# 1. Project Data

| Summary project data | | | |
|---|---|---|---|
| **GEF project ID** | | 2553 | |
| **GEF Agency project ID** | | 3248 PIMS | |
| **GEF Replenishment Phase** | | GEF-4 | |
| **Lead GEF Agency (include all for joint projects)** | | UNDP | |
| **Project name** | | Piloting Climate Change Adaptation to Protect Human Health | |
| **Country/Countries** | | Global (Barbados, Bhutan, China, Fiji, Jordan, Kenya, Uzbekistan) | |
| **Region** | | Global | |
| **Focal area** | | Climate Change | |
| **Operational Program or Strategic Priorities/Objectives** | | Special Climate Change Fund | |
| **Executing agencies involved** | | World Health Organization (WHO) | |
| **NGOs/CBOs involvement** | | secondary executing agency; through consultation: e.g. Population Service International (PSI) | |
| **Private sector involvement** | | No involvement | |
| **CEO Endorsement (FSP) /Approval date (MSP)** | | 11/30/2009 | |
| **Effectiveness date / project start** | | 01/2010 (TE,p.14) | |
| **Expected date of project completion (at start)** | | 01/2014 (initially four years, TE,p.58) | |
| **Actual date of project completion** | | 01/2015 | |
| **Project Financing** | | | |
| | | **At Endorsement (US $M) (GEF Secretariat review, 11/30/2009)** | **At Completion (US $M)** |
| **Project Preparation Grant** | GEF funding | 0.47 | 0.47 |
| | Co-financing | | |
| **GEF Project Grant** | | 4.50 | 4.57 (TE,p.39) |
| **Co-financing** | IA own | | |
| | Government | | 13.97 |
| | Other multi- /bi-laterals | | 7.85 |
| | Private sector | | |
| | NGOs/CSOs | | 0.44 |
| **Total GEF funding** | | 4.97 | 5.04 (TE,p.39) |
| **Total Co-financing** | | 15.96 | 22.26(TE,p.41) |
| **Total project funding (GEF grant(s) + co-financing)** | | 19.93 | 27.30 (calculated figure) |
| **Terminal evaluation/review information** | | | |
| **TE completion date** | | 02/2015 | |
| **Author of TE** | | Kristie L. Ebi | |
| **TER completion date** | | 01/21/2016 | |
| **TER prepared by** | | Chenhao Liu | |
| **TER peer review by (if GEF EO review)** | | Molly Watts | |

## 2. Summary of Project Ratings

| Criteria | Final PIR | IA Terminal Evaluation | IA Evaluation Office Review | GEF EO Review |
|---|---|---|---|---|
| **Project Outcomes** | HS | HS | NR | MS |
| **Sustainability of Outcomes** | | HS | NR | MU |
| **M&E Design** | | S | NR | S |
| **M&E Implementation** | | S | NR | MS |
| **Quality of Implementation** | | HS | NR | S |
| **Quality of Execution** | | HS | NR | S |
| **Quality of the Terminal Evaluation Report** | - | - | - | MU |

## 3. Project Objectives

3.1 Global Environmental Objectives of the project:

"This global pilot project was designed to increase the adaptive capacity of national health system institutions, including field practitioners, to prepare for, respond to, and recover from the health risks of climate variability and change." (TE, p.12)

"The objective of this first global project on public health adaptation to climate change is to "increase adaptive capacity of national health system institutions, including field practitioners, to respond to climate-sensitive health risks". The project outcomes will contribute to the broader goal of ensuring that "health sectors are able to manage health risks driven by climate change, including variability". (PD, p.24)

3.2 Development Objectives of the project:

"The objective of the project was to increase the adaptive capacity of national health system institutions, including field practitioners, to respond to climate-sensitive health risks. It was anticipated that this would contribute to the broader goal of ensuring that health systems were able to manage health risks resulting from climate variability and change." (TE, p.19; PD, p.30)

"The project included four outcomes at the global level:

- Outcome 1: an early warning and response system established with timely information on likely incidence of climate-sensitive health risks in the participating countries;
- Outcome 2: Capacity of health sector institutions improved to respond to climate-sensitive health risks based on early warning information;
- Outcome 3: disease prevention measures piloted in areas of heightened health risk due to climate change; and
- Outcome 4: cooperation promoted among participating countries on innovative adaptation centric strategies, policies, and measures." (TE, p.19)

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

There were noo changes in GEOs and PDOs during implementation. In response to the recommendations of the MTR (Mid-Term Review), the project was granted a one-year no-cost extension. (TE, p.33)

## 4. GEF EO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

| 4.1 **Relevance** | **Rating: Satisfactory** |
|---|---|

The TE rated the project's strategic relevance as "Highly Satisfactory". In a binary scale (Satisfactory/Unsatisfactory), this TER will rate the project's outcome relevance as "Satisfactory". The project is consistent with relevant strategic priorities for development at the national and international level.

As identified by the project document, health risks caused by climate change are significant in the project's participating countries. "Climate change can cause diseases to spread to new areas, increasing the number of people exposed." This applies to increases in range of malaria in Kenya, and malaria and dengue in Bhutan (PD, p.8); "climate change brings additional health burdens through increasing the frequency or intensity of health risks that already occur within a given population. " This applies to heatwaves in China and in Uzbekistan, hydro-meteorological disasters in Fiji, Glacial Lake Outburst Floods in Bhutan, and diarrhea in Bhutan and Uzbekistan" (PD, p.8); Climate change also may lead to a higher degree of water scarcity, which entails an increased use of treated wastewater in agriculture. However, unless appropriate standards and procedures are implemented and enforced, use of treated wastewater will increase the number of cases of diarrheal diseases. "This mechanism applies to the increased use of wastewater in Jordan and Barbados, and increased storage of water, and thereby heightened risk of dengue transmission, in Barbados." (PD, p.8) The project is therefore highly consistent with the priorities of its participating countries in addressing the risks discussed above.

The project belongs to the GEF focal area climate change, and it is placed under the project portfolio of the Special Climate Change Fund (SCCF). The project is consistent with the eligibility criteria for the SCCF, as laid out in GEF/C.24/12 (paragraph 40), in that the project: i. is country-driven, cost-effective and

integrated into national sustainable development and poverty-reduction strategies; ii. takes into account national communications and other relevant studies and information. (PD, p.25)

It also worth mentioning that, "The project objective corresponded to UNDP and WHO objectives, and was designed to contribute to several MDG Goals and Targets, including:

MDG Goal 4: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate;

MDG Goal 5: Reduce, by three quarters, between 1990 and 2015, the maternal mortality rate;

MDG Goal 6, Target 7: Have halted by 2015, and begun to reverse, the incidence of malaria and other diseases." (TE, p.19)

| 4.2 **Effectiveness** | **Rating: Moderately Satisfactory** |
|---|---|

The TE rated the project's outcome effectiveness as "Satisfactory", and this TER downgrades the rating for effectiveness to **Moderately Satisfactory**. According to the TE, "Effectiveness varied somewhat across the projects, but all made satisfactory progress in building health system resilience to climate variability." (TE, p.56). Concerning the Project Development Objective and the project's 4 expected outcomes, none of them have been reached in a full degree. But various activities have been undertaken towards realizing these objective/outcomes based on relevant evidence presented by the TE as per follows:

**The Project Development Objective (PDO)** was to increase adaptive capacity of national health system institutions, including field practitioners, to respond to climate- sensitive health risks. It is unclear whether or not this PDO was achieved. The specific target under the PDO was to reduce the overall average VRA across all countries (Vulnerability Reduction Assessment) score from a baseline level of 2.14 to 1.498 and with the added goal that in no single country would the score be higher than 0.85X (X=baseline score)=1.819 . It is unclear whether or not this target was achieved. The TE only reported that baseline VRA data was collected in all participating countries in 2013, three years in to the five year project, and it didn't report the end of project values of the VRA score.

**The project's expected outcome 1 is that**, an early warning and response system will be established with timely information on likely incidence of climate-sensitive health risks in the participating countries. This outcome was partly achieved. There are three targets under this outcome: 1) The coefficient of the correlation between metrological data and incidence of health risks calculated using the data measuring the last three years of project implementation: p(x,y) , should be 1.3 times of the baseline coefficient which is calculated based on historical data; This target was partly achieved. By the end of the project, the TE reported that all countries have analyzed retrospective meteorological and health data to identify any trends in health impacts (TE, p.43), but the TE or the final PIR didn't provide any relevant evidence confirming the level of achievement for this target. 2) By the end of project at least 90% of health care facilities will report on weekly basis; This target was partly achieved. The TE reported that, by mid-2014 health care facilities of five pilot countries (Bhutan, China, Fiji, Kenya and Uzbekistan) were able to monitor climate-sensitive health outcomes (including outbreaks) and report them regularly, which correspond to

approximately 71.4% of pilot health facilities in all implementing countries. Although this figure indicates an increase of 14.3% compared to the previous year, it still represents a short fall in reference to the preset target of 90%. (TE, p.44) 3) By the EOP climate data available for all districts; This target was partly achieved as all countries have analyzed retrospective meteorological and health data to identify any trends in health impacts (TE,p.43), but no further information was available regarding the specific level of achievement for this target.

In addition to the achievement of targets, for the project's expected outcome 1 the TE also reported that by the end of the project: All project countries have made significant progress in implementing the integrated surveillance of climate-sensitive health outcomes, which is a significant improvement over baseline. Early warning systems are working in several countries, with more systems expected to come online within the time frame of the project. The TE also showcased several project outputs under the outcome 1 , such as: "improved coordination and implementation of systems monitoring the quality of treated wastewater used in agriculture" and "reliable health and epidemiologic surveillance data on diseases related to use of wastewater" in Jordan; 100% of the pilot zones are monitoring malaria, including outbreaks on a weekly basis in Kenya. (TE, p.43-44)

**The project's expected outcome 2 is that**, capacity of health sector institutions was improved to respond to climate-sensitive health risks based on early warning information; This outcome was partly achieved. Targets under outcome 2 are that, 1) by the end of the project, at least 90% of district health managers believe their response plan enables them to initiate effective responses, and that 2) by the end of the project, at least 90% of district health managers consider that inter-agency and inter-sectoral barriers are not important in delivering effective responses. The TE specified that, in June 2013 30.3% of (142) district health managers consider their response plan enables them to initiate effective responses; 74.9% of district health managers consider that inter-agency and inter-sectoral barriers constrain the delivery of effective responses. However, the TE didn't report the end of project value of these two indicators. Instead, the TE confirmed that various capacity-building activities were conducted in different participating countries as an effort to reach the project outcome 2, and it listed a number of examples of successful practice. For example, in Barbados, 84 environmental health officers were trained on the integration of climate into their health data in conjunction with GIS targeted vector control. In addition, 24 lectures on climate change and health were presented to churches, social groups, schools, government institutions and a health NGO across the island. China developed software modules for a heat-related health risk early warning systems using a mathematical model based on historical health and climate data. The modules were designed to forecast health risks associated with heat and to provide public health recommendations for particularly vulnerable districts. (TE, p.45-46) Overall, one can draw the conclusion that some progress has been made in achieving outcome 2, but more available information on the end of project values of the two indicators will be preferable so as to confirm the level of achievement of the project outcome 2.

**The project's expected outcome 3**, that disease prevention measures were piloted in areas of heightened health risk due to climate change, was partially achieved. Within six months of the start of the project implementation, response plans were formulated in all pilot districts**.** At the time of the TE**,** all countries

were on track to successfully achieve outcome 3, with activities of high benefit to the pilot locations carried out and with lessons learned summarized that will be useful at the national level for scaling up project activities. (TE, p.47) By the end of June 2014, 71.43% of pilot districts in the seven countries were implementing locally appropriate prevention/ risk and emergency management interventions within a pre-defined appropriate response period. That rate is on track to be much higher by project completion, but it still shows the distance to the preset target of 90 %.( TE, p.47) No information was available regarding the formulation of response plans.

**The project's expected outcome 4**, that cooperation was promoted among participating countries on innovative adaptation centric strategies, policies, and measures, was also partly achieved. There are a few targets under this outcome: 1) By the end of the program, there is at least one example in each country of a strategy or practice that was introduced on the basis of experiences gained in other countries; This target was achieved, as the TE reported that by the end of the project various activities were carried out with the aim of enabling knowledge transfer across national borders and sub-projects, in the form of meetings, workshops, and seminars. For example, an inter-country seminar was held in China in April 2014 aiming at promoting project-wide the country's successful practice of constructing early warning systems for health, which was attended by representatives from other participating countries of the project. 2) Within one month of the start of implementation, a publicly accessible website (for the project) should be created, and at the end of the project, a survey should be conducted among project stakeholders in each country and it could reveal at least 60% of them used the project website regularly; This target was partly achieved. The TE reported that a public accessible website for the project was built up, and from 1 July 2013 to 30 June 2014, the webpage was accessed 10,019 times. But the TE didn't specify if the website was built up within one month of the start of project implementation nor had it specify any details on the execution of the survey. 3) At the time of project completion, draft documents have been prepared to guide future UNDP and WHO support for intervention on adaptation to climate change including variability. This target was achieved. By the end of the project, the TE reported a number of policy documents were developed/ being developed based on the highlighted experience/practices of this project, which will be a reference for the UNDP and WHO support for intervention on adaptation to climate change including variability: such as a guidance on conducting health and vulnerability assessments and a guidance on how to protect health from climate change through the health component of a national adaptation plan (H-NAP) (TE,p.49)

Overall, it is clear that there has been some documented progress toward achieving the project's expected objective/outcomes, but none of these objective/outcomes were fully achieved with documented evidence. Thus, a rating of "Moderately Satisfactory" for the project's outcome effectiveness is justified.

| 4.3 **Efficiency** | **Rating: Moderately Satisfactory** |
|---|---|

The TE rated the project's outcome efficiency as "Satisfactory". In a same rating scale, this TER will rate it as "Moderately Satisfactory". According to the evidence presented by relevant project documents, the project's implementation has been cost-effective, but with some delays.

With regard to the supporting rationale for its "Satisfactory" rating, the TE only reported that "As would be expected with a seven-country project with a wide diversity in initial capacity on climate change and health, countries progressed at different rates. The rate of progress was determined not only by the capacity built to manage the health risks of climate change, but also by national contexts and processes that were generally outside the control of the project team. The countries made good progress even in the face of a variety of constraints." (TE, p.9) However, this conclusion does not assess the project's cost-effectiveness, which is the key determinant to the project's outcome efficiency.

According to the TE, the project started in January 2010 after a multi-year delay (TE, p.14). The project was designed and prepared in 2005/2006, but was only put into implementation in January 2010, with an expected duration of 4 years. (TE, p.58) The project was completed after a one-year no-cost extension and the MTR (Mid-Term Review) concluded that "No additional funding would be required to successfully complete the outcomes and outputs" but a one-year extension is important to "allow some countries to complete their outcomes and outputs."(TE, p.32) There was also a delay in project implementation reported by the TE, in setting up the VRA (Vulnerability Reduction Assessment) baseline, which affected the timely monitoring of progress toward achieving project outcome 1. (TE, p.10)

The project's financial management has been effective. The TE reported that the actual expenditure of GEF grants (which directly supports the project implementation for component 1-4) was $4,565,209.19, indicating a very slight (1.4%) overspend of the budget ($4,500,000), which is to be commended. (TE, p.39) In addition, assessment of the project's outcome effectiveness in the above section shows that this project has effectively translated its financial resources to moderately satisfactory outcomes. Thus, based on the overall evidence currently available, it is reasonable to draw the conclusion that the project has been implemented in a cost-effective manner, even though with some delays. A rating of "Moderately Satisfactory" for the project's outcome efficiency is therefore justified.

| 4.4 **Sustainability** | **Rating: Moderately Unlikely** |
|---|---|

The TE rated the project's sustainability as "Highly Satisfactory." This TER, which uses a different scale, will rate the project's overall sustainability as "Moderately Unlikely", based on an assessment of the four sub-categories of sustainability below. Relevant project documents have presented evidence on a limited level of political and institutional support for sustaining the project's impact after its completion, but so far no solid financial and instructional arrangements at both the national and international level were in place for this cause.

**Financial Resource Sustainability-Unlikely**

The project financial sustainability is unlikely. There has been no immediate scale-up or replication activities or any financial commitments to these activities reported by relevant project documents. So far the project's only follow-up activity is the WHO's attempt to summarize the lessons learned from this project and disseminate its good practices. Thus, the evidence for the project's financial sustainability is unclear.

**Socio-political Sustainability-Moderately Unlikely**

The project's socio-political sustainability is moderately unlikely. There is limited evidence on the social/political support at the national and international level with the aim of ensuring the sustainability of project outcomes. There is evidence from the project's relevant executing parties that they have the interest in sustaining the project's achievements. The WHO, the project's executing agency, has summarized the lessons learned from the project and provided recommendations for its potential scale-up, and will disseminate them in the form of publications. (TE, p.50-52) At the national level, no concrete activities have been reported by relevant project documents to be specifically carried out by relevant executing parties to ensure the sustainability of the project.

**Institutional Sustainability-Moderately Unlikely**

The project's institutional sustainability is moderately unlikely. The TE reported that "there is evidence that the capacity built and the national and regional processes established will ensure continued national priorities for incorporating climate change and health into ministry of health policies and plans, and into national adaptation plans."(TE, p.9) However, without either creating funded climate change and health positions within national ministries of health or finding another source of extra-budgetary support after the project, the level of activity to sustain the project is likely to decline at least to some degree (TE, p.50) This indicates a limited likelihood in the short-run for the national governments of participating countries to provide any immediate institutional support to sustain the project.

**Environmental Sustainability-Unable to Assess**

The project has mainly focused on strengthening the public health management of participating countries as a response to the increasing health risk caused by the climate change, thus it has no immediate environmental impact. Project documents didn't provide any relevant information regarding the project's environmental sustainability either. Thus, this TER is unable to assess this area.

Overall, it is clear from the above assessment that there has been limited favorable evidence reported regarding the project's political and institutional sustainability, while the evidence on any financial and institutional support for sustaining the project's impact is not clear. Thus a rating of 'Moderately Unlikely" for the project's overall sustainability is justified.

## 5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

According to the TE, country co-financing was mobilized to enhance the baseline and WHO and other co-financing was used to support activities associated with baseline development.(TE,p.14) The project's planned level of co-financing is $16,658,000, and its actual level of co-financing realized is $22,256,590

(TE, p.41), indicating a materialization rate of 134%. The TE didn't specify the linkage of the higher-than-expected co-financing and the project's outcomes.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

According to the TE, the project started in January 2010 after a multi-year delay (TE, p.14). The project was designed and prepared in 2005/2006, but was only put into implementation in January 2010, with an initial expected duration of 4 years. (TE, p.58) The delay at the project's inception phase led to modifications of the originally proposed outcomes for several countries: e.g., for Jordan, outcome 1 "Establish early warning and response systems with information on the likely incidence of climate-sensitive health outcomes" was changed to "A comprehensive and integrated monitoring and surveillance systems for wastewater reuse activities is in place" (TE,p.43) The project was granted a no-cost extension for one year to ensure the completion of its activities (TE,p.32). Relevant project documents didn't specify any direct linkage between the delay/extension and project outcomes. But the TE reported a delay in setting up the baseline for VRA (Vulnerability Reduction Assessment) score, which affected the timely monitoring of progress toward achieving the project outcome 1. (TE, p.10)

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

The TE presented evidence on a high-level country ownership of this project: "Having the national projects led by Ministries of Health ensured strong country ownership. Further, the multi-ministry national steering committees significantly strengthened country ownership. " (TE, p.52) But the TE didn't specify linkage between the level of country-ownership and project outcome.

## 6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

| 6.1 **M&E Design at entry** | **Rating: Satisfactory** |
|---|---|

The TE rated the entire M&E system as "Satisfactory" without specifying in detail its assessment of the M&E design at entry. This TER will also rate the project's M&E design at entry as "Satisfactory." The project's M&E design at entry was specific and comprehensive, and outcome indicators are SMART.

The Project Document provided a comprehensive M&E execution plan, which specified in detail the timeline for each specific M&E activity to be taken (e.g, inception workshop, setting up means of verification, PIR, progress reports, MTR and TE), responsible parties for these activities, and a total M&E budget of US$ 350,000 (PD, p.55-56)

The project's M&E activities are aligned with a result-based management framework, in which the project outcomes are measured by specific indicators. The baseline, target values of these indicators, as well as the source of data were all specified. The indicators were identified following the SMART principle. For example, for the project outcome 2 "health sector institutions have the capacity to respond to climate-sensitive health risks based on early warning information", indicators were "X% of district health managers consider their response plan enables them to initiate effective responses" and "X% of district health managers consider that inter-agency and inter-sectoral barriers constrain the delivery of effective responses" with their end of project target values were set at 90%. (TE, p.28-30)

Overall, a rating of "Satisfactory" for the project's M&E design at entry is justified.

| 6.2 **M&E Implementation** | **Rating: Moderately Satisfactory** |
|---|---|

The TE rated the M&E system as "Satisfactory" without explaining the rationale and rating separately for the project's M&E implementation. This TER will rate the project's implementation as "Moderately Satisfactory." The M&E activities were implemented in line with the original plan of activities, with some shortcomings.

The UNDP has undertaken the major responsibility of project monitoring. PIRs were issued in due course in each reporting year, and each of them was consistent with the reporting standard of UNDP by incorporating detailed information on the following items: Progress toward the target outcomes and rating (comparing values of the baseline, target, current status, and status of past PIRs); progress in project implementation and rating; assessment of project's risks; the project's financial status; highlights of project implementation in the reporting period (especially on communications & knowledge management, partnerships and gender mainstreaming); lessons learned. Specifically, the PIRs and TE were able to observe the result-based management framework, and outcome indicators as originally designed.

However, shortcomings still exist regarding the M&E implementation. For example, the average VRA (Vulnerability Reduction Assessment) score across project countries was identified to measure the PDO "To increase adaptive capacity of national health system institutions, including field practitioners, to respond to climate-sensitive health risks", and a marked change in the average VRA scores from the baseline was expected by the end of the project. However, the project was only able to set up the VRA baseline by June 30 2013 due to delay (TE, p.56), at a time only 1 year and a half before the project completion. Thus, by the end of the project, the final VRA score was not available so as to measure the level of achievement of PDO. In addition, the quality of the TE is moderately unsatisfactory. Specifically,

the project achievements it reported were not categorized under the indicators specified in the result-based management framework, and it didn't specify in detail the rationales for its ratings.

A MTR (Mid-Term Review) was conducted, which provided recommendations such as a one-year no-cost extension, more flexible budget allocation, providing technical support and access to technical skills to executing partners at the national level, and revising outcomes and outputs. As a response, project extension and provision of technical support were adopted but not the other recommendations considering the project's progress already made.

Overall, given the marked shortcomings of the M&E implementation, a rating of "Moderately Satisfactory" is justified.

## 7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

| 7.1 **Quality of Project Implementation** | **Rating: Satisfactory** |
|---|---|

The TE rated the project's implementation and execution together as "Highly Satisfactory". Considering the relevant evidence presented by the TE regarding the satisfactory performance of the UNDP as the implementing agency, this TER will rate the quality of project implementation as "Satisfactory."

The UNDP played a supervisory role in the project operation. The Senior Technical Advisor from the UNDP chairs the project's global project board, the project's highest decision-making authority, by carrying out objective and independent project oversight and monitoring functions. UNDP also participated in the project's advisory committee, which is the project's steering committee at the national level. (TE, p.37-38) "To ensure UNDP's ultimate accountability, project board decisions were made in accordance with standards that ensured management for development results, best value money, fairness, integrity, transparency, and effective international competition." (TE, p.37). UNDP also assumed a major responsibility of managing the project's M&E, in collaboration with the WHO. (TE, p.62)

The project also requires UNDP's close collaboration with WHO, who is the project's principal executing agency. The TE commended UNDP for its success and effort in advancing the inter-UN collaboration with the WHO to ensure the success of project outcome: "The pilot project is an excellent example of best practice in several aspects, including multi-UN agency cooperation and collaboration, capacity building, and mainstreaming. "UNDP and WHO combined their strengths and networks, resulting in supportive and mutually reinforcing roles as the implementing and executing agencies, respectively"(TE,p.57) "Project

implementation and execution were complex, yet were effectively managed by WHO and UNDP. The agencies combined their strengths and provide a best practice example of across UN cooperation." (TE, p.10)

Overall, given the positive evidence presented by the TE regarding the UNDP's performance as the project's implementing agency, a rating of "Satisfactory" is justified.

| 7.2 **Quality of Project Execution** | **Rating: Satisfactory** |
|---|---|

The TE rated the project's implementation and execution together as "Highly Satisfactory". Considering the positive evidence presented by the TE related to the project's execution, especially the successful role of the WHO as the project's principal executing agency, this TER will rate the quality of project execution as "Satisfactory".

The WHO participated in the global project board and project's advisory committee at the national level. The project's advisory committee at the national level was chaired by the country's Ministry of Health, with participation of national stakeholders, the WHO and UNDP (country office). The WHO country office also contributed towards the execution of the project, including issuing and monitoring contracts to the Ministry of Health and other sub-contractors according to WHO processes, and providing technical guidance and resources. (TE, p.38)

"WHO provided technical support and guidance to Ministries of Health through their Headquarters office in Geneva, their regional offices, and the WHO country offices. This support and guidance included approaches to mainstreaming the health risks of climate changes into health system policies and measures. Further, WHO country offices often had experience with convening ministries whose activities affect health, including the ministry of health and ministries whose mandates include meteorological services, agriculture, etc. The project was structured to identify and share lessons learned across countries and with other partners." (TE, p.41)

"As noted, there was excellent coordination throughout the project between WHO and UNDP. At the national level, all interviewees underscored the very good collaboration at the national and international level. The project management team made very effort to engage with national and local stakeholders around the outcomes of interest, in many cases forging new partnerships across departments and ministries. Regular meetings with all stakeholders were deemed highly valuable and productive. The partnerships created exceeded the expectation of project design. "(TE, p.42)

WHO headquarters was also responsible for managing the disbursement of project resources to its regional and country offices. WHO headquarters reported expenditures to UNDP and provided quarterly and annual reports detailing project progress. (TE, p.37) For financial management, the TE reported that the actual expenditure of GEF grants was $4,565,209.19, indicating a very slight (1.4%) overspend of the budget ($4,500,000), which is to be commended. (TE, p.39)

Overall, considering the positive evidence presented by the TE regarding the project's execution, a rating of "Satisfactory" for the quality of project execution was justified.

## 8. Assessment of Project Impacts

***Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.***

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

As the project aims to strengthen the national capacity in addressing the climate-sensitive health risks, it was not designed with the intention of bringing about any environmental change, nor was any environmental changes identified by relevant policy documents.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The project mainly focused on capacity building, thus it does not contain elements aiming at bringing about social and economic change. But the project's capacity building activities had some additional impacts on the people's social and economic life, such as in Jordan, the project led to an increased social acceptance of agricultural products irrigated with treated wastewater. (TE, p.43)

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. "Capacities" include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. "Governance" refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities

By the end of the project, all project countries made significant progress and are expected to achieve having implemented integrated surveillance of climate-sensitive health outcomes, which is a significant

improvement over baseline. All countries analyzed retrospective meteorological and health data to identify any trends in health impacts. Early warning systems are working in several countries, with more systems expected to come online within the time frame of the project. (TE, p.43)

By the end of the project, various capacity-building activities were conducted in different participating countries as an attempt to improve the capacity of health sector institutions to respond to climate-sensitive health risks based on early warning information. For example, in Barbados, 84 environmental health officers were trained on the integration of climate into their health data in conjunction with GIS targeted vector control. In addition, 24 lectures on climate change and health were presented to churches, social groups, schools, government institutions and a health NGO across the island. China developed software modules for a heat-related health risk early warning system using a mathematical model based on historical health and climate data. The modules were designed to forecast health risks associated with heat and to provide public health recommendations for particularly vulnerable districts. (TE, p.45-46)

By the end of the project, all countries have made significant progress to pilot disease prevention measures in areas of heightened health risk due to climate change, with activities of high benefit to the pilot locations carried out and lessons summarized that will be useful at the national level for scaling up project activities. (TE, p.47) By the end of June 2014, 71.43% of pilot districts in the seven countries were implementing locally appropriate prevention/ risk and emergency management interventions within a pre-defined appropriate response period. (TE, p.47)

By the end of the project, various activities with the aim of enabling knowledge transfer across national borders and sub-projects were carried out to promote innovation in adaptation to climate variability and change through facilitating cooperation among participating countries. For example, an inter-country seminar was held in China in April 2014 with the aim of promoting project-wide the country's successful practice of constructing early warning systems for health, which was attended by representatives from other participating countries of the project; A public accessible website for the project was established, the TE reported that from 1 July 2013 to 30 June 2014, the publicly accessible webpage was accessed 10,019 times; A number of policy documents were developed/ being developed based on the highlighted experience/practices of this project, which will be a reference for the UNDP and WHO support for intervention on adaptation to climate change including variability: such as a guidance on conducting health and vulnerability assessments and another provided guidance on how to protect health from climate change through the health component of a national adaptation plan (H-NAP) (TE,p.49)

b) Governance

Relevant project documents didn't report any change in governance.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

Relevant project documents didn't report any unintended impacts led by the project.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

There was no immediate scale-up or replications reported by relevant project documents, although in its "replication approach" section the TE mentioned that lessons learned from this project transferred across different participating countries lay a good foundation for replication or scale-up. (TE, p.37)

## 9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The TE summarized the following lessons learned: (TE, p.57-58)"

The pilot project is an excellent example of best practice in several aspects, including multi-UN agency cooperation and collaboration, capacity building, and mainstreaming.

- UNDP and WHO combined their strengths and networks, resulting in supportive and mutually reinforcing roles as the implementing and executing agencies, respectively. The multi-disciplinary nature of the projects required close collaboration between, at a minimum, the ministry of health and the ministry of the environment (or equivalent ministry housing the national meteorological and hydrological services). In countries without a history of such collaboration, having both UN agencies involved facilitated participation.

- The extensive time invested into project design, including country selection, was valuable for ensuring effective project formulation and for facilitating implementation. The countries presented an appropriate range of health risks of climate change.

- International and national level project management were well organized and thorough, with regular communication, monitoring of results, and clear follow-up actions if a potential problem was identified. The engagement of WHO headquarters and the regional and country offices helped support effective and efficient project management. The collaborative spirit of the project teams was evidence of a well-managed project.

- At the start of the project, the participating countries had limited capacity to understand and manage the health risks of climate change. Capacity building was achieved through a range of activities, including training workshops, annual meetings, participation in scientific conferences, conference

calls, electronic information, and selected visits by WHO headquarters and regional staff. The use of external consultants varied across the participating countries, with some countries finding their input important for project success. While the country project teams would have appreciated additional training opportunities, overall the project showed that significant capacity could be built amongst health professionals and relevant stakeholders; health professionals are quite interested in better understanding the health risks of climate change, so took full advantage of training opportunities offered. Other countries can use similar approaches to build capacity as they begin vulnerability and adaptation assessments and conducting the health component of national adaptation plans. This also means that future projects should include sufficient budget for training, meetings, and other capacity building activities. The national projects also showed the value of transferring knowledge and tools to the full range of health system actors, the general public, and decision- and policy-makers.

- The project clearly demonstrated that health protection to manage the health risks of climate change could be effectively mainstreamed into national health policies and plans. Country-specific monitoring and evaluation systems, customized to country needs, enabled national health adaptation assessments to identify priority areas for mainstreaming.

- At the same time, the national projects primarily focused on the health risks of current climate variability. Future projects should explicitly incorporate consideration of longer-term climate change. In addition, building iterative management components into policies and plans would help facilitate future resilience as the climate continues to change.

- Scaling up should be likely for most participating countries conducting pilot studies, but it would be better for future projects to incorporate a specific output to develop a plan for scaling up, including estimating the necessary human and financial costs.

- Four years is a short period in which to demonstrate the success of an adaptation project. The one-year no cost extension was important for the project success."

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE provided the following recommendations: (TE, p.10-11)"

- The national projects had significant impact on increasing resilience to selected health risks of climate variability and change. The capacity built means the follow-up to the projects could provide more comprehensive impact across the range of risks the countries are facing.
- Future projects would benefit from investing sufficient time into project formulation, to ensure that country ownership, an enabling environment, stakeholder engagement, and other conditions that facilitate project success are maximized. Strengthening cooperation between the health sector and meteorological services in the access and use of climate and health data should be part of the process of project formulation.

- UNDP and WHO headquarters were extremely effective partners; continuing that partnership would be beneficial for future projects. Engaging UNDP and WHO headquarters and the regional and country offices in national projects would be effective in supporting implementation, capacity building, sharing lessons learned, and project management. It would be helpful to develop guidance on monitoring and evaluation systems for health adaptation projects that could be customized to country needs, while having a consistency that would facilitate comparisons across countries.

- The mix of capacity building used in the project was highly successful, including training workshops, annual meetings, participation in scientific conferences, conference calls, electronic information, and selected visits by WHO headquarters and regional staff. It would be helpful for future projects to have sufficient funding for (1) targeted training courses, such as training on analyzing weather and climate data, or on developing and deploying early warning systems; and (2) more frequent meetings of project teams, particularly early in the project. Learning curves on health adaptation are fairly steep at the beginning of a project; holding meetings about every six months for the first two years could support a more rapid capacity building on project implementation. Capacity development across the full range of actors from health systems to decision-makers to the general public would be beneficial.

- Future projects should explicitly incorporate consideration of longer-term climate change, building iterative management approaches into policies and plans to ensure resilience as the climate continues to change. It also would be helpful for future projects to include a specific output to develop a plan for scaling up.

- Adaptation is a long-term process. To the extent possible, it would be beneficial to support longer-term projects, to ensure sufficient time for implementation and monitoring and evaluation of results."

## 10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

| Criteria | GEF EO comments | Rating |
|---|---|---|
| To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? | The TE reported in detail the project's actual outcome achievements, and it specified the target level for the indicators of each project outcome; due to the shortcomings in M&E implementation, the TE failed to match the project's actual outcome achievements with the outcome indicators. | **Moderately Satisfactory** |
| To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated? | The TE was in general logically consistent, but with some cases of marked inconsistency: (e.g., in discussing the project's sustainability, the TE spent lengthy chapters documenting the WHO's policy formulation after the project rather than assessing the project's financial, social-political and environmental sustainability). The TE provided ratings for all the areas in line with GEF requirements, but without rationales substantiating them | **Unsatisfactory** |
| To what extent does the report properly assess project sustainability and/or project exit strategy? | The TE discussed the project's sustainability, but evidence provided was insufficient and to some extent irrelevant; The TE didn't mention the project's exit strategy | **Unsatisfactory** |
| To what extent are the lessons learned supported by the evidence | "Lessons Learnt" section is adequate and comprehensive | **Satisfactory** |

| | | |
|---|---|---|
| presented and are they comprehensive? | | |
| Does the report include the actual project costs (total and per activity) and actual co-financing used? | The TE reported in detail the project's actual costs and level of co-financing realized, but it didn't specify the level of co-financing used. | **Moderately Satisfactory** |
| Assess the quality of the report's evaluation of project M&E systems: | The TE only provided rating in this area, without specifying the rationale | **Unsatisfactory** |
| **Overall TE Rating:** | | **Moderately Unsatisfactory (3.1)** |

## 11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).

In the preparation of this TER, no additional documents were referred to as the source of information apart from PIRs, TE, and PD.