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UNITED NATIONS ENVIRONMENT PROGRAMME

PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT

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|             |   |
|-------------|---|
| To:         | Mr. Avami Vaish<br>GEF Secretariat<br>Washington D.C.   |
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| From:       | Pak Sum Low<br>Senior Programme Officer (Climate Change/Ozone)<br>GEF Coordination Office                     |
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| Subject:    | Lesotho: Enabling Activities for the Implementation of the UN Framework Convention on Climate Change (UNFCCC) |

Prefix No: \_\_\_\_\_

Dear Avami,

Attached please find the revised Lesotho Proposal. I have marked those paragraphs which have been revised based on the comments received in your e-mail dated 14 August 1996. Also, after consultations with the Lesotho Meteorological Services, the nominated Executive Agency for the project by the Lesotho Government, we have now produced a revised budget which clearly indicates the cost for UNEP's Coordination. This cost (US\$26,000 or about 8% of the total estimated cost) is excluded from the Project Management cost of US\$58,000, which will be spent entirely on the local Project Management Team.

As advised by you, we have now broken down the cost of each proposed activity into major relevant items for ease of reference.

Kindly note that the proposed budget is entirely country-driven. It is produced entirely based on Lesotho's specific needs and circumstances, and each budget line can be fully justified. Please let me know if you need any further information.

With these clarifications, we would be most grateful if you could now kindly seek the approval of the CEO for this proposal as soon as possible.

With best regards,

*Pak Sum*

p.s. Vijay asks me to send his best regards to you.

Country: Lesotho

Project Title: Lesotho: Enabling Activities for the Implementation of the UN Framework Convention on Climate Change (UNFCCC)

GEF Focal Area: Climate Change

Country Eligibility: Ratified UNFCCC on 7 February 1995

GEF Financing: US\$350,000

Government Counterpart Financing: US\$50,000(in kind)

GEF Implementation Agency: UNEP

Executing Agency: Lesotho Meteorological Services (LMS)

Local Counterpart Agency: National Environment Secretariat (NES), Lesotho

Estimated Starting Date: September 1996

Project Duration: 2 years

6. A recent survey by the Department of Energy (DOE) shows Lesotho's total energy consumption at 26,000 TJ, which represents 13,000 MJ or an equivalent of 430 kg of oil per

## Energy supply and demand

5. The industrial sector currently contributes some 38% of GDP, its share having grown rapidly due to the recent investment in the LHP and associated infrastructure. However, manufacturing base remains small, with weak linkages with the rest of the economy.

4. More than 55% of the population derive some income and employment from the agricultural sector, but Lesotho has limited comparative advantage in agriculture and the sector currently contributes around 14% of GDP. Only 9% of the total land area is suitable for arable production. Lesotho produces less than half her domestic food needs. Livestock products now contribute more to agricultural output than arable products.

3. Lesotho has a limited resource base. Water is the only major natural resource in the country, and is being developed through the Lesotho Highlands Water Project (LHWP), which aims to sell water to the RSA and to generate electricity for Lesotho. Other resources include small deposits of coal, uranium, limestone, phosphates and diamonds and semi-precious stones, but generally insufficient for commercial exploitation. Lesotho's other main resource is her workers in gold and coal mines, and this reflects Lesotho's heavy dependence on the South African economy.

2. The climatic conditions of Lesotho are subject to wide seasonal and geographic variations. Temperatures range from -4 to 32 °C in the Lowlands, and are generally lower and more volatile in the highlands. The mean annual rainfall ranges from 600 mm in the southern and western lowlands to 1200 mm in the north-eastern highlands. The fragile ecosystems of the country are vulnerable to frost and heavy snowfall in winter and high intensity of rainfall and hail storms in summer, while recurrent periods of drought have contributed to desertification in the southern districts of the country. Rapid population growth and intense pressure on land resources have further contributed to serious environmental degradation. With a GNP/capita in 1994 of c. US\$540, Lesotho currently ranks among the world's Lower Income Countries.

1. Lesotho is a small developing, land-locked and a mountainous country of 30,355 square km wholly surrounded by the Republic of South Africa (RSA), with a rapidly growing (2.6% p.a.) population of about 2 million (mid-1994). The capital Maseru lies close to the western border of the country in the Lowlands, which lie on average 1,600 m above sea level and comprise about one quarter of the country's area. The rest of the country is dominated by the Maloti (which means "mountains") mountain range which rises to 3,482 m at its peak, and is classified into three further zones: the Foothills, the Mountains, and the Senqu (Orange) River valley.

## Introduction

## BACKGROUND

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13. Lesotho is a country with high level of soil erosion and soil degradation due to poor land use practices. Although very little of Lesotho is actually totally "bare" in the plant growing

12. Lesotho has been a virtually treeless country throughout its recorded history. Trees planted under afforestation programmes have not been well maintained and the larger plantations cover less than 0.5% of the country. According to Lesotho's figures in the SADC Forestry Sector Data Bank, Lesotho has about 34,000 ha of planted trees in a large number of groves planted for firewood or erosion control, and in rather gappy Government woodlots. Most of its non-arable land contains a significant proportion of shrubs (estimated for SADC to be equivalent to a fully-stocked area of 165,100 ha). The shrubs are very small and sparse in the more densely-populated areas due to their over-exploitation for fuel.

11. GHG emissions from agricultural sectors include methane emissions from livestock (non-dairy cattle, sheep, goats, horses, mules and donkeys, pigs).

10. The major sources of greenhouse gas (GHG) emissions in Lesotho are those related to traditional (fuelwood, shrubs, cow dung and crop residues) and non-traditional fuels (petroleum and coal) consumption in households, transportation and industries. However, Lesotho has a small but rapidly growing industry. The country does not have industrial pollution control standards.

#### Major sources and sinks of GHG

9. According to the summary report (July 1991) of the Lesotho Energy Master Plan (LEMP) undertaken in 1987 through the aid of Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), the demand for firewood and coal amounted to 40,000 tonnes and 13,000 tonnes respectively (these figures are for imported firewood and coal only), while the demand for petroleum products peaked to about 116 million litres by 1987, of which 40% was paraffin used in most households for cooking, lighting and other heat energy needs. The rest is used mainly for transportation and industry.

8. In order to reduce dependency on external energy supply and to promote rural electrification, four mini-hydropower plants were established in 1987/88 at Mantsonyane (2.0 MW), Semonkong (0.18 MW), Qacha's Nek (0.41 MW) and Mokhotlong (0.68 MW), with a total power output of 3.27 MW.

7. Lesotho depends for its lighting, heating, cooking, industry and transportation on the following energy resources: electricity (which supplies only to about 15% of the total population), petroleum, coal, firewood and various new and renewable resources. The major forms of so-called non-traditional energy - petroleum, electricity and coal - are all imported from the RSA.

Traditional fuels, such as fuelwood, shrubs, cow dung and crop residues, account for about 77% of total consumption. Demand by sector is dominated by the residential sector (90%), while transportation accounts for 7% and productive services for 3%.

Revised

20. Apart from being a Party to the UN Framework Convention on Climate Change, Lesotho

19. Activities of the NES are directed by the National Environment Council which is composed of the following: four government Ministers, two Senators, two members of Parliament, one NGO representative, one business community representative and one eminent (on environment issue) person.

18. Although much progress was made through NEAP, there was, however, a delay in setting up an institutional framework to promote the sectoral coordination and interaction of environmental coordination in planning and decision making. In April 1994, the National Environment Secretariat (NES) was established under the Office of the Prime Minister. It is the lead agency for environmental management with its key responsibility being to coordinate environmental matters and activities over all ministries. Furthermore, it is responsible for the implementation of Agenda 21. The Secretary General of NES reports directly to the Prime Minister and enjoys the status of the Principal (Permanent) Secretary.

17. Lesotho was in 1988 the first country in sub-Saharan Africa to commit itself to prepare a National Environmental Action Plan (NEAP). That plan provides a framework for the integration of environmental consideration into the planning and decision making process for social and economic development. It also outlines the policy, institutional and legislative constraints and proposes action programmes to remedy the shortcomings, including mechanism for the coordination of environmental policies and programmes at the national and local levels. The NEAP is currently being incorporated within the Government strategy for its implementation of Agenda 21.

16. The constitution of Lesotho (1993) provides that Lesotho shall adopt policies designed to protect and enhance the natural and cultural environment of Lesotho for the benefit of both present and future generations and shall endeavour to assure to all citizens a sound and safe environment, adequate for their health and well-being.

#### Environmental policy and legislation

15. Due to the lack of analytical facility, analysis of air samples is undertaken in the RSA.

14. There is only one atmospheric monitoring station in Lesotho, which is located near the airport in Maseru. The station monitors the following gases: nitrogen, nitrogen oxide, carbon dioxide, methane and sulphur dioxide. It is maintained by the Lesotho Meteorology Services (LMS).

#### Trace gases monitoring and analysis

season. the overall cover in non-arable areas was determined in the National Rangeland Inventory at less than 50%. The situation is thus very favourable for the creation of GHG sinks through afforestation and revegetation with other perennial plants, and this cover will also provide very substantial benefits in environmental rehabilitation.

(c) Any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends".

(b) A general description of steps taken or envisaged by the Party to implement the Convention; and

(a) A national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties.

"In accordance with Article 4, paragraph 1, each Party shall communicate to the Conference of the Parties, through the secretariat, the following elements of information:

23. Article 12.1 of the UNFCCC states that:

#### Relevant Articles in UNFCCC

22. UNEP has in 1996 provided assistance to the Government of Lesotho on a joint UNEP-UNDP project to formulate a Disaster Management Act which is pending approval and adoption by the Parliament of Lesotho.

21. UNEP has provided assistance to the Government of Lesotho in 1995/96 to draft the Environmental Protection and Enhancement Act 1996, which is now being finalized by the Government with UNEP assistance and will be discussed in a national legal workshop (jointly organized by UNEP and UNDP) to be held in Lesotho in 1996.

- Vienna Convention on the Protection of the Ozone Layer and its Montreal Protocol on the Substances that Deplete the Ozone Layer, 1993.

- Lusaka Agreement on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora, 1995.

- Convention on Biological Diversity, 1992; and

- Convention on the Conservation of Migratory Species of Wild Animals, 1979;

- Convention on International Trade in Endangered Species and Wild Fauna and Flora, 1973;

- African Convention of Nature and Natural Resources, 1968;

- Convention of the African Migratory Locust Organization, 1962;

is also a Party to the following international and regional environmental conventions:

28. The existing scientific and technical capacity of Lesotho for the implementation of the objectives of the UNFCCC and the fulfillment of its commitments to the Convention will be public awareness campaigns

Activity 1: Capacity building for the Project Management and National Study Teams and

27. There are seven activities in this proposal, each of which is briefly described as follows:

Project Description

- (d) To assist the general public, as well as the policy and decision-makers to better understand the climate change issues and its implications for natural resource and environmental management.
- (c) To assist the country to develop the least-cost GHG abatement and climate change adaptation strategies that promote environmentally sustainable development.
- (b) To enhance the scientific and technical capacity of the country so that it can sustain all aspects of its activities related to the implementation of the Convention. This will be achieved by strengthening the capacity of appropriate national institutions.

Revised

(a) To enable the country to fulfil its commitments and obligations as required by Articles 4.1 and 12.1 of the Convention, especially the preparation and the reporting of its initial national communication as required by Article 12.1 (a) (b) and (c) of the UNFCCC based on the recommended format for non-Annex I Parties.

26. The objectives of this proposal are:

25. At present Lesotho has not participated in any enabling activities programmes initiated by any donor countries and UN agencies conducive to its implementation of the UNFCCC. Thus, this proposal is the first of its kind in the country.

Project Objectives

"Each developed country Party and each other Party included in Annex I shall make its initial communication within six months of the entry into force of the Convention for that Party. Each Party not so listed shall make its initial communication within three years of the entry into force of the Convention for that Party, or of the availability of financial resources in accordance with Article 4, paragraph 3. Parties that are least developed countries may make their initial communication at their discretion. The frequency of subsequent communications by all Parties shall be determined by the Conference of the Parties, taking into account the differentiated timetable set by this paragraph."

24. Article 12.5 of the Convention states that:

33. So far no inventory on the sources and sinks of GHG has been undertaken in Lesotho, and there is virtually no capacity to undertake this activity. A comprehensive inventory on the sources and sinks of GHG will be undertaken by the GHG Inventory Group formed within the National Study Team. This group will include relevant scientific and technical expertise from appropriate public (e.g., Departments of Energy, Transport, Forestry, Livestock and Crops),

**Activity 2: GHG inventories**

- (a) Establishment of the Project Management and the National Study Teams and their capacity building.
  - (b) Enhancement of public awareness on climate change issues.
  - (c) Strengthening of major educational institutions on training courses related to climate change.
32. The major outputs of this proposed activity will be:

*New paragraph*

**Major outputs:**

31. Public awareness on climate change issues is still lacking and hence it is considered to be very important in Lesotho. A series of public awareness campaigns, which include seminars for both public and private sectors, including NGOs and rural communities, will be one of the first tasks to be undertaken by the Project Management Team. However, to be effective, public awareness campaigns must be persistent throughout the project. Thus, it is expected that news releases through media communication (newspapers, radio and TV) will be organized for each proposed activity whenever it is feasible. In addition, the capacity of the major educational institutions will also be strengthened so that they can effectively provide training courses related to climate change.

*Revised*

30. The capacity of the National Environment Secretariat, Project Management Team and the National Study Team will be enhanced through appropriate training on all aspects of the enabling activities as indicated in the standard activity matrix (Table 1).

29. The Project Management Team will be headed by the Director General of Lesotho Meteorological Services (LMS). It will include technical experts drawing from various relevant governmental departments. The National Study Team is coordinated by the Project Management Team. It comprises the following core groups: GHG Inventory, Vulnerability Assessment, Mitigation and Adaptation Options/Plans and National Communication. Each group is composed of a number of experts drawing public and private sectors, including NGOs. A Project Officer will be engaged to coordinate the day-to-day project activities between the Project Management Team and the National Study Team. The Project Management Team is supported by a secretary and appropriate computer and telecommunication facility.

assessed. Based on this assessment, a Project Management Team and a National Study Team which include the best experts in the country will be established under the auspices of the National Environment Secretariat in consultation with other relevant governmental departments and private sector, including NGOs.



39. As a land-locked country "with arid and semi-arid areas, ... and areas liable to forest decay" (Article 4.8 (c)), "with areas prone to natural disasters (Article 4.8 (d)), "with areas

*Activity 3: Vulnerability Assessment*

- (e) The reports of the workshops.
- (d) Recommendations on areas of targeted research to improve future inventories and to suggest revisions to the existing IPCC GHG inventory methodology.
- (c) A description of any original research needed to develop and/or apply new emission factors for specific activities.
- (b) Identification of shortcomings and gaps of the IPCC Guidelines in relation to the local conditions.
- (a) A full GHG inventory based on the most current version of the IPCC Guidelines in the standard reporting format.
38. The major outputs of this proposed activity will be:

*Major outputs:*

37. At the end of the GHG inventories, with the support of the Project Management Team, the GHG Inventory Group of the National Study Team will hold a workshop to review and present their results to national policy and decision makers.
36. A data collection and management system will be set up so that both the data and the GHG inventories can be updated regularly. Some original survey (e.g., energy supply and demand in rural communities) or research (e.g., certain emission factors) will be conducted where necessary in order to fill the data gaps.
35. This activity will be coordinated with the regional efforts, such as UNDP's "Building Capacity in Sub-Saharan Africa to Respond to the UNFCCC", UNEP's "Project to Support Enabling Activities Related to Initial National Communications under the UNFCCC for the Sub-Saharan Africa Region" which is being finalized.
34. The most current version of the "IPCC Guidelines for National Greenhouse Gas Inventories" and methodology will be used for the inventories. All existing available data and on-going activities (if any), particularly those from the scientific research community will be critically reviewed and the data gaps will be identified. A national workshop to train the Project Management Team and particularly the GHG Inventory Group within the National Study Team on the scientific and technical aspects of GHG inventories will be held. An international and a local consultants will be engaged to assist in the training.
- and private (e.g., industries) sectors and NGOs, including scientific, technical and educational institutions (e.g., University of Lesotho).

45. Based on the results of GHG inventory, a range of potential mitigation options for various sectors will be identified, analyzed and assessed so that a national strategy for the viable measures can be developed and formulated. This task will be undertaken by the Mitigation and Adaptation Options Group formed within the National Study Team. The group will include experts from the Departments of Energy, Transport, Livestock and Crops; Forestry Division, Conservation Division, Water Affairs, Water and Sewerage Authority (WASA) and LHWP. The

#### *Activity 4: Mitigation Options*

- (c) The workshop report.
- (b) A comprehensive vulnerability assessment for various sectors based on established procedures.
- (a) Important baseline data required for assessing climate change vulnerability and adaptation options.
44. The major outputs of the proposed activity will be:

#### *Major outputs:*

43. A workshop will be held for various stakeholders as well as policy and decision makers to review and publicize the results at the end of the study.
42. The *IPCC Technical Guidelines* will be used for this study. In addition, lessons will be learned from the methodology as developed by UNEP's "Country Case Studies on Climate Change Impacts and Adaptation Assessments (Phase I)". In view of the lack of data in this area, it is expected that some original research will be needed.
41. A Vulnerability Assessment Group will be formed within the National Study Team to undertake this task. This group will include expertise from the Departments of Health (Sociology), Land and Physical Planning, Livestock, Energy and University of Lesotho. The capacity for this group to undertake the task will be strengthened and enhanced where necessary. An international and a local consultant will be engaged to train the group in undertaking this proposed activity.
40. A comprehensive vulnerability assessment will be undertaken for various sectors, including agriculture (crops and livestock), forestry, water resources, natural ecosystems, human health and other (e.g., social) impacts, so as to enable the country to fulfill its reporting requirements for the initial national communication. Particular attention will be paid to the impact of climate change on the water resources, which are most valuable and important for economic development in the country.
- able to drought and desertification (Article 4.8 (e)), and "with areas with fragile ecosystems, including mountainous ecosystems (Article 4.8 (g)), Lesotho is particularly vulnerable to the adverse effects of climate change.

51. Based on the analysis of mitigation and adaptation (stage 1) options and strategies, national plans for mitigation and adaptation will be prepared by the Mitigation and Adaptation

*Activity 6: Preparation of national plans for mitigation and adaptation*

- (c) Workshop report.
- (b) Preparation of the first national adaptation strategy for the national communication.
- (a) Identification of adaptation (stage 1) options.

50. The major outputs of the proposed activity will be:

*Major outputs:*

49. A workshop will be conducted for key stakeholders and policy-makers to review the options and strategies at the end of the study.

48. Based on the results of the comprehensive vulnerability assessment for various sectors, a range of potential adaptation (stage 1) options will be identified, analyzed and assessed so that a national strategy for the viable measures can be developed and formulated. The capacity for the Mitigation and Adaptation Options/Plans Group to undertake this task will be strengthened and enhanced where necessary. An international and a local consultants will be engaged to train the Group in undertaking this proposed activity.

*Activity 5: Adaptation Options*

- (d) Workshop report.
- (c) Preparation of the first national mitigation strategy for the national communication.
- (b) Recommendations on reducing the number and intensity of emissions from various strength of sources and the enhancement of sinks.
- (a) Identification of mitigation options.

47. The major outputs of the proposed activity will be:

*Major outputs:*

46. A workshop will be conducted for key stakeholders and policy and decision makers to review the options and strategies at the end of the study.

capacity for this group to undertake this task will be strengthened and enhanced where necessary. An international and a local consultants will be engaged to train the group in undertaking this proposed activity. Useful lessons will be learned from UNEP/UCCBE's "Economics of GHG Limitations - Phase I: Methodological Framework for Climate Change Mitigation Assessment".

Options/Plans Group for fulfilling the country's reporting requirements under the UNFCCC. 52. A workshop will be conducted for the key stakeholders as well as policy and decision makers to review the plans after their completion.

**Major outputs:**

53. The major outputs of the proposed activities will be the national plans for mitigation and adaptation, as well as the workshop report.

**Activity 7: Preparation of national communication**

54. The initial national communication as required under Article 12 of the UNFCCC will be prepared and submitted to the UNFCCC Secretariat. It will include the outputs of Objectives 2 to 6 as described above.

55. A consultant will be engaged to assist in this task. The draft national communication will be reviewed by a respectable technical institution. Based on this review, a revised version will be produced. A meeting will then be organized for key stakeholders and policy and decision makers to review this revised draft national communication before it is finalized and submitted to the UNFCCC Secretariat.

**Major Output:**

56. The major output of this proposed activity will be the initial National Communication to be submitted to the UNFCCC Secretariat.

**Proposed work schedule**

57. The proposed timetable for commencement and completion of all activities described above is given in Table 1. Detailed work plans for each activity will be developed by the Project Management Team with the assistance of UNEP. UNEP will be consulted throughout the period of the project implementation.

**Appropriate sequencing**

58. The above project activities will be undertaken in appropriate sequence based on good practice. Established guidelines will be followed, while established tools and methodologies will be used. Lessons learned from the past and on-going projects, including UNEP's "Country Case Studies on Sources and Sinks of Greenhouse Gases", UNEP/UNCCEE's "Economics of GHG Limitations - Phase I: Methodological Framework for Climate Change Mitigation Assessment", UNEP's "Building Capacity in Sub-Saharan Africa to respond to the UNFCCC" and UNEP's "Country Case Studies on Climate Change Impacts and Adaptation Assessments (Phase I)", will be useful for the implementation of the project.

64. In order to facilitate the implementation of this proposal, an *Ad Hoc* Committee for Enabling Activities for the Implementation of the UN Framework Convention on Climate Change was formed recently. This Committee is chaired by the Chief Technical Adviser of NES, Professor Edward B. Rugumayo. Three successful intersectoral meetings with more than 20 participants from various relevant governmental departments (Meteorological Services, Department of Economic Planning, Department of Energy, Department of Crops, Department of Agriculture, Department of Transport), NGOs (University of Lesotho, Lesotho Girl Guides, Sechaba Consultancy, etc.) and UNDP field office, were held on 12, 17 and 21 June 1996, respectively. The present proposal has been thoroughly reviewed, revised and finalized by the Committee and endorsed by the GEF Focal Point in Lesotho, Mr. B. Motsamai, who is also the Secretary General of NES. His letter of support is attached.

63. This project enjoys a very high level and a wide range of national support. It will be implemented under the guidance of the National Environment Secretariat (NES) of the Ministry of Natural Resources. NES, which has been established since 1994, is the government authority which deals with all environmental issues exclusively.

#### National level support

62. UNEP, with its extensive experience in training in enabling activities, will be consulted on all aspects of training, such as the workshop agenda, the trainers, etc. Technical assistance will be provided where necessary.

61. Training materials from the past and on-going activities may be obtained from various regional and international sources, such as IPCC, UNITAR (CC:TRAIN), etc. Lessons can also be learned from other on-going enabling activities programmes in the Sub-Sahara African countries implemented by UNEP or UNDP.

60. All training activities including national workshops and participation of regional workshops to be organized by UNEP, UNDP or other international agencies for their on-going enabling activities programmes, will be coordinated by the Project Management Team. The request for participation in the UNITAR CC: TRAIN programme has been made by Lesotho in August 1995 but the application was unsuccessful because of the lack of enabling activities in the country then. Lesotho will reactivate its application.

#### Training

59. As no enabling activities for the implementation of the UNFCCC have been undertaken in Lesotho before, information is needed in all areas, as shown in the standard activity matrix in Table 2. This proposal will ensure that there will be no duplication between the proposed activities and the past and on-going activities (if any).

#### Activity matrix

Revised

69. International and local consultants, as well as the local NGOs, including the local higher learning institutions such as the University of Lesotho, will be invited to assist and participate in the implementation of the project where appropriate. Their contribution to the proposed activities are indicated in Table 3.

68. As shown in the project management structure (Figure 1), the National Environment Secretariat (NES) of Lesotho will oversee the overall execution of the project. The project will be executed by the Lesotho Meteorological Services (LMS). Under the guidance of LMS, a Project Management Team, which comprises experts from various relevant governmental departments such as Department of Energy, Department of Crops, Forestry Division, Ministry of Health, and Department of Transport, will provide guidance for the implementation of the project. The Project Officer of the Project Management Team will provide the day-to-day coordination of the implementation of the various proposed activities, which will be undertaken by the National Study Team comprises of a number of experts from various sectors.

### Institutional framework and project implementation

67. As a country "with arid and semi-arid areas, .... and areas liable to forest decay (Article 4.8 (c)), "with areas prone to natural disasters (Article 4.8 (d)), "with areas liable to drought and desertification (Article 4.8 (e)), "with areas with fragile ecosystems, including mountainous ecosystems (Article 4.8 (g)), and as a "land-locked and transit" country (Article 4.8 (i)), Lesotho deserves special consideration under Article 4, paragraph 8 of the Convention, including necessary actions related to funding, insurance and the transfer of technology, to meet its specific needs and concerns arising from the adverse effects of climate change and/or the impact of the implementation of response measures.

66. The requested funding is at the ceiling of the cost norm because no enabling activities have been undertaken in Lesotho before. First of all, in order for the Project Management Team and the National Study Team to be effective and efficient, it is necessary to equip the teams with appropriate tools and facilities (e.g., computers, fax and photocopy machines, e-mailing systems, etc), which are urgently needed. In addition, there may be a need to collect a lot of primary data in the field (e.g. traditional energy supply and demand survey) and this would imply higher cost. Due to poor infrastructure, many rural areas are not too easily accessible, and this will make the data collection (e.g., traditional energy supply and demand survey) more difficult.

65. As the proposed activities are standard enabling activities as defined by the Operational Criteria, so the incremental cost for undertaking these activities are also full cost. The total funding requested is US\$ 350,000, as shown in Table 3.

### Project financing and budget

65. The support of the UNDP field office is crucial, as it may act as an intermediate for UNEP to disburse project funds. Other support including the logistical support by UNDP will be solicited wherever appropriate.

New paragraph

73. In order to successfully implement the project, the following issues need to be addressed:

(a) Close coordination by the NES among the Project Management and National Study Teams are essential to ensure the success of the project. Also, the NES needs to work closely with all relevant stakeholders in both public and private sectors, including NGOs.

(b) There is a need for the Government to initiate and commit itself to implement policies and procedures on the UNFCCC in the country.

(c) There is a need to raise public awareness on the various aspects of the climate change issues, through an information dissemination programme and network.

#### Issues

#### Issues and risks

72. The Government of Lesotho is fully committed to the implementation of the UNFCCC, and hence the goals and objectives of this project. The strengthening of scientific, technical and institutional capacities of Lesotho in various aspects of the proposed activities, as well as the leading role taken by the LMS to execute the project would enable the country to fulfill its obligations and commitments to the UNFCCC on a sustainable basis. Indeed, the whole project management structure is designed in such a way that full participation by local experts in all aspects of activities are ensured, so that further activities in the future are sustainable.

#### Sustainability and participation

71. This is a standard enabling activities proposal which will assist Lesotho to fulfill its reporting requirements under the UNFCCC. As GEF is the international entity entrusted to operate the financial mechanism for the UNFCCC on the interim basis, the proposed activities are eligible for GEF funding.

#### Rationale for GEF support

70. The project will be implemented through UNEP's Atmosphere Unit with the support of the Regional Office for Africa based in Nairobi and UNEP Collaborating Centre on Energy and Environment (UCCBE) based in Denmark. While the Atmosphere Unit has successfully implemented the "Country Case Studies on the Sources and Sinks of Greenhouse Gases", the UCCBE has been successfully completing the "Greenhouse Gas Abatement Costing Studies", and it has provided technical support to the national teams in Egypt and Jordan for similar GEF/UNDP capacity building projects. UNEP will play a technical support and advisory role so as to ensure that the project is properly implemented.

77. UNEP will provide its established monitoring and evaluation guidelines and assessment procedures, which will be applied to evaluate the progress of the project during mid-term and after its completion.

76. The NES will meet on a quarterly basis to review project implementation and provide scientific, technical, policy and strategic guidance. The minutes of these meetings will be shared with all participating institutions. The NES will provide six-monthly progress reports and quarterly financial reports to UNEP based on UNEP's standard format.

75. The National Study Team will provide a monthly progress report to the Project Management Team, which will share it with UNEP. If possible, these reports may be compiled into an electronic newsletter that will be distributed to all participating institutions. These reports will enable the LMS and NES to evaluate the implementation of the project on an ongoing basis and identify difficulties and shortcomings at an early stage. They will be reviewed by the Project Management Team for their quality and standard, comprehensiveness, and conformity to the proposed terms of reference and dates of completion.

#### Monitoring and evaluation

(c) Lack of involvement of major policy and decision makers in the formulation of final strategy. A firm commitment for participation must be secured from each stakeholder.

(b) Inadequate coverage of proposed activities and inadequate consultations among various stakeholders.

(a) Longer time period than expected for the collection of reliable data. Although the project duration is deliberately set for two years by the NES in order to create a sense of urgency within the country, it may be noted that as an underdeveloped country, Lesotho may make its initial communication at its discretion. However, the NES is committed to complete the project within 2 years.

74. The potential risks which may mask the objectives and goals of the project are:

#### Risks

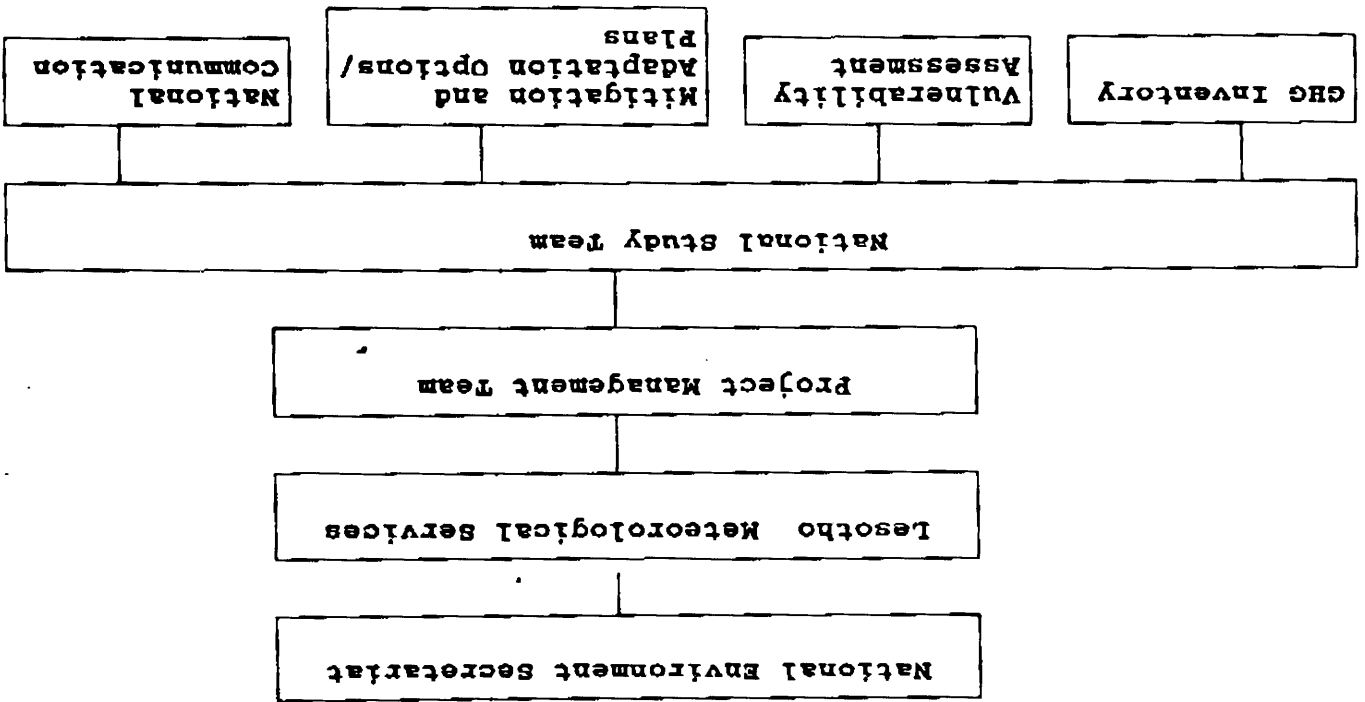


NB: Some activities are expected to run concurrently (e.g., Activities 1 and 2, Activities 4 and 5).  
 PM is Project Management.  
 M&E is Evaluation and Monitoring.

| ACTIVITY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | PM | M&E |
|----------|---|---|---|---|---|---|---|----|-----|
| 1        | ■ | ■ |   |   |   |   |   | ■  |     |
| 2        | ■ | ■ |   |   |   |   |   | ■  |     |
| 3        | ■ |   |   |   |   |   |   | ■  |     |
| 4        |   | ■ |   |   |   |   |   | ■  |     |
| 5        |   | ■ |   |   |   |   |   | ■  |     |
| 6        |   |   |   |   |   |   |   | ■  |     |
| 7        |   |   |   |   |   |   |   | ■  |     |
| 8        |   | ■ |   |   |   |   |   | ■  |     |
| 9        |   | ■ |   |   |   |   |   | ■  |     |
| 10       |   | ■ |   |   |   |   |   | ■  |     |
| 11       |   | ■ |   |   |   |   |   | ■  |     |
| 12       |   | ■ |   |   |   |   |   | ■  |     |
| 13       |   | ■ |   |   |   |   |   | ■  |     |
| 14       |   | ■ |   |   |   |   |   | ■  |     |
| 15       |   | ■ |   |   |   |   |   | ■  |     |
| 16       |   | ■ |   |   |   |   |   | ■  |     |
| 17       |   | ■ |   |   |   |   |   | ■  |     |
| 18       |   | ■ | ■ | ■ | ■ |   |   | ■  | ■   |
| 19       |   | ■ | ■ | ■ | ■ |   |   | ■  | ■   |
| 20       |   | ■ | ■ | ■ | ■ | ■ |   | ■  | ■   |
| 21       |   | ■ | ■ | ■ | ■ | ■ | ■ | ■  | ■   |
| 22       |   |   |   |   | ■ | ■ | ■ | ■  | ■   |
| 23       |   |   |   |   |   | ■ | ■ | ■  | ■   |
| 24       |   |   |   |   |   |   | ■ | ■  | ■   |

TABLE 1. PROPOSED WORK SCHEDULE

Figure 1: Project management structure.



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| Enabling Activity  |  | Commitment | Planning and execution | Institution strengthening | Training | Research | Education |
|--|--|------------|------------------------|---------------------------|----------|----------|-----------|
| <ul style="list-style-type: none"> <li>- emission inventory</li> <li>- CO<sub>2</sub> from energy sources</li> <li>- CO<sub>2</sub> from land use change</li> <li>- CH<sub>4</sub> from energy sources</li> <li>- CH<sub>4</sub> from other sources</li> <li>- N<sub>2</sub>O</li> <li>- other sources and gases</li> <li>- vulnerability assessment</li> <li>- agriculture</li> <li>- forestry</li> <li>- water resources</li> <li>- health impacts</li> <li>- natural ecosystems</li> <li>- other impacts</li> </ul> |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- mitigation options</li> <li>- energy related</li> <li>- industry</li> <li>- transport</li> <li>- energy supply</li> <li>- residential</li> <li>- non-energy sources</li> <li>- agriculture</li> <li>- forestry</li> <li>- waste management</li> <li>- other</li> <li>- sink enhancement</li> </ul>  |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- adaptation options (stage I)</li> </ul>   |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- national plan for mitigation</li> </ul>   |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- national plan for adaptation</li> </ul>   |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- inventory</li> <li>- mitigation options</li> <li>- vulnerability and adaptation</li> <li>- other relevant information</li> </ul>  |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- Preparation of a National Communication</li> </ul>  |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- Preparation of a Plan to Fulfill Commitments</li> </ul>   |  | X          | X                      | X                         | X        | X        | X         |
| <ul style="list-style-type: none"> <li>- Identification of Options to Meet the Objectives of the Convention</li> </ul>   |  | X          | X                      | X                         | X        | X        | X         |

Legend: X activity undertaken in the proposed project

| Cost by each activity: |   | Total Cost: US\$ |
|------------------------|---|------------------|
| <b>Activity 1:</b>     | Capacity building for the Project Management and National Study Teams and public awareness campaigns            |                  |
| (a)                    | Seminars targeted at various groups in public and private sectors, including local authorities for 10 districts | 16,000           |
| (b)                    | Youth campaigns   | 3,000            |
| (c)                    | Visual aids, leaflets, advertisements   | 6,000            |
| (d)                    | Capacity building (institutional strengthening and education)   | 20,000           |
|                        |   | 45,000           |
| <b>Activity 2:</b>     | National GHG inventory  |                  |
|                        | Training workshops (X3):  | 18,500           |
|                        | International consultant  | 7,000            |
|                        | Local consultant  | 2,500            |
|                        | Local coordinators  | 35,000           |
|                        | Planning and execution (including research)   | 63,000           |
| <b>Activity 3:</b>     | Vulnerability Assessment  |                  |
|                        | Training workshops (X2):  | 8,500            |
|                        | International consultant  | 3,500            |
|                        | Local consultant  | 2,000            |
|                        | Local coordinators  | 26,000           |
|                        | Planning and execution (including research)   | 40,000           |
| <b>Activity 4:</b>     | GHG Mitigation Options  |                  |
|                        | Training workshop:  | 8,500            |
|                        | International consultant  | 12,000           |
|                        | Local consultant (whole activity)   | 2,000            |
|                        | Local coordinators (whole activity)   | 7,000            |
|                        | Planning and execution  | 2,000            |
|                        | External review consultancy   | 3,500            |
|                        | National seminar to review results  | 35,000           |

|   |  |
|---|--|
| <p>350,000</p>  | <p>Total GEF project cost:</p>   |
| <p>26,000</p>   | <p>UNEP Coordination (8%)</p>  |
| <p>324,000</p>  | <p>Sub-total</p>   |
| <p>5,000</p>  | <p>Evaluation and Monitoring</p>   |
| <p>58,000<br/>18,750<br/>11,250<br/>20,000<br/>8,000</p>        | <p>Project Management<br/>Local Project Officer (2 years)<br/>Local Secretary (2 years)<br/>Equipment (computers, softwares, photocopier, weighing scales, etc.)<br/>Telecommunications (including internet) and logistics</p>         |
| <p>261,000</p>  | <p>Sub-total</p>   |
| <p>18,000</p>   | <p>Activity 7: Preparation of National Communication</p>   |
| <p>9,000<br/>6,000<br/>3,000</p>                                | <p>Planning and execution<br/>National seminar to review National Communication<br/>Local consultant</p>   |
| <p>25,000</p>   | <p>Activity 6: Preparation of National Plans for Mitigation and Adaptation</p>   |
| <p>13,000<br/>9,000<br/>3,000</p>                               | <p>Planning and execution<br/>National seminar to review the plans<br/>Local consultant</p>  |
| <p>35,000</p>   | <p>Activity 5: Adaptation (Stage I) Options</p>  |
| <p>8,500<br/>12,000<br/>2,000<br/>7,000<br/>2,000<br/>3,500</p> | <p>Training workshop:<br/>International consultant<br/>Local consultant (whole activity)<br/>Local coordinators (whole activity)<br/>Planning and execution<br/>External review consultancy<br/>National seminar to review results</p> |