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Economic Commission for Latin America and the Caribbean
Subregional Headquarters for the Caribbean

Meeting on an evaluation of ECLAC post-disaster
assessments in the Caribbean
Rodney Bay Village, Saint Lucia
25 February 2014

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**REPORT OF THE MEETING ON AN EVALUATION OF
ECLAC POST-DISASTER ASSESSMENTS
IN THE CARIBBEAN**

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A. ATTENDANCE AND ORGANIZATION OF WORK

1. Place and date

1. The Economic Commission for Latin America and the Caribbean (ECLAC) convened a one-day meeting in collaboration with the Caribbean Catastrophic Risk Insurance Facility (CCRIF) to discuss the evaluation of ECLAC post-disaster assessments in the Caribbean in Rodney Bay Village, Saint Lucia on 25 February 2014.

2. Attendance

2. Emergency Management Coordinators from national emergency management agencies attended the meeting: Civil Defence Commission, Guyana; Department of Emergency Management, Barbados; National Emergency Management Organization, Saint Vincent and the Grenadines; and National Office of Disaster Services, Antigua and Barbuda.

3. A representative from CCRIF attended the meeting.

4. Representatives of the following Ministries in Saint Lucia attended the meeting: Ministry of Finance, Economic Affairs, Planning and Social Security; Ministry of Infrastructure, Port Services and Transport; Ministry of Social Transformation, Local Government and Community Empowerment; Ministry of Physical Development, Housing and Urban Renewal, and the Office of the Prime Minister. A representative from the Ministry of Finance in Grenada was also in attendance.

5. The following institutions were also represented: Antilles Economics, Barbados; Caribbean Risk Managers Ltd, Inter-American Institute for Cooperation on Agriculture; Learn and Lead Disaster Consultancy, Turks and Caicos Islands, and the Water Resources Agency, Saint Lucia.

3. Agenda

6. The meeting adopted the following agenda:

1. Opening of the meeting
2. Adoption of the agenda
3. Procedural matters and organization of work
4. Case review – Evaluations of past events in Caribbean
5. Evaluation of ECLAC post-disaster assessments in the Caribbean
6. Assessing challenges to implementing recovery activities
7. Conclusions and recommendations
8. Closure

B. SUMMARY OF PROCEEDINGS

1. Opening of meeting

7. Welcome and opening remarks were delivered by Willard Phillips, Economic Affairs Officer of ECLAC subregional headquarters for the Caribbean, and the meeting received greetings from Gina Sanguinetti, the representative from CCRIF.

8. The Economic Affairs Officer noted that ECLAC has been undertaking damage assessments in the subregion since the early 1990s, and observed that the need for such assessments has become greater

given the increased frequency of natural disaster events in the Caribbean region over the recent decade. He further pointed out that the evaluation of such assessments has been requested by CCRIF as part of a work programme approved under the terms of a memorandum of understanding signed between ECLAC and CCRIF in 2010. In referring to the recent excessive rainfall event which affected Dominica, Saint Lucia and Saint Vincent and the Grenadines in December 2013, the Economic Affairs Officer indicated that these events make clear the need for continuous dialogue on matters of disasters and disaster risk reduction in the Caribbean. The CCRIF representative also noted the importance of the meeting as a basis for supporting the CCRIF effort to validate its model-based approach to assessing the economic impact of disasters. She also reiterated CCRIF commitment to continued partnership with ECLAC and other relevant partners in the Caribbean.

2. Objectives and organization of the meeting

9. The Economic Affairs Officer outlined that the general objective of the meeting was to evaluate previous damage and loss assessments (DaLA) undertaken by ECLAC between 2004 and 2011. He provided a synopsis of the day's agenda. He noted the importance of participants contributing to the discussions since the validation of the information presented in the meeting depended on their insights as managers of national emergency agencies. He also outlined the broad organizational aspects of the day's agenda.

3. Case Review – Evaluations of past events in the Caribbean

10. A presentation which reviewed three damage and loss assessments undertaken by ECLAC during the review period was delivered by the Economic Affairs Officer of ECLAC. This review summarized the assessments for Hurricane Ivan in Jamaica, 2004; the Flooding Event in Guyana, 2005; and Hurricane Tomas in Saint Lucia, 2010. This presentation noted the key elements of the DaLA methodology to include measures of direct damages of the disaster as impacts on assets; and indirect damages as disruptions of the flow of goods and services. The method also assesses damages and losses in terms of their effects on key macroeconomic variables such as gross domestic product, balance of payments, inflation and unemployment. Another important consideration highlighted in the presentation was the importance of the timing of the assessment, which was shown to be best done after the humanitarian and emergency phases of the disaster. The presentation also showed that the results of DaLA assessments were typically summarized under four broad headings, these being: 1) productive, 2) social, 3) infrastructure, and 4) environment.

11. Following the presentation, the discussions centred on the need for training in the implementation of the methodology; the importance of strengthening the environmental component of the methodology. Questions were also raised regarding the feasibility of the use of the DaLA for long run impacts assessments, given that the method is applied relatively early in the recovery and reconstruction phase of the post disaster period. The need for an executive summary in the assessment report was also noted. It was acknowledged that indeed, there was a shortage of skilled personnel to undertake DaLA assessments in the region. It was noted that during the recent past, ECLAC had consistently provided training to technicians in the countries, and in fact, local training was a part of the methodology, in order to enhance countries' capacity to undertake future DaLA assessments.

12. With respect to the assessment of long run impacts, the Economic Affairs Officer observed that possibly the conduct of meta-analyses based on the previous set of assessments could be considered as part of a modelling framework for the future development of the methodology.

4. Evaluation of ECLAC post-disaster assessments in the Caribbean

13. In this session the Consultant presented analyses which compared estimates of ECLAC assessments undertaken using the DaLA with other methodologies in order to compare how closely the method captured measures of economic damages and losses in the Caribbean context. In order to set the context for the evaluation, the Consultant also reviewed the status of long-term risk for the Caribbean by presenting long-term trends for the occurrence of hurricanes, earthquakes, tsunamis, and volcanoes. These trends confirm the vulnerability of the subregion to these natural hazards. The DaLA results were compared to results obtained from five broad alternative methodologies, these being: Hybrid models – in this particular instance the HAZUS Model used by the United States Federal Emergency Management Agency; Emergency Management Agency Disaster Loss Assessment Guidelines; Social and Economic Impact Assessment Models; Input-Output Models; and econometric approaches.

14. With respect to the evaluations, the Consultant noted that many of the assessment approaches identified above differed from the ECLAC DaLA. While the above models estimated a likely future damage amount, the DaLA assesses actual damage and loss. Further, he observed that the social and psychological impacts of a disaster on country are difficult to estimate, but may have long-term economic and social consequences. Nevertheless, a comparison of the DaLA assessments for Hurricanes Dean, Ivan and Tomas was made against the other methods employed by the International Monetary Fund (IMF), as well as assessments made using the CCRIF 2G Model. In the evaluations, the comparisons were made for both direct and indirect impacts where applicable. The comparisons showed that the ECLAC DaLA and IMF measures to be consistently within a range difference of 10 per cent for the direct economic estimates such as change in GDP, fiscal deficit, or public debt due to the disaster. The largest differences in measures of impacts were seen at the sector level, for *indirect* losses particularly to agriculture, as well as changes in current account balances, with the DaLA method having slightly lower estimates of the impact of the disasters. These differences were considered to be due to the fact that the other methods were usually implemented somewhat later into the recovery period compared to the DaLA, by which time the possibility for concomitant variations based on changes in external markets could have further impacts on assessment values. Overall however, the DaLA was found to provide largely consistent estimates of the impact of a disaster on the economy of Caribbean countries relative to other assessment methods.

5. Assessing challenges to implementing recovery activities

15. This session focussed on the challenges for disaster risk reduction through the mechanism of insurance. The consultant presented several issues which affected the development of insurance markets for risk in the Caribbean. Among the main factors were: 1) underdeveloped risk identification and forecasting; 2) the non-homogenous nature of disaster risks; 3) low demand for insurance given the infrequent manifestations of disaster risks relative to other types of risks; 4) poor regulatory framework for insurance; 5) restrictions on regional insurers; and 6) substantial international aid in response to disasters which serves as a disincentive to assume risk cover. The Consultant also noted that governments in the Caribbean were often deficient in undertaking insurance coverage for many public and social assets, which then results in significant recovery costs with the occurrence of a natural disaster. Considering constraints to the actual implementation of recovery efforts, the Consultant identified data and information inadequacies, limited human and institutional capacity, some limitations of disaster assessment methods, particularly where such methods undervalue ecosystem services, and lack of political will as some of the major factors.

6. Conclusions and closing remarks

16. The meeting concluded with a summary of the main discussion points and closing remarks by Willard Phillips, Economic Affairs Officer of ECLAC.

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