



UNITED NATIONS ENVIRONMENT PROGRAMME ASSISTANCE TO FOURTEEN COUNTRIES WITHIN THE FRAMEWORK OF THE GLOBAL ENVIRONMENT FACILITY EXPEDITED FINANCING FOR (INTERIM) MEASURES FOR CAPACITY BUILDING IN PRIORITY AREAS

Background

1. The LDCF/SCCF Council reviewed at its April 4, 2008 meeting, GEF/LDCF.SCCF.4/5 “ *Elaborating a Strategic program to Scale-up the Level of investment in the Transfer of Environmentally-sound Technologies (ESTs)*, and agreed that the GEF Secretariat should work with UNDP and UNEP to present a report by the end of May 2008 on past experience of all technology needs assessments (TNAs) supported through funding from the GEF Trust Fund, including a full accounting of all resources committed, allocated, and disbursed; a description of all results achieved; publication of all completed TNAs; and a summary of all of the lessons learned through the initial round of TNAs.
2. The information provided below serves to provide UNEP inputs into the preparation of a paper, which responds to the guidance, provided to the GEF Secretariat by the LDCF/SCCF Council.

Introduction

3. In May 1999, the GEF Council, with the view to comprehensively respond to the capacity building needs of non-Annex I Parties under the UNFCCC beyond support for the preparation of initial national communications, approved a shorter, medium and longer-term plan to build the capacity of these countries to implement the UNFCCC. The Council decided that the immediate capacity building priorities of Non-Annex I countries, identified in COP decision 2/ CP.4 (1998), be met through additional funding under the expedited procedures for enabling activities. The medium to longer term action plan would be prepared through a 'Capacity Building Initiative' aimed at developing such an action plan for implementation by mid-2001. Eligible countries wishing to utilize the initial and expedited opportunity, were requested to select their preferences from the under-listed activities, although no formal reporting requirement were explicitly provided in the COP guidance:
 - (i) Identification/ submission of technology needs, and capacity building to assess technology needs, modalities to acquire and absorb them, design, evaluate and host projects¹
 - (ii) Capacity building for participation in systematic observation networks²
 - (iii) Studies leading to the preparation of national programs to address climate change: improvement of emission factors³
4. To ensure continuity with the earlier enabling activity as well as maintaining and enhancing capacities already built within the framework of preparing the first

¹ Paragraph 1 (g), subparagraphs (i), (ii) and (iii) of 2/ CP.4

² Paragraph 1 (c) of 2/ CP.4,

³ Paragraph 1 (e) of decision 2/ CP.4

national communications, recipient countries were expected to use the same institutional structure and personnel that were involved in the preparation of the first national communication. It was also essential that they time their request for additional funding, under expedited procedures, in such a way as to minimize the gap between the two stages of enabling activities, i.e. the completion of the first national communication process and the start of the phase II enabling activities.

Funding

5. The Global Environment Facility provided funding of up to US\$ 100,000 for each of the 92 non Annex 1 Parties to conduct the TNAs through its interim financing for capacity building in priority areas - enabling activities phase II (also known as top-ups⁴). Fourteen (14) countries supported by UNEP included Comoros, Cote D'Ivoire, Haiti, Kenya, Lesotho Nepal, Niue, Mauritania, Mauritius, Pakistan, Tanzania, Turkmenistan, Vietnam and Zimbabwe. Financial reporting in US\$ to date is as follows:

- (i) GEF approval (US\$): 1,383,000
- (ii) Funds advanced to countries by UNEP (US\$): 1,255,000
- (iii) Fund accounted for by countries (US\$): 1,127,880
- (iv) Percent accountability of funds by countries: 90 (%)

6. The outstanding accountability of 10% is being pursued by UNEP and will be achieved within the next few months or the funding released for re-use by GEF in other projects.

Table 1: Summary table of status of implementation

Country	Date of project Approval	Total amount approved (US\$)	TNA as a priority ⁴	TNA carried out	TNA reported submitted
Comoros	29-01-2004	100,000	Yes	Yes	Yes
Cote d'Ivoire	30-11-2001	100,000	Yes	Yes	Yes
Haiti	19-08-2002	90,000	Yes	Yes	Yes
Kenya	09-12-2002	100,000	Yes	Yes	Yes
Lesotho	11-03-2001	100,000	Yes	Yes	Yes
Mauritania	27-01-2003	100,000	Yes	Yes	Yes
Mauritius	21-11-2002	97,000	Yes	Yes	Yes
Nepal	22-02-2004	100,000	Yes	Yes	No
Niue	11-05-2001	100,000	Yes	Yes	Yes
Pakistan	02-04-2004	100,000	Yes	Yes	No
Vietnam	4-09-2003	100,000	Yes	Yes	Yes
Tanzania	17-04-2004	100,000	Yes	Yes	Yes
Turkmenistan	13-11-2001	100,000	Yes	Yes	Yes
Zimbabwe	06-06-2001	96,000	Yes	Yes	Yes

7. As per Table 1 above, all countries with the exception of Pakistan and Nepal have submitted their TNA reports to the UNFCCC secretariat. UNEP is in communication with Pakistan and Nepal to have the TNA reports submitted to the UNFCCC secretariat as soon as practicable. The table also serves not only to provide the dates of approval of project documents by UNEP, but also reveals that all 14 countries identified TNA as priority activity. Information provided in the individual project documents suggests that countries allocated between 63% and 87.5% of GEF funding to TNAs alone.

⁴Budgetary allocation for TNAs ranged from 61% in Haiti to 87.5% in Vietnam

8. Twelve (12) out of the 14 countries assisted by UNEP opted to apply the GEF funding received for activities 1 (i) and (ii) above, while 2 countries decided to carry out only activity 1 (i). None of the 14 countries assisted, opted to implement activities 1 (iii) and 1 (iv) with the GEF grant.

Technology Needs Assessments

9. The UNFCCC technology transfer framework defines Technology Needs Assessments (TNAs) as *a set of country-driven activities that identify and determine the mitigation and adaptation technology priorities of Parties, ..., particularly developing country Parties*. They involve different stakeholders in a consultative process to identify the barriers to technology transfer and measures to address these barriers through sectoral analyses. The purpose of TNAs therefore is to assist in identifying and analysing priority technology needs, which can form the basis for a portfolio of Environmentally Sound Technologies (ESTs) projects, and programmes which can facilitate the transfer of, and access to, the ESTs and know-how in the implementation of the Convention. These activities are central to the work on technology transfer and follow a country-driven approach, bringing together stakeholders to identify needs and develop plans to meet those needs.

Methodology and guidance

10. Although the preparation of project proposals commenced in 2000 with the issuance of the GEF operational guidelines for expedited financing of climate change enabling activities Part II in October 1999, it was not until March 2002 that the Climate Technology Initiative (CTI) prepared a document entitled “Methods for Climate Change Technology Transfer Needs Assessments and Implementing Activities: Developing and Transition Country Approaches and Experiences” to provide countries with a summary of *methods for conducting climate change technology needs assessments and implementation activities*.

11. In July 2004, UNDP developed a GEF funded handbook entitled “*Conducting Technology Needs Assessments for Climate Change*” in co-operation with the CTI and several multilateral agencies and country experts. The handbook provides ‘user-friendly’ guidance on approaches, methods, and tools for conducting a TNA and reviews key concepts and approaches for assessing technology needs for climate change. The CTI, in collaboration with UNDP, organized 3 regional workshops to field-test and further develop the TNA handbook, to discuss regional concerns and priorities in assessing technology needs and to further assist Parties in conducting TNAs. However by the time these workshops were being held 11 out of the 14 countries working with UNEP had undertaken most of the proposed activities under the project using the CTI document.

The needs assessments process

12. The needs assessments process employed by the twelve reporting countries included the establishment of an appropriate institution arrangements involving all relevant stakeholders; collection of baseline information at the sectoral and national levels, review of socio-economic plans and development goals, establishment of criteria for selecting technology transfer priorities, accessing relevant technology and market information, identification of priority technologies, assessing barriers and opportunities for overcoming them, the preparation of the needs assessment report as well as the development and implementation of technology transfer actions and plans.

13. Stakeholder consultations were mentioned in almost all the twelve TNA reports but a description of the stakeholders were sometimes not provided. Although most of the stakeholders were involved in prioritizing technology needs, the initial review of needs and setting criteria for ranking technology needs, only a limited number of stakeholders were adequately consulted in the identification of capacity-building needs and next steps.

14. More than half of the TNA reports covered both technologies to mitigate climate change and to facilitate adaptation to the adverse effects of climate change.

Selection of Priority needs and their relation to national development objectives

15. Several of the TNAs included a description of the process used to conduct the assessment, including the criteria and methodology applied to prioritize technology needs. In a number of these reports an attempt was made to select technological options on the basis of their contribution to the country's sustainable development and other goals identified in national development strategies, such as poverty reduction, national economic growth and improvement in the standard of living. Methods used to prioritize technology needs included multi-criteria analysis, cost/benefit and risk/benefit analyses, questionnaire surveys, and interviews and workshops with stakeholders. In most cases, the methodology used for prioritizing technology needs for mitigation was the same as that used for prioritizing needs for adaptation. Although countries described in detail the methodologies used, methods were not always applied consistently

Commonly identified mitigation and adaptation technologies in TNAs

16. The sectors considered in the TNAs vary according to national circumstances. However, the most commonly selected sectors and subsectors for which technology needs were identified for mitigation were energy generation and use, industry and transport, and for adaptation, agriculture and fisheries, coastal zones and water resources.

Barriers to technology transfer

17. The barrier to technology transfer most frequently identified by the countries was the lack of financial resources. High investment costs and incompatible prices, subsidies and tariffs were also considered important economic/market barriers. Other important barriers included lack of information and awareness regarding ESTs (information on technical performances of ESTs and on means to acquire ESTs), inefficient networking, inadequate systems and tools for research, complexity of some of the technologies and lack of a database on new/clean technologies.

18. The measures identified by Parties to address barriers were most commonly placed in the following categories: regulatory and policy, increasing access to information and awareness raising, and economic and market measures.

Gaps identified in submitted TNA reports

19. The quality and scope of information provided in the submitted reports varies widely and gaps identified in the reports included:

- (i) Justification of selected sectors of the national economy for assessments not always clear;
- (ii) Basis for the choice of technologies not provided for by some countries;
- (iii) Assessment methodology was not always described;

- (iv) Although most countries involved a number of stakeholders, their roles and specific contributions not clearly explained;
- (v) Some countries did not identify clear barriers and capacity building needs; and
- (vi) Some countries did not adequately describe their follow-up activities.

Some key findings

20. Most countries identified TNA is a helpful tool for policy and decision makers in facilitating the technology transfer process at the national level. They have also found the assessments useful in not only identifying specific technology needs, but also in providing some indications of future direction for policy formulation and enactment of regulations. For the TNA process to be very effective it must be demand driven and sector specific and embedded into the national development process. Effective participation, of key stakeholders involving government (sectoral planners and policy makers), the private sector, and civil society particularly at the early stages of the process is imperative. Addressing cross-sectoral issues, including linkages between mitigation and adaptation priorities is important.

Issues for future consideration

21. There is the need to identify good practices for conducting TNAs and provide technical support for countries to do the same. As regards, reporting, synthesizing and communicating TNA findings, there is the need to provide clear guidance on reporting and periodicity of updating. Efforts must also be made to support the implementation of the findings of TNAs, by helping countries develop good implementation plans and prepare bankable project proposals. Global or regional market assessments would provide information on techno-economic ranking of technologies and strengthen country level analysis as well as introduce consistency that would allow aggregation across countries.