

**Annex 13: Reviewer's Comments and Response**  
**Independent Review and Response to Reviewer's Comments**  
**of**  
**Papua New Guinea's Strategic Program for Climate Resilience**

prepared for the Pilot Program for Climate Resilience (PPCR)

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**Introduction**

This external review of the draft Papua New Guinea Strategic Program for Climate Resilience (PNG SPCR) was undertaken in late March - early April 2012, based on desk review of documents and telephone conversations.

The review follows the structure specified in Annex A of the "Procedures for the Preparation of Independent Technical Reviews of PPCR and SREP Investment Plans and Programs," based on general criteria (part I), program-specific criteria (part II), and additional recommendations (part III).

**I: General Criteria**

**a) The program complies with the principles, objectives, and criteria of the relevant program as specified in the design documents and programming modalities.**

The PNG SPCR is consistent with the principles, objectives, and criteria of the PPCR.

**b) The program takes into account the country capacity to implement the plan.**

As in many highly vulnerable countries, current capacity for adaptation in PNG is still relatively low, but capacity building, both in terms of technical capacity and in terms of institutional and implementation arrangements, is an essential component of the program.

The program is ambitious in what it aims to achieve in this area, but this ambition appears to be matched by strong country ownership of the program's objectives, and an institutional framework with high-level government support and clear legal status. Strong support from the government and the Asian Development Bank (ADB) will be required to ensure the central coordinating unit, the Office of Climate Change and Development (OCCD), will be able to coordinate the ambitious SPCR effectively and eventually achieve even broader adaptation objectives.

Special attention will also be required to build capacity beyond national government structures, particularly regarding subnational government, civil society, and the private sector. This will require special care in specific project design, close monitoring, and sufficient flexibility to adjust the capacity building needs as the program progresses.

**c) The program has been developed on the basis of sound technical assessments.**

The program is based on a range of technical assessments and consultations: a stocktaking of adaptation frameworks, projects, and programs in PNG and in the Pacific region; a climate change risk assessment; adaptive capacity assessment (including the most vulnerable groups through a household survey); a prioritization exercise; an assessment to review whether the proposed investments enhance resilience within vulnerable communities/sectors and at the national level; an initial (scoping) cost/benefit analysis; and design of implementation modalities.

These assessments are of sufficient quality, striking an appropriate balance between, on the one hand the need to keep the process simple and participatory enough so that a wide range of actors can be engaged and the technical assessments can be used to achieve consensus on prioritization of risks and potential interventions to address those risks; and on the other hand, the aim to use all relevant science and representation of complexity and uncertainty (where some steps have understandably been kept relatively straightforward).

The bulk of the analysis has focused on the analysis of potential impacts and identification of generic options to address those risks, with less analysis on the detailed characterization of those options and more refined prioritization (including in terms of risk management costs and benefits). Further technical assessment will be needed during detailed project preparation and implementation, including the context of specific investments (e.g., coastal morphology for some of the investments in coastal areas), as well as environmental and social analysis (the latter specifically including incentives and barriers for action, particularly also in the case of community-based activities and early warning systems).

In undertaking that more detailed project preparation work, one of the aspects that could be given more technical attention is the characterization of risks—including climate change, but also explicitly current variability (including seasonal forecasting) and extremes (where information may be better and sometimes more relevant for the investment decisions being taken than for long-term change). Generally, the program appropriately takes a comprehensive approach, not aiming to separate climate change artificially from other climate-related risks. However, in some cases, there appears to be a lack of clarity in use of terminology (e.g., climate change risk management versus climate risk management—I would suggest always using the latter), and/or analysis (for instance regarding ENSO related variability to characterize risk).<sup>16</sup>

**d) The program demonstrates how it will initiate transformative impact.**

Overall, the PNG SPCR comes across as a well-balanced package of interventions to achieve better climate resilience. It focuses on a number of priority sectors and areas, targeting the most vulnerable groups, while particularly using its investments to foster programmatic approaches in overall development planning, capacity building, and institutional strengthening.

The combination of local and national investments, and of different types of interventions (from local action and food security improvements to infrastructure proofing) ensures that experience is built in a wide range of adaptation interventions involving a variety of different key actors, which will also

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<sup>16</sup> It would be highly useful to make the full technical assessments done for the preparation of the SPCR available online—possibly with a little further polishing—so that in-country stakeholders and other countries going through similar exercises can benefit from them.

facilitate broader implementation and mainstreaming beyond the SPCR based on lessons learned and capacities built in this program.

The program has additional opportunities to generate and share lessons learned through the regional Pacific PPCR program. This documentation and evaluation of good practice merits continued attention during further project preparation and implementation.

**e-i) The program provides for prioritization of investments.**

Prioritization of investments was based on the priorities identified in the March 2010 Climate Compatible Development Strategy (CCDS) and the SPCR national consultative planning process. The intervention areas appear to be well chosen for the range of risks the SPCR identifies and aims to address.

**e-ii) The program provides for adequate capturing and dissemination of lessons learned.**

The program clearly refers to a range of other efforts internationally that will be reviewed and drawn on to guide the implementation of the SPCR.

In addition, the SPCR contains pilot activities that will be evaluated and scaled-up to other areas and sectors, including through tools and training modules.

Finally, the fact that the PNG SPCR is part of a broader regional program allows PNG to benefit from regional expertise and enhances the opportunities to contribute to scaling-up beyond the country the lessons learned during implementation of the PNG SPCR.

**e-iii) The program provides for monitoring and evaluation and links to the results framework.**

The Results Framework included in the current program documents (Annex 11) is a good basis for monitoring and evaluation.

Some aspects merit further attention during project preparation (as partly already indicated). The indicators are a mixture of process and outcome indicators (which is appropriate, but could be structured more clearly). In addition, some indicators are appropriate in principle, but will require some hard thinking in implementation, for instance in terms of

- baseline data (e.g., lives lost/injuries/economic losses from extreme climatic events—what is the baseline or control group given that each event is different?);
- attribution of progress to the program (especially in the case of high-level outcomes, such as Millennium Development Goal indicators or poverty incidence, unless applied at relatively local level).

Elements of the national adaptation planning and management assessment (Annex 7) could possibly be included in the program's Results Framework.

**f) The program has been proposed with sufficient stakeholder consultation and provides for appropriate stakeholder engagement.**

As outlined in section 1.3, a participatory approach that included a wide range of stakeholders was used to prepare the SPCR. These consultations appear to have been successful to identify a general sense of issues and priorities for the general program. However, there is clearly a need for continued and more intense consultation for detailed design and implementation. Such stakeholder engagement is a clear priority, particularly in components 1 and 2. It will merit continued attention and further capacity building, including among civil society and local government.

**g) The program adequately addresses social and environmental issues, including gender.**

Community, civil society, and gender perspectives were taken into account in the consultations and capacity assessments (see Annex 2); this rich information should continue to inform detailed project preparation.

Environmental assessments will have to be carried out for specific investments during detailed project preparation.

**h) The program supports new investments or funding additional to on-going/planned multilateral development bank investments**

The program primarily supports new (pilot) investments as well as the enabling capacity building, jointly laying the groundwork for further scaling-up.

The SPCR also provides a good overview of other ongoing programs in related areas. A good example is the World Bank's "Building a More Disaster and Climate Resilient Transport Sector" (to be implemented 2012–2015) and ADB loans for the infrastructure sector. There seems to have been good engagement with other development partners during the preparation process, which should be continued systematically as standard practice during the implementation of the SPCR to ensure synergies and mainstreaming of climate risk management into other programs, utilizing capacities built in the context of the SPCR.

**i) The program takes into account institutional arrangements and coordination.**

The program is strongly grounded in the Government's institutional arrangements for addressing climate resilience (particularly through the OCCD), and builds on existing high-level policies and development plans.

At the same time, it is clear that the program is ambitious, and it will require significant efforts to ensure that it achieves all its objectives. A particular challenge will be to ensure proper arrangements at subnational levels (including local government, but also civil society, private sector, and communities). This merits further attention during detailed project preparation.

As noted above, the SPCR preparation process has included strong consultations with development partners. It is recommended that this be continued through the implementation of the SPCR.

Coordination with knowledge partners and regional expertise is ensured through the parallel Pacific regional SPCR.

**j) The program promotes poverty reduction.**

At policy level, the SPCR is connected to the Climate Compatible Development Strategy (CCDS) which outlines a vision to broaden the base of PNG's economy and reduce reliance on natural resource exports while enhancing the earning power of smallholder farmers and forest communities; and contribute to food security by enhancing agricultural productivity and to rural development through small-scale electrification, infrastructure development, and service provision—all contributing to sustainable growth and poverty reduction.

The choice of SPCR interventions has been made with specific focus on the most vulnerable groups, which are generally also the poorest segments of the population, and dependent on limited and strongly climate-affected livelihoods.

The interventions will enhance their resilience in the face of shocks and changes, now and in the future, which clearly contributes to poverty reduction.

**k) The program considers cost effectiveness of proposed investments.**

An initial cost/benefit analysis framework has been developed, to be further developed and applied to investments specified during detailed project preparation. In that sense, there is no comprehensive quantitative assessment of the cost effectiveness of the specific investments in the current program. As noted in this analysis, a challenge is that many of the SPCR components can be qualified as climate adaptation “enablers” or “enhancers,” for which it is difficult to quantify development benefits in the absence of bigger investment flows building on that capacity.

However, the choice of the pilot investments (sectors, geographic areas, target population) appears to have been made on sound criteria and matches international experience on sound adaptation programming, including cost effectiveness.

In addition, rather than investing directly in specific investments (such as infrastructure) the SPCR will also facilitate better access to information and funds for private and public initiatives, which should facilitate market efficiency and result in more effective climate risk management by local authorities.

**II: Compliance with the Investment Criteria or Business Model of the Relevant Program**

**a) Climate Risk Assessment**

The SPCR is based and good assessment of key climate impacts, vulnerabilities, and implications.

The risk assessment and intervention prioritization methodology is strongly based on expert judgment, including a range of people with strong local knowledge from diverse technical backgrounds. It provides a good list of priority interventions, but could be framed more sharply in terms of its approach in dealing with climate change in the context of current variability and extremes (and the country's current adaptation deficit). This merits further attention in future capacity building, but has no strong impact on the overall program design, given that the assessment does identify a set of high-priority risks and interventions that are both climate-related and particularly relevant in the context of the current vulnerabilities and the adaptation deficit facing the country.

## **b) Institutions/Coordination**

The program is closely tied to the government's institutional arrangements for addressing climate resilience, particularly through the newly established OCCD, and builds on existing high-level policies and development plans. See also item I-i.

## **c) Prioritization**

The SPCR has adequately prioritized activities, building on the risk assessment and options screening (as discussed above).

## **d) Stakeholder Engagement/Participation**

The SPCR preparation process included stakeholder participation as well as a household survey to gather perspectives of particularly vulnerable groups. The poor are generally the largest groups of vulnerable people, with particular concerns for those in the areas most exposed to climate related hazards, which include the pilot areas addressed in the project.

Further stakeholder participation will be required through the design and implementation phases, especially for components 1 and 2; and will be stimulated, for instance, through the small grants fund that is being established as part of component 1. See also I-f.

## **III: Recommendations**

This section provides additional recommendations that could be considered to further strengthen the program.

One area that is already covered in some program activities but can be explored more explicitly is the overlap between climate change adaptation and disaster risk reduction (as highlighted in the recent Intergovernmental Panel on Climate Change [IPCC] Special Report on Managing the Risks of Extreme Events and Disasters to Advance Adaptation [SREX]). The issue of climate-related extreme events is clearly addressed in the SPCR, for instance in early warning systems component, and in the collaboration with the Global Facility for Disaster Reduction and Recovery (GFDRR)-funded infrastructure project, but further and more explicit attention could be given to coordination with a wider range of disaster-oriented agencies (also in the region) as well as use of climate information on risks of extremes across timescales (see next point).

A second issue that merits attention (as mentioned above, e.g., in item 1-c) is the use of climate information across timescales. The current early warning systems focus on immediate risks and the long-term climate analysis is focusing on trends (in averages or in frequency of extremes). Some decisions would also benefit from predictability on intermediate timescales (El Niño/La Niña-Southern Oscillation [ENSO] in particular), and characterization of the most relevant envelopes of risk on the timescale most relevant to a particular decision (a season in the case of choice of crop; several years in the case of agriculture skills development; years to decades in the case of land-use planning, etc.). A helpful approach is often to look at the decisions at stake, explicitly map the timescales on which their implications play out, and then organize the climate information (characterization of variability, predictions, trends, etc.) in the way that is most relevant to that context.

This could be facilitated by exploring links to the development of “climate services” as expressed in the Global Framework for Climate Services (GFCS), which explicitly focuses on the user interface to make climate information across timescales more relevant to end users. Regional partners, such as the Australian Bureau of Meteorology, likely already have linkages to the PNG meteorological office that could be built on to also strengthen both general provision of information, but particularly tailoring of information to user needs and application in decision making (in a variety of program components, from community-based elements to sector planning).

### **Specific Detailed Comments (beyond the formal review)**

- Section 1.1 under climate could be strengthened (clarified, more focused on key aspects). For instance, ENSO (El Niño/La Niña) merits more specific attention, describing key aspects of (partly predictable) climate variability (including variability in sea levels) that directly affects development.

As an example of less relevant detail and lack of clarity: in the same section, below Figure 2: there is a reference to weakening La Niña signals and longer decadal phases of dry conditions. Firstly, the notion of changing ENSO patterns may have been correctly identified at the time of the first communication, but current scientific knowledge indicates very high uncertainty regarding trends in ENSO. Secondly, it is not clear what is meant by the decadal statement—La Niña impacts primarily affect seasonal/interannual climate patterns. There will be further information on decadal predictability as part of the new climate model outputs for the IPCC Fifth Assessment Report (AR5), but for now, the main message is that one should take account of the potential of decadal variability as a component of overall climate risk management (e.g., in infrastructure design, water management, and agriculture strategies—not over-interpreting short-term trends but being aware of this potential variability), but not expect too much predictability for specific planning on decadal timescales.

For this entire section, I would consider basing the description more strongly on the Australian assessment mentioned at the end, plus a more user-oriented description of current variability (including regular seasons and, for instance, ENSO), and leave out the older information.

- In Table 2, in the category of “event risks,” the categorization appears to contain overlaps; for instance “increased incidence of extreme events” overlaps with “increased flooding”, “increased intensity of rainfall” and “storm surge”.
- Annex 8, item 2e: Reassurance -> reinsurance.