement in the execution of the GEF Enabling Activity Project was unique in that CEEST coordinated and implemented it successfully. The quality of the reports was very good and CEEST must be commended for the good work done. It is worth mentioning here that the vast experience that CEEST had from the previous studies undertaken on energy and environmental issues contributed to the success of the project. In addition, the Government of the United Republic of Tanzania should also be commended for nominating a national non-governmental organization to implement the project. This was a unique experience in that a non-governmental organization worked closely with the Government and effectively coordinated various government institutions that participated in the project.

D. Background literature and experience

19. Most of the studies undertaken under this project were a continuation of the studies undertaken by USCSP and the green-house gas Inventories Project that was supported by UNEP/GEF. The project was therefore aimed at accomplishing, updating and filling gaps of the previous studies, with the exception of areas that were not covered under USCSP. The 1996 IPCC revised guidelines were used to determine emissions for 1994. The revised guidelines were also used to compile a revised green-house gas inventory for 1990.

20. The final draft report on the Initial National Communication of the Republic of Tanzania is a product of the combined effort of researchers who participated in previous climate change studies, in-house experts from CEEST and other experts who were co-opted during the Enabling Activity Project. The Division of Environment was the responsible authority while CEEST provided technical coordination for this work. In producing the Initial National Communication, references were made to local and international literature relevant to climate change and national communications submitted to the UNFCCC Secretariat by Annex 1 Parties.

II. PROJECT IMPLEMENTATION

21. The project was divided into nine activities for purposes of implementation. The outputs of each activity were synthesized to produce the Initial National Communication. The activities were carried out in a logical sequence as prescribed by Project Document Number GF/2200-97-43. In addition, established guidelines and methodologies including lessons learnt from the past and current studies formed the basis of the studies. The project activities are described in the sections that follow.

Activity 1: Establishment of the project management and national study teams

22. The project management team and the national study team were established under the auspices of CEEST. The project management team comprised the following persons: the Project Leader, Mr. Mark Mwandosya, Director and Chairman of CEEST; the Project Coordinator, Mr B. S. Nyenzi, Director of Meteorology and Assistant Coordinator; and Mr. Stephen Mwakifwamba, Research and Consultancy Officer at CEEST and the leader of each core group. The project management team was supported by a secretary.

23. The national study team comprised the following four core groups: the green-house gas inventory; mitigation options; vulnerability/impacts assessment and adaptation; and the National Communication. Each core group consisted of a number of experts drawn from government ministries and departments as well as the private sector. The project management team was provided with adequate and appropriate computer and telecommunication facilities. The major output of Activity 1 was the establishment of the project management team and the national study team which were fully committed to the successful implementation of the project.

Activity 2: Preparation of the green-house gas inventory

24. This work involved review of existing data, identification of data gaps and updating of green-house gas inventories from base year 1990 to 1994 (UNEP has sent communication with regard to CEEST with an indication that UNEP will not be able to accept the output of this report until the baseline is changed to 1994 as was specifically agreed by both Parties in the project document). Following new guidelines for non-Annex 1 Parties by the Second Conference of the Parties, the green-house gas inventory group focused on carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) and other important gases which are indirect green-house gas or ozone precursors, including the oxides of nitrogen (NO_x), carbon monoxide (CO) and non-methane volatile organic compounds ((NMVOCs) which were targeted. These gases were emitted from all energy sources, industrial processes, agricultural processes, land-use change and forestry and other sources. The green-house gas inventories were prepared using 1994 as a base year.

25. The study used emission factors based on IPCC default values in most of the calculations using the 1996 IPCC guidelines. The major problem encountered during the preparation of inventories was that different sources of activity data had different versions of data on the activities for the same year. The study was able to devise a spreadsheet system for data collection and management. The system could help to update green-house gas inventories regularly. The study was unable to develop local emission factors. Major outputs from this activity were:

(a) An updated green-house gas inventory for the year 1994 which was used as basis for selection of mitigation options;

(b) The results of this activity were discussed on 4 March 1999 at a stakeholders' workshop. The inventory work took more time than expected due to lack of activity data, hence the delay in hosting the stakeholders' workshop.

Activity 3: Programmes to address climate change and its adverse impacts, including abatement and sink enhancement

26. The group that worked on mitigation options focused on identifying and analysing a range of potential technological and other options for the mitigation of greenhouse gas emissions. An analysis of the economic and other implications of the identified mitigation analysis was carried out, forming the basis of screening the mitigation options as well as carrying out a multi-criteria assessment of the significance and impacts of the mitigation options. A sectoral analysis was done and a number of technological and non-technological options were identified that would serve as an input to various national plans and decision-making processes. Major outputs from this activity were: identification and assessment of potential mitigation options; recommendations on reduction of methane emissions in crop and livestock production; and the report of the workshop.

Activity 4: Policy options for monitoring systems and response strategies for impacts

27. The working group responsible for this activity focused on development of climate change scenarios and assessment of vulnerability and impacts of climate change in forestry, agriculture, livestock, coastal resources, biodiversity, human health and wildlife sectors. Some of the work on vulnerability and impact assessments was also done under USCSP. The working group could not extend the assessments to include the islands of Mtwara, Tonga, Mafia and Zanzibar due to insufficient funds. Extension of the assessments to Lake Nyasa and Lake Tanganyika could not be carried out as preliminary data were not available for these two basins. Some preliminary data for Lake Victoria were available and were improved on. The SPAR model did not work properly and no help was forthcoming from its developers. Major outputs from this activity were: production of important baseline data required for assessment of climate change vulnerability and impacts assessment and adaptation options; comprehensive assessments for various sectors; and the workshop report.

Activity 5: Policy framework for implementing adaptation measures and response strategies

28. This activity would have been based on the results of activity 4. There was no evidence of work done regarding the activity. However, mention was made that the activity had been well elaborated in the macroeconomic policy framework and sectoral policy framework which formed subchapters in the Initial National Communication. In addition, it was reported that the policy framework for implementing adaptation measures was included in the national action plans. The national action plans were not available during the evaluation. No workshop was held.

Activity 6: Building capacity to integrate climate change into planning

29. This activity focused on building and strengthening the national capacity to integrate climate change concerns into medium and long-term planning. Training was conducted for researchers and roundtable discussions were held with stakeholders. This activity resulted in enhanced capacity of researchers and stakeholders.

Activity 7: Programmes related to sustainable development, research, public awareness, etc.

30. This activity identified and developed a cost-effective awareness programme that reached some levels of society in the country. Due to insufficient funds, this activity focused on production of information packages, video aids and relevant publications using private print media. The major outputs of this activity were information packages, video aids and other relevant publications and enhanced public awareness to some levels of society in the country.

Activity 8: Provision of other information

31. The project provided information relevant to the achievement of the objectives of UNFCCC. It identified technical and financial needs associated with proposed projects and response measures under Article 4 of the Convention. The United Republic of Tanzania has submitted a proposal for additional GEF funding for developing national emission factors and mounting public awareness campaigns. The development of national emission factors will reduce the margin of uncertainty in emissions and removal of variables through appropriate institutional capacity-building.

Activity 9: Preparation of the Initial National Communications

32. The final draft Initial National Communication was completed in July 2000. The Initial National Communication is a synthesis of outputs from activities 2-8. The Division of Environment was the responsible authority for the activity while CEEST was the technical coordinator. A team of researchers who participated in previous climate change studies contributed to the development of the Initial National Communication. In addition, other experts were co-opted and provided their input. The working group responsible for this activity made reference to Initial National Communication reports submitted by Egypt, Lesotho, Mauritius and Zimbabwe. The draft Initial National Communication was sent to the Division of Environment, the National Environment Management Council, the Department of Meteorology, the Division of Forestry and the Ministry of Agriculture and Livestock Development for review. The final draft of the Initial National Communication will be presented to key policy makers for further review and government endorsement before submission to the UNFCCC Secretariat.

A. Monitoring the progress of the project

33. Preparations of the GEF Enabling Activity Project took place between 1 October and 31 December 1997. During that period, office accommodation and office equipment for the project were acquired. The national study team held one meeting to introduce the project to the national study team and review the various assignments. In addition, the national study team reviewed the terms of reference and the expected output and developed a work plan for the study.

34. Meetings between the project leader and the team leaders from each working group were held biweekly to review the progress of the project. At a higher level, two meetings of NCCC were held (4 March 1999 and 11 June 1999). At these meetings, the Project Leader gave a briefing on the activities of the project, after which NCCC discussed what had been presented and made recommendations for the way forward.

35. Quarterly progress reports were sent to UNEP. These reports contained a summary of the activities and a financial statement for the quarter. Only two copies of the quarterly progress reports were made available during the evaluation.

B. Workshops

36. The first stakeholders' workshop was held on 6 October 1998. At this workshop, presentations on climate change impact on agriculture and coastal resources sectors were made. The presentations were followed by discussions. A video was shown on the vulnerability of the Dar-es-Salaam and Unguja coastlines and the impact of the rise of the sea level due to climate change. Another stakeholders' workshop was held on 4 March 1999 at which the results of the green-house gas inventory study were presented and discussed.

C. Policy makers' view on the project results

37. Senior policy makers in the Government of the United Republic of Tanzania were informed of the progress of the project through the representation of various senior officials from government ministries and departments on NCCC. Through NCCC and the National Environmental Management Committee, the Government gets expert advice and policy analysis on issues related to climate change. The National Action Plan on Climate Change will be integrated with other national development plans and programmes. The Division of Environment is charged with the responsibility of ensuring that the plan is integrated into other programmes by channeling it through normal official planning procedures.

D. Sustainability of methodological issues and institutions

38. Tanzania has, through past climate change activities and the Enabling Activities Project, built capacity in climate change studies. There is an institutional framework for implementation of UNFCCC.

Although some capacity in climate change was developed through training and participation in USCSP, the majority of the people involved left the country for their post-graduate studies while others changed jobs and therefore were not available to participate in this project. However, the national study team was able to produce good results despite the limitation of data on activities and the absence of formal training. The country has submitted a proposal to GEF for funding a study to develop national emission factors. This activity is expected to contribute to the process of improving the green-house gas inventory methodology.

39. The capacity that has been built in the Division of Environment and other related agencies should be maintained. Special attention should be paid to sources and accuracy of activity data so that the margin of uncertainty in green-house gas emissions and removals is reduced. These activities will assist in the preparation of the Second National Communication. It is envisaged that the implementation of the National Action Plan through the various government ministries, departments and non-governmental organizations such as CEEST and the private sector will keep the momentum for the long-term sustainability of future climate change activities.

E. Quality of expertise

40. The national study team was made up of a wide range of local professional staff from different institutions with expertise in various areas of the project. A notable feature was the close collaboration among government institutions, non-governmental organizations and the private sector during the implementation of the project. In this regard, CEEST played a major role in coordinating the project. Under the GEF Enabling Activity Programme, some members of the National Study Team benefited from the workshops and training offered by the National Communications Support Programme (NCSP) in conjunction with the UNEP secretariat in 2000. The workshops and training were focused on green-house inventory preparation, abatement of green-house emissions, vulnerability and adaptation assessments.

F. Training

41. Training and institutional strengthening under the climate change training (Phase II) did not take place at all as described in the project document (paragraph 58). In addition, education and training for national development planners and policy and decision makers were not conducted (paragraph 58 of the project document). Some members of the national study team had received training during previous climate change studies in various institutions in the United States of America through USCSP and UNEP/UCCEE. Other training workshops were organized by the National Communication Support Programme as described in paragraph K.

G. Views of the Project Leader

42. The views of the Project Leader were summarized as follows:

(a) The project was well established and properly implemented although the funds were not sufficient for accomplishing all the identified activities. In future, GEF/UNEP should allocate more funds to the project;

(b) The project should start by providing all required tools of analysis and training workshops should be carried out well in advance by the Atmosphere Unit of UNEP. This will enable country teams to undertake the studies properly;

(c) Time was not sufficient for accomplishing all the activities. In future, adequate time should be allocated for successfully carrying out all project activities.

H. Special needs

43. Apart from producing the Initial National Communication, the study has assisted in the formulation of the National Climate Change Action Plan. The plan will be circulated to various stakeholders and the country as a whole. Specific areas that need further attention are:

- (a) Human resource development through short and medium-term training in climate change studies;
- (b) Refining models to make them user friendly and suit national needs;
- (c) Training in climate change modelling and integrating this with socio-economic and meteorological issues;
- (d) Strengthening of CEEST and relevant government organizations;
- (e) Strengthening of technological management capacities;
- (f) Establishment and strengthening of linkages between research and development institutions, the academia and activities of the productive sector;
- (g) Identification of reliable and appropriate financing mechanisms for technological innovation investment in technology;
- (h) Strengthening of national capacity to manage technological change.

III. RESULTS OF THE GLOBAL ENVIRONMENT FACILITY ENABLING ACTIVITY STUDY

(a) Mitigation options

44. A number of mitigation options for reducing greenhouse gas emissions were identified in various sectors. The sectors include energy, industry, transport, household energy, agriculture and livestock, forestry and land-use as shown in table 2. Mitigation options identified are both technological and non-technological. Non-technological options include such interventions as policy and behavioural changes.

Table 2: Some green-house gas mitigation options

SECTOR /OPTION	DESCRIPTION
<p>Sector: Energy supply</p> <p><u>Options</u></p> <ol style="list-style-type: none"> 1. Advanced electricity generation technologies 2. Efficiency improvements 3. Charcoal production 4. Coal mining 5. Renewable technologies 	<ol style="list-style-type: none"> 1. Install 230MW of combined cycle power plants instead of simple cycle gas turbines 2. Increase the efficiency of existing power generation systems by repowering and improving transmission and distribution systems 3. Improve the conversion efficiency of charcoal kilns 4. Optimize methane release from coal mines 5. Promote use of solar collectors, photovoltaics, wind turbines and biomass
<p>Sector: Industry</p> <p><u>Options</u></p> <p><u>Cement Production</u></p> <ol style="list-style-type: none"> 1. Production management 2. Carbon dioxide recovery system 3. Fuel switching 4. Production mix <p><u>Pulp and Paper</u></p> <ol style="list-style-type: none"> 1. Efficiency improvements 2. Recovery of carbon dioxide <p><u>Other industries</u></p> <p>Energy efficiency improvements</p>	<ol style="list-style-type: none"> 1. Install automatic control systems for reducing the amount of fuel used and improving production efficiency. 2. Install CO₂ recovery systems. Recovered CO₂ can be used for other industrial applications. 3. Substitute natural gas for fuel oil in two production plants. 4. Produce blended cements such as pozzolanic cements, blast furnace slag cement and Portland cements in order to reduce the amount of fuel used for calcinations and the amount of lime used per unit of cement produced. 5. Optimize the recovery boiler in order to reduce both the amount of time and energy used. 6. Recover CO₂ from calcinations by absorption of CO₂. 7. Improve efficiency in existing plants through maintenance, improved steam production and management, improvements to motor drive systems, cogeneration and power factor correction

SECTOR /OPTION	DESCRIPTION
<p>Sector: Transportation</p> <p><u>Options</u></p> <ol style="list-style-type: none"> 1. Vehicle efficiency 2. Improve system efficiency 3. Modal split 4. Urban transport 	<ol style="list-style-type: none"> 1. Improve technical efficiency of vehicles. 2. Improve traffic flow, increase vehicle load factors, improve vehicle maintenance, traffic operation, training and management. 3. Rehabilitate and expand the railway system. 4. Introduce city trains in Dar-es-Salaam.
<p>Sector: Household and service sector</p> <p><u>Options</u></p> <ol style="list-style-type: none"> 1. Electrical appliances 2. Cooking stoves 3. Waste management 	<ol style="list-style-type: none"> 1. Improve efficiency of electrical appliances. 2. Increase efficiency of biomass cooking stoves. 3. Waste management including landfills, waste management and water treatment.
<p>Sector: Agriculture and livestock</p> <p><u>Options</u></p> <ol style="list-style-type: none"> 1. Agricultural practices 2. Livestock husbandry 	<ol style="list-style-type: none"> 1. Reduce methane and carbon emissions through better practices related to fertilizer application, rice cultivation and loss of organic carbon from cultivated soils. 2. Better husbandry including better breeding and feeding practices
<p>Sector: Land-use and forestry</p> <p><u>Options</u></p> <ol style="list-style-type: none"> 1. Forest management 2. Grasslands and range lands 	<ol style="list-style-type: none"> 1. Maintain existing stocks through forest protection and conservation and expand carbon sinks by means of afforestation, reforestation and enhanced regeneration an agroforestry practices. 2. Maintain or increase carbon sequestration through better soil management and sustainable agricultural practices.

(b) Vulnerability to climate change

44. The United Republic of Tanzania implemented a study on the assessments of vulnerability and adaptation to the impacts of climate change on various sectors in country. This study was supported financially by USCSP. The country is likely to suffer significant physical and socio-economic impacts from possible climate change. Climate change will lead to increased frequency of floods, droughts, and storm surges, rise in the sea level and other severe weather-related phenomena. According to the results of the study, the most vulnerable sectors to climate change are agriculture, forestry, livestock, human health, water and coastal resources. This study was published by CEEST in the form of a book The assessment of vulnerability and adaptation to climate change impacts in the United Republic of Tanzania. Under the GEF Enabling Activity Project, the vulnerability and adaptation studies under USCSP were updated. In addition, the scope of the study was expanded to include Zanzibar Island and the wildlife sector which were not studied under USCSP.

Table 3: Some of the potential impacts of climate change on various sectors

SECTOR	POTENTIAL IMPACTS
Agriculture	<p><u>Coffee – principal cash crop</u></p> <ol style="list-style-type: none"> 1. Rise in temperature and rainfall will result in low yields due to increase in pests and plant diseases. 2. Drought will result in crop failures. <p><u>Maize – major staple food crop</u></p> <ol style="list-style-type: none"> 1. Lower yields would be expected under the double carbon dioxide climate than under the baseline climate. 2. Decrease in rainfall and increase in temperature would result in low yields. <p><u>Cotton - cash crop</u></p> <ol style="list-style-type: none"> 1. No significant relationship between yield and temperature and rainfall. 2. Higher temperatures will result in low yields due to increase in pests and diseases.
Grassland and livestock	<ol style="list-style-type: none"> 1. Rangeland is important in livestock production. The bulk of livestock feed is forage. This invaluable resource is greatly affected by change in climatic factors, especially temperature and rainfall. Heavy rainfall would result in abundant water for drinking and forage, which is good for livestock breeding. 2. Increases in temperature and rainfall would result in changes in plant species and create favourable conditions for pests to thrive, reducing the livestock population. 3. Drought conditions will result in heavy animal losses due to thirst and hunger.
Forestry	<ol style="list-style-type: none"> 1. Decline in precipitation and increase in temperature will result in total land shift from subtropical dry forest and subtropical moist forest to very dry tropical forest, tropical dry forest and small areas of tropical moist forests. 2. Climate change associated with disease and destruction of seeds will cause changes in

SECTOR	POTENTIAL IMPACTS
	<p>the composition and structure of species resulting in some species failing to reproduce.</p> <p>3. Vegetation will suffer under drier conditions.</p>
Human health	<p><u>Malaria – one of the major public health problems in Tanzania</u></p> <p>1. Climate change is expected to affect the ecology of malaria in a given geographical location.</p> <p>1. Climate change will also affect the life cycle of the malaria vector as well as the transmission of malaria. The malaria vector survives between 120°C and 350°C.</p> <p>2. Increase in humidity and rainfall will provide breeding sites and increase the survival of mosquitoes.</p>
Water resources	<p>Three river basins were studied (Ruvu, Pangani and Rufiji).</p> <p>1. In the three basins, climate change scenarios due to doubling carbon dioxide concentration produced seasonal variation in runoff.</p> <p>2. The Ruvu and Pangani basins with relatively higher mean temperatures had an overall decrease in runoff while Rufiji produced an increase in runoff. The reason for an increase in runoff in Rufiji basin can be attributed to an increase in rainfall shown by the rainfall scenarios of the Global Climate Model.</p>
Coastal resources	<p><u>The Dar-es-Salaam coastline</u></p> <p>1. Dar-es-Salaam was the most vulnerable while Tanga was the least vulnerable area.</p> <p>2. Climate change was likely to increase the strength and frequency of tropical storms.</p> <p>3. There would be damage to important infrastructure</p>
Wildlife and biodiversity	<p><u>Mikumi National Park</u></p> <p>The UK89 model predicted increases in precipitation and ambient temperatures that would result in habitat suitability loss of ungulates.</p>

(c) Response measures

46. Possible response measures to adaptation of climate change in Tanzania show that some measures have two-fold benefits - achieving the objectives of the sector as well as mitigating the effects of climate change impacts on development. Less costly measures can be considered for implementation in the short and medium-term programme while those demanding higher investment for further research can form part of the long-term programme. Table 4 shows some possible adaptation measures.

Table 4: Possible adaptation measures

SECTOR	MEASURES
Agriculture	<p><u>Coffee</u></p> <ol style="list-style-type: none"> 1. Parts of southern Tanzania will experience reduced rainfall. 2. Introduce crop varieties whose maturities vary widely and which have climate tolerance. 3. Introduce irrigation to supplement moisture losses caused by increased temperature and reduced precipitation. <p><u>Maize</u></p> <ol style="list-style-type: none"> 1. Introduce food and other social security programmes. 2. Introduce insurance against crop failure. <p><u>Cotton</u></p> <ol style="list-style-type: none"> 1. Shift cotton growing from the southern and central to the northern areas where rainfall availability would be better. 2. Introduce drought resistant crops
Grassland and livestock	<ol style="list-style-type: none"> 1. Changes in management and land-use. 2. Adjustment of to grazing systems that avoid the destruction of the environment. 3. Planning of animal breeding during the rainy season 4. Better animal husbandry measures and optimization of livestock production.
Forestry	<ol style="list-style-type: none"> 1. Better forest management practices. 2. Afforestation programmes in degraded lands using more adaptive species. 3. Change in the use of forests and forest products to reduce tree felling. 4. Enhancement of forest seed banks and development of new plant varieties. 5. Encouragement of multiple management practices in the case of plantations. 6. Reduction of habitat fragmentation. 7. Promotion of the development of migration corridors and buffer zones. 8. Application of technologies that use materials other than wood.

Human health	<ol style="list-style-type: none"> 1. Institution of malaria control measures. 2. Monitoring of relevant special studies. 3. Making use of environmental, chemical and biological barriers and chemotherapy.
Water resources	<ol style="list-style-type: none"> 1. Increase capital investment in reservoirs and the infrastructure. 2. Reduce the demand for water by investigating new water saving- technologies and changing the patterns of use conservation in the domestic sector. 3. Conservation in the agricultural sector. 4. Conservation in the industrial sector.
Coastal resources	<ol style="list-style-type: none"> 1. Abandonment of the land and structures in vulnerable areas and resettlement of inhabitants. 2. Continued occupancy and use of vulnerable areas which may involve changes in land-use. 3. Building of a barrier wall around the vulnerable areas.
Wildlife and biodiversity	<ol style="list-style-type: none"> 1. Implementation of ecosystem and forest policy options for adaptation of anticipatory and reactive adaptive measures to alleviate climate change impacts on the ungulates. 2. Fire control to minimize degradation and disturbances of the natural vegetation cover. 3. Removal of impediments to migrations and colonization. 4. Preparation of land for the establishment of the desired species. 5. Plans for assisted migration due to climate change influences and the control of alien species to minimize disturbances and hence reduce their susceptibility to invasion. 6. Comprehensive food and water provision programme aimed at alleviating the impact of drought or famine.

A. Scope of the evaluation

1. The National Climate Change Committee

47. NCCC is charged with the responsibility of providing the Government with expert advice and policy analysis on issues related to climate change. The Committee receives periodic climate change reports for review and provides advice on the implementation process of the study and gives guidance to researchers. NCCC comprises representatives from government ministries and departments, non-governmental organizations, academic and research institutions. It is chaired by the Director of Environment. It played a key role by providing guidance on the implementation of the project through discussions held during meetings. The list of the members of NCCC appears in annex.

2. Planned and actual outputs

48. To a large extent, what was planned in the project document was achieved apart from the four stakeholder workshops that were not held. Although some difficulties were experienced with models, the quality of the studies was good. It is worth noting that UNEP provided technical assistance on a proactive basis as Tanzania did not request for technical assistance. This is a clear demonstration of the national capacity that was built through the GEF Enabling Activity Project and previous climate change projects in the country.

3. Lessons learnt from the implementation of the project

49. The following lessons have been learnt from the implementation of the project:

- (a) Prior consultation with relevant stakeholders can help to identify a number of problems that could be avoided during implementation;
- (b) Lack of data on the activities greatly hampered the success of the project;
- (c) Due to reasons of confidentiality, the sources of data were not willing to release the required data as they thought the data might be used against them by the tax authorities;
- (d) It was difficult to operate some software (computer models) because training was not provided. It would be better to provide training prior to the commencement of the project;
- (e) Institutional awareness of climate change is very low. Many people representing various institutions that the national study team came into contact with did not understand climate change issues. It was difficult for many to appreciate the measures proposed to fulfil UNFCCC obligations. There is therefore need to carry out climate change institutional and public awareness campaigns.

4. Appropriateness

50. In assessing the appropriateness and in meeting the long-term objectives of UNEP, GEF and UNFCCC, the study has benefited Tanzania in the following ways:

- (a) The Establishment of a green-house gas inventory has helped to identify sectors emitting green-house gases and the level of emissions. This will help in knowing the position of the country in terms of emissions and sinks;
- (b) As a result of the identification of mitigation options, measures can be developed that could limit green-house gas emissions leading to stabilization of concentration of green-house gases in the atmosphere;
- (c) The identification of critical sectors that are vulnerable to climate change will assist in developing adaptation measures;

(d) The project assisted in building human resources capacity in the area of climate change in order to address climate change issues in the country.

B. Results of the evaluation

51. The results of the evaluation are as follows:

(a) The enabling activity has helped the United Republic of Tanzania to produce its Initial National Communication that will be submitted to UNFCCC;

(b) In determining the appropriateness of the project to the objectives of UNFCCC, GEF and UNEP, the project has built capacity in climate change, laid a foundation for future projects on climate change and provided a basis for reporting the position of the United Republic of Tanzania on climate change to UNFCCC.

(c) The quality of the reports is good. The project outputs could have been better if training had been provided on models such as DSSAT and SPAR and more funding had been made available. The National Action Plan will be integrated into the national development process. The project met the identified objective of producing the Initial National Communication;

(d) No awareness programmes were conducted for the majority of the people. For the key stakeholders that participated in workshops and NCCC meetings, the level of awareness was raised. The level of awareness among stakeholder institutions is much higher than prior to the execution of the greenhouse gas Enabling Activity Project;

(e) Stakeholder involvement was at three levels: members of NCCC; members of the national study team recruited after the approval of the project; and participants in stakeholders' workshops. The members of NCCC provided guidance to the project. The members of the national study team were involved in the four components of the study; the lesson learnt from this arrangement is that it was not possible for the members of NCCC and the national study team to contribute to the process of project design as they had not been appointed at this stage. In future, it would be advisable to hold a national seminar or workshop at which people who have participated in previous studies on climate change can help in the formulation of project proposals. At such a workshop, various project components, models, the time frame and so on could be discussed. After such a workshop, the relevant people could then prepare project proposals. This would minimize the number of problems likely to arise during project implementation and minimize the delays;

(f) Capacity has been built over a number of years. The project has increased the awareness of various climate change issues. This has equipped negotiators with the necessary skills for negotiation at the meetings of the Conference of the Parties of UNFCCC. Unfortunately, due to budgetary constraints, sustainability will depend on the provision of funds to continue climate change activities and the debate on climate change issues. It might be useful to persuade the Government to consider funding some of the activities to ensure that the capacity built is not wasted;

(g) UNEP gave very useful assistance. It assisted the United Republic of Tanzania in the formulation of proposals and in training workshops organized in conjunction with the National Support Communications Programme. However, the training workshops should be conducted before project implementation. Although UNEP assisted the national study team in many cases in the acquisition of relevant software, technical back-up was not available from the source of the software. It is strongly recommended that a contractual relationship between UNEP and software developers be established to enable the latter to be responsive to the problems and needs of the national study team;

(h) The project was monitored through quarterly reports that were sent to UNEP. It is strongly recommended that UNEP officials meet the national study team at project start-up and draw up a timetable for the various activities that should strictly be adhered to. UNEP and the national study team should decide at what stage the project should be visited and monitored. This would help in identifying problems before they occur. An evaluation should then be conducted at the end of the project;

(i) The organizational structure was effective. In terms of the management and financial systems,

CEEST entered into a contractual agreement with each member of the National Study Team. A full complement of staff was employed to take care of various aspects of the project such as accounting, typing and communication. The project's expenditure was subjected to an independent audit;

(j) No training was provided at the beginning of the project. Some of the analytical tools such as DSSAT and SPAR models did not work properly. Some analyses were data-intensive and, as a result, the members of the national study team could not deliver in time. Members of the national study team worked on a part-time basis on the project. At times, their employers assigned them work that took priority over the project's work. Government bureaucracy in the approval process also contributed to the delay in endorsing the final draft of the Initial National Communication. UNEP provided technical literature and IPCC material and training opportunities in conjunction with NCSP. It also provided technical review of sectoral reports. The executing agency requested for extension after anticipating delay in the completion of the project. The following measures need to be taken: proper training and data analysis in the form required before the commencement of the project; and persuasion of institutions to release researchers so that there is full commitment to the project to ensure its timely implementation and success. Implementation of the above measures will no doubt call for additional financial resources;

(k) Measures for national institutions to initiate the integration of the results and the recommendations of the enabling activity into the national development process are yet to be implemented. It is strongly recommended that the Government formulate a climate change policy and incorporate the results of the climate change studies into the national development process. UNEP and GEF, in consultation with the executing agency, should work out plans and modalities of monitoring these activities;

(l) At the global level, there is need to identify possible areas in which emissions could be reduced. At the regional level, capacity-building could be enhanced through interactions with colleagues at regional workshops and information sharing. At the national level, there is need for capacity-building and institutional strengthening and contribution to policy analysis and formulation and for identification of critical areas that will need intervention, especially vulnerability and adaptation;

(m) The results of the project compare well with the short and long-term results identified in the project document;

(n) There was no gender consideration in the project; the inclusion of women in it was coincidental;

(n) Concrete suggestions and recommendations appear in section T;

C. Observations and rating

52. The terms of reference for the evaluation require that the success or failure of the items indicated in table 5 below be assessed on a scale of 1 to 5. According to the scale, 1 is the highest while 5 is the lowest. From the table, it is clear that the project did well with an average score of 2.1.

Table 5: Rating of the success of the implementation of the project

NO.	PARAMETER	RATING	COMMENTS
1	Timeliness	4	A number of factors delayed the project.
2	Achievement of results/objectives	1	The technical reports were of good quality and had no external input. The draft final Initial National Communication was produced.
3	Attainment of outputs	3	More stakeholder workshops could have been held.
4	Completion of activities	2	Modelling of the land-use sector and macro-economic aspects was not done in the mitigation analysis. The mitigation report can be improved to contain all the necessary details.
5	Project executed within the budget	1	This was achieved.
6	Impact created by the project	2	The impact of the project has been affected by low levels of awareness among stakeholders and the general public.
7	Sustainability	2	Tanzania does not have financial resources and technological capacity to sustain the activities contained in the National Action Plan.

IV. CONCLUSION

53. It is gratifying to note that Tanzania has been able to produce its Initial National Communication without requesting for external expertise. A unique feature of the Tanzania GEF Enabling Activity Project is the way the institutional structure of climate change activities was organized, with CEEST playing a key role in coordinating the project. The way CEEST collaborated with various institutions like government ministries and departments, the private sector, non-governmental organizations, community-based organizations and others is commendable. CEEST also acts as a secretariat to the National Climate Change

Committee. The capacity of the members of the national study team has been enhanced through several technical workshops and training programmes organized by UNEP on green-house gas inventory preparation, abatement analysis, vulnerability assessment and adaptation. Through interactions during the implementation of the project, many institutions have become aware of climate change issues in Tanzania.

54. Through the GEF Enabling Activity Project, Tanzania has been able to prepare its Initial National Communication. The project has also assisted in filling the gaps and building on a number of past and ongoing activities related to climate change. The National Action Plan has been produced and will be integrated into the national development programmes. The plan contains policy frameworks and options for adequate monitoring systems and for implementing adaptation measures and response strategies. It will guide the implementation of all climate change activities.

V. RECOMMENDATIONS

A. Time frames

55. Although the disbursements of the project funds were timely, the project was not implemented on time. The GEF Enabling Activity lasted 32 months instead of the 24 months indicated in the project document. The main reasons for the delay were as follows:

- (a) The project document did not take into account local factors such as government procedures and recruitment of the members of the national study team;
- (b) The research documents were not reviewed on time;
- (c) With regard to the methodologies, some of the models were difficult to implement. The members of the national study team spent a great deal of time learning how the models should be applied;
- (d) The models were data-intensive. The available data were unreliable and researchers had to collect data a second time;
- (e) It was discovered during the implementation of the project that there was more work than indicated in the project document ;
- (f) The majority of the members of the national study team worked on the project part-time as they had to attend to their normal duties.

Recommendations

56. It is recommended that:

- (a) Project time frames take into account the recruitment of the members of the National Study Team, the time required to peer review draft reports and government approval procedures;
- (b) The members of the National Study Team be trained in areas that are likely to be difficult during project implementation. Training where possible should be provided before project start-up;
- (c) Capacity be built in relevant government institutions for collection of data on activities;
- (d) Permission be sought from the employers of members of the national study team to allow them to devote more time to climate change studies and activities.

B. Methodologies

57. Most of the models used in the studies could not work due to many local factors that prevented them from operating effectively. Some of the models could be modified to suit local conditions.

Recommendation

58. Where possible, models should be developed in collaboration with local scientific institutions and scientists to improve the quality of the results and to make it possible to make accurate predictions and assess the impacts of climate change accurately.

C. Public awareness

59. Public awareness of climate change issues is critical to the successful implementation of UNFCCC. Some of the response measures involve change in lifestyles. People will not change their lifestyles unless they are aware of the consequences of climate change. Experience has shown that policy makers will be reluctant to commit government resources to issues that they know little about.

Recommendation

60. Awareness workshops should be organized for key policy makers, academia, research institutions, the private sector and non-governmental organizations. These should be followed by training workshops for media personnel and the civil servants responsible for planning in relevant key government ministries and departments. The Government should also make budget provisions through the relevant institutions for public awareness campaigns.

D. The National Action Plan

61. The National Action Plan will be integrated into the national development plans and programmes. This will ensure quick implementation of some of the measures in the plan. Like many non-Annex 1 countries, Tanzania does not have financial resources to implement the mitigation and adaptation measures and will therefore need the support of the international community to achieve the objectives of the Convention.

Recommendation

62. Implementation of some of the mitigation and adaptation measures presented in tables 2 and 4 does not require huge financial resources. It is recommended that some of these measures be implemented together with other national development programmes.

E. Interim green-house gas finance

63. The United Republic of Tanzania will be eligible for the interim GEF fund (\$100,000) as soon as it submits its Initial National Communication. The final draft of the Initial Communication is ready and awaiting the Government's endorsement before submission to the UNFCCC Secretariat. The interim fund is meant for capacity-building in areas that need strengthening and maintenance of the momentum of climate change activities while waiting for the funds to start the process of preparing the Second National Communication.

Recommendation

64. It is recommended that the United Republic of Tanzania use the interim fund for, inter alia, developing national emission factors and public awareness programmes.

F. The green-house gas database

65. During the implementation of activity 2 of the project, a computer programme was developed for data collection and a management system that will allow the updating of data and green-house gas inventories regularly. There is need to build capacity in the Division of Environment and the Bureau of Statistics for collection of data on activities. Unavailability and unreliability of data were among the problems encountered during the implementation of the project. Similar activities that had taken place had inconsistent versions of data.

Recommendation

66. To overcome the problem of inconsistencies in the data on activities, it is recommended that funds be made available for the purchase of computers and relevant software for the collection and processing of data on activities. This should be an ongoing exercise. Training, where necessary, should be provided to some staff at the Bureau of Statistics. This should be done to ensure that there is accurate data on activities at all times that can be used to produce a high-quality green-house gas inventory that would provide a basis for selecting mitigation options.

G. Green-house gas abatement options

Recommendations

66. It is recommended that:

- (a) Capacity-building in data management and modeling be intensified;
- (b) The rigidity of land-use and forestry models be reduced so that they are adapted to the needs of developing countries;
- (c) Training be provided on multi-criteria analysis of mitigation options in order to link them with macroeconomic factors such as GDP, employment, rural development and sustainability.

H. Vulnerability and adaptation

67. A lot of effort has been made in building capacity in climate change activities in the United Republic of Tanzania. In 1994, an agreement was signed between Tanzania and USCSP to undertake a number of climate change studies such as vulnerability and adaptation assessments of major natural resources and socio-economic sectors. Some members of the national study team attended a training workshop on methodological tools to ascertain the vulnerability of various sectors to climate change organized by USCSP in Hawaii from 30 January to 10 March 1995. The workshop enriched the Tanzanian study team with methodological tools of analysis and sharing of experience with other country study teams and learning from other countries and regions of the world.

68. It is regrettable that after receiving training in vulnerability and adaptation assessments, most of the members of the national study team were not available to participate in the GEF enabling activity as they had left employment or had gone overseas for their post-graduate studies. The new members of the National Study Team had no training and had to depend on manuals to learn how the computer models worked. No assistance was received from the institutions that had developed the models whenever members of the National Study Team encountered difficulties in operating the models. In some cases, models did not work properly and consultants had to rely on their expert judgement to come up with results.

Recommendations

69. Vulnerability and adaptation assessments are critical areas of climate change studies for non-Annex 1 countries as they do not have financial resources and technological means to respond adequately to the effects of climate change. It is recommended that:

(a) The urgent need for capacity-building and sustaining of relevant institutions in vulnerability and adaptation assessments be addressed. Mechanisms for training of members of staff and retaining them should be put in place to ensure that they can contribute to the process of implementing UNFCCC effectively;

(b) The number of sectors to be studied be limited to about three instead of seven. This will result in more resources being available for the few sectors studied and enable consultants to carry out in-depth studies;

(c) The consultants' fees be increased as more financial resources become available. This would result in improved quality of work.

(i) Attendance of National Communication side events at meetings of the Conference of the Parties

70. The team responsible for this activity learnt a great deal from the four initial national communications from non-Annex 1 countries that had been submitted to the UNFCCC Secretariat. The four initial national communications were from Egypt, Lesotho, Mauritius and Zimbabwe. Reference to these documents was useful in the preparation of the Tanzanian Initial National Communication.

71. It is worth noting that at the meetings of the Conference of the Parties, side events are organized where several presentations are made on national communications. These are useful meetings that can benefit countries that are in the process of preparing their initial national communications. The GEF Enabling Activity Project does not have budget provisions for attending meetings of the Conference of the Parties. The financial assistance that is available for developing countries from the UNFCCC Secretariat is normally given to delegates nominated by the Government who are not necessarily members of the national study team.

Recommendation

72. It is recommended that financial consideration be given for members of the National Communication Group to attend side events on national communications at meetings of the Conference of the Parties.

Annex

Members of the National Climate Change Committee

MEMBER	INSTITUTION	REPRESENTATIVE
Director	Office of the Vice-President	Mr. E. Mugurusi (Chairman)
Chairman and Director	CEEST	Mr. M. J. Mwandosya
Director	Department of Meteorology	Mr. B. S. Nyenzi
President	Tanzania Chamber of Commerce	
	Industry and Agriculture	Mr. C. Mwanyika
Director	Crop Development MAC	Mr. B. W. Rwenyagira
Journalist	Freelance journalist	Mr Z Ubwani
Head of Physics	University of Dar-es-Salaam	Mr. E.C. Njau
International Affairs	Ministry of Foreign Affairs	Mr. M.W. Mangachi
Director	National Environmental	Mr. K.C. Sengoe
Management Council		
Assistant Director	Office of the Vice-President	Mr. R.S. Muyungi
Assistant Director	Office of the Vice-President	Ms. A. Madete
Director	Forest and Bee keeping Division	Mr. G.J. Kamwenda
Commissioner	Ministry of Natural Resources	-
and Tourism (Fisheries)		
Commissioner	Ministry of Energy and Minerals	-
Secretariat	CEEST	Mr B Kajamiti
Secretariat	CEEST	Mr. S.M. Mwakifwamba

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