

United Nations Environment Programme

**Enabling activities for the preparation of initial
national communications related to the
United Nations Framework Convention
on Climate Change - Pakistan**

Evaluation report on UNEP/GEF subproject GF/2200-97-57

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Acronyms and abbreviations

| | |
|--------|---|
| ALGAS | Asia Least Cost GHG Abatement Strategy |
| BIOME3 | Biogenic Emissions Clearinghouse |
| CCEA | Climate change enabling activities |
| DG | Director general |
| DPDL | Division for Policy Development and Law |
| EOU | Evaluation and Oversight Unit |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| GEF | Global Environment Facility |
| GHG | Greenhouse gases |
| IPCC | Intergovernmental Panel on Climate Change |
| MELGRD | Ministry of Environment, Local Government and Rural Development |
| NST | National Study Team |
| PSC | Project Steering Committee |
| STAP | Scientific and Technical Advisory Panel |
| TOR | Terms of reference |
| UNEP | United Nations Environment Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |

Executive summary

The present evaluation examined and assessed the activities carried out by the United Nations Environment Programme (UNEP) and the Government of Pakistan (Ministry of Environment) under the UNEP subproject entitled Pakistan: enabling activities for the preparation of initial national communications related to the United Nations Framework Convention on Climate Change (referred to hereinafter as “the Convention”).

The evaluator compared planned outputs with actual outputs and assessed the steps needed to finalize submission of the initial national communications to the Convention secretariat. The exercise, in itself, resulted in an improved work atmosphere and provided a much-needed catalyst to the stalled process of finalization of the initial national communications under the project.

The evaluation highlights lessons learned from the implementation of the project activity and provides some recommendations toward meeting the objectives of the Convention.

Evaluation

Methodologically, the evaluator carried out an analysis of the project activity according to the project rating criteria listed under the terms of reference of the exercise, as contained in the annex to the present report. The analysis draws on information from the project documents produced, the detailed correspondence between the Ministry of Environment, Local Government and Rural Development (MELGRD) and the national study team, the project steering committee meeting minutes, workshop reports and interviews conducted with MELGRD officials and members of the national study team.

Overall, project activity was extended a rating of good after a careful, item by item analysis. This reflected the finding that the overriding objectives of the project, in terms of producing the initial national communications document to meet obligations under the Convention and carrying out activities leading to strengthened technical and institutional capacity, have been met adequately. Pakistan is thus in a better position to respond to its commitments under the Convention and to address issues related to climate change.

The project document clearly defined nine activities with targeted outputs, all of which provided both a short- and long-term framework to be established for the attainment of the overall Convention objectives. Overall, most of the stated outputs were achieved and the desired activities carried out during the project implementation, which included the establishment of the project management team and national study team, production of an updated greenhouse gases (GHG) inventory, climate change impact assessment activities, and the production of a comprehensive initial national communications document, including appropriate adaptation and mitigation options for the country.

In addition, the technical expertise required to understand and address the climate change issue was enhanced in both the private and the public sectors. The enhancement was triggered by four workshops held on the GHG inventory, mitigation options, adaptation, impact assessments and policy options, which provided useful forums for information dissemination and capacity enhancement.

The project managed, in particular, to develop a sound basis for the preparation and regular updating of the national GHG inventory and vulnerability or impact assessments in the country. Moreover, an effective framework for further research and future analysis was also identified through the project. The above-mentioned achievements can all be described as significant project impacts.

There were, however, project shortcomings during implementation. Most significantly, the completion of the project was delayed inordinately thereby diluting its efficacy. The delay in finalization and submission of the initial national communications document can be attributed mainly to managerial and monitoring issues, which have been identified carefully in the evaluation.

The requisite implementation and project administration structure within MELGRD could not be fully established, which was one of the major causes for the weak administration leading to project derailment and subsequent delay in finalization of the initial national communications. Other managerial problems, including the continued and unexplained delay in release of contractual project payments to national study team members, dented seriously the sustainability of the expert capacity built.

During the final evaluation, it was noted that had the required UNEP mid-term evaluation been carried out, it might have identified some of the managerial problems and possibly enabled them to be rectified at an early stage. Its absence caused slackness in the timely management and submission of the project outputs.

Thus, although the project implementation framework was successful in producing the required outputs, the operational delays and problems caused by lack of establishment of the managerial framework and the lack of continued adherence to the stipulated work schedule, led to unwanted delays in project implementation and completion.

Lessons learned

The project implementation went through lots of ups and downs and a number of useful lessons can be deduced from the exercise. Some of the more pertinent ones include the importance of timely and continuous monitoring, in particular the use of a mid-term evaluation, to avoid the kind of compounding of problems and unnecessary delays that occurred in this case. Equally essential, is the establishment of the originally stipulated managerial framework to keep projects on track and ensure their timely completion.

The project evaluation demonstrated that future projects should examine and incorporate defensive management practices to ensure the sustainability of capacity built. Finally, in order to impact national planning and policy effectively, it is essential to ensure continuous, formalized and consistent involvement of policy decision makers in the project.

Recommendations

Some pertinent recommendations toward the attainment of Convention objectives that became evident during project implementation include the need to enhance climate-related capacity-building continuously in the country. In particular, any follow-up project activity should include research support for the development of emission factors, which could significantly enhance the credibility of the GHG inventory and adaptation measures in the country.

Pakistan, as a developing country, has a number of data deficiencies. These have been identified in the initial national communications report and it is essential that efforts be undertaken to try to fill the data gaps. This should be coupled with a detailed assessment of technological needs to support sectoral responses to climate change in the country.

Although some expert capacity was developed through the initial national communications exercise, this requires enhancement according to a focused strategy. It should be supported by the development of a cohesive climate change action plan or strategy, which can align with national development policies and mainstream policy planning processes and keep pace with rapid developments in international negotiations and policy formulation processes.

I. Introduction

1. Under the guidance of the chief of the evaluation unit, and in close collaboration with the UNEP task manager for climate change enabling activities, the present report contains an evaluation of the UNEP/Global Environment Facility (GEF) subproject entitled: Pakistan: enabling activities for the preparation of initial national communications related to the United Nations Framework Convention on Climate Change (UNFCCC/2200-97-57). The evaluation was conducted during the period from 11 August 2003 to 10 October 2003.
2. Pakistan signed the United Nations Framework Convention on Climate Change in 1992 and ratified it in 1994. Under article 12.5 of the Convention, Pakistan, as a non-Annex I Party, is required to make its initial national communications “within three years of the entry into force of the Convention for that Party, or of the availability of financial resources”.
3. In pursuance of the objectives of the Convention, Pakistan undertook a number of enabling activities such as the Asian Development Bank-funded report on climate change in Asia: Pakistan, in 1993; the Asia least-cost greenhouse gas abatement strategy report funded by the United Nations Development Programme, GEF and Asian Development Bank, in 1997; and the UNEP and GEF funded country case study on climate change impacts and adaptations assessment phase-1 report, in 1998. The project under review aimed at enabling the country to harmonize, update and refine previous results, fill in gaps and enhance further its scientific and technical capacity, especially within the Government sector. The overall objective was to enable Pakistan to fulfil its commitments and obligations as required by articles 4.1 and 12.1 of the Convention, especially in relation to the preparation and reporting of the initial national communications as required by article 12.1 (a), (b) and (c) of the Convention, based on the guidelines and format for non-Annex I Parties recommended by the Conference of the Parties to the United Nations Framework Convention on Climate Change at its second session.
4. In line with the overall objectives, financial assistance was provided for undertaking the following activities under the project:
 - (a) Preparation of the GHG inventory for the year 1994;
 - (b) Identification and assessment of mitigation options;
 - (c) Development of a comprehensive vulnerability assessment for various sectors;
 - (d) Identification of stage I adaptation options;
 - (e) Capacity-building to integrate climate change concerns into planning;
 - (f) Provision of public awareness and other information.
5. Administratively, the UNEP task manager of climate change enabling activities, currently located in the Division for Policy Development and Law of UNEP, implemented the project internally. Domestically, the project was executed by the project coordinator at MELGRD, Pakistan.

II. Evaluation

6. This section of the report undertakes an evaluation of the project as per the project rating criteria detailed below:
 - (a) Achievement of objectives and planned results;
 - (b) Attainment of activities and outputs;
 - (c) Cost-effectiveness;
 - (d) Impact;
 - (e) Sustainability;
 - (f) Stakeholder participation;
 - (g) Country ownership;
 - (h) Implementation approach;
 - (i) Financial planning;

- (j) Replicability;
- (k) Monitoring and evaluation.

7. Most of the items detailed in paragraphs 3–16 of the terms of reference (see the annex to the present report) are, directly or indirectly, encompassed under the above-mentioned criteria. For the purposes of the evaluation, the report first describes briefly each of the above items in the light of the terms of reference requirements, and then analyses and assesses the extent to which the stated objectives were met by the project.

8. This analysis is based on the project documents produced, the detailed correspondence between MELGRD and the national study team, the project steering committee meeting minutes, the workshop reports and interviews conducted with MELGRD officials and members of the national study team.

9. During the evaluation, a rating of each item was carried out on a scale of 1–5, with 1 being the highest rating (excellent) and 5 being the lowest (unsatisfactory). Finally, based on individual ratings, an overall rating of project implementation was compiled at the end of the evaluation.

A. Achievement of objectives and planned results

1. Objective

10. This section analyses whether the overall project objectives, as defined in the project document (subproject no. GF/2200-97-57), were met and whether the general project results expected were attained. The quality and usefulness of the planned and current project outputs is also analysed to determine how they contributed to the attainment of results and overall objectives identified in the approved project proposal, in meeting Convention commitments and responding to the identified needs and problems in Pakistan

2. Evaluation

11. As specified in the project document, the overall objectives of the project were to meet the requirements of articles 4.1, 12.1 and 12.5 of the Convention and to endeavour to prepare and submit the initial national communications (including updated inventory and steps taken) within 12 months of the approval of the required project funding. The initial national communications preparation process was intended to build national capacity, fill in technical gaps and enhance the enabling environment toward fulfilling commitments and obligations under the Convention.

12. The initial national communications process commenced in Pakistan with the signing of the project document in January 1999, which encompassed a financial budget outlay of \$274,300. The project completion date was initially indicated as December 2000 (24 months) while the project document mentioned a rather ambitious target of 12 months for completion and submission of the initial national communications. Both the deadlines were missed and the project completion date was extended to December 2003, which would, if achieved, be four years since the arrangement of funding. Thus, the project completion was delayed substantially and missed the three-year requirement under article 12.5 of the Convention. The delays were due to a host of factors that are analysed in the present report.

13. The timing target clearly having been missed, other objectives related to the process of preparation of the initial national communications, including the quality of content and the accompanying enabling activities. In this regard, the project document specified nine activities with targeted outputs, which were mostly achieved and that were analysed in detail for quality of content in the next section.

14. Activities included the setting up of an institutional support structure in the form of a project steering committee and national study teams; the preparation of an updated GHG inventory; identification of mitigation options; reporting of impact monitoring and adaptation measures; and other programmes related to capacity-building, research, public awareness and sustainable development.

15. During the process, five meetings of the project steering committee were held, four national technical workshops were organized, nine background studies were completed and additional special studies were commissioned. Finally, the initial national communications document, which collectively embodies the consolidation of all the above-mentioned activities, was presented in draft form in April 2001.

16. The document was revised, through the required technical review process, by October 2001. Since then, however, the initial national communications document has been awaiting final packaging and subsequent government endorsement and submission to the Convention secretariat (table 1). The process has been embroiled in administrative problems with final payments pending to national study team members, which has delayed the project by over two years.

Table 1: Time line of project activities

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------------------------------|---|-----|--|---------------------------------|-----|-----------------------------|--------------------------------|-----|---|-----|----------------------------------|
| 1999 | Contract signed with UNEP | | | | | | | Work awarded to NST led by HBP | | | | |
| 2000 | 1 st PSC meeting | | | 2 nd PSC meeting + Inventory Wksp | Special Studies approved by GOP | | 3 rd PSC meeting | Mitigation wksp | | Impact / Adaptation Wksp | | Initial completion date - MISSED |
| 2001 | DG Env/Chair PSC leaves | Payments STOP to NST Policy Wksp | | NC draft submitted for REVIEW | | | | 4 th PSC meeting | | Extended REVIEW process completed Revised INC | | |
| 2002 | NST work STOPS / Fire in MELGRD | | | All project doc's plus invoices resubmitted | | | | | | | | |
| 2003 | | 5 th PSC meeting Doc's resubmitted INC Finalization Scet | | | | | | | | | | Expected completion date |

3. Rating

17. As analysed above, the overriding objectives of the exercise in terms of producing the initial national communications document to meet obligations under the Convention and carrying out activities leading to strengthened technical and institutional capacity, have been undertaken. Pakistan is, therefore, in a better position at present to respond to its commitments under the Convention and to address issues related to climate change. The timing of the exercise, however, has been delayed inordinately thereby diluting its efficacy and so a rating of 2 was given.

Achievement of objectives and planned results

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | X | | | |

B. Attainment of activities and outputs

1. Objective

18. The project document clearly defines nine activities with related outputs, all of which provide a short- and a long-term framework to be established for the attainment of the overall Convention objectives. This section analyses the attainment of the desired activities and outputs in detail.

2. Evaluation

19. As stated above, this section assesses the results of the nine stated activities due to be carried out during the implementation of the project.

20. It should be noted that the content analysis below is based upon the initial national communications report output reviewed and finalized by the national study team members and provided to MELGRD. The contractor's report was submitted to a subcommittee constituted at the fifth meeting of the project steering committee in February 2003. The final version of the report, to be submitted by the Government of Pakistan to the Convention secretariat, might be altered in the light of the subcommittee recommendations.

(a) Activity 1: Establishment of the project management team and national study teams

21. The first activity aimed to set up two managerial tiers for the timely, effective administration and implementation of the project. These included an inter-ministerial project steering committee and an expert national study team comprising subgroups on GHG inventory, mitigation, vulnerability and adaptation, and national communication. Furthermore, a project management team comprising group leaders of the national study team, a designated senior officer of MELGRD as project coordinator, a full-time project manager and a senior technical advisor, were to be appointed to supervise, manage and provide overall technical advice to the project.

22. In terms of the project implementation, an overall project steering committee was formed comprising the following institutions:

- (a) MELGRD;
- (b) Ministry of Industry;
- (c) Ministry of Planning;
- (d) Ministry of Petroleum and Natural Resources;
- (e) Ministry of Water and Power;
- (f) Ministry of Science and Technology;
- (g) Ministry of Agriculture;
- (h) Ministry of Finance;
- (i) Ministry of Foreign Affairs;
- (j) Ministry of Transport;
- (k) Pakistan Academy of Sciences.

23. The project steering committee met five times and was responsible for guiding overall project implementation.

24. The national study team, comprising experts from the following public and private organizations, was formed and it was awarded the contract for preparation of the initial national communications in August 1999:

- (a) Hagler Bailly Pakistan – head of the national study team;
- (b) Energy wing, planning and development division;
- (c) National Agricultural Research Center;
- (d) National University of Science and Technology;
- (e) National Institute of Oceanography;
- (f) Marine Investigators;

- (g) Pakistan Forest Institute;
- (h) Pakistan Science Foundation;
- (i) ENVORK Research & Development;
- (j) Independent consultants.

25. The project management team, as suggested in the contract, could not be established. Neither the project manager nor the senior technical advisor were appointed although they were budgeted for and required under the contract. This led to weak overall management of the project implementation activity as highlighted in the present report.

26. Based on the above, an overall rating of 3 was given to this activity, which reflected the lack of formation of the project management team.

(b) Activity 2: GHG inventory

27. The project envisaged the preparation of the GHG inventory for three gases (CO₂, CH₄, N₂O) covering five categories, including energy, industrial processes, agriculture and livestock, land-use change and forestry. The objective was to update the inventory, identify any technical gaps and areas for further research and try to develop new emission factors where possible.

28. The initial national communications project prepared its GHG inventory covering the period July 1993 to June 1994 and included the gases and sector sources mentioned in the project document. In fact, the coverage of gases was extended to CO gas although not required under the project terms of reference, whereas the solvent category was excluded due to absence of activity and emission data.

29. According to the initial national communications, total national emissions and removals accounted for 94,571 Gg of CO₂ emissions, the energy sector being the largest contributor with 81 per cent of these, followed by industrial processes with 12 per cent and forestry with 7 per cent. For CH₄, agriculture was the primary source, accounting for 87 per cent of all emissions and fugitive plus waste management emissions accounting for the remainder. Agriculture also accounted for the bulk of N₂O emissions (81 per cent) with the remainder coming from human sewage and the energy sector. For CO, the transport sector was the prime source with 81 per cent of emissions.

30. The preparation of the inventory relied mostly on the Intergovernmental Panel on Climate Change (IPCC) guidelines and on previous national data attained from sources such as the Forestry Master Plan data, the HESS survey for forestry and fuel wood respectively, and the Asia least-cost GHG abatement strategy (ALGAS) study data for the energy sector. Some emission factors have also been developed where reliable data were available, including for natural gas and coal, and for sulphur contents of coal and liquid fossil fuels. Mostly, however, IPCC default values for emission factors were used, which suggested strongly that more research work should be undertaken to localize the presented data figures totally.

31. It is worth mentioning that during the first project steering committee meeting, the members of the national study team raised the issue of funding research on the measurement of local emission factors but they were informed by MELGRD that funding could not be extended for this and that the IPCC default guidelines should be used.

32. As required by the project document, an inventory workshop was held in April 2000 and feedback from the multi-stakeholder workshop was integrated into the document during the review process. The results of the inventory were also presented at the south Asian GHG inventory conference organized by UNEP, in New Delhi, in April 2001. Overall, the inventory update exercise met the objectives sufficiently in terms of reliably updating, identifying gaps and providing a solid database system for future use. A rating of 2 was, therefore, given to this activity.

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

33. This activity was intended to use the updated inventory to generate a comprehensive list of mitigation options and to prepare a national mitigation strategy.

34. For this activity, significant work had already been undertaken through the Asian Development Bank-funded ALGAS project. During the initial national communications process, a significant update of the GHG inventory was carried out while developing a national mitigation strategy and, in conjunction with this, a special report on policy issues was commissioned by the project steering committee. Using the combined indicators of cost-effectiveness and abatement potential, a comprehensive mitigation assessment exercise was carried out to identify options in energy use (21

options in subsectors, including residential, transport and manufacturing, and specific renewable and supply side options), agriculture and livestock (two options analysed), and the forestry and land-use change sectors (six options analysed, including afforestation, forest protection and watershed management).

35. While carrying out the prioritization of options, qualitative ranking criteria were developed and used, based on factors such as environmental impact, national development priorities, net present value, institutional and policy development, social benefits and CO₂ abatement potential. The relative weights given under this ranking could be debated but, nevertheless, the exercise provided a very useful comparative framework for future use.

36. As required, a workshop was also held in August 2000 to present the work done and to solicit and incorporate input from a wide range of stakeholders. Overall, the activity was carried out very effectively and it produced useful and tangible results meriting a ranking of 2.

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

37. The fourth activity aimed at undertaking an exercise to evaluate baseline data and the monitoring system feeding the data. The objective was to improve and update the data and use it as a basis for a thorough vulnerability and impact assessment for various sectors.

38. This section of the initial national communications identifies serious constraints relating primarily to the lack of adequate monitoring systems, especially for prediction of extreme events, as well as shortage of adequate base studies for impact assessment in the agriculture sector. Subsequently, expert judgement was used, based on some logical assumptions, to compensate for a number of such technical gaps.

39. The climate change scenarios were formulated using a synthetic model guided by global climate model outputs from a variety of global climate models. For the initial national communications, the country's geographical area was divided into nine regions on the basis of climate and physiography and the climate change scenarios were applied to them to obtain results in terms of changes in temperature and precipitation. Seven out of nine regions showed a temperature change of +0.3°C while a precipitation change of between +/- 1.2 and 1.5 per cent was observed for six of the regions.

40. Based on the scenarios, impact assessment was carried out for a number of sectors. This analysis built upon the data and information already available about areas that include water resources, hydropower generation, groundwater resources, agriculture, forests, cyclones, livestock, energy and infrastructure, while analysing new sectors with scan prior information such as biodiversity, human health and coastal zones. In particular, the water and agriculture sectors, both of which are vital to the economy of Pakistan, were assessed in detail for impacts, including a re-run of the CERES crop model, to assess the impacts on growth and yield of main crops and to analyse shifts in crop boundaries. Similarly, the Biogenic Emissions Clearinghouse (BIOME3) computer simulation model was used for impacts on forests.

41. The data deficiencies differed from location to location and were identified adequately such as in the measurement of radiation, humidity and wind data. Some sectors, including impacts on biodiversity and human health, have a greater reliance on expert judgements due to non-availability of relevant data.

42. The coastal area environmental plan, carried out by the Economic and Social Commission for Asia and the Pacific (ESCAP), was mentioned specifically in the project document as a plan to be upgraded in the light of climate change impacts. It was not mentioned in the initial national communications report on coastal zone impacts owing to the fact that the onward contract with the national study team excluded this part. A more organized analysis of current monitoring systems for basic data collection to highlight deficiencies might have strengthened the section.

43. As required, a workshop was organized, in October 2000, for key stakeholders and policy makers to discuss collectively the results of the vulnerability assessment exercise and to review the list of adaptation options (activity 5).

44. The section provided detailed analysis of most of the requisite parts, occasionally going into too much detail. On the other hand, there were some areas, mentioned above, which will require improvement in the future. Overall, the section merited a rating of 3.

(e) Activity 5: Policy frameworks for implementing adaptation measures and response strategies

45. Linked with the previous activity, this section was designed to analyse and identify adaptation options and suggest a national policy framework for implementing adaptation measures.

46. The impacts of climate change and the adaptive response strategies were analysed in the initial national communications through an integrated approach that considered possible impacts both within and among sectors. The thrust of the adaptation strategy was on water and agriculture with the focus of water being on conservation and efficient use. In this regard, general options such as rain harvesting, improved maintenance and lining of canals, waste-water reclamation and use, and reservoir system management were suggested as no regrets adaptation strategies.

47. Similarly, for the country's vital and vulnerable agriculture sector, adaptation strategies encompassing improved crop varieties and agronomic practices, irrigation expansion, and changes in cropping patterns were suggested. Other adaptation options were suggested for floods, shifts in rangeland ecosystems, pest control techniques and for forestry, biodiversity, coastal zones and livestock.

48. As mentioned above, a combined vulnerability assessment and adaptation options workshop was organized with stakeholder participation to solicit feedback to the project.

Although well organized, this section suffered from too much emphasis on generalized adaptation options with scant localized strategies specific to Pakistan and its particular environment. Data deficiencies were cited as a possible reason and these should be addressed in the future development of adaptation response measures. Overall a rating of 3 was awarded to this section.

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

49. One of the objectives of the initial national communications exercise was to enhance the capacity of national development planners and policy and decision makers so that climate change concerns could be integrated into medium- and long -term planning.

50. The institutional arrangement, which included the formulation of an inter-ministerial project steering committee as well as the multidisciplinary national study team, resulted in the strengthening of capacity related to climate change in both the private and public sectors. Both the above-mentioned project management and implementation bodies provided effective forums for increasing understanding of climate change among policy planners and decision makers in the country.

51. In addition to this, four workshops were conducted with a much wider and more diverse participation of stakeholders from both the public and private sectors. The workshops allowed for the dissemination of the initial national communications results and direct stakeholder input into the process, which resulted in the strengthening of climate-related understanding in the country. This might, however, have been enhanced further through the use of budgeted funds to conduct the additional four workshops that were stipulated in the project document.

52. The multisectoral initial national communications research catalysed enhanced knowledge among the various Government departments and private bodies dealing with sectors including energy, agriculture, water resources, forestry and livestock.

53. The project suffered from the lack of appointment of a regular project manager and a senior technical advisor, which might have strengthened expert capacity in the country. The project delay due to non-payment of contractual dues and project mismanagement caused the national study team to disintegrate rather than being sustained as a useful expert body on climate change. The project did not benefit optimally, therefore, from the budgeted allocations for group training and capacity enhancement. A more organized and sustained capacity-building effort should be undertaken if a serious impact on national policy is to be effected. Overall, this section was awarded a rating of 4.

(g) Activity 7: Programme related to sustainable development, research, public awareness

54. A budget of \$20,000 was available in the project for producing information packages, video aids, publications and enhancing public awareness at the grass-roots level with the aim of implementing article 6 of the Convention relating to education, training and public awareness.

55. The initial national communications project identified programmes for creating public awareness about climate change factors, parameters, impacts, adaptation strategies and other priority areas. Various suggestions were put forward for the forestry, biodiversity and agricultural sectors relating to integrating climate change concerns and understanding in the education system and targeted information dissemination through seminars, lectures and the electronic and print media. Unfortunately, the initial national communications project was unable to use the allocated funds for this exercise.

56. The generalized suggestions were not supported by any focused activity programme although specifically stipulated in the budget and the project document. The initial national communications-related workshops did create awareness but this was focused on an expert stakeholder group rather than the general public. This section deserves further attention in the future and the rating given was 4.

(h) Activity 8: Provision of other information

57. The stated objective of this activity was to provide information on various related aspects of the project such as data relevant for calculation of global GHG emission trends, financial or technological constraints associated with the communication of information, and needs for further improvement of national communications.

58. The initial national communications project developed and updated the GHG inventory data in Pakistan and enhanced the authenticity and correctness of the data. This could be used very effectively for the purpose of defining global GHG trends. Moreover, the project identified priority research areas for relevant sectors such as water resources, agriculture, energy, forestry and biodiversity. This was complemented by a well-researched exercise to identify organizations in the country with the capacity and the willingness to be involved in future climate-related research. The exercise provided extensive and informative suggestions and a very useful institutional framework for the funding of future research in the country and improving national communications in a phased manner. A rating of 2 was given to this activity.

(i) Activity 9: Preparation of the initial national communications

59. This activity was aimed at collating the previous eight activities in an organized manner under the guidance of a senior technical adviser and with the involvement of members of the project management team and national study team. Other steps to be followed were a review by the project steering committee and a final stakeholders workshop to finalize and approve the revised draft of the initial national communications for submission to the Convention secretariat.

60. As is evident from the initial national communications document, the collation of the above-mentioned activities was achieved effectively. Moreover, the draft initial national communications went through an extensive and inclusive review process. Copies were circulated to over 40 organizations and departments, and to all the project steering committee members, external experts and to the UNEP office in Nairobi. In addition, the key reports were circulated to targeted experts for comments during the study and preparation period. The feedback from the review process, relevant suggestions and comments emanating from the four workshops were then incorporated into the draft document. In order for the review exercise to be conducted efficiently, the review period was extended from May to October 2001 after which time the document was consolidated.

61. The final version of the initial national communications document was submitted in October 2001 but since then the project has been derailed administratively and it has been delayed to date. The requisite final meeting of the project steering committee took place in February 2003 and a final subcommittee was set up to finalize the initial national communications draft document for submission. The process remains stalled, however, pending resolution of the issue of payments due to the national study team members.

3. Rating

62. The rating of the attainment of activities and outputs reflects the overall activity of the nine stated activities and the rating of 3 reflects consideration of the individual ratings of all the activities.

Attainment of activities and outputs

| | Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|---------------------------|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| Activity 1 | | | X | | |
| Activity 2 | | X | | | |
| Activity 3 | | X | | | |
| Activity 4 | | | X | | |
| Activity 5 | | | X | | |
| Activity 6 | | | | X | |
| Activity 7 | | | | X | |
| Activity 8 | | X | | | |
| Activity 9 Overall | | | X | | |

C. Cost-effectiveness

1. Objective

63. This section analyses how effectively the project funds were used under the terms of the budgetary provisions and whether the use of funds allowed the achievement of the desired project objectives.

2. Evaluation

64. The section on outputs and activities demonstrated clearly that the project was able to meet the overall stated objectives effectively and this points to the appropriate use of the funds allocated. The total funds budgeted for the project were \$274,300, which included components for project personnel, sub-contractors, training, equipment, miscellaneous costs and UNEP participation costs (table 2). The budget was estimated realistically in view of the special consideration deserved by Pakistan (under article 4 of the Convention) with a large population, complex ecosystems and a highly vulnerable environment.

Table 2: Division of project funds

| Use of GEF funds | Amount (\$) |
|----------------------------|-------------|
| UNEP participation cost | 28,300 |
| Project / MELGRD component | 246,000 |
| Total | 274,300 |

65. The project budget for use through MELGRD was \$246,000, which included funds allocated for various purposes as shown in table 3, below. The major portion of project funds was allocated to contracted consultants (almost 50 per cent) and the second largest allocation was for purposes of training and travel (25 per cent) followed by funds for hiring of technical personnel (12 per cent) reflecting a high focus on training of experts and personnel under the project.

Table 3: Use of project funds

| Expense item | All items in \$ | |
|--------------------------|---------------------|---------------------|
| | Budgeted allocation | Allocation per cent |
| Project personnel | 29,000 | 12 |
| Consultants | 52,000 | 21.2 |
| Travel | 14,000 | 5.6 |
| Sub-contracts | 80,500 | 32.8 |
| Group training | 51,100 | 20.8 |
| Expendable equipment | 2,050 | 0.8 |
| Non-expendable equipment | 7,500 | 3 |
| Operation | 750 | 0.3 |
| Reporting costs | 4,100 | 1.6 |
| Sundry | 5,000 | 2 |
| Total | 246,000 | |

66. To date, the use of project funds has been quite slow with almost 30 per cent (\$60,000) still in process at a late stage of project implementation. According to data on cash advances by UNEP, as

shown in table 4 below, however, almost 85 per cent of project funds have been used. The lack of full use of funds can be attributed to the fact that relevant personnel, as stipulated in the project, were not employed. The posts of a full-time project manager and an expert senior technical adviser remained unfilled due to reasons that were unexplained and this is reflected by the zero use of project personnel funds to date.

Table 4: UNEP cash advances

| Date | Amount of UNEP Advances | Use (per cent) |
|------------------|-------------------------|-----------------|
| 7 January 1999 | \$60,000 | |
| 19 December 2000 | \$75,000 | |
| Sept 2001 | \$15,000 | |
| In process | \$60,000 | |
| | \$210,000 | 85 |

67. The data on expense items was not available from MELGRD but available data showed that the only components to be used adequately were the consultants and sub-contracts components, which were contracted out to the national study team for the core project activities and the additional special studies. However, the disbursement of those components also underwent unwanted procrastination especially at the final stages of the project and that resulted in the whole exercise being delayed considerably.

68. The project component intended for training and capacity-building was also used sparsely resulting in only four of the eight targeted training workshops being conducted. It is to be hoped that, with the availability of the final amount of \$60,000, which is under process at this time, further capacity-building will be undertaken through focused workshops or climate-related capacity-building within MELGRD.

69. The UNEP budgetary component (table 2) was intended for coordination and implementation of project activities and for carrying out mid-term and final evaluations. The mid-term evaluation was not carried out, which was unfortunate as it might have prevented the project from derailing.

3. Rating

70. Based on the cost-effectiveness performance, as described above, a rating of 3 was awarded. This reflected the fact that the funds were available but were left unused until a very late stage of the project.

Cost effectiveness

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | | X | | |

D. Impact

1. Objective

71. The present section analyses, through stakeholder consultation, the impact of the planned and current results of all the activities to prepare the initial national communications.

2. Evaluation

72. The most significant impact of the project was in the area of capacity-building. The technical expertise, to deal with and understand the climate change issue, was enhanced in both the private and public sectors. In addition to fostering focused in-country expertise, the high powered, inter-ministerial project steering committee increased awareness of the issue at the policy decision makers level while public awareness was enhanced through the process of wide-scale result dissemination at the project workshops. This impact could, however, have been enhanced significantly by the full and proper use of funds allocated to capacity-building.

73. An invaluable database was, nevertheless, developed in the country through the updated GHG inventory and the mitigation and adaptation options, which have been aptly integrated into a multisectoral policy to deal with the climate change issue in Pakistan. Moreover, an effective framework for further research and future analysis was also identified through the project and all of these are significant impacts of the project exercise.

3. Rating

74. A rating of 2 was given since the expected impact was achieved for the most part.

Impact

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | X | | | |

E. Sustainability

1. Objective

75. This section assesses the role that the project made in capacity-building of participating national institutions in the area of reporting to the Convention secretariat, and the long-term sustainability benefits of such an undertaking. It also analyses additional information generated by the project to build upon the earlier ALGAS and UNEP adaptation projects.

2. Evaluation

76. As mentioned in the project document, three specific teams were to be developed and sustained for the purposes of the project. These included the project management team, the national study team and the project steering committee. Of these, the project management team could not be constituted as stipulated, owing to the non-appointment of the project manager and the senior technical adviser.

77. The project steering committee was constituted as an inter-ministerial body and was supposed to meet on a quarterly basis to review project progress and provide sustained guidance. The body met three times, almost quarterly, in 2000 but the fourth project steering committee meeting then took place after almost a full year and the fifth after a period of more than another 16 months (table 1).

78. This not only loosened administrative control of the project but also weakened the sustained effort that was required to meet the required Convention objectives on time. The sudden departure in early 2001 of the director-general of environment, who was also the project steering committee chair and the project focal point, also affected the timely implementation of the project. His replacement was unable to be as effective as the incumbent director-general who was very well versed in climate-related activities in general, and this project, in particular. If the project manager and senior technical adviser had been nested in the MELGRD, as designed in the project, the level of derailment of project implementation might have been avoided. Also, this in-house technical expertise would have proved useful for project sustainability.

79. The national study team members, who constituted the third team of experts, were responsible for working on the sub-contracted project documents. These included a number of specified reports such as those on the GHG inventory, mitigation and adaptation options, vulnerability and impact assessments, policy options, and additional reports on international climate change negotiations and global policy issues. Thus, most of the expertise development under the project was centered around the national study team and this core of experts might have been instrumental in ensuring long-term project sustainability. Owing to the unfortunate delay of pending payments to the national study team members by MELGRD, however, the expert team withered away. The two-year period of inactivity for the national study team (from February 2001 to present) proved detrimental to climate-related expertise in the national study team and a special effort would be required to re-invigorate interest in the body.

80. Thus, although relevant technical expertise did certainly develop through the project, its sustainability was affected by the non-appointment of the project manager and senior technical adviser and the discouraging delay in payments to national study team members. Moreover, as stated, the poor use of funds for capacity-building lowered significantly the level of success that might have been achieved by the project on this front.

81. Aside from capacity-building, the project did manage to develop a strong and sound basis for preparation and regular updating of the national GHG inventory and vulnerability and impact assessments, which is certainly a plus for future project sustainability.

3. Rating

82. In the light of the factors outlined above, a rating of 3 was given to this aspect of the project.

Sustainability

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | | X | | |

F. Stakeholder participation

1. Objective

83. This section assesses the decision-making process and the criteria used to attract qualified consultants for the implementation of the various project components, identifying lessons learned for improving such involvement in the future. It also looks at the extent to which gender considerations were incorporated into the various technical and operational aspects of the project.

2. Evaluation

84. During the project decision-making process, the participation of stakeholders was solicited at two different levels. One level was directly through the involvement of experts and policy decision makers in the project steering committee, the national study team and the partially composed project management team, as elaborated in earlier sections. This provided multidimensional and multidisciplinary input during project implementation that was effective in the production of a well-composed output in the form of the initial national communications report. Furthermore, the leading role taken by MELGRD in the process helped to improve in-house capacity and Government involvement while the participation of concerned ministries assisted in incorporating the initial national communications results and concerns into the planning process.

85. MELGRD advertised the soliciting of responses for carrying out activities related to the initial national communications in May 1999, which led to the selection of the members of the national study team group, led by Hagler Bailly consultants. The lead organization had been involved previously in various work on climate change, including the ALGAS study, and augmented its internal strengths by successfully building a consortium of other organizations and qualified experts working on various focused aspects of climate change. The strong consortium was awarded the initial national communications job by MELGRD in August 1999 and it was effective in attracting very qualified consultants to work on the project.

86. The sustainability of the expert involvement was seriously damaged and discouraged, however, by the continued delay in release of project contractual payments to national study team members who formed the core of the expert group. As a result, the capacity developed was not streamlined properly nor maintained cohesively and this point requires further attention. Moreover, on the Government side, lack of continuity of expert involvement also hampered sustainability of participation with the focal project coordinator not having been formally designated since the departure of the director-general of environment in January 2001.

87. The other indirect level of stakeholder participation was through the workshop process. Four workshops were held on the GHG inventory, mitigation options, adaptation and impact assessments, and policy options. These workshops, with between 30 and 40 participants, provided useful forums for disseminating national study team findings on the various topics and for soliciting suggestions and input from a diverse group comprising non-governmental organizations, research organizations and other civil society bodies. The funds allocated for this exercise were used sparsely, however, with only 22 per cent of the funds intended for group training actually spent. A more extensive programme for stakeholder participation could have been constituted under the stipulated budget.

88. Gender imbalance is a generic problem in most of the professional fields in Pakistan and the initial national communications stakeholder group was no different. Although a few qualified women participated actively in the expert process, especially through the lead consultants Hagler Bailly, in general, the gender balance was male-oriented with under-representation of women.

3. Rating

89. Due to the above-mentioned factors, a rating of 3 was given for this section.

Stakeholder participation

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | | X | | |

G. Country ownership

1. Objective

90. This section identifies and assesses measures that national institutions have initiated to integrate the results and recommendations of the initial national communications into national policy-making and planning and makes recommendations regarding follow-up measures for ensuring longer term sustainability of project activities.

2. Evaluation

91. On the climate change front, Pakistan ratified the Convention in 1994 and has, since then, undertaken some very useful studies such as the ALGAS study and the UNEP country study on impacts and adaptation. Furthermore, the initial national communications process augmented capacity significantly at the inter-ministerial policy-making level and at the expert and public levels through the implementation framework, which included the project steering committee, national study team and various workshops. Although this has created institutional awareness and built a constituency conducive to the formulation of a comprehensive national strategy, further steps are required to develop a concerted climate change strategy supported by dedicated policy, planning and implementation capacity.

92. In order to be successful, a climate change policy in Pakistan must be integrated fully with national development and environment priorities and, as a first step, the initial national communications project identified various climate change policy options for Pakistan. These included identification of areas for effective and coordinated mitigation and adaptation responses and, in this context, the development sectors of energy and industry, agriculture, water and forestry were identified as key sectors that form the basis of economic development in Pakistan with major implications for, and interlinkages with, the climate change issue.

93. Realistically speaking, the initial national communications process has not triggered any large-scale climate response shifts or integrative measures within the policy-making framework in Pakistan. It has managed, however, to create interministerial awareness about climate issues and identify the policy areas, which are affected by or can benefit effectively from developing a climate focus. This exercise was quite useful as it worked towards placing the current and existing development priorities of Pakistan on a more climate-friendly trajectory, especially in the sectors of energy, water resources, agriculture and forestry.

94. In the follow-up, Pakistan should develop a comprehensive national action plan on climate change, amalgamating the prioritized adaptation and abatement strategies. This should build upon an environment of enhanced capacity, understanding and awareness about the climate issue. In this regard, one of the starting points should be the strengthening of capacity to identify and analyse technology needs and to build a comprehensive strategy for appropriate transfer of technology. Account should be taken of the need for increased awareness about the use of various financial mechanisms in the climate arena, such as GEF and the Clean Development Mechanism, and the need to integrate those with national development priorities.

3. Rating

95. In the light of the above facts, a rating of 3 was awarded to the initial national communications process for enhancing country ownership of the climate issue.

Country ownership

| | | | | |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
| | | X | | |

H. Implementation approach

1. Objective

96. This section analyses the decision-making process and identifies technical and operational constraints encountered during project implementation, including those that contributed to delays in implementing the approved work plan. Furthermore, it identifies the actions required by UNEP and the national executing agency to overcome the constraints, and appropriate alternative measures to be undertaken.

2. Evaluation

97. As outlined earlier, the decision and management framework for the implementation of the project consisted of three tiers, namely the project steering committee, the national study team and the project management team, each with its own assigned role and responsibility. The project steering committee, under the director general (environment), was intended to provide overall guidance to the project and to make executive decisions while the national study team, with its four expert subgroups, was supposed to carry out the contractual studies. The project management team was to consist of the national study team plus the support framework consisting of a project coordinator, project manager and senior technical adviser.

98. A meetings schedule was also stipulated in the project document, which included monthly reports by the project management team to the project steering committee that was to meet on a quarterly basis to review progress and implementation. In turn, the project steering committee was to make suggestions to MELGRD and UNEP for adequate monitoring of the project.

99. There were problems, however, with both the establishment of the above-mentioned framework and with its scheduled working. The implementation framework was established only partially with the non-appointment of the project coordinator, full-time project manager and senior technical adviser. That contributed to the considerable project delay as an essential element of project implementation was missing throughout the project cycle.

100. The director-general of environment worked in the supervisory role of project coordinator during the initial phase (from August 1999 to January 2001) but the project started to derail following his departure, in January 2001, as the Ministry failed to appoint formally a project coordinator to work continuously on the project after that. The appointment of a full-time project manager, intended to manage the day-to-day activities of the project, might have assisted in keeping the project on track but that vital implementation management function was left vacant without any valid explanation. The other important managerial pillar of the project was that of the senior technical adviser who was due to work on the technical and expert refinement, and finalization of the initial national communications draft. Although clearly stipulated in the project document and in the project budget, the non-appointment of this vital post remains unexplained. The draft of the initial national communications was the subject of an extended review process and it has remained in an unwarranted, continuous, refinement process since April 2001. The appointment of an adviser might have streamlined the haphazard review process for the initial national communications.

101. During the initial phase of the project (from August 1999 to January 2001) the stipulated meeting timetable was followed, more or less, with three project steering committee meetings reviewing and guiding the project implementation and three of the four project-related workshops being held. That said, after missing the initially stipulated completion date of December 2000 and with the departure of the director-general of environment, who was the only person to provide any level of project supervision, in January 2001, project implementation spiralled into delay.

102. Payments that were being made regularly to the national study team were stalled in February 2001 due to the absence of a project manager. That unfortunate state has continued to date despite the fact that the initial national communications draft has been submitted, reviewed, re-submitted and finalized by the project steering committee in the period from February 2001 to 2003. During that time, the MELGRD offices were damaged in a serious building fire and, due to lack of a proper backup, the

project document had to be reconstructed twice (April 2000 and February 2003) through the active involvement and assistance of the national study team led by Hagler Bailly, Pakistan.

103. MELGRD officials were constrained, apparently, in using the funds available to them. The exact reasons for this constraint have not been ascertained as, according to MELGRD, most of the project record was destroyed in the January 2002 fire. What can be deduced from talking to Ministry officials and examining the record available, however, is that the departure of the director-general of environment without subsequent proper delineation of authority was a major factor in the stalling of the project. The financial handling of the project, such as operation of the project bank account, remained personalized in the name of the director-general of environment and, in the absence of proper and formal financial authority being assigned, the bureaucratic decision-making was stalled. In this regard, a specific approval was sought recently from the Ministry of Finance for use of funds in the account. The approval was received, finally, in 2003 and it was expected that funds would be released to the contractors. Nevertheless, this impediment was a major operational lacuna, which must be overcome, as soon as possible, to allow for the final completion, approval and submission of the project.

104. In the light of the above, it can be deduced that although the project implementation framework was successful in producing the required outputs, the operational delays and problems caused by the lack of establishment of the managerial framework and the lack of continued adherence, especially from January 2001 onwards, to the stipulated work schedule, caused serious problems in the implementation and completion of this project.

105. It is essential that the issue of payments outstanding for contractors and national study team members should be resolved immediately in order for the project to proceed. Following this, the initial national communications draft should be finalized, in consultation with the project steering committee subcommittee that was formulated at the fifth meeting of the project steering committee in February 2003. In addition, if deemed essential, the services of a senior technical adviser should be sought urgently as per the budgetary provisions for technical assistance in finalizing the draft for submission to the Convention secretariat.

3. Rating

106. Based on the above, and on satisfactory production of project outputs, a rating of 4 was given to this section.

Implementation approach

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | | | X | |

I. Financial planning

1. Objective

107. This section investigates the financial planning of the project, including budgetary provisions, timely use, release and adequacy of funds in the light of the needs and concerns of the country.

2. Evaluation

108. The approved project budget, entailing GEF financing of \$274,300, was estimated by MELGRD, in close consultation with UNEP, taking all past and existing climate-related activities into account. The budget reflected the special consideration accorded to Pakistan under article 4 of the Convention and owing to its particular circumstances, including a large, low-income and vulnerable population along with complex and fragile ecosystems prone to climate vulnerability. The GEF budget was complemented by a contribution of \$50,000 from the Government of Pakistan, to be spent during the project period on salaries, vehicles, field trips, office rental and maintenance, library and information facilities, insurance and other things.

109. UNEP retained \$20,300 for the purposes of administrative support and \$8,000 for two evaluations (mid term and final) as specified in table 2. In addition, upon signature of the project, an advance sum of \$60,000 was provided by UNEP to MELGRD with subsequent cash advances to be made quarterly and subject to a written confirmation by the Ministry detailing, with notice of two weeks at least, the expense required and that the cash position necessitated such a payment. This was to be

complemented by a satisfactory financial report showing expenditures incurred for the previous quarter and a satisfactory progress report on project implementation.

110. As such, the above-mentioned financial planning was on a very sound footing but it was conditional on certain requirements being met. There were, however, a number of contraventions, which led to the delays in project implementation.

111. Firstly, some essential parts of the budget, such as the allocations for project coordinator, project manager and senior technical adviser, were left unused, as were some other major items intended for capacity-building activities (see table 4). This led to almost 30 per cent of the stipulated budget still in the process of being used at present while 15 per cent of the budget might go unused and lapse. This is an unfortunate situation as the funding was available from MELGRD and its use, especially for timely climate-related capacity-building, would have led to effective project implementation and would have responded to one of the identified needs of the country. This strange aspect of the project remains totally unexplained.

112. Secondly, the financial approval process that hinged on the director-general (environment) at MELGRD caused serious problems following his departure. Both the administrative authority, in terms of a formally named project coordinator, and the financial authority, in terms of handling of the bank account, were left open-ended and were not formally delineated. Such an eventuality should be avoided during the financial planning process of future projects.

113. Furthermore, the required mid-term UNEP evaluation was not carried out. That would certainly have identified and rectified the complete absence of the project-related personnel and management framework and might have assisted in avoiding the project derailment and the magnitude of the current delay.

3. Rating

114. In the light of the above, a rating of 4 was given for financial planning undertaken for the project.

Financial planning

| | | | | |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
| | | | X | |

J. Replicability

1. Objective

115. This section analyses the replicability of the exercise for other countries by UNEP in the light of the lessons emanating from its implementation in Pakistan.

2. Evaluation

116. This particular criterion relates to the aspect of project design and planning more than to the actual enforcement of the plan during the implementation phase. In this regard, analysis of the project design has shown that the basic outputs demanded of the project, the management framework, the monitoring plan, the project work scheduling, the financial planning and other aspects, including ensuring long-term sustainability and country ownership, were all incorporated very well. Their inclusion was undertaken through a well thought out implementation process but problems arose due to the lack of strict adherence to the enforcement of various important parameters of the project plan such as monitoring, evaluation and implementation approach.

117. In terms of replicability, the project plan can be recommended safely and followed in other countries after consideration of particular country circumstances. The emphasis on strict and timely adherence to the project plan cannot be understated.

3. Rating

118. A rating of 2 was awarded on the criterion of replicability potential.

Replicability

| | | | | |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
| | X | | | |

K. Monitoring and evaluation

1. Objective

119. This section reviews the adequacy of national and international monitoring and evaluations systems developed to supervise and implement the project and, based on the lessons learned, provides recommendations that aim to improve current procedures related to monitoring and evaluation.

2. Evaluation

120. A two-tier monitoring and evaluation framework was established for the project. The first tier was at the project steering committee and MELGRD level while the second tier was at the UNEP level. Focused timetables and responsibilities were assigned to both tiers in the project document.

121. MELGRD and the project steering committee were supposed to obtain a monthly progress report from the project manager or project coordinator and then share it with UNEP after reviewing it for quality, standards, comprehensiveness and conformity to the project terms of reference. The reports were to be presented to the project steering committee at its quarterly meetings, which was to refine them into concrete suggestions for MELGRD. The ministry, in turn, was to provide quarterly progress and financial reports to UNEP.

122. At the second tier, UNEP was to keep track of both the monthly project coordinator reports and the comprehensive quarterly progress and financial reports from the project steering committee and MELGRD. On the basis of these and its established monitoring and evaluation guidelines and assessment procedures, a mid-term and a final project evaluation were to be carried out.

123. The framework was intended to evaluate project implementation on an ongoing basis in order to identify and rectify difficulties and shortcomings at an early stage thereby avoiding the potential spiralling of problems. The project managed to achieve its objectives of producing the relevant outputs and compiling them in the form of the initial national communications report. The timing of submission of the useful output encountered serious delays, however, that can be attributed mainly to the lack of adherence to the monitoring strategy.

124. The absence of a full-time project manager, lack of continuation of the post of project coordinator, and interruption in the quarterly project steering committee meetings schedule were some of the main aspects of the problem. In retrospect, the problem could have been addressed and reversed at an early stage by timely intervention from UNEP, especially by carrying out the specified mid-term evaluation.

125. Owing to the above-mentioned managerial lacunas, however, the stipulated monitoring programme of monthly reports, quarterly project steering committee reviews and financial reports all slackened. This perpetuated a spiralling delay that eventually led to the almost two-year stalling of all project activity. It should be noted that the UNEP monitoring leverage was severely constrained by the fact that MELGRD was not asking for any further releases from unused funds that were available, mostly for capacity-building. The request for release of 30 per cent of the remaining funds came at a very late stage of project implementation and it is currently being processed although the project is nearing completion. That unexplained situation, apparently due to the departure of the director-general of environment from the country and bureaucratic reluctance to take financial decisions in the absence of clearly delineated authority, stalled project progress while limiting the power of the funding agency to influence movement on the project. As previously stated, the mid-term evaluation might have identified the problem and enabled it to be rectified at an early stage.

126. The monitoring and evaluation exercise was effective, therefore, in the production of the required project outputs but it proved to be slack in terms of timely management and submission of the outputs.

3. Rating

127. The monitoring aspect of the project can be described as barely satisfactory.

Monitoring

| Excellent=1 (90–100 per cent) | Very good=2 (75–89 per cent) | Good=3 (60–74 per cent) | Satisfactory=4 (50–59 per cent) | Unsatisfactory=5 (<49 per cent) |
|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| | | | X | |

III. Relevance of project to UNEP and its implementing role

128. Prior to formulating the overall project rating, the final section looks briefly at the role of UNEP as implementing agency and the usefulness of the project in enhancing UNEP work in the area of climate change.

129. As the implementing agency, UNEP was responsible for providing assistance in the development of project proposals, liaison with government officials and other stakeholders, provision of tools and methodologies, coordination of capacity-building activities and monitoring of implementation progress. UNEP discharged those duties largely to the satisfaction of the MELGRD officials. Delays, as evaluated above, were caused by project mismanagement by MELGRD. It should be reiterated, however, that a UNEP mid-term review might have been effective in catalysing action at a critical stage of the project.

130. The project certainly enabled Pakistan to meet its commitments under the Convention and it contributed, thereby, to better management of the global environment. The country was able to report on the amount of emissions, to assess the state of its climate change vulnerability and to report on planned mitigation and adaptation measures for various sectors. Moreover, it achieved all of those with a high level of national ownership and the project built upon existing climate-related activities as enumerated in the evaluation.

131. Although some of the capacity needs of the country were addressed through the implementation of the project, given the relatively short time in which climate change issues have evolved, much more should be done to enhance human and institutional capacity in the country to respond to the challenges posed by climate change. UNEP should design a more strategic and long-term approach to further capacity-building in Pakistan, which might include follow-up activities, technical assistance and the development of functioning and responsive institutional structures designed to deal with the climate issue. Public awareness and stakeholder participation, which has been significantly enhanced by the project implementation, should be increased to ensure the participation of multisectoral and multi-stakeholder groups and should consolidate and sustain efforts made in the project under review.

132. The project allowed UNEP, therefore, to cater to one of its key strategies, which focuses on the development of environmental conventions as a means of fostering global consensus on the environment.

IV. Overall project rating

133. Table 5, below, consolidates the results of the present analysis in order to extend an overall project rating. The individual ratings for each criterion were established after a careful evaluation exercise and they have been qualitatively collated assuming equal weight. As there are five ratings of good, three of very good and three of satisfactory, they have been aggregated to extend an overall weighted rating of good to the project, which translates into a 60–74 per cent success rating. This rating reflects aptly the success of the initial national communications project in attaining the planned content outputs while accounting for the delays in project finalization and submission due to managerial and monitoring issues, and the poor utilization of funds, as described by the evaluation exercise.

Table 5: Overall project rating

| No. | Criterion | Excellent=1 (90-100 per cent) | Very good=2 (75-89 per cent) | Good=3 (60-74 per cent) | Satisfactory=4 (50-59 per cent) | Unsatisfactory=5 (<49 per cent) |
|-----|---|----------------------------------|---------------------------------|----------------------------|------------------------------------|------------------------------------|
| 1 | Achievement of objectives and planned results | | X | | | |
| 2 | Attainment of activities and outputs | | | X | | |
| 3 | Cost-effectiveness | | | X | | |
| 4 | Impact | | X | | | |
| 5 | Sustainability | | | X | | |
| 6 | Stakeholder participation | | | X | | |
| 7 | Country ownership | | | X | | |
| 8 | Implementation approach | | | | X | |
| 9 | Financial planning | | | | X | |
| 10 | Replicability | | X | | | |
| 11 | Monitoring and evaluation | | | | X | |
| | Overall rating | | | X | | |

V. Lessons learned

134. As is evident from the analysis, the implementation of the project went through lots of ups and downs and a number of useful lessons can be deduced from the exercise. Some of the more pertinent ones are mentioned below.

A. Importance of effective monitoring and mid-term evaluation

135. The importance of timely and continuous monitoring cannot be understated. That should be undertaken in tandem with enforcement measures that are able to correct problems that are still at the incubation stage and avoid them affecting the course of the project seriously. The project should incorporate financial or administrative levers that can support and ensure such enforcement. In this project, the mid-term evaluation could have been used as an effective tool to correct the absence of incorporation of the requisite project managerial structure in MELGRD and, thereby, to correct the root of the delay problem at an early stage. The importance of the mid-term evaluation should be stressed, therefore, for any future project.

B. Establishment of stipulated managerial framework essential

136. One of the most important lessons learned was that the desired managerial framework should have been established as per the requirements of the project document. In this case, the timely appointment of a project manager, senior technical adviser and an officially designated project coordinator might have helped keep the project on track and ensured its timely completion. To expect a project to deliver effectively without the establishment of project managerial capacity is a mistake and this was proven during the implementation process of the initial national communications project.

C. Use of funds linked with proper management

137. Weak management and the absence of appropriate project management structures resulted in 30 per cent of the project funds being used at a very late stage in the project while 15 per cent of the funds may go unused. Although the fire and loss of documents in MELGRD compounded the situation, it is clear that no project can achieve proper use of funds without the requisite management structure to administer and oversee the whole process. The initial national communications project demonstrated this weakness.

D. Sustaining expert capacity

138. The building of climate-related expert capacity in both the private and the public sectors is absolutely essential for furthering the objectives of the Convention in developing countries like Pakistan. What is even more important, however, is the creation of conditions conducive to sustaining the capacity built. In this regard, issues such as the stalling of contractual payments to national study team members can have a very damaging effect on the sustainability of limited capacity and that can lead to the neutralizing of any benefit that might have accrued from such an endeavour in the long run. The project preparation should examine carefully and incorporate defence management practices that aim to avoid such detrimental effects.

E. Continued involvement of decision makers

139. In order to be successful in incorporating the results of the whole initial national communications exercise into the mainstream decision-making process of the country, one of the most important steps is to ensure the continuous and sustained involvement of policy decision makers in the project. The project steering committee and the national study team were both managerial tiers where that involvement was sustained to some extent. Further improvements in the structure should be made so that the involvement of decision makers is formalised and made more consistent.

VI. Recommendations

140. A number of recommendations can be formulated, taking into account the aim of furthering the objectives of the Convention, including enhancing the enabling environment and creating sustainable climate-related expert capacity within Pakistan. Some pertinent recommendations for future development of Convention objectives, as evident from the initial national communications project implementation, are outlined below:

A. Use of remaining funds

141. As stated, about 30 per cent of the project funds were being processed by the funding agency at a very late stage of project implementation while almost 15 per cent of the funds may go unused and lapse. The reasons for this have already been detailed and consist mainly of managerial weaknesses. The fire in MELGRD, which destroyed all records, also played a part in the project stoppage. In spite of all these failings, it remains an undeniable fact that Pakistan requires urgent strengthening of its enabling environment and climate-related capacity within both the private and the public sectors. This is essential in order to alleviate the concerns and impacts arising from climate change and to play an active role in the international negotiations process on the climate issue while aiming to benefit from participation in the market-based mechanisms under the Kyoto Protocol.

142. In the light of the above, it is strongly recommended that remaining funds should be processed urgently for disbursement. The unused funds should not be allowed to lapse and, as a very special case, they should be carried forward for use for phase-II of the project, in addition to the already stipulated funds for that phase. It would be very unfortunate if the funds lapsed despite the prevailing needs of the country. The follow-up project should be targeted at much-needed, climate-related capacity-building in the country and it should be guided by strict time-barred benchmarks to ensure full and proper use of funds. The technical and capacity needs identified below may be targeted for use of such funds.

B. Emission factors development

143. Emissions factors development was one of the most essential identified needs for improvement of the GHG inventory in order to make it more specific to the particular circumstances of Pakistan. Only scant research has been carried out on the development of emission factors specific to Pakistan and for the development of a credible inventory this requirement should be recommended strongly as it forms the basis of all response and adaptation measures to the climate issue.

C. Data deficiencies to be filled especially in impact and adaptation sectors

144. A number of data deficiencies exist in Pakistan, as a developing country, and these were identified in the initial national communications report. As a result, regionally applicable IPCC default values have been used in the report especially in the impacts and adaptation sector reports. In the

follow-up exercise, it is essential that an effort is made to try and fill the data gaps so that the credibility of the exercise is enhanced significantly and streamlined.

D. Technology needs assessment

145. A thorough and detailed assessment of technological needs should be carried out in the light of the identified and prioritized options for mitigation and adaptation. Such an exercise is the logical next step while formalizing a national climate change response strategy that is able to cut across the prioritized sectors of energy, forestry, agriculture, livestock and water.

E. Climate-related capacity-building

146. Some expert capacity has been developed through the initial national communications exercise but this should be maintained and sustained in the future according to a focused strategy. This is required in both the private and the public Government sectors and it should encompass aspects of training, awareness-raising and widespread information dissemination.

F. Climate change action plan or strategy

147. The initial national communications developed a comprehensive strategy for mitigation and adaptation, which should be amalgamated properly into a cohesive climate change action plan or strategy to align with national development policies and the mainstream policy planning process, and keep pace with rapid developments in the international negotiations and policy formulation process. In that regard, particular focus should be accorded to the development and progress of various aspects of the Kyoto Protocol, in particular, emissions trading and the Clean Development Mechanism, so that Pakistan is able to benefit from such market-based mechanisms being incorporated on the international front.

G. Public participation enhancement

148. The participation of public stakeholders should be enhanced further so that they are involved pro-actively in the national climate change response. Public participation can be enhanced through the use of the various forms of the media, training, information dissemination and awareness-raising through workshops. This process is essential in order to sustain the response effort and strengthen any climate-related national strategy.

Annex

Terms of reference of the evaluation

Evaluation of the UNEP/GEF subproject gf/2200-97-57

Enabling Activities for the preparation of Initial National Communications
Related to the UNFCCC - Pakistan

Under the guidance of the Chief of the Evaluation Unit and in close collaboration with the UNEP Task Manager for Climate Change Enabling Activities (CCEA), the evaluator shall undertake an evaluation of the UNEP/GEF subproject Pakistan: Enabling Activities for the Preparation of Initial National Communications Related to the UN Framework Convention on Climate Change (UNFCCC) GF/2200-97-57). This evaluation will be conducted during the period of 11 August 2003 to 10 October 2003 (28 days spread over 9 weeks)

I. Background

1. The project to be evaluated is being implemented internally by the UNEP Task Manager of Climate Change Enabling Activities, currently located in the Division for Policy Development and Law (DPDL) of UNEP. Nationally the project is executed by the project co-ordinator at the Ministry of Environment, Local Government and Rural Development (MELGRD), Pakistan. This project provided financial assistance necessary for the following activities:
 - Preparation of the GHG Inventory for the year 1994
 - Identify and assess mitigation options
 - Develop a comprehensive vulnerability/assessment for various sectors
 - Identify Stage I adaptation options
 - Build capacity to integrate climate change concerns into planning
 - Provide public awareness and other information.

The planned start date of the project was January 1999 and final end date is December 2003. The total budget of the project was \$274,300.

II. Scope of monitoring and evaluation

2. The scope of the evaluation will cover the activity UNEP undertook to implement this project and MELGRD to execute it nationally.
 - a) The consultant will compare the planned outputs of the project to the actual outputs and assess the steps taken to follow-up in the country in view of maintaining the capacity built.
 - b) The consultant will also highlight the lesson learned from the implementation of climate change activities and assess the appropriateness of this project in meeting the longer-term objectives of the country, UNEP, GEF and the United Nations Framework Convention on Climate Change (UNFCCC).
 - c) The consultant will review the national institutional and technical capacity built by the UNEP/GEF project and its linkages established with related ongoing and planned activities in the country, such as the National Biodiversity Strategy and Action Plan, National Capacity Needs Self-Assessment and others as appropriate.
 - d) The consultant will recommend corrective and other practical steps required to strengthen and improve the institutional framework, specifically to ensure successful implementation of the following activities:
 - i) Official submission of the initial national communications to the UNFCCC;
 - ii) Phase II Climate Change Enabling Activities to assess technology needs;
 - iii) Participation in regional climate change projects such as capacity-building for systematic observation systems and development of local emission factors

III. Terms of reference for the evaluator

The evaluator shall:

3. Analyse the quality and usefulness of the planned and current project outputs, and determine how these contribute to the attainment of results and overall objectives identified in the approved project proposal in meeting its UNFCCC commitments. It should determine whether the project has been able to answer the identified needs and problems in Pakistan.
4. Measure the impact of the planned and current results of all the activities to prepare the Initial National Communications to the UNFCCC. The consultant will consult majority of the stakeholders who participated in the preparation of initial national communications to the UNFCCC.
5. Assess the decision making process and the criteria used to attract qualified consultants for the implementation of the various project components and identify the lesson learned providing recommendations on how such involvement could be improved.
6. Assess the role the project made in building the capacity of the participating national institutions in the area of reporting to the UNFCCC and assess the long-term sustainability of the benefits of this capacity-building.
7. Assess the additional information generated and capacity built by this project in particular following the completion of Asia Least-cost Greenhouse Gas Abatement Strategy (ALGAS) and UNEP project on adaptation.
8. Determine the future assistance required from UNEP and GEF, specifically in ensuring successful implementation of future GEF funded projects identified in para 2(d). Identify the lessons learned and provide recommendations that might improve the delivery of similar assistance in similar projects.
9. Review the adequacy of national and international monitoring and evaluations systems developed to supervise and implement the project and based on the lesson learned, provide recommendations that could improve current procedures related to monitoring and evaluation.
10. Review the effectiveness of the institutional structure, management and financial systems, which played an important role in the implementation of the project, investigating the staffing, administrative arrangements and operational mechanisms with an emphasis on co-ordination within and outside of UNEP. The evaluator will solicit the views of relevant UNEP staff members on the usefulness of the project in enhancing both UNEP's and GEF's work in the area of climate change.
11. Identify any technical and/or operational constraints encountered during project implementation including those that contributed to delays in implementing the approved work plan. Identify further the actions required by UNEP and the national executing agency to overcome the constraints, and any appropriate alternative measures that need to be taken.
12. Identify and assess any measures that national institutions have initiated to integrate the results and recommendations of the initial national communications into national policy making and/or planning. The evaluator should also make specific recommendations regarding follow-up measures that would enable longer-term benefits and sustainability of project activities.
13. Determine the potential contribution of the project to furthering the objectives of the relevant global, regional, and national environmental assessments, policy frameworks and action plans, and to strengthen the United Nations Framework Convention on Climate Change.
14. Evaluate whether the actual results of the project compare with the long term and short-term results identified in the project document and what needs to be done further.
15. Determine the extent to which gender considerations were incorporated into the various technical and operational aspects of the project.
16. Propose concrete suggestions or recommendations, to MELGRD and UNEP on how to further build Pakistan's capacity in implementing the provisions of the UNFCCC and decisions of the Conference of Parties and advise them in undertaking them as appropriate.

IV. Format of the evaluation report

16. The evaluator will prepare the report in full consultation with the Additional Secretary, Ministry of Environment, Local Government and Rural Development (MELGRD) and UNEP. The Evaluator shall also prepare his/her report in the form of:

- (i) a concise summary (4 pages); and
- (ii) A detailed evaluation report (about 30 pages) addressing sections II and III.
- (iii) Rate the implementation success of the project on a scale of 1 to 5 with 1 being the highest rating and 5 being the lowest. The rating criteria are: The evaluation rating will be based on a scale of 1-5, with 1 being the highest rating and 5 being the lowest.

The following items will be considered for rating purposes:

- Achievement of objectives and planned results
- Attainment of activities and outputs
- Cost-effectiveness
- Impact
- Sustainability
- Stakeholders participation
- Country ownership
- Implementation approach
- Financial planning
- Replicability
- Monitoring and evaluation

Each of the items should be rated separately and than an overall rating given.

The following rating system is to be applied:

| | |
|--------------------|---|
| 1 = Excellent | (90 per cent -100 per cent achievement) |
| 2 = Very good | (75 per cent - 89 per cent " " ") |
| 3 = Good | (60 per cent to 74 per cent " " ") |
| 4 = Satisfactory | (50 per cent to 59 per cent " " ") |
| 5 = Unsatisfactory | (49 per cent and below " ") |

V. Schedule of the evaluation

17. The evaluation should begin on 11 August 2003 and end on 10th October (28 days spread over nine weeks). While conducting the evaluation, the consultant should communicate by telephone or e-mail with the relevant staff in UNEP i.e. the Division for Policy Development and Law (DPDL) and the UNEP Evaluation and Oversight Unit (EOU). There is no travel involved for this evaluation.
18. The consultant will discuss aspect of the project with relevant officials of the Ministry of Environment and selected members of the Pakistan National Climate Change Committee in Pakistan.
19. The consultant will send the draft evaluation report by 15 September 2003. The UNEP Climate Change Enabling Activities in the Division of Policy Development and Law will provide written comments of the draft evaluation report to the consultant through the UNEP/EOU to the consultant by 29 September 2003.
20. The consultant will incorporate responses to these comments in the report and present a final version of the evaluation report to UNEP in English by 10 October 2003. This report should be presented in written form and in electronic (MSWord) format. The core report should not exceed 30 pages. All Annexes should be typed.

VI. Consultant

21. The consultant should preferably be on the GEF/STAP Roster of Experts, has an advanced university degree in a relevant discipline and have demonstrated expertise in the area of climate change and GEF projects. Previous experience in the evaluation of UN programmes will be an advantage. The candidate should have at least 10 years experience in the field of climate change or in a related environmental field

VII. Schedule of payment

22. The evaluator will receive 40 per cent of the total amount to be made upon assessment of satisfactory progress. Final payment of 60 per cent will be made upon satisfactory completion of work and submission of final report. The fee is payable under the individual SSAs of the evaluator and is not inclusive of all expenses such as travel, accommodation and incidental expenses.
23. In case, the evaluator cannot provide the products in accordance with the TORs, the timeframe agreed, or his products are substandard, the payment to the evaluator could be withheld, until such a time the products are modified to meet UNEP's standard. In case, the evaluator fails to submit a satisfactory final product to UNEP, the product prepared by the evaluator may not constitute the evaluation report.

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