

REGIONAL WORKSHOP ON Responding to Climate Change in the Pacific

MOVING FROM STRATEGY TO ACTION

Asian Development Bank



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SUMMARY REPORT

A. Introduction

- 1. A Pacific climate change workshop with the theme "Moving from Strategy to Action" was organized by the Pacific Department (PARD) of the Asian Development Bank (ADB) at the Hotel Novotel in Nadi, Fiji, on 12–13 October 2010. The workshop had 106 participants comprising representatives from ADB's 14 Pacific developing member countries (DMCs), development partners (DPs), regional organizations, the academe, international nongovernment organizations (NGOs), and the private sector, as well as consultants and resource persons (see Appendix 1 for the full list of workshop participants). The two-day workshop had six sessions, each with a designated session chair and rapporteur (see Appendix 2 for the agenda). The session chairs included Pacific Island Forum Secretariat (PIFS) Secretary General Tuiloma Neroni Slade, Pacific Regional Environment Programme (SPREP) Director David Sheppard, Australian Agency for International Development (AusAID) First Secretary Ryan Medrana, German Agency for Technical Cooperation (GTZ) Climate Change Technical Adviser Marita Manley, and SPREP Program Manager Netatua Pelesikoti. Mr. Mahfuz Ahmed, Principal Natural Resources and Agriculture Economist, ADB, served as overall workshop moderator.
- 2. The workshop was conducted to (i) disseminate ADB's work and approach in support of climate change adaptation and mitigation measures in its Pacific DMCs; (ii) promote partnership and dialogue with the Pacific DMCs, DPs, and other stakeholders for a coordinated and harmonized response to climate change in the region; and (iii) discuss possible mechanisms and actionable recommendations for improving the access of Pacific DMCs to climate change financing in the region.

B. Summary of Discussions

1. Opening Session

- 3. Mr. Richard Keith Leonard, ADB Regional Director, welcomed the participants to the workshop and acknowledged the complexity of adequately addressing climate change, particularly in the Pacific region, because of the uncertain nature of its impacts and consequences, and limited local resources to allocate across a number of national priorities. He emphasized the need to take intergenerational equity considerations into account in responding to climate change in the Pacific, through a balance between making decisions now for future generations and addressing the problems that current generations are facing.
- 4. Mr. Tuiloma Neroni Slade, PIFS Secretary General, delivered the keynote address. He thanked ADB for the timely opportunity to consolidate ideas on climate change and what it means for the Pacific region. He then reviewed the history of the global climate change issue and noted the ongoing global transformation in perception and attitude among the development sectors and industrialized countries as well as the general acknowledgment of the urgent need for climate change response measures with particular focus on the protection and adaptation of the most vulnerable. The Secretary General noted that climate change is the greatest challenge facing the Pacific island countries, as it threatens livelihoods, living standards, and the very viability of communities, and called for countries and their DPs to exert concerted efforts in the fight against climate change. He urged the countries to clearly articulate their priorities and needs for assistance, and asked the DPs to exercise collective and coordinated action and to facilitate the countries' access to international financing for climate change.
- 5. After the Secretary General's speech, Mr. Ahmed gave a brief overview of the workshop background and objectives.

2. Session 2: Climate Change Priorities and Strategies of ADB's Pacific DMCs

- The session was chaired by Ms. Netatua Pelesikoti, Program Manager of the Pacific Futures Programme of the Pacific Regional Environment Programme (SPREP), and Mr. Paula Jone Vea Uluinaceva, ADB/World Bank (WB) Climate Change Focal Person for the Solomon Islands, served as rapporteur.
- 7. In her opening statement, the Session Chair noted that at the country level, climate change priorities and strategies cascade from national development strategies and plans. Some countries have sector strategies that reflect climate change policies and strategies, whereas some have national adaptation plans of action (NAPAs) and national disaster risk management (NDRM) strategies. At the regional level, there are numerous climate change-related initiatives being undertaken by regional agencies like Pacific Islands Applied Geoscience Commission (SOPAC), Secretariat of the Pacific Community (SPC), and SPREP as well as by international agencies like ADB, United Nations (UN) and World Bank; and bilateral organizations, such as AusAID, British High Commission, European Commission, GTZ, Japan International Cooperation Agency (JICA), and New Zealand Aid Programme (NZAID), among others. Some initiatives involve the collaboration of both international and regional institutions, as currently pursued through the Global Environment Facility (GEF), Institutional Adaptations to Climate Change Project (IACC), and GEF Pacific Islands Greenhouse Gas Abatement through Renewable Energy Program (PIGARREP), to name a few.
- After the Chair's introduction, representatives of the 14 Pacific DMCs (Cook Islands, Fiji, Kiribati, Republic of Marshall Islands (RMI), Federated States of Micronesia, Nauru, Palau, Papua New Guinea (PNG), Samoa, Solomon Islands, Tonga, Timor-Leste, Tuvalu, and Vanuatu) made their respective presentations covering the following aspects: (i) current climate change issues; (ii) the countries' responses to the climate change threat (including national policies and institutional arrangements, strategies, and priorities); and (iii) current and planned government programs and projects.
- In summary, the country papers listed the following climate change issues, country responses, and needs for assistance.

Vuln	nerabilities	Country Responses	Country Priorities / Needs for Assistance	
liv hu ex Tu O Dr wa O Str O Ocores ma	ea level rise and its impacts on velihood, food security, and uman well-being (as semplified by the king tide in uvalu) roughts and resulting food and vater shortages torms/cyclones cean acidification and the esultant effects on coastal and narine resources icreasing ocean water emperature and coral bleaching	 Institutional responses (e.g., policies, legislation, creation of climate change office, capacity building and institutional strengthening) Programs and projects, both donor- and government-funded, such as renewable energy programs, water resource management initiatives, and food security measures 	 Strengthening technical capacity Enhancing national climate information management systems Enhancing capacity to access funds Sustainable finance for implementation of conservation plans Building synergies between adaptation and mitigation Funding of identified and readily implementable climate change projects 	

After the 14 country presentations, the Chair noted that the presentations all clearly highlighted the following: (i) the Pacific DMCs' vulnerabilities to the changing climatic conditions; (ii) their capabilities, or lack thereof, and priority needs, which are similar for most Pacific DMCs; (iii) the many actions/activities that are already being pursued on the ground by Pacific DMCs; (iv) the need for the initiatives to be country-led; (v) the challenges in Pacific DMCs' institutional arrangements and the lack of enabling climate change policies and strategies in some cases; (vi) the need to strengthen existing initiatives with the support of DPs; and (vii) the need for regional and international agencies to coordinate and collaborate in a more effective and efficient manner in order to improve implementation on the ground.

During the open forum, a number of Pacific DMC representatives gave their views regarding the presentations. Timor-Leste commented that their presentation did not include NAPA initiatives since those were still being formalized for discussion with DPs, and also requested the DPs to be more flexible with their requirements, such as in monitoring, reporting, and verification (MRV). Palau congratulated Tuvalu for sending a very powerful message regarding the urgent need for action against climate change. The Marshall Islands said that the countries all share the same issues and have existing plans that need support from DPs. Kiribati shared the Marshall Islands' sentiments and high expectations, expressed the need for assistance in building their technical capacities and enabling structures, and echoed Timor-Leste's request for more flexibility in DPs' requirements for financial assistance. Vanuatu reiterated the other countries' call for urgent action, particularly in facilitating their access to climate change financing, and requested the DPs to streamline their procedures further to accelerate the delivery of technical and financial support to the countries. The Cook Islands asked how climate change impacts, which are already being felt in a number of countries, can be managed through engineering interventions. Fiji stressed the need for better coordination between countries and their partners and regional institutions, and specifically noted the need for ADB regional technical assistance on capacity strengthening to provide better clarity in directions and expected outputs. In response to the countries' comments, AusAID said that it is ready to provide technical support, but needs to know what is needed and the extent of flexibility requested by the countries, given that the agency also needs to comply with the reporting requirements of the Government of Australia. Nevertheless, AusAID is open to accommodating the countries' request for flexibility in its procedural requirements.

3. Session 3: Addressing Climate Change in the Pacific

- 12. The session was chaired by Ms. Marita Manley, Technical Adviser for Climate Change of the SPC/GTZ Project on Adaptation to Climate Change in the Pacific Island Region, and Ms. Katarina Atalifo of the United Nations Development Programme (UNDP)/GEF-funded Small Grants Programme (SGP) in Fiji served as rapporteur.
- 13. The session consisted of two papers by ADB: one on the Pacific Climate Change Program (PCCP) established under TA 7394: Strengthening the Capacity of Pacific DMCs to Respond to Climate Change presented by Mr. Ahmed, and the other on the Pilot Program for Climate Resilience (PPCR) presented by Ms. Anne Witheford, PARD Public Management Specialist.
- 14. The first paper provided an overview of ADB's climate change program in the Pacific. It highlighted certain issues that provide the rationale for the program: (i) how climate change compromises prosperity, stability, and security; and (ii) limitations of Pacific DMCs in terms of the (a) capacity to plan for or design ways to adapt to (or mitigate) climate change, (b) affordability of technologies or the huge financing requirements of climate change adaptation or mitigation interventions, (c) capacity to handle the complex financing arrangements of existing global climate change funds, and (d) lessons that have been learned from previous experiences, such as (1) the overall disconnection between aspiration (national level) and delivery on the ground, compounded by capacity issues and the appropriate level of engagement of stakeholders, resulting in the inability to access funds and minimal private sector involvement; and (2) the critical need for DP coordination. ADB acknowledges the need for more support toward capacity development and assistance at the national level in the mainstreaming of climate change into national policies, plans, and programs, and hopes to

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provide a more effective response to its Pacific DMCs' needs, through a full engagement with other DPs in both adaptation and mitigation interventions.

- 15. The Pacific Climate Change Program (PCCP) was developed by ADB to operationalize the recommendations of the comprehensive Climate Change Implementation Plan (CCIP), which was formulated by an ADB team through a participatory process involving the Pacific DMCs and DPs in 2008–2009. The PCCP has adopted a three-pronged strategy comprising (i) immediate attention to fasttracking and scaling up of climate change adaptation and mitigation investment; (ii) building capacity to strengthen knowledge, skills, and practices of sector agencies and communities in various climate change-related fields to enable integration of climate change into Pacific DMC development plans and programs; and (iii) promoting more effective DP responses by coordinating and harmonizing their responses, sharing best practices, and helping Pacific DMCs access funding from other global financing facilities. Its priority sectors are (i) water and sanitation and urban development; (ii) energy efficiency and renewable energy; (iii) transport and information and communication technology (ICT); and (iv) natural resources (including coastal and marine resources management). The program is intended to be a "one-stop climate change service" providing increased financial and technical support for measures that will ensure continued economic growth in the face of climate change and facilitating the countries' access to various financing facilities for climate change.
- 16. The second paper on PPCR gave an update on the current status of the joint ADB/World Bank-implemented pilot program. PPCR is a program under the multidonor Climate Investment Funds (CIF), which is designed to pilot and demonstrate ways in which climate risk and resilience can be integrated into core development planning and implementation. It seeks to mainstream climate change adaptation into national development planning through a long-term programmatic approach. PPCR has two phases: Phase 1, which supports countries in developing a Strategic Program for Climate Resilience, including an underlying investment program; and Phase 2, which supports implementation of the strategic program. The Pacific region pilot is one of two regional and nine country PPCR pilots across the globe. The Pacific PPCR has four components: country activities in three countries (PNG, Samoa, and Tonga) and a region-wide activities component. The three countries were chosen, and accepted, to participate in the PPCR as pilot countries under a process of selection, which included a set criteria outlined by the CIF. Under an agreed division of labor, ADB is leading in PNG and Tonga, while the World Bank leads in Samoa. The region-wide component is undertaken jointly, with ADB in the administrative lead.
- 17. During the open forum, the PIFS Secretary General expressed concern about an apparent lack of cross-referencing between the ADB's climate change response and the Pacific DMCs' climate change priorities and needs, as presented in the preceeding country presentations, and with existing regional initiatives such as the data collection and management efforts of SPC, which has an excellent climate-related database for the Pacific. The Federated States of Micronesia echoed the Secretary General's comments on alignment of ADB's climate change program with the Pacific countries' priorities.
- 18. In response, Mr. Ahmed of ADB explained that the PCCP is an offshoot of the CCIP, which was developed in consultation with the countries and DPs and which considered the countries' identified needs and priorities. ADB's priority sectors for assistance were selected based on country partnership strategies formulated by ADB country programming missions, which worked with the concerned ministries in the countries. ADB does not intend to set up a climate change database; instead, the PCCP hopes to work with other regional organizations, such as SPREP and SOPAC, to facilitate data and information exchange required by the countries in the planning and design of their climate change measures. Ms. Witheford added that for PPCR, country pilot initiatives were selected through a participatory process involving consultations between multidonor missions and country stakeholder representatives, including concerned government ministries/offices, NGOs, and the academe.

19. The Solomon Islands and PNG acknowledged ADB's projects in their respective countries in partnership with other DPs. Timor-Leste informed the workshop that their country expects to become a member of the Association of Southeast Asian Nations (ASEAN) by 2012, and commented that mitigation, rather than adaptation, should be given higher priority in climate change responses.

4. Session 4: Climate Change Adaptation Mainstreaming

- 20. The session was chaired by Mr. Ryan Medrana, First Secretary (Climate Change) of AusAID in Fiji, with Ms. Connie Ben Siliota of UNDP/GEF-SGP, Solomon Islands, as rapporteur and had four presentations.
- 21. The first paper, "Economic Evaluation of Climate Proofing Development Projects in the Pacific," by Dr. Mohiuddin Alamgir, ADB Senior Climate Change Economist (Consultant), defined "climate proofing" as increasing resilience to, and reducing to acceptable levels, the risks due to climate variability and change, including extreme events. To climate proof a development project means to (i) identify risks to the project, or any other specified natural or human asset, as a consequence of both climate variability and extremes; and (ii) ensure that those risks are reduced to acceptable levels through long-lasting and environmentally sound, economically viable, and socially acceptable changes implemented at one or more stages of the project. Dr. Alamgir proposed that the current ADB approach be expanded to constitute a comprehensive framework of analysis that can be extended to the project level. He also presented a decision-making matrix for the economic analysis of climate proofing of development projects, which combines simulation results with multiple criteria to determine whether or not to invest in climate proofing, which climate proofing option to pursue, how much to invest, and when to invest. The results will then have to be calibrated to have a credible indication of the (i) range of climate proofing options that are long-lasting, environmentally sound, economically viable, and socially acceptable; and (ii) timing and amount of investment.
- The second paper, "Climate Resilience and Sustainable Urban Development," was presented by 22. Dr. Tom Connor, Vice President of Kellogg Brown & Root Pty Ltd Australia. The paper noted that urbanization is one of the critical issues exacerbated by climate change and requires special attention as adaptation moves to action. Adaptation actions are challenged by physical constraints emanating from historic urban development patterns, which usually involve proximity to the coastal fringe, siting surrounding major streams subject to flooding and saline intrusion, established infrastructure systems that are costly to relocate, pressure of growth on natural resource systems, and the fact that such areas can be occupied by high proportions of poorer households that are most susceptible to disasters. To address the special case of urbanization adaptation across the Pacific DMCs, the paper proposed an approach that will involve the examination of infrastructure vulnerability and the identification of key climate resilience issues and alternative solutions for climate adaptation through sustainable urban development. Potential measures should include approaches which do not "reinvent the wheel," such as encompassing natural disaster risk management and integrated coastal zone management. Specific adaptation actions should also be subject to a balanced assessment which considers optimum timing and progressive adaptation options.
- 23. The third paper, "Climate Change and Food Security," was presented by Dr. Mark Rosegrant, Director of the Environment and Production Technology Division (EPTD) of the International Food Policy Research Institute (IFPRI) in Washington, DC, United States. The paper described the threats to sustainable food security in the Pacific Islands in the face of climate change and presented an overview of a proposed ADB-supported study on "Climate Change and Food Security: Adaptation Mechanisms for Sound Economic Livelihood in the Pacific Islands," which will be implemented in three countries (Fiji, PNG, and Solomon Islands) over a 12-month period. The study will (i) assess the impacts of climate change on food security, availability, and accessibility, and how they influence the livelihood of Pacific island communities; (ii) determine the potential adaptation mechanisms and coping strategies that will ensure food security and enhance livelihoods for rural communities; and (iii) recommend policy options

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for agriculture, fisheries, and food security that will strengthen support from national governments, and technical and financial assistance from regional and international organizations for rural communities facing climate change.

- 24. The fourth paper, "Climate Change and the Role of the Education Sector in the Pacific," presented by Dr. Murari Lal of the University of the South Pacific (USP), provided background information on climate change manifestations and projections in the Pacific and cited the Pacific Islands Forum Leaders' call for education, training, and awareness of the risks and effects of climate change, particularly at the community level, to increase resilience to climate change impacts. He then described USP's formal and non-formal education programs and USP's role in addressing climate change education through teaching, research, and community engagement.
- 25. During the open forum, GTZ expressed the view that, while there is value in undertaking cost-benefit analyses of climate adaptation measures, including climate proofing, there is limited capacity in the Pacific countries for the conduct of such analyses. UNDP Samoa echoed the GTZ concern and asked the other DPs how long-term issues involving climate change investment could be dealt with and what their financial implications are. Dr. Alamgir responded by saying that ADB and other donors should be able to provide the resources needed for the economic analyses. AusAID added that they have program funds for countries to carry out cost-benefit analysis of climate change adaptation programs and projects. AusAID also has capacity building funds available for short-term courses at USP on the economics of climate change adaptation.
- 26. On the IFPRI presentation on food security, the PIFS and SPC said that food security is not a new issue in the Pacific region and that food security studies have been implemented since 2007. Food security is among the current programs of SPC and SPREP. The Food and Agriculture Organization of the United Nations (FAO-UN) and UNDP have been involved in identifying food security issues and vulnerable sectors in 14 Pacific countries, and several governments have developed their respective food security frameworks to address identified food security issues as an offshoot of such studies. What is needed is the provision of training and capacity building to countries in the use of tools for the conduct of vulnerability assessment to determine their food security needs. To these comments, IFPRI responded that it is aware that there have been previous food security studies in the Pacific region, and requested the DPs to share the information available within their respective organizations for the proposed ADB-funded food security and climate change study.
- 27. On the USP paper, Tuvalu requested scholarships for climate change courses, including for those currently employed. USP informed the participants that they are currently offering climate change-related courses, and that scholarships have been available but not widely advertised. Climate change courses for online distance learning are now being developed and will soon be available to interested parties. Pacific countries are encouraged to enroll in these courses given the great climate change challenge in the region, as it is imperative for everyone to have a deep understanding and knowledge of issues and technical parameters related to climate change.

5. Session 5: The Economics of Climate Change in the Pacific

- 28. The half-day session gave an overview of ADB studies on the economics of climate change and presented the preliminary results of regional and country studies covering climate change economics, climate change impact modeling, and reduced emissions from deforestation and forest degradation (REDD). The session was co-chaired by Mr. David Sheppard, Director of SPREP, and Mr. Ahmed of ADB. Ms. Jindra Samson of ADB served as rapporteur.
- 29. The first paper by Mr. Suphachol Suphachalasai, Economist, ADB Economics and Research Department (ERD), provided the overview, framework, expected outputs, and preliminary findings of

their study on "The Economics of Climate Change in the Pacific." Key messages emerging from the study include the following:

- Without global mitigation, the Pacific could lose the equivalent of 5%–7% of gross domestic product (GDP) by 2100 with some adaptation and the equivalent of more than 12% with no adaptation.
- Climate/catastrophic risks could be large and need to be managed. The Pacific would require up to US\$300 million per year (or 1% of GDP) to cope with climate change impacts, if the current emission trends continue.
- Initiatives on adaptation to climate change should target the health, energy, agriculture, and water resources sectors.
- Climate impact pattern varies from country to country, indicating the need for a country-specific adaptation strategy. Forward-looking and "no-regrets" adaptation strategies are needed, and a mitigation-adaptation strategy should be exploited (e.g., energy efficiency helps reduce cooling energy costs and emissions).
- Regional cooperation saves costs and enhances benefits.
- 30. The second paper, "Regional Climate and Impact Modeling in the Pacific," was prepared by Mr. Muhammad Ardiansyah and Mr. Akhmad Faqih of the Center for Climate Risk and Opportunity Management in Southeast Asia and Pacific (CCROM-SEAP) of Bogor Agriculture University, Indonesia. A regional climate change modeling study was carried out to assess the vulnerability and physical climate change impacts in the agriculture, water resources, and coastal sectors and analyze the effectiveness of adaptation in these sectors. The paper presented the study observations and results of modeling rainfall; the El Niño Southern Oscillation (ENSO) and its impact on current and future rainfall and seasonal patterns of sea surface temperature; the impact of current and future climate on agriculture and water resources; and the impact of sea level rise (SLR) in the coastal area. Most of the climate models show an increase in intensity and frequency of El Niño and La Niña events, with the increase in ENSO also likely to increase the probability of tropical cyclones and flood disasters in the Pacific. In the agriculture sector, the impact models showed that climate change will shift the optimum planting time, thereby influencing the cropping system. Impact analysis in the water sector showed that some regions in the Pacific will be exposed to longer water-deficit periods, while others will have shorter waterdeficit periods. Extreme climate change events and SLR are already exacerbating inundation, storm surges, erosion, and other coastal hazards, thus putting at risk vital infrastructure, settlements, and facilities that support the livelihood of island communities.
- 31. The third paper, presented by Mr. Leandro Buendia, ADB Climate Change Consultant, provided a PNG forest profile and presented the results of an assessment of REDD as a potential mitigation option. The study concluded that shifting cultivation and fuelwood gathering are the biggest contributors to PNG's greenhouse gas (GHG) emissions and that, by reducing the current rate of use by 25% and 50%, respectively, PNG could contribute significantly to global GHG reduction while obtaining carbon credits and environmental benefits from keeping carbon in its forests. If PNG wishes to develop nationally appropriate mitigation actions (NAMAs) with significant impacts on GHG abatement, its policies and measures should prioritize (i) reduction of the area of shifting cultivation through (a) coordinated land use planning to avoid conflicts between forestry and agriculture, (b) use of improved crop varieties to increase agricultural production without clearing more forest lands, (c) improved crop management and making use of less land areas; and (ii) reduction of the volume of fuelwood gathered by (a) encouraging people to plant more trees, (b) use of efficient stoves and cooking and heating devices, and (c) use of alternative energy sources like natural gas.
- 32. After the three presentations, Mr. Juzhong Zhuang, ADB's Deputy Chief Economist, summarized the conclusions of the papers and added that combating climate change requires a global solution built on a common but differentiated responsibility. While the Pacific DMCs have made significant efforts in adapting to climate change, more is needed to mainstream adaptation in

development planning. Also, while adaptation is a priority, the Pacific DMCs should also pursue low-carbon growth since this brings co-benefits. Adaptation and mitigation will create economic opportunities and provide new sources of growth. International funding and technology transfer are critical to the success of actions against climate change in the Pacific. The region should be helped to enhance its capacities to make better use of existing and potential international funding sources. Regional cooperation offers effective means to deal with cross-boundary issues, such as water resources, forest fires, extreme events, disease outbreaks, and learning and knowledge sharing. Mr. Zhuang then listed the next steps in the study on the economics of climate change in the Pacific, including the outline of the report that should be ready by the second quarter of 2011 (see Appendix 3 for the PowerPoint presentation).

- 33. During the open forum, the following points were raised by workshop participants:
 - Need to downscale climate impacts and economic assessment on a country-specific level, i.e., climate modeling should use country data to reflect the real issues and challenges experienced by the different countries and disaster risk management should also be considered.
 - Need to tailor economic assessment to cover sectors that are relevant to the country (e.g., infrastructure and transportation).
 - Need to improve information networking within the region.
 - Importance of knowledge sharing and capacity building in terms of assessing country-specific climate and economic impacts; countries should also be trained on how to use the tools that will assist them in decision making (e.g., cost-benefit analysis and modeling).
 - Need to identify the countries' capacity building requirements, not what donors want to fund.
 - Need for greater local involvement, consultation, and participation of the Pacific DMCs in the study to ensure focus on relevant issues and increase ownership of the study's results.
 - Need for a strategy that will integrate all the information from various studies that have already been conducted and translate these into real action on the ground.
 - Need to form an advisory and peer review group to assess the data and policy recommendations of the study (World Bank willing to partner).
 - Need for the study report to be useful for policy negotiations and to provide information on the financing requirement and sources for countries to implement effective climate action.

6. Session 6: Panel Discussion on Financing the Climate Change Response in the Pacific

- 34. This session took stock of existing climate change financing in the Pacific, presented options and mechanisms for partnership and coordination among DPs on climate change financing in the Pacific, and discussed constraints to the Pacific countries' access to financing. The session was chaired by PIFS Secretary General Slade and documented by Ms. Nancy Wells, ADB Development Coordinator in Vanuatu. The case for a Pacific climate change facility was laid out by Mr. Ahmed of ADB, followed by the presentation of the findings of a study on a Pacific climate change mechanism by Mr. Sheppard of SPREP and options for collaboration in a climate change partnership facility by representatives of AusAID, European Union (EU), GTZ, UNDP, and World Bank.
- 35. In his presentation on "Financing the Climate Change Response in the Pacific: The Case for a Climate Change Partnership Facility," Mr. Ahmed highlighted what he referred to as a "vicious cycle in climate change financing." The Pacific countries are constrained by (i) limited human resources and institutional capacity; (ii) limited knowledge and data to plan for or design ways to address climate change; (iii) demonstrable or proven adaptation or mitigation technologies (often unaffordable); and (iv) access to global climate change funds. Limited capacity, knowledge, and technology to address

climate change limit the Pacific countries' access to available global funds, which in turn exacerbates the said limitations. This "vicious cycle" can be broken when Pacific countries are able to access existing climate change funds, which are provided through three main channels: (i) the United Nations Framework Convention on Climate Change (UNFCCC) mechanism (through GEF Adaptation Funds); (ii) the multilateral development banks (MDBs), mainly ADB, European Investment Bank (EIB), European Reconstruction and Development Bank (ERDB-UN), and the World Bank; and (iii) bilateral agency programs, such as AusAID's International Climate Change Adaptation Initiative (ICCAI, A\$150 million) and International Forest Carbon Initiative (IFCI, A\$200 million), the Canada Climate Change Development Fund, EU's Action Plan on Climate Change and Development, GTZ's Climate Protection Program, Japan-Asia Clean Energy Fund (in ADB), the Japan Cool Earth Partnership (US\$20 billion over 5 years), NZAID's Pacific Regional Environment and Vulnerability Program, and the UK Environmental Transformation Fund-International Window (ETF-IW). The total nominal amount of dedicated finance from these initiatives is less than US\$3 billion per year, representing a small percentage of the expected needs of developing countries, which is estimated by UNFCCC at \$14 billion for climate change adaptation in forestry, fisheries, and agriculture alone. All the funds have a limited time horizon, with no commitments beyond the 2012 date for negotiations on a post-Kyoto agreement—indicative of a pilot phase, rather than a new long-term architecture of global environmental funding. Mr. Ahmed then outlined some broad principles for a climate change partnership facility in line with the Pacific Leaders' directives, as embodied in the 2010 PIF Communiqué (see Appendix 4 for the PowerPoint presentation).

- 36. The SPREP paper presented by its Director, Mr. David Sheppard, outlined the context for Pacific climate change financing, summarized the preliminary findings of the SPREP Study on Climate Change Finance, and identified key principles and the next steps relating to climate change financing. The SPREP study was conducted upon the request of the 2010 Small Island States (SIS) Leaders for PIFS and SPREP to facilitate the development of a regional financing modality to administer, manage, and monitor the influx of funding. The priority is to ensure that adequate finance is available to implement practical and relevant actions at the national level to adapt to climate change. Donors must recognize and support existing processes and policies, such as the Pacific Plan, Pacific Islands Framework for Action on Climate Change (PIFACC), and the Pacific Climate Change Roundtable, and national development and climate plans, including NAPAs. Better information on climate change funding amounts and options, including mechanisms for improved and enhanced country access to climate funds, and better coordinated efforts at the regional and national levels and among donors will be essential. In addition, a balance of financing programs and initiatives for climate change adaptation, mitigation, and policy support will be required, with increased emphasis on adaptation and building resilience.
- 37. The climate finance study covered (i) an assessment of the current situation with respect to resources available to PICs for climate change initiatives at national and regional levels, (ii) an analysis of options for a Pacific Region Climate Change Funding Facility/Mechanism to support PICs and DPs' decisions in this area, and (iii) the pros and cons of instituting a regional backstopping mechanism as an adjunct of the Funding Facility/Mechanism or a stand-alone mechanism. Options for the Funding Facility/Mechanism include (i) a regional fund that is either a stand-alone mechanism or linked to an existing agency, (ii) national trust funds, and (iii) multilateral funds, although the best option may involve a combination of these. The SPREP study had been presented and discussed at the Finance and Economic Ministers Meeting (FEMM) held in Niue in late October 2010. For the 3rd Pacific Climate Change Roundtable in March 2011, a revised paper will have been prepared based on comments and suggestions received, and recommendations will be subsequently elevated to the Pacific Islands Forum Leaders' meeting in 2011.
- 38. Presentations by DP representatives provided broad overviews of their climate change-related programs in the Pacific. Mr. Ryan Medrana, First Secretary (Climate Change) of the Australian High Commission in Suva, Fiji, noted that Australia's ICCAI has been recently increased to A\$328.2 million

until June 2013. It is a policy and technical assistance program that is jointly managed by AusAID and the Department of Climate Change and Energy Efficiency (DCCEE) of the Government of Australia targeted for PICs. The ICCAI has four principal components: (i) science, (ii) strategic planning and vulnerability and adaptation assessment, (iii) priority action, and (iv) multilateral adaptation funds (such as the PPCR), through which it aims to achieve the following objectives:

- a) Establish policy, scientific, and analytical basis for climate change adaptation.
- b) Increase understanding of climate change impacts on natural and socioeconomic systems.
- c) Enhance capacity to assess vulnerabilities and risks, formulate adaptation strategies, and mainstream adaptation into decision making.
- d) Help finance priority adaptation actions.

In addition, Australia finances several regional bilateral programs as well as country-specific climate change adaptation projects in the Pacific. These include, for example, the Pacific Adaptation Strategy Assistance Program, the Pacific Climate Change Science Program, the Pacific Future Climate Leaders Program, and bilateral activities with Fiji, Samoa, Tuvalu, and Vanuatu.

- 39. GTZ Technical Adviser for Climate Change, Ms. Marita Manley, described the Regional Program on Coping with Climate Change in the Pacific Island Region (CCCPIR), which is being implemented by the Secretariat of the Pacific Community (SPC) in 12 PICs with a funding of €14.2 million and a 6-year timeframe, 2009–2015. The program focuses on land-based natural resources, marine resources, tourism, and sustainable energy, in stronger cooperation with SPREP. The Government of Germany is also funding Climate Protection through Forest Conservation in the PICs, and a REDD+ program with an overarching goal of supporting the conservation of forest ecosystems in PICs in order to mitigate climate change and preserve biodiversity.
- Mr. Marius Adrian Oancea, Third Secretary (Infrastructure) of the Delegation of the EU for the 40. Pacific, summarized the EU's ongoing and future regional- and national-level climate change programs in the Pacific. Current regional programs include (i) the Disaster Risk Reduction Programme that focuses on drought resilience and emergency operation centers and early warning systems; (ii) one on reducing vulnerability to natural disasters; and (iii) a Natural Disaster Facility, which covers disaster policy and planning, training and capacity development, and a regional information database. A future program on Global Climate Change Adaptation (GCCA) will aim at increasing the resilience of nine Pacific small island states (Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Tonga, and Tuvalu) through the development of "climate change roadmaps," implementation of pilot projects, and strengthening the capacity of regional organizations. An EU-Pacific Joint Initiative on Climate Change will also support regional efforts in defining and establishing the most appropriate and efficient regional aid delivery modality for climate change and bring about enhanced political dialogue, better coordination among stakeholders, and more efficient systems for financing climate change actions in the Pacific. In closing, Mr. Oancea emphasized that, while the crosscutting theme of climate change is high on the international political agenda, with a large number of donors conducting (or interested in conducting) a large number of projects and programs in the Pacific region, coordination among donors has been inadequate. It will therefore be important to increase the absorption capacity of PICs at the national level by enhancing their eligibility for budget support as well as strengthening the capacity of regional organizations and coordination among donors.
- 41. Mr. Toily Kurbanov, UNDP's Deputy Resident Representative in Fiji, discussed three major points related to climate change financing in the Pacific. These were (i) lessons learned in improving access to climate change financing for PICs; (ii) what is needed to be fixed when it comes to climate change financing; and (iii) some elements of the long-term policy agenda. Because governments aim to strengthen linkages between the pro-poor policies and climate adaptation policies, climate finance needs to be embedded in the countries' development strategies and to be tightly integrated with national public expenditure budget systems. For these, international climate change financing should

be seen as a complement, not as an add-on, to national budgetary allocations, and development coordination becomes a function of interdepartmental and intra-government coordination. The international policy framework should then assist countries in using climate change to advance propoor low-emission, climate-resilient development and encourage direct budgetary support, complemented with capacity building (and donor exit) strategies for development effectiveness.

- 42. Mr. Charles Feinstein, Sector Leader for Sustainable Development in the Pacific of the World Bank, gave the last presentation on climate change financing, reinforcing key messages from the earlier presentations. He reiterated that the current situation appears to be less about the money but more about the more difficult aspect of building capacity: human capacity, institutional capacity, and absorptive capacity. He urged DPs and the donor community to focus on a "differentiated regional mechanism" for financing climate change, which, in contrast with common connotation, will not be a single unitary regional fund to capture large amounts of donor finance. Already there are emerging partnerships among concerned ministries and departments in some countries, because there is a real sense of purpose toward mainstreaming climate change in development planning and in budget planning. These countries have thus been building national absorptive capacity to handle climate change financing from international sources effectively and efficiently. Other countries, which find it harder to attract donor attention or to rapidly build up absorptive capacity, may be better served through a regional entity that helps them build that capacity.
- 43. After the presentations by the speakers and comments by a number of Pacific DMC and DP representatives, the Chair summarized the discussions as follows:
 - The exchanges during the session underscore the urgency and overwhelming nature of climate change in the Pacific region.
 - Considerable work in many aspects has been done by the PICs to respond to climate change, but very little has been done in the marine area, e.g., ocean acidification, which is a direct result of the high CO₂ concentrations in the atmosphere.
 - There is a deserving need for climate change financing amongst Pacific island countries, yet there also is a demonstrated inability to effectively access international funding, i.e., access that caters to the region's capacities and whose procedures are sensitive to both the capacities and requirements of the Pacific region. A voice in the decision making will also be an important aspect of access to funding.
 - The cost of climate change response is very high, but multiple sources of funding exist at the global level. However, access to these funds has to be effective, and fund management has to be credible and according to international standards.
 - The climate change financing mechanism has to adhere to principles embodied in the PIF Leaders' Declaration, such as total transparency and accountability as well as strong coordination at the regional level and among DPs.
 - A range of funding mechanisms is available, such as trust funds, but Pacific DMCs prefer a multidonor financing facility that is properly coordinated under harmonized conditions in line with the Paris Declaration and the Cairns Compact.
 - Lastly, there was equal emphasis on collaboration and coordination at all levels—international, regional, national, and local, for both technical and financial aspects. With large sums of climate change funds available globally, countries ought to ensure that there are strong and robust public financial management systems with proper accounting and ownership checks and guidelines in place. The countries need to be fully accountable for the funds regardless of the form of the regional climate change financing facility.

7. Concluding Session

44. Mr. Ahmed listed the following key messages that have resonated throughout the workshop discussions:

- Climate change is the greatest challenge facing the PICs, threatening livelihoods, living standards, and the very viability of communities.
- ADB's 14 Pacific DMCs need assistance in accessing financing for their climate change response and have expressed support for a Pacific-tailored climate change financing facility.
- PICs and their DPs need to exert collective and coordinated action in the fight against climate change.
- DPs must recognize and support existing processes and policies and build on existing climate change initiatives in the region.
- 45. Mr. Robert Dobias, ADB Senior Climate Change Advisor, expressed satisfaction at the high quality of the discussions and the full and active participation of the countries during the two-day workshop. He then closed the workshop by thanking the countries and the DPs and acknowledged the excellent support provided by the workshop secretariat in the numerous arrangements prior to and during the workshop.



APPENDIX 1. List of Participants

	Country / Organization		Name (FAMILY NAME, First Name)	Designation	Affiliation and Address	
PAC	ACIFIC DMCs					
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APPENDIX 2

Regional Workshop RESPONDING TO CLIMATE CHANGE IN THE PACIFIC: MOVING FROM STRATEGY TO ACTION Hotel Novotel Nadi, Fiji, 12–13 October 2010

AGENDA

Day 1: 12 October (Tuesday)

0800 – 0900	Arrival and Registration of Participants
0900 – 1000	SESSION 1: WORKSHOP OPENING
0900 – 0915	Welcome and Opening Remarks Mr. Richard Keith Leonard, Regional Director South Pacific Subregional Office (SPSO), ADB
0915 – 0930	Keynote Address Mr. Tuiloma Neroni Slade, Secretary General Pacific Islands Forum Secretariat (PIFS)
0930 – 0945	Group Photo
0945 – 1015	Coffee/Tea Break
1015 – 1230	SESSION 2: CLIMATE CHANGE PRIORITIES AND STRATEGIES OF ADB'S PACIFIC DMCs Session Chair: Ms. Netatua Pelesikoti, Programme Manager, Pacific Futures Programme, SPREP, Apia, Samoa Resource Person / Rapporteur: Mr. Paula Jone Vea Uluinaceva, ADB Development Coordinator, Honiara, Solomon Islands
	This session will provide an overview of the national climate change and climate change-related priorities and strategies of each of the 14 Pacific developing member countries, to provide the broad context for the two-day workshop.
1015 – 1200	Country Presentations (5 minutes each)
1200 – 1230	Open Forum
1230 – 1330	Lunch

1330 – 1730	SESSION 3: ADDRESSING CLIMATE CHANGE IN THE PACIFIC Session Chair: Ms. Marita Manley, Technical Adviser, Climate Change, SPC/GTZ Adaptation to Climate Change in the Pacific Island Region, GTZ, Suva, Fiji Resource Person / Rapporteur: Ms. Katarina Atalifo, UNDP/GEF-SGP, Suva, Fiji
	This session will discuss the general description of the program that ADB is currently pursuing in response to the request of Pacific developing member countries for assistance in addressing climate change and its impacts.
1330 – 1400	ADB's Climate Change Response in the Pacific: An Overview of the Work and Approach Mr. Mahfuz Ahmed, Principal Natural Resources Economist, Pacific Department (PARD), ADB
1400 – 1415	Pilot Program for Climate Resilience (PPCR): An Update Ms. Anne Witheford, Public Management Specialist, PARD, ADB
1415 – 1430	Open Forum
1430 – 1730	SESSION 4: CLIMATE CHANGE ADAPTATION MAINSTREAMING Session Chair: Mr. Ryan Medrana, First Secretary (Climate Change), AusAID, Suva, Fiji Resource Person / Rapporteur: Ms. Connie Ben Siliota, UNDP/GEF-SGP, Solomon Islands
	This session will present mechanisms for, and cost implications and economics of, mainstreaming climate change adaptation in government plans, programs, and projects. It will describe threats and potential impacts of climate change to urban development and sustainable food security, and present analytical approaches for assessing appropriate strategies for the sustainable development of Pacific DMCs. The role of education and research in addressing climate change threats in the Pacific will also be discussed.
1430 – 1500	Economic Evaluation of Climate Proofing Development Projects in the Pacific Mr. Mohiuddin Alamgir, Senior Climate Change Economist (Consultant)
1500 – 1510	Open Forum
1510 – 1520	Coffee/Tea Break
1520 – 1550	Climate Resilience and Sustainable Urban Development Tom Connor, Kellogg Brown and Root Pty Ltd Australia
1550 – 1600	Open Forum
1600 – 1630	Climate Change and Food Security Mr. Mark Rosegrant, Director, Environment and Production Technology Division (EPTD), International Food Policy Research Institute (IFPRI), Washington DC, USA
1630 – 1640	Open Forum

1640 – 1710	Climate Change and the Role of the Education Sector in the Pacific Murari Lal, University of the South Pacific (USP), Suva, Fiji
1710 – 1720	Open Forum
1720 – 1730	Summary of Day 1 Discussions Ms. Anne Witheford, PARD, ADB
1830 – 2030	WELCOME COCKTAILS AND DINNER – Poolside Garden Restaurant

Day 2: 13 October (Wednesday)

0830 – 0845	SESSION 5: THE ECONOMICS OF CLIMATE CHANGE IN THE PACIFIC Session Co-Chairs: Mr. David Sheppard (SPREP) and Mr. Mahfuz Ahmed (ADB) Resource Person / Rapporteur: Ms. Jindra Nuella G. Samson, ADB This session will present preliminary results of regional and country studies covering climate change economics, climate change impact modelling, and REDD.
0845 – 0925	The Economics of Climate Change in the Pacific: Methodology and Preliminary Findings
	Mr. Suphachol Suphachalasai, Economist, ERD, ADB
0925 – 1005	Regional Climate and Impact Modelling in the Pacific Mr. Muhammad Ardiansyah and Mr. Akhmad Faqih, Center for Climate Risk and Opportunity Management in Southeast Asia and Pacific (CCROM-SEAP), Indonesia
1005 – 1020	Coffee/Tea Break
1020 – 1100	Assessing REDD Potential and Options in Papua New Guinea Mr. Leandro Buendia, Climate Change Specialist (Consultant)
1100 – 1200	Discussions, Wrap-up, and Next Steps Mr. Juzhong Zhuang, Deputy Chief Economist, ERD, ADB
1200 – 1330	Lunch
1330 – 1700	SESSION 6: PANEL DISCUSSION ON FINANCING THE CLIMATE CHANGE RESPONSE IN THE PACIFIC

Session Chair: Mr. Tuiloma Neroni Slade, Secretary General, PIFS Resource Person / Rapporteur: Ms. Nancy Wells, ADB Development Coordinator, Vanuatu

This session will take stock of climate change financing in the Pacific and discuss constraints to access to financing by the Pacific countries. It will discuss options and mechanisms for partnership and coordination amongst development partners in climate change financing in the Pacific. It aims to

	come up with a set of actionable recommendations for enhancing Pacific DMCs' access to climate change financing.
1330 – 1345	The Case for a Climate Change Partnership Facility for the Pacific Mr. Mahfuz Ahmed, PARD, ADB
1345 – 1415	Preliminary Findings of a Study on Climate Change Financing Mechanism Mr. David Sheppard, Director, Secretariat of the Pacific Regional Environment (SPREP)
1415 – 1530	 Options for Collaboration in a Climate Change Partnership Facility <i>Development Partner Representatives:</i> AusAID – Ryan Medrana, First Secretary (Climate Change), Development Cooperation Section EU – Marius Adrian Oancea, Third Secretary (Infrastructure) GTZ – Marita Manley, Technical Adviser, Climate Change UNDP – Toily Kurbanov, Deputy Resident Representative World Bank – Charles Feinstein, Sustainable Development Leader
1530 – 1545	Coffee/Tea Break
1545 – 1645	Responses from Selected Pacific Developing Member Country Representatives and Open Forum
1645 – 1700	Session Summary
1700 – 1730	SESSION 7: CONCLUDING SESSION Session Chair: Mr. Robert Dobias, Senior Advisor for Climate Change Program, Regional and Sustainable Development Department, ADB
1700 – 1730	Workshop Summary and the Way Forward Mr. Mahfuz Ahmed, PARD, ADB
1730 – 1800	Closing Remarks <i>Mr. Robert Dobias, RSDD, ADB</i>

The Economics of Climate Change in the Pacific: **Discussion, Wrap-up & Next Steps**

Juzhong Zhuang
Deputy Chief Economist
Economics and Research Department
Asian Development Bank

Regional Workshop on Responding to Climate Change in the Pacific:

Moving from Strategy to Action

Hotel Novotel, Nadi, Fiji

12–13 October 2010



Plan of talk

- Why Climate Change Matters for the Pacific?
- Summary of key findings
- Take away messages
- Next steps
- Report structure



Why climate change matters for the Pacific?

- The Pacific developing member countries (PDMC) are among the most vulnerable nations threatened by climate change.
 - Location: Island states located in naturally isolated and spread over vast areas in the Pacific Ocean;
 - Economy: Mixed economic growth & performance; lowest annual average growth of GDP per capita (2000–2009);
 - Population: 9.7 million (in 2008); rapid growth over the past decades; high concentration on coastal areas; millions trapped in poverty with low adaptive capacity
 - Resources: Fragile ecosystems; limited land for development; scarce water resources; high dependence on natural & marine resources;



Regional Climate & Impact Modelling

- The Pacific will be experiencing increasing intensity & frequency of ENSO events (El Nino and La Nina) in the future.
- With a temperature rise of 1°C, some countries in the Pacific will experience decrease in rainfall

Example: Peak rainfall months: Fiji by 25–35%, PNG by 19–34%

Driest months: Timor-Leste by 64%, Vanuatu by 23%

- Agriculture: In Fiji, sugarcane planting date will significantly shift from May–June to July–September, leading to significant yield loss ranging from 20% to 37%, and changes in cropping systems.
- <u>Water Resources:</u> Many countries will be exposed to longer period of water scarcity, while others will suffer shorter periods.
- <u>Disaster:</u> Changes in ENSO events will bring increased occurrence of flood disasters caused by the increasing number of Tropical Cyclones in the <u>Pacific.</u>

Regional Climate & Impact Modelling

Sea-level rise (SLR) and extreme climate events are already exacerbating inundation, storm surge, erosion, and other coastal hazards, thus putting at risk vital infrastructure, settlements, and facilities that support the livelihood of many island communities.

Land Inundation:

- ✓ About 25,075 Ha (1.38% of total land area) will be affected by temporary inundation in event of a 1.15m high-tide
 - Seriously affected areas: Toyota Island, Nausori International Airport & small island near Daria & Vinivutu
- ✓ If SLR rise up to 60 cm, about 770 hectares of coastal areas will be permanently inundated
- <u>Wave surge</u>: Increased probability of occurrence of 2.9 m height wave expected to occur once a month in the future.

Economic Assessment

- Climate change is already affecting the Pacific region—the worst is yet to come.
- With no global actions, climate change could cost the region equivalent to 5-7% of GDP by 2100 (with baseline adaptation), and over 12% of GDP by 2100 (with no adaptation)
- Poverty eradication, economic development, and greener world economy are key elements to sustainable Pacific
- Pacific would require up to \$300 million per year (1% of GDP) to address climate impacts under a high emission scenario
- There is a need to pay attention to the potentially sizeable climate risks and take them into account in adaptation planning
- There exist the synergy between adaptation and low carbon measures, particularly in energy sector and REDD



Assessing REDD in Papua New Guinea

- Shifting cultivation (SC), fuelwood gathering (FG), and timber harvesting (TH) are the main drivers of PNG's GHG emission in the LUCF sector.
- Reducing the rates of these main drivers of deforestation and forest degradation (DD) could result in significant CO2 abatement:
 - At 25% DD rate reduction could abate the emission of 31.4 Mt CO_2 -e/year by 2020 and 50.2 Mt CO_2 -e/year by 2050
 - At 50% DD rate reduction could abate the emission of 70.4 Mt CO_2 -e/year by 2020 and 86.6 Mt CO_2 -e/year by 2050
- PNG has a high potential for REDD carbon credit. For a carbon price of \$10/tonne:
 - REDD 25%: US\$314 M (in 2020); US\$ 502 M (in 2050)
 - REDD 50%: US\$705 M (in 2020); US\$ 866 M (in 2050)

PNG could contribute significantly to global GHG reduction, while obtaining REDD credits and gaining environmental co-benefits from preserving its forests.

Nationally appropriate mitigation action and policy measures on LUCF sector in Planta should focus on reducing the rates of shifting cultivation and fuelwood gathering

Take Away Messages

- Combating climate change requires a global solution built on a common but differentiated responsibility. The Pacific region should play an important part in working towards such global action given its high stake.
- PDMCs have made significant efforts in adapting to climate change impact, but more is needed to mainstream adaptation in development planning.
- While adaptation is a priority, PDMCs should also pursue low carbon growth since it brings co-benefits
- International funding and technology transfer are critical for the success of actions against climate change in the PDMCs



Take Away Messages

- The region should be helped to enhance its capacities to make better use of the existing and potential international funding sources
- Regional cooperation offers effective means to deal with crossboundary issues
 - e.g. water resources, forest fires, extreme events, outbreak of diseases, and learning and knowledge sharing
- Need for strengthening policy and planning coordination among different ministries and levels of government
- Need for more research
- Adaptation and mitigation will create economic opportunities and provide new sources of growth



Next Steps

- Finalize Analysis
- Preparation of briefing materials for COP16 (December 2010)
- Presentation/consultation of pre-final report (Q1, 2011)
- Publication of final report (Q2, 2011)
- Final Report launch (Q2, 2011)
- Dissemination (Q2, 2011)



Report Structure

Part I Introduction—Background and Regional Circumstances

Part II Climate Change, Its Impact, and Adaptation

- Climate Change and Its Impact: A Review
 - Observed & projected climate change and physical impact by sector
- Modeling Climate Change and Its Impact
 - Regional climate downscaling (temperature, rainfall, sea level)
 - Analysis of ENSO and extreme weather events
 - ✓ Vulnerability & impact assessment by sector
- Economic Assessment of Climate Change Impact and Adaptation
 - Cost of climate change (economy-wide and by sector)
 - Cost-benefit of adaptatation options
 - Adaptation funding need
- Adaptation Options and Practices



Report Structure

Part III Low Carbon Development

- Low Carbon Options and Practices
 - GHG Profile
 - Existing Mitigation Options and Practices by sector
- GHG Mitigation Potential and Options in Agriculture and Land-use
 Change and Forestry: A Case of Papua New Guinea
 - Current Situation
 - Baseline Scenario
 - REDD Scenarios (Land Use Change and Forestry and Agriculture)
 - Mitigation Potential and Options

Part IV Policy Review & Recommendations



Thank You!

jzhuang@adb.org



Financing the Climate Change Response in the Pacific

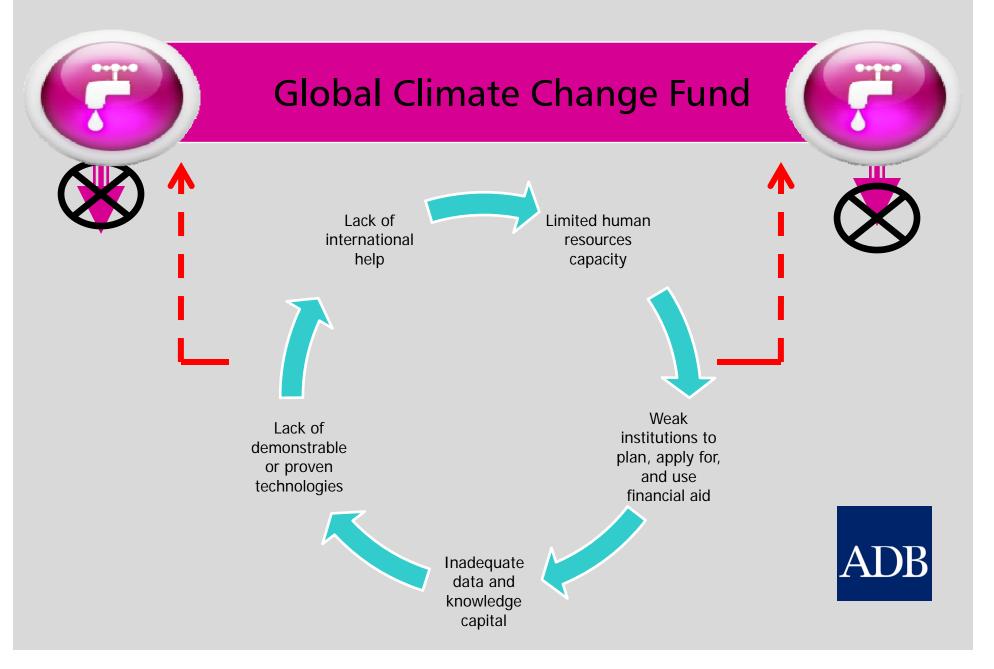
The Case for a Climate Change Partnership Facility

By Mahfuz Ahmed





Vicious Cycle of Climate Change Financing



Global Climate Change Fund -which One (s) to tap?

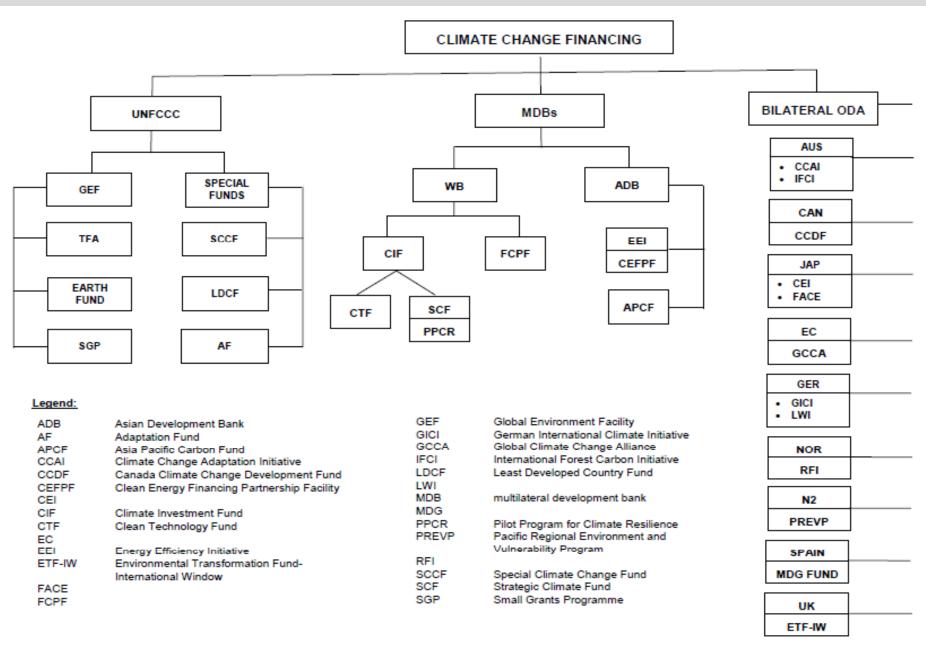


Many funds, many requirements

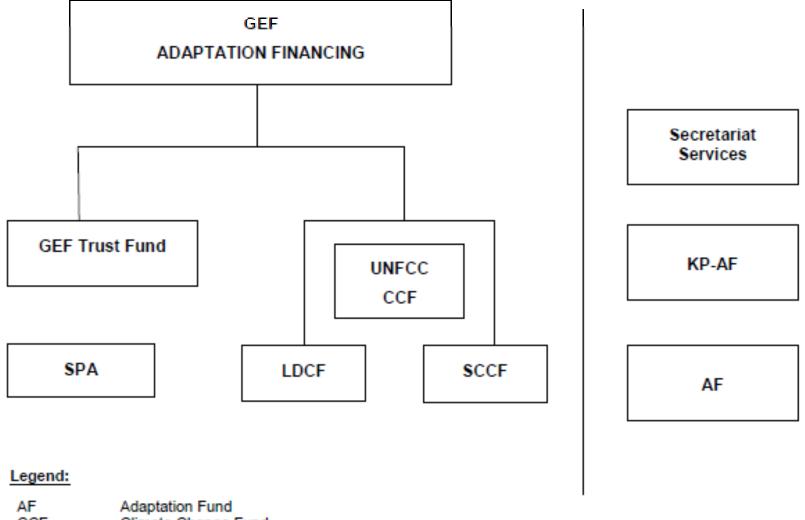
- Political considerations
- Time-framing
- Processing requirements and complexities
- Size of funds
- Bureaucracy



Global Financing Mechanisms for CC



1. UNFCCC Mechanism: GEF Adaptation



AF Adaptation Fund
CCF Climate Change Fund
GEF Global Environment Facility

KP-AF

LDCF Least Developed Countries Fund for Climate Change

SCCF Special Climate Change Fund SPA Strategic Priority on Adaptation

UNFCC United Nations Framework Convention on Climate Change

3. Bilateral ODA—Pacific

- Australia Adaptation to Climate Change Initiative (3-yr, A\$150 million)
- Australia IFCI (A\$200 million)
- GTZ Climate Protection Program
- EU Action Plan on Climate Change and Development
- EC GCCA (US\$79 million from 2008-2010)
- NZAID Pacific Regional Environment and Vulnerability Program
- Japan Cool Earth Partnership (US\$20 billion over 5 yrs)
- Japan Asia Clean Energy Fund (in ADB)
- UK ETF-IW (US\$1.6 billion)
- Canada CC Development Fund



Global Financing for Climate Change: Supply Side

- The total nominal amount of dedicated finance from these initiatives is less than \$3 billion per yr, representing a small percentage of the expected needs of developing countries, estimated by UNFCCC at \$14 billion for CC adaptation, forestry, fisheries, and agriculture alone.
- All the funds have a limited time horizon, with no commitments beyond the 2012 date for negotiations on a post-Kyoto agreement—indicative of a pilot phase rather than a new long-term architecture of global environmental funding.



Other sources (non-Fund)

- National government spending
- National private sector spending
- Foreign direct investment
- International debt
- Official development assistance (ODA)



Pacific barriers to accessing finance

- Isolation from major markets
- Small population sizes and economies
- Vulnerability to natural disasters
- Fragile freshwater supplies
- Narrow resource base
- Extreme vulnerability to sea level rise
- Array of systems, policies; varying capacities and institutional strengths

What is the solution? Breaking the cycle....



UNFCCC/GEF CIF/MDB BILATERALS

- Coordination
- Harmonization
- Collaboration

Are these enough?

Pacific Leaders' Directives (2010 PIF Communique principles to guide PICs and DPs in CC A&M)

- Sufficient and sustainable resources should be mobilized based on existing and predicted CC impacts
- Resources should be timely, easily accessible, and commensurate with PICs' absorptive capacities
- CC A&M should be integrated into broader national development efforts
- A&M measures should be country-led and supported in a coordinated way by DPs
- As far as practicable, support should be provided through PIF country systems and processes

A way forward for the Pacific? Some broad principles for a partnership facility....

Vehicle for donor coordination (in line with 2010 PIF climate change principles)

- Draw on existing multilateral funds with possible supplementation from bilateral donors, drawing on experiences gained from existing sub-regional funding modalities (eg.HIV/AIDS or, to lesser extent, GEF-PAS)
- Assist PICs (particularly smaller PICs) to access funding for programs/plans from existing donor resources
- Possibility to receive and hold funds on behalf of very small countries i.e possibly more relevant for SIS
- Help PICs to integrate climate change into development plans and budgets
- Provision of technical assistance—planning, management and implementation of climate change programs

In longer term...

- Aim for a regional climate change financing mechanism (facility plus fund) to be in place for post 2020 period
- To be closely linked with UNFCCC architecture (Green Climate Fund/Adaptation Fund)

Thank you.



Regional Workshop on Responding to Climate Change in the Pacific Moving from Strategy to Action

A climate change workshop with the theme "Moving from Strategy to Action" was organized by the Pacific Department of the Asian Development Bank (ADB) and attended by 106 representatives from various stakeholder groups in Pacific developing member countries (DMCs). The workshop aimed to (i) disseminate ADB's work and approach in support of climate change adaptation and mitigation measures in its Pacific DMCs; (ii) promote partnership and dialogue with Pacific DMCs, development partners, and other stakeholders for a coordinated and harmonized response to climate change in the region; and (iii) discuss possible mechanisms and actionable recommendations for improving the access of Pacific DMCs to climate change financing in the region.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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