

**Review of Investment Plan-Jamaica Strategic Programme for
Climate Resilience**

Submitted to the CIF Administrative Unit, World Bank,
Washington, D.C.

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- 1.0 Title of Investment Plan:
2.0 Program under the Strategic Climate Fund: Pilot Program for Climate Resilience
3.0 Reviewer: Dr. Leonard A. Nurse
4.0 Date of Submission: October 20, 2011
5.0 Part I: General Criteria: **Compliance with general criteria indicated in Annex A of the “Proposal for the preparation of independent technical reviews of PPCR and SREP investment plans and programs”**

The document is well structured and presented, and generally provides sound justification for the proposed interventions. Jamaica’s draft SPCR complies with the core objectives of the PPCR, which seeks to (a) pilot and demonstrate ways to integrate climate risk and resilience into critical development planning processes, and (b) complement other ongoing activities. Similarly, the document is considered, in all material respects, to be compliant with the requirements contained in Annex A.

- 6.0 Part II: **Compliance with the investment criteria or business model indicated in Annex A of the “Proposal for the preparation of independent technical reviews of PPCR and SREP investment plans and programs”**

The project could potentially have a positive, transformative impact, once the components of the three investment projects are implemented efficiently and in a timely manner. The proposal has taken into account the country’s ability to implement the proposed activities and a steering committee has been put in place. The Planning Institute of Jamaica (PIOJ), the institution designated as Executing Agency by the Government of Jamaica, has appropriate prior experience with the coordination of similar projects, and is currently integrally involved in other relevant climate change initiatives.

The draft SPCR also complies with the guidelines established in Document: PPCR/SC8/CRP.8, with respect to the following sub-heads:

Climate risk assessment

The process has been country-led, and appropriate consideration has been taken of the vulnerability of key sectors, populations and ecosystems to the socio-economic and biophysical implications of climate change.

Institutions/coordination

The process to achieve effective coordination is clearly set out in the draft SPCR. The document identifies inter- and cross-sectoral arrangements, coordination mechanisms between central and local government authorities, and other stakeholders including donors, the private sector, academia and civil society.

Prioritization

The draft SPCR has adequately prioritized proposed activities, in the context of known and projected climate risks, national development priorities, sectoral policies, known policy reform processes and other activities and strategies.

Stakeholder engagement/participation

There is adequate evidence of effective consultation with the various stakeholder groups, including vulnerable communities.

7.0 Part III: Recommendations:

While the draft SPCR is generally compliant with the relevant conditions set out in Annex A **of the “Proposal for the preparation of independent technical reviews of PPCR and SREP investment plans and programs”**, the reviewer considers that there are some areas that require adjustments which would not only serve to enhance the final product, but also help to bring further clarity to the overall objectives of the exercise. In this regard, the following observations are offered for the Government’s consideration:

- i. It will be recalled that Jamaica contributed significantly to the success of the regional projects “Caribbean Planning for Adaptation to Global Climate Change” (CPACC, 1997-2001), “Adaptation to Climate Change in the Caribbean” (ACCC, 2001-2004) and Mainstreaming Adaptation to Climate Change in the Caribbean” (MACC, 2004-2008). The country also benefitted from a number of capacity building activities including training in vulnerability and risk assessment for adaptation decision-making, and coral reef monitoring for climate change.¹ In addition, a water sector adaptation strategy for Jamaica was developed, based on a pilot project undertaken in southern Clarendon. A small sample of some specific relevant outputs from these projects is provided in Appendix 1. It is therefore surprising that the draft SPCR makes no reference to these projects. The reviewer considers that it would be helpful to learn how the Government of Jamaica intends to (a) build on these earlier activities and (b) use the experiences gained from these initiatives to enhance the design and execution of the SPCR.
- ii. Throughout the document attention is consistently drawn to (a) the criticality of Jamaica’s coastal and marine resources including vital biodiversity associated with mangroves, corals, seagrasses and beaches (b) the non-climate factors that are already functioning as stressors on these resources and (c) the projected enhanced exposure, higher risk and increased vulnerability of the systems under realistic climate change scenarios. Equally, the vulnerability of tourism-related infrastructure and other vital economic and social assets at or near the coast (e.g. highways, air

¹ This pilot project was undertaken by Jamaica, The Bahamas and Belize under the MACC

and sea ports) is brought into sharp focus. This is made explicitly clear from the outset in the “Summary table for the strategic programme for climate resilience, Jamaica” (p. x), section 7 (a) ‘*Key challenges related to vulnerability to climate change/variability*’. Among the key challenges identified are “significant beach erosion, damage to coastal ecosystems and other natural infrastructure, and inadequate management of coastal resources, as well as the need to revise and enforce regulations’. In addition, one of the *sectors* targeted for intervention in the SPCR is “Human settlements and coastal resources”. The importance of coastal resources is further highlighted in sections 1.4 (Environmental context), 2.0 (Development context and climate risks), 3.4 (Coastal and marine resources), 3.5 (Tourism), 7.1 (Priority sectors and themes) and 7.3 (SPCR general strategies).

It is noted that the PPCR investment interventions focus on (a) strengthening Jamaica’s meteorological observation and data collection systems to enhance climate monitoring, weather forecasting and early warning systems (b) creation of an enabling framework for mainstreaming climate change adaptation at the local and national levels, with specific emphasis on the agriculture and water resources sectors (c) improving access by small and medium scale operators in the agribusiness and related sectors to resources for financing adaptation initiatives, and (d) the creation of a pool of resources for sustainable financing of initiatives in the areas of climate change adaptation and disaster risk management. While this focus is fully supported, the conspicuous absence of any clearly defined pilot projects or other activities specific to the coastal and marine resources and tourism sectors is difficult to comprehend, in light of the observations set out in the preceding paragraph. Indeed, a very compelling case can be made for the inclusion of these sectors in component 2 of investment project 2, which proposes the conduct of detailed vulnerability assessments and identification of appropriate adaptation strategies (See Table 23 of draft SPCR).

Even if the omission is intentional, the Government of Jamaica should be invited to provide a sound and acceptable rationale for the decision. Similarly, if the coastal resources and tourism sectors are the focus of other complementary projects (either presently under execution or contemplated in the near future), such information ought to be communicated in the draft SPCR, so that stakeholders can better evaluate the extent to which resources being sought under the CIF are being optimized. At the very minimum (and even if the Government of Jamaica determines that there is no pressing need to undertake specific pilot activities involving these sectors) some attempt should be made to demonstrate how these sectors will benefit from activities and lessons learned from proposed SPCR activities. Alternatively, the Government may wish to indicate explicitly how it intends to manage the obvious vulnerability of these two key economic sectors in the short, medium and long term. The reviewer is persuaded that failure to do so would demonstrate an unfortunate disconnection between the Government’s own well-reasoned arguments and the investment activities proposed for the SPCR.

- iii. The proposals to establish (a) a line of credit "...to provide loan financing to farmers and other businesses in the agricultural and related sectors", and (b) A 'Climate Change Adaptation Trust Fund' are sound and supportable, given the vulnerability of agriculture sector to weather and climate-related risks, and its lack of access to immediate post-event financing. It is to be hoped that in the setting up of these facilities, the unique circumstances of the most vulnerable and marginalized groups within the farming community will also be given special consideration.

Consideration might also be given to the establishment of a climate-related agricultural insurance scheme for crop as well as non-crop agriculture. Such an initiative would complement components 1 and 2 of investment project 3, and increase the likelihood of achieving objectives 1 and 2 as stated (refer to Table 24 of draft SPCR). If the Government of Jamaica determines that the recommendation is worth further consideration, there are existing models that can provide guidance for such a scheme. One such model is WINCROP, an insurance scheme established in 1988 for banana farmers in the Windward Islands, from which valuable, transferrable lessons can be learned.

- iv. Considerable emphasis is appropriately placed on the goal of "Mainstreaming climate change in national, sectoral and spatial development planning and ensuring that impacts on vulnerable groups and women are prioritized in plans" (Section 7.3, SPCR General Strategies, p. 42). This goal is repeated under 'Agriculture and Food Security Strategies' where it is intended to "Mainstream climate change adaptation strategies across all agricultural sub-sectors, including fisheries and horticulture" (p. 45). The SPCR will also seek to "Mainstream climate change considerations into all the sectoral, disaster risk management plans, local development plans, as well as the policies and regulations" (Section 8, SPCR priority areas for investment, p. 61). Similar statements are made with respect to terrestrial resources and terrestrial biodiversity (Table 17) and tourism (Table 18).

However, it is unclear to the reviewer how the important goal of 'mainstreaming' is to be achieved. The Government of Jamaica should be ever mindful that although mainstreaming is a universally accepted and desirable goal, it can prove difficult to achieve 'on the ground' without careful planning and execution. Further, there is a dearth of well-documented, globally representative case studies that demonstrate successful mainstreaming. So while there is no expectation that the draft SPCR could at this stage provide all the specific details of the process, a clearly enunciated *methodology* or *strategy* for implementing the task of mainstreaming would be most helpful. This could be presented in any format which the Government of Jamaica finds appropriate, including a simple conceptual model or a set of well thought-out principles which would provide guidance for the process. Such a platform could provide a useful initial basis for early national stakeholder consultations on the process, so that a clear consensus about the objectives, strategies and expectations

of mainstreaming can emerge. Mainstreaming is a *cross-cutting* as well as *overarching* goal of the PPCR initiative², and therefore the extent to which mainstreaming is ultimately achieved must surely be one of the key indicators of success of Jamaica's SPCR. The SPCR therefore affords an excellent opportunity for ensuring that mainstreaming is not relegated to the realm of an intangible appendage of the project.

- v. The proposal to pilot a managed artificial aquifer recharge scheme in the Rio Minho hydrologic basin is innovative, and if successful could be beneficially replicated at other appropriate sites across the country. Notwithstanding, the draft SPCR provides no information on the process which led to the selection of this site. Consequently, the impression is given (very likely unintentionally) that the decision was taken in an *a priori* manner. The Government of Jamaica would be aware that while the processes and technologies used in artificial aquifer recharge are generally well understood, the success of any such undertaking is partly dependent, among other considerations, on choosing an appropriate candidate site. Based solely on the information communicated in the draft SPCR, it would appear that the main criterion that led to the choice of the Rio Minho (over the other threatened southern basins – Kingston and Rio Cobre) is the size of the projected annual water deficit by 2015. While this is not an unimportant consideration, the Government of Jamaica should be invited to include in the draft SPCR the full suite of criteria that were applied in the screening of potential candidates for the experiment. This ought not to be burdensome requirement, as there are indications that the information exists, but for reasons not clearly understood, was not included in the document.

- vi. It is also noted that Jamaica is currently in the process of finalizing a request for project funding to the Secretariat of the Adaptation Fund Board titled “Enhancing the resilience of the agriculture sector and coastal areas to protect livelihoods and improve food security”. One sub-component – “Enhancing the climate resilience of the agricultural sector by improving water and land management in select communities” appears to mirror activities that show some similarity with certain items identified in the draft SPCR. Among the expected outcomes of this component are: establishment of a micro-dam, rehabilitation of a reservoir, implementation of rainwater harvesting and a small scale, gravity irrigation programme, rehabilitation and development of flood mitigation (climate change) resilient infrastructure, and the establishment and rehabilitation of soil conservation and water catchments infrastructure. The proposal to be executed under the Adaptation Fund targets locations in Northern Manchester, Clarendon (South Clarendon and Rio Minho Watershed), and Caymanas, St. Catherine.

² While matters relating to the regional PPCR fall outside the terms of reference for this assignment, it is this reviewer's considered view that the *development of mainstreaming methodologies and approaches* should also be an integral component of the regional track.

The reviewer considers that there is considerable potential for overlap between the SPCR and the Adaptation Fund proposal. While all potential synergies should be optimized and encouraged, every effort must be made to ensure that the projects are aligned in a manner that avoids duplication of resources as well as effort. More specifically, the Government of Jamaica should be invited to make explicitly clear in the draft SPCR (a) how it intends to integrate these two programmes (b) which specific elements of the potentially overlapping activities will be tackled in each project and why, i.e. the rationale for the allocation, and (c) the deliverables from each project that are expected to serve as inputs to the other. Fortunately, the Planning Institute of Jamaica (PIOJ) is Government's executing agency for the two programmes, and the World Bank is providing resources for both. This coincidence of circumstances should provide an efficient mechanism for focused coordination with the other major players, i.e. the Inter-American Development Bank and the United Nations Development Programme, to promote cross fertilization while eliminating redundancy.

From an operational perspective, it might also be helpful to learn whether it is intended that the two programmes will be executed simultaneously or in sequence. If the former is likely, then the Government of Jamaica may wish to provide clear assurance that the PIOJ will have the required resources to implement both initiatives concurrently.

- vii.** Finally, it is stated in various sections of the document that the poor and other marginalized groups suffer disproportionately from extreme events, and will be the most vulnerable to the adverse consequences of climate change and natural disasters (See for example section 2.33, social vulnerability; Table 15, SPCR strategic actions for human settlement). It is evident that many of the proposed actions can impact these groups in a positive way; however the linkages between proposed SPCR interventions and reduced vulnerability in these communities is implicit at best. Therefore, the reviewer considers that the document would be further enhanced with the inclusion of a brief section that explicitly seeks to demonstrate how the anticipated outcomes of SPCR investment projects are likely to increase the resilience of poor and marginalized groups.

Appendix 1:

A sample of relevant products produced under the regional CPACC and MACC projects

Creary, M., 2006: Coral Reef Monitoring for Climate Change Impacts: Jamaica 2001-2003. Caribbean Community Climate Change Centre, Belmopan, Belize.

Jamaica Water Resources Authority, 2008: Vulnerability and capacity assessment: Southern Clarendon pilot project Jamaica. Final Report. Caribbean Community Climate Change Centre, Belmopan, Belize.

Pulwarty, R. and Hutchinson, N., 2008: Vulnerability and capacity assessment methodology: A guidance manual for the conduct and mainstreaming of climate change vulnerability and capacity assessments in the Caribbean. Caribbean Community Climate Change Centre, Belmopan, Belize.

Taylor, M., Chen, A., Bailey, W., 2009: Review of Health Effects of Climate Variability and Climate Change in the Caribbean. Final Report. Caribbean Community Climate Change Centre, Belmopan, Belize.

ESL Management Solutions Ltd., 2009: Development of a National Water Sector Adaptation Strategy to Address Climate Change in Jamaica: Strategy and Plan of Action. Final Report. Caribbean Community Climate Change Centre, Belmopan, Belize.