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FINAL REPORT OF THE EXECUTIVE DIRECTOR ON THE IMPLEMENTATION OF THE UNEP/GEF STRATEGIC PARTNERSHIP ACTIVITIES

(Prepared by the United Nations Environment Programme)



United Nations Environment Programme

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PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT • PROGRAMA DE LAS NACIONES UNIDAS PARA EL MEDIO AMBIENTE ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ

October 2000

Final Report of the Executive Director on the implementation of the UNEP/GEF Strategic Partnership Activities

INTRODUCTION

- 1. At its meeting held in May 1999, the GEF Council welcomed the Action Plan on Complementarity between the activities undertaken by the United Nations Environment Programme (UNEP) under the Global Environment Facility and its work programme. The GEF Council "expressed its appreciation for the quality of the UNEP document which helps to clarify UNEP's niche within the GEF family, and it commended UNEP for the comprehensive process of consultations that it had followed in preparing the report". The Action Plan on UNEP/GEF Complementarity identified the strengthening of the collaboration between UNEP and the GEF Secretariat through the adoption of a strategic partnership of a long-term nature as an important tool to achieving its objectives (GEF/C.13/9).
- 2. Given UNEP's comparative advantages and its mandate as an Implementing Agency of the GEF, it was decided that the UNEP/GEF Strategic Partnership should focus upon the following three areas: Assessment, Global Environmental Knowledge Management, and Global Environmental Outreach. In early December 1999 the Council approved four activities for FY00-01 under the UNEP/GEF Strategic Partnership, in the amount of US\$ 1.3 million. Also agreed was the importance of keeping a close co-operation with the Scientific and Technical Advisory Panel (STAP) of the GEF during the implementation stage.
- 3. One activity was undertaken under the Assessment area. The activity (Activity 1) was an assessment of the potential for the commercialisation of conjunctive photovoltaic-hydro power generation. The Global Environmental Knowledge Management area had two distinct activities. The first activity (Activity 2) was the development of a "Technology and Know-how Transfer Clearinghouse". The second activity (Activity 3) was the development of a GEF Program Tracking and Mapping System. An activity (Activity 4) implemented under the Global Environmental Outreach area was the development of an internet-based interactive forum on global environmental issues.
- 4. In October 1999 the UNEP/GEF Programme Coordination Committee reviewed the implementation plan of the four Activities under the UNEP/GEF Strategic Partnership. In January 2000, the UNEP Project Approval Committee adopted the UNEP internal documents for each activity. Subsequently the Steering Committee, comprising the Chairman of STAP, the Assistant Chief Executive Officer of the GEF and the Executive Coordinator of the UNEP/GEF

- Coordination Office, held a meeting though a teleconference and agreed on the implementation plan of the four activities.
- 5. This report contains a detailed presentation on the progress of the four activities agreed upon under the UNEP/GEF Strategic Partnership.

Activity 1: Assessment of the potential for the commercialisation of conjunctive photovoltaic/hydro power generation (US\$ 270,000GEF US\$250,000 KfW)

- 6. UNEP commissioned a study on the potential of installing photovoltaic (PV) systems to work in conjunction with existing hydropower plants. This is aimed at examining replication potentials of a GEF demonstration project in the Philippines (i.e., IFC's CEPALCO project), which was developed in accordance with the so-called PV-Hydro conjunctive approach. The study objective was to determine whether sites suitable for grid-connected PV-hydropower conjunctive applications exist in sufficient quantity to enable commercialisation of grid connected PV in this market niche. If the answer is affirmative, the GEF – through its emerging "Sustainable Technology Alternatives Network"- will consider to facilitate a global market development alliance led by interested industry, utility/IPP, banking, venture capital and public financing partners. The alliance would focus on those developing country markets where viable PV applications are within arms length reach of viability. The aim of UNEP/GEF facilitated market aggregation would be to secure sufficient PV orders over a medium term time horizon to trigger large-scale investments in local PV manufacturing capacities.
- 7. Task 1 under this activity included, development of detailed bidding documents for the study, preparation of a shortlist of international consultancy consortia, tendering, review of incoming bids, selection of the most convincing proposal/consortium and co-managing the study implementation. The bidding was completed in late April and a contract was awarded shortly thereafter.
- 8. The basic approach of the project was first presented to an international audience in June 2000 at the Global Dialogue on Natural Resources during the Expo 2000 in Hanover, Germany. Initial feedback received from the international expert audience present in Hannover confirmed the validity of key assumptions underlying the approach. A number of promising hydro sites were recommended for in depth review.
- 9. Task 1 was finalised in September 2000. Results were presented and reviewed at a steering committee meeting in Marrakech, September 25-27, which was organised back to back with the GEF's expert workshop on how to make a difference in emerging PV markets. The workshop provided a forum to introduce the results to a wider audience. Task 1 findings indicate a vast technical potential for the PV-

Hydro conjunctive approach. More specific outputs include:

- Identification of suitable sites in the order of more than 10.000 Megawatt installed PV capacity, and
- A conjunctive PV-hydro dispatch optimisation model enabling maximum PV benefits at least economic. cost.
- 10. The Marrakech workshop further agreed that the effective economic potential needs further scrutiny and hinges decisively upon the cost reductions which could be achieved over time. An approach to assess the overall market potential as a function of the market price was accepted by all parties. Likewise there was acceptance for the approach to build up the real effective demand by conducting detailed case studies which can be used to identify concrete cases for large scale applications of the PV-Hydro conjunctive use, to gain more insight in the working of the approach and the necessary system optimization by progressing from comparatively simple to more complex power systems, to enhance the information base for an overall market assessment.
- 11. Task 2 of the study is well underway and is to be completed by March 2001. It is concentrating on the verification of specific utility/independent power producer (IPP) interests to invest in complementary PV installations to address peak-load energy demand. The model which has been developed in the first phase as a critical assessment tool to enable determination of suitable sites will be refined and made available to interested utilities and independent power producers. This is to allow independent verification of study results by third parties. Additional case studies will be undertaken to the utmost extent possible subject to the limitations of the study budget. In addition desk studies are planned for some other countries to enhance the market assessment. In order to enlarge the number of stakeholders and to increase the range of potential financial support for the follow-up of the Study, talks with other interested institutions such as IEA, AsDB, IDB, and the U.S. DOE will be scheduled.
- 12. The concluding experts' group review meeting will be organized in early 2001 involving those concerned such as multilateral and bilateral financing organizations, governments, utilities, IPP developers, and PV industry representatives. The meeting is to discuss the findings of the study, to explore interests of key stakeholders to join a market development alliance, and to propose specific follow-up under the Sustainable Technology Alternatives Network.
- A.
 13. The final findings of the study will include: (i) ranking of most promising investment opportunities according to utility/IPP interest, technical, financial, and economic feasibility, power system requirements, utility performance, and so on, and (ii) recommendations for at least two ideal sites for additional scale-up demonstrations.

B.

Activity 2: Clearing House for technology and know-how transfer: a public-private partnership (US\$ 550,000 GEF, 264,000 EC)

- 14. The goal of Activity 2 is to design a UNEP-GEF "Sustainable Technology Alternatives Network". This comprehensive approach responds to corporate GEF demand identified through its implementing and executing partners. It is to foster rapid transfer of cleaner technology alternatives to recipient country markets and to promote adoption of business practices consistent with global environmental agreements and GEF objectives. The Network will facilitate information exchange, development of common goals, and strategic alliances between private and public partners to support clean technology market development. It is to offer tools that enable integration of the various global environmental considerations covered by the GEF mandate in holistic business planning. The network may also provide incentives for strategic market assessments, alternative feasibility studies and business planning. It will facilitate access to technology and market information and venture capital, and disseminate models of best business practice.
- 15. Following consultation with the GEF Secretariat and the UNEP GEF Unit, the Terms of Reference (ToR) for a consolidated consultancy assignment were developed in March 2000 to enable rapid implementation of this Activity. The holistic approach underlying the ToR were intended to examine opportunities to integrate related UNEP project activities in a programmatic framework with the view to delivering a holistic package of technology information, assessment, training and advisory services to facilitate investments in sustainable technology alternatives.
- 16. The bidding process started upon the finalisation of ToR. Incoming bids were reviewed in June. However, none of the proposals met the requirements set out in the ToR in a fully satisfactory manner. Three promising but incomplete proposals eventually were short-listed. The proposing consortia were requested to provide additional clarifications concerning key deliverables and staff assignments to enable informed decision making by the steering committee. Final responses from short-listed companies were received in September. A recommendation to award the contract to a consortium was presented to the steering committee on September 20. The steering committee endorsed this recommendation. The proposed contract is currently awaiting clearance by UNEP contracts committee, and assignment is expected to become effective in October.
- 17. The agreed outputs of the consultancy include design of a largely internet based network architecture and a business plan for the operation of a fully integrated Technology Transfer Clearinghouse, with the following underlying elements:

Review of the lessons provided by existing public and private clearing houses and corporate knowledge management systems (Task 1): The reviews are to identify lessons learned and to define best ways and means to complement existing mechanisms. Specific attention will be drawn to the experience gained under the UNEP's Ozone Clearing House, the Clearing House of the Convention on Biological Diversity, as well as other technology related knowledge management systems. Reviews of related UNEP activities such as the Global Wind and Solar Resource Assessment, the PV-Hvdro Market Assessment and the Redirecting



The Sustainable Technology Alternatives Network



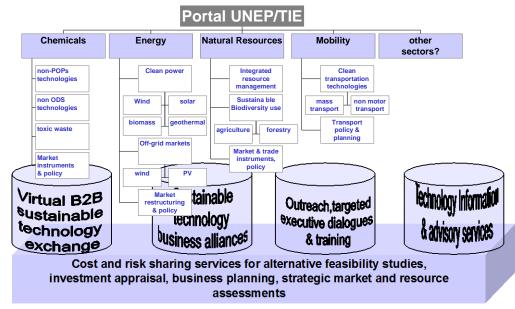
Prime facilitator of clean technology transfer, trade & related training

Network clusters

clusters

Technology transfer support services

> Incentives Mechanism



...operated by UNEP

- 18. The figure 2.1 above provides an initial and illustrative outlook on a possible network configuration option.
- 19. Delivery of final results of this Activity is scheduled for March 2001 to enable the presentation of a full fledged network business plan to GEF Council in due time before the May 2001 meeting.

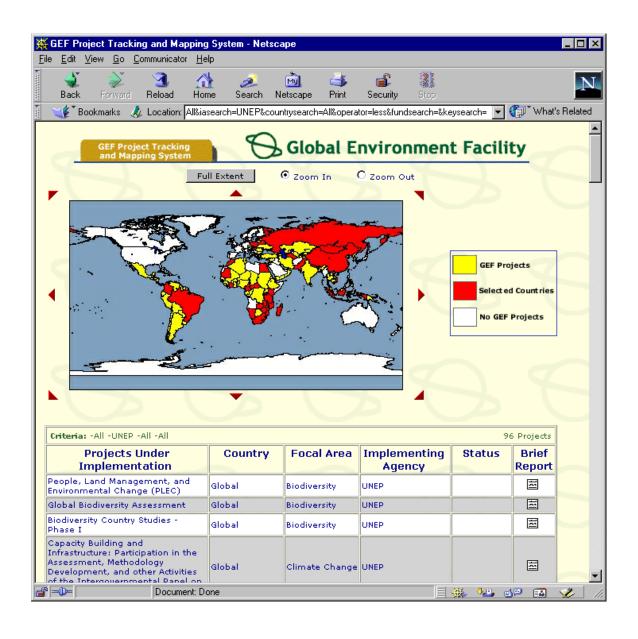
Activity 3: GEF Program tracking and mapping system (US\$ 250,000)

- 23. The goal is to utilise state-of-the-art Internet technology to establish an advanced environmental database for both spatial and thematic information. It will serve as a decision-support and outreach tool, tailored to the needs of defined user-groups. The project has leveraged advanced Internet technology to connect all GEF projects, thereby promote communications that cut across agency boundaries.
- 24. The output of this activity is preparation of a geographical interface for the *Operational Report on GEF Programs* (ORGP), which is updated quarterly and published on the GEF website by the GEF Secretariat. This interface will allow users to access the ORGP database in a user-friendly way through maps. It will be made available on the website as a search engine.
- 25. Task 1 involves geo-referencing the GEF Operations
 Report on the World Wide Web with an easy to use text
 search and query capabilities. A demonstration of the
 outputs of Task 1 (See Figure 3.1), the GEF Program
 Tracking and Mapping System, was organised at the
 margins of the May 2000 Council meeting. This system
 has already been released on the GEF website.
 Consultations were held with GEF Secretariat in Sioux
 Falls and Cambridge to refine the system. It was
 decided that Task 1 should be concentrated on the
 development of a system for the website. Consequently
 further activity on the CD-ROM was dropped.
- 26. Task 2 calls for the development of geo-referenced biodiversity information. In order to provide a broader geographic and regional coverage, it was decided that the original African regional focus should be replaced by a country biodiversity map server for Kenya, the Philippines and Mexico. The country map server for these three countries (See figure 3.2) was completed in September and was integrated with the GEF Programme Tracking and Mapping

System.

- 27. A formal demonstration of the integrated "GEF Programme Tracking and Mapping System" and "Biodiversity Internet Mapping System" is to be made at the GEF Council meeting in November 2000. A simplified presentation is considered for the NGO Consultation Forum preceding to the Council Meeting.
- 28. In consultation with the GEF Secretariat, it was decided to hold a workshop for global environmental projects information sharing (Task 3) in February 2001. This is because 'launching' the outputs from Tasks 1 and 2 at the Council meeting was an important and necessary precursor to convening the workshop that is intended to generate wider support and inputs for longer term development of the system. Except for the actual workshop, all Tasks including planning for the workshop will be completed by the end of this year. The workshop will address (i) the identification of other key partners in this effort; and (ii) the identification of existing information sources on environmental investment activities and projects of the multilateral donors, bilaterals and aid agencies.

Figure 3.1 PTMS -typical results screen



GEF Program Mapping: Kenya - Microsoft Internet Explorer Mapping: Kenya Click here for the complete GEF program listing for Kenya Legend II . Selected_Features **Q Q** GEF Programs (combined) National Protected Areas 0 4 Major Rivers Centres of Plant Diversity Political and Coastal Boundaries **National Protected Areas** AREA PERIMETER NATIONAL_ NATIONAL_I SITE_CODE AREANAME ISO3 5833 752 1.05688 4.53762 Tsavo East 38.79427 2.74033 Click here for the complete UNEP-WCMC animal species list for Kenya

Figure 3.2 Biodiversity Internet Mapping System -typical results screen

Activity 4: Interactive Forum on Global Environmental Issues (US\$ 290,000)

- 29. The goal of this activity is to establish, operate, and moderate a geographically balanced, internet-based, interactive forum for the scientific and technical communities. The forum is to encourage sharing of views on identified scientific and technical issues related to GEF programs.
- 30. Task I. calls for the establishment of an Expert Locator System. The following actions were taken to establish the system:

- A workshop on meta information (i.e. where the information is) systems was held in Bupadest in November 1999. The work of the European Environment Agency in developing the Catalogue of Data Sources (CDS) was reviewed.
- An Agreement was finalised between UNEP and the EEA in January 2000 on the adaptation of the Catalogue of Data Sources (CDS) Tool from EEA as the basis for the development of a Environmental Directory of Information Resources (EDIR), which is a core part of the Expert Locator System.
- A 2-day meeting between UNEP and EEA representatives was held in July 2000 to develop the technical specification of the global information directory. The EEA agreed to proposed modifications to the CDS software.
- The UNEP-Infoterra information exchange network is currently implementing the network reform measures endorsed by the 20th session of UNEP's Governing Council. The restructured network defines the institutional infrastructure needed to build and maintain the EDIR, specifically, the formation of national consortia of institutions that can locate environmental information and expertise within countries and regions.
- The Southern Africa component of UNEP-Infoterra met in Swaziland in June 2000 to discuss network reform issues and the EDIR initiative was well received by the meeting. A decision has yet to be taken on the most appropriate sub-regional node for the meta-information system in Southern Africa. UNEP's GEO collaborating centres in Africa have also been surveyed and three have expressed interest in being sub-regional nodes.
- 31. A Search and Retrieval Module of EDIR has been developed and installed (see Fig 4.1-Fig 4.2). This is a multilingual web based interface to provide access to meta-information in an efficient, easy and standardised fashion. The interface, which is tied to an environmental thesaurus, was designed to be simple, yet effective, to locate relevant information.
- 32. An Update Module needs to be developed to keep the database updated and to accommodate additional information particularly from developing countries. UNEP's reformed Infoterra Network is considered useful in making the current module meet such future requirements. A comprehensive design of the new module is already in place, and implementation shall commence in Jan 2001 at UNEP's own cost. To guide UNEP's work in the area of meta-information system development, a Metadata Working Group will be established in the last quarter of 2000.

EDIR - Microsoft Internet Explorer File Edit View Favorites Iools Help Home ो 80 Stop Refresh Forward Search Favorites History ▼ 🗟 Go Links » Address Addres a partner in the GEF Environmental Directory of Information Resources Expert Search for Data Sources Introduction Search in Data Sources Welcome to the search: Addresses searchtern : **Environmental Directory of** Topic Search Information Resources use translations (EDIR) search in following fields: title only As a joint effort between UNEP and the EEA under the <u>UNEP/GEF Strategic Partnership</u>, the Environmental Directory of Information Resources is a multilingual meta-database which catalogues g title, abstract, keywords Help class: Show Printfolder document other information sources on the internet, in dataset Feedback Email electronic form or other, into a number of classes project undefined (or categories). It's aim is to tell you where the information is and how to get it in a simple M map ■ undefined consistent and standardised format. undefined undefined It is updated through a global collaborative network coordinated by UNEP-infoterra and NGO's and various international organisation and country: ALL COUNTRIES consortia (regional and national). language of source: ALL LANGUAGES Features: time: Simple text search of metafrom/since 01 1900 . 01 SIMPLE database (all catagories, all SEARCH 01 01 2001 options) **EXPERT** Provides more options to refine SEARCH Data and Address searches PRINT Area to place all records that will FOLDER be printed later Listing of records against the TOPIC environmental thesaurus top level SEARCH http://gef.forum.unep.org/CDS/ Local intranet

Figure 4.1 EDIR "data search" screen

_ 🗆 × File Edit View Favorites Iools Help (2) Refresh Discuss Home 100 Stop Search Favorites History Back Forward Address (2) http://157.150.113.235.12345/servlet/CatalogueServlet?page=CCDSFrameSet&language=en ▼ 🔑 Go Links » a partner in the Environmental Directory of Information Resources Detailed Information Data Sources Search in Data Sources Land cover catalogue searched CDS Addresses number of found object 42 The CORINE land cover database (Version 6/1999) provides a p European inventory of biophysical land cover, using a 44 dass nomendature. It is made available on a 250m by 250m grid de which has been aggregated from the original vector data at 1:1 CORINE land cover is a key database for integrated environment assessment. Application examples are available on-line. Pleass download the database(s) to receive all datasets. Topic Search from 1 to 10 dataset Bio-geographic regions Data set incendi Boschivi del CFS П Help Download database after fill in the agreement ordering Show Printfolder European rivers and catchments public Feedback Email 2000-04-04 Statistiche del Corpo Forestale dello Stato 2000-04-04 dataset descriptio European Topic Centre on Land Cover (ETC/LC) П CORINE Land Cover 250m Grid in BIL-format leaugr250.zip (14) REMARK: This .zip file is protected. Send the signed agreement receive the password. CORINE Land Cover Arc/Info (Info) lectin (2XB) CORINE Land Cover Arc/Info (Info) legr.grid.e00 (1XB), Cr Land Cover Arc/Info (Info) legr.grid.e00 (1XB) 72/436/EEC: Commission Decision of 6 December 1972 on the French system of aid for the production of paper pulp, for papermaking and forestry research and for afforestation (Only the French text is a П -7005873 -6031238 Biodiversity indicators for the OECD - Environmental Outlook and Strategy: A feasibility study П 5700041 5060184 1984-01-01 г 1996-12-31 CORINE Information System - Summary Data Dictionary П parents. NATure/LANd Cover information package (NATLAN) D wetland. put in printfolder agricultural real estate, 1 2 3 4 5 1 http://gel-forum.unep.org/CDS/ E Local intranet

Figure 4.2 Typical results screen

- 33. Task 2 calls for the establishment of internet interactive forums:
- A web server providing general information about the interactive forum, the GEF and the Strategic Partnership was launched (URL: http://gef-forum.unep.org or http://gef-forum.unep.org or http://gef-forum.unep.org

- The forum on Land and Water Degradation in Africa (URL: http://gefforum.unep.org:8080/~land-water) was launched in January 2000 on the occasion of the African Month of the United Nations Security Council. More than 250 participants actively contributed to the discussion. The interim results of the forum were presented in May at a meeting held during the 5th meeting of the Conference of the Parties to the Convention on Biological Diversity in Nairobi. This interactive forum is currently being used to provide inputs into the Action Plan on Integrated Land and Water Management in Africa.
- Following the STAP workshop on agrobiodiversity, held in Barbados in February 2000, the agrobiodiversity interactive forum (URL: http://gefforum.unep.org:8080/~agrobio) was launched in March 2000. About 180 scientists participated in this forum. Recommendations from this forum with respect to the operation programme on Agrobiodiversity, have been compiled.
- For the preparation of the STAP workshop on Power Sector Reform, held in Bangalore in June 2000, an interactive forum was launched in April 2000. This forum was used to facilitate "pre-brainstorming" among the scientists concerned (URL: http://gef-forum.unep.org/~PSR).
- The initial experience provided by these three fora provides a basis for understanding opportunities and limitations of this still relatively new communication medium. The level of participation and the extent of substantive engagement varied by topic and within topics by issue. Additional learning and experience can be expected to illuminate appropriate opportunities and methods of utilising interactive fora and other communication tools for information sharing and consultation on global environmental issues.

Conclusion

- 34. Despite the short time period available, all of the four Activities planned under UNEP/GEF Partnership have progressed very well with a minimal delay. All Activities will be completed by the end of the first quarter of the year 2001.
- 35. All of the four Activities will deliver the results, which had been originally envisaged. Activity 1 has identified a large potential for Hydro-PV and on this basis it is in the process of creating a much broader momentum. Activity 2 has already worked out conceptual details of the Sustainable Technology alternatives Network. It will produce a comprehensive network proposal in March 2001. Activity 3 has already developed web-based GEF Programme Tracking and Mapping System and released it on the GEF website. It is planned to involve other interested organisations to further improve the system. Activity 4 has almost completed its planned tasks. The Expert Locator System has been established in co-operation with EEA. Three web-based interactive forums were put in operation under this Activity.

- 36. Members of the Steering Committee of the UNEP/ GEF Partnership expressed their satisfaction regarding the substantive results achieved by each of the four Activities in a very short period of time. The Committee continues to oversee the progress of activities planned by the first quarter of the next year.
- 37. In view of the positive results achieved through the implementation of the first phase of the UNEP/GEF Strategic Partnership, it is envisaged that suggestions on the second round of activities for FY01-02 will be submitted to the May 2001 Council for approval in accordance with agreed procedure. The second round will revolve around the implementation of the second phase of the "Clearing House for Technology and Know-how Transfer" and the "GEF Programme Tracking and Mapping System"