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LATINOAMERICANO  
Y DEL CARIBE



UNISDR  
The United Nations Office for Disaster Risk Reduction

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Ministerio de Planificación Nacional y Política Económica



## Final Report

## Economic and Technical Cooperation

*Regional Meeting on the Macroeconomic Impact of Disasters due to the Occurrence of Natural Events  
in Latin America and the Caribbean  
San José, Costa Rica  
04 and 05 October 2017  
SP/RRIMDOENALC/IF-17*

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## I. RAPPORTEUR'S REPORT

1. The "[Regional Meeting on the Macroeconomic Impact of Disasters due to the Occurrence of Natural Events in Latin America and the Caribbean](#)", organized by the Permanent Secretariat of the Latin American and Caribbean Economic System (SELA), jointly with the United Nations Office for Disaster Risk Reduction (UNISDR) and the government of Costa Rica, through the Ministry of National Planning and Economic Policy (MIDEPLAN), was held in San José, Costa Rica, on 04 and 05 October 2017.
2. The objectives of meeting were: i) Disseminate the document prepared by the Permanent Secretariat, which measures the impact of disasters due to the occurrence of natural events on the economic activity and public expenditure; ii) Analyze the type of impact of disasters due to the occurrence of natural events on the main macroeconomic variables; and iii) Present regional and global experiences in the design of public policies aimed at reducing disaster risk due to the occurrence of natural events.
3. In accordance with the approved agenda, 17 presentations were made by representatives of the Member States, international and regional organizations and special guests, which can be accessed through their respective links.
4. Participants included representatives of the following Member States of SELA: Chile, Colombia, El Salvador, Guatemala, Jamaica, Mexico, Nicaragua, Paraguay, Peru, Dominican Republic and Uruguay. Also participating in the meeting were representatives from the following organizations: CAF-development bank of Latin America, Coordination Centre for Natural Disaster Prevention in Central America (CEPREDENAC), re-insurance firm Swiss-RE and the United Nations Office for Disaster Risk Reduction (UNISDR). The list of participants is available at the following link: <http://www.sela.org/bd-documental/documentos/impacto-macroeconomico-desastres-naturales-participantes/>.
5. In the opening session the following officials took the floor: Eduardo Piña, Specialist of Studies and Proposals of the Permanent Secretariat of the Latin American and Caribbean Economic System (SELA), Mrs Olga Marta Sánchez Oviedo, Minister of National Planning and Economic Policy (MIDEPLAN) of Costa Rica, and Raúl Salazar, Head of the Regional Office for the Americas of the United Nations Office for Disaster Risk Reduction (UNISDR).
6. The support documents for this meeting are available at the following link: <http://www.sela.org/es/eventos/2017/10/impacto-desastres/documentacion/>
7. The official photographs and videos of the event can be seen in the following address: <http://www.sela.org/es/eventos/2017/10/impacto-desastres/fotos/>

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### II. CONCLUSIONS

- Disasters due to the occurrence of natural events are disturbances that affect the environmental, social and economic conditions of a country or geographical region. After the Asian continent, America is the area of the world with the greatest occurrence of natural disasters.
- Natural phenomena with the greatest occurrence globally and in Latin America and the Caribbean are the hydrological and meteorological events. However, at the global level, the category responsible for the largest number of fatalities are those disasters caused by weather events, whereas in the region are those associated with geological events.
- From the economic perspective, the consequences of disasters can be divided into effects and impacts. The effects are damages on the wealth of capital that alter the flow of economic activities. The impacts, on the other hand, are associated with the incidence of effects on economic and social variables.
- Available empirical evidence sheds no definitive conclusions about the impact of natural disasters on economic growth and government expenditure. On this matter, the document prepared and submitted by the Permanent Secretariat carried out an assessment of the temporal variation of the real per capita Gross Domestic Product and the real per capita government consumption expenditure vis-à-vis the occurrence of natural disasters in Latin America and the Caribbean.
- Making an analysis by subregional integration mechanism during the period 1960-2014, the findings were varied. In the case of the Central American Integration System (SICA) and the Common Market of the South (MERCOSUR), in case of a disturbance from a natural disaster, the statistically significant results suggest a negative response in the real per capita GDP and a positive impact on the real per capita government consumption expenditure. In the cases of the Pacific Alliance (PA) and the Andean Community of Nations (CAN), the results were contrary to the expected ones according to the economic theory, although they were statistically non-significant.
- In Latin American and Caribbean countries, there are various degrees of exposure and vulnerability, as well as various levels of development in their strategies for reducing disaster risk and strengthen emergency response. However, there is a regional consensus on the need to move forward in the design, implementation and monitoring of mechanisms and tools that optimize the capabilities of risk reduction and response to disasters.
- The articulation of efforts for disaster risk reduction and improvement of emergency disaster plans requires the participation of all governmental institutions and society as a whole. In national and regional development plans, the treatment of disasters due to the occurrence of natural events must become a cross-cutting element.
- In order to establish common lines of action and objectives to guide global efforts in disaster risk reduction, the Sendai Framework envisages a series of guiding principles for joint work. Thus, priority areas are identified to foster greater understanding of disaster risk, strengthen governance for disaster risk management, increase investment for resilience, and

increase preparedness for more effective response in the areas of recovery, rehabilitation and reconstruction.

- From the perspective of macroeconomic planning and fiscal management, attention should focus on institutional strengthening (legislation and autonomy of organizations), the sophistication of empirical tools for risk modelling, effects and impacts of natural disasters, the continuous improvement of the mechanisms for transmitting information among the entities of the State, and increase funds for prevention and risk mitigation.
- Standing out on a regional scale is the initiative of the Disaster Deficit Index (DDI) developed by the Inter-American Development Bank (IDB) as a tool that allows for analysing, in comparative terms, the countries' economic resilience during the occurrence of disasters. Based on the historical and scientific evidence, this indicator allows for assessing the extent of the financial resources which can be accessed by a country to meet the commitments of recovery and reconstruction after a disaster.
- At present, rating firms have incorporated fiscal resilience to natural disasters as a factor for analysis in their assessments. In this way, a poor policy for disaster risk reduction and emergency management will also make access to financial resources more expensive and more difficult.
- A major challenge faced by the region is the generation of resilient public investment that integrates risk reduction criteria. An amount of public capital with great capability to resist disasters will not only allow for protecting human lives, but will also reduce the economic effects and impacts. This resilience condition must be incorporated both in the new infrastructure projects and in those associated to restorations and reconstructions after disasters.
- Available evidence allows for establishing a bi-directional relationship between higher levels of risk and poverty. Accordingly, the provision of resilient public infrastructure should prioritize care of the most vulnerable people, in order to facilitate the transmission of social benefits and foster the capacities of communities vis-à-vis disasters.
- The provision of public and private investment must include financial strategies that allow for the transfer of risk, so as to facilitate the process of reconstruction of capital goods. In the early stages of the projects, a rigorous process of analysis of feasibility and pre-investment is necessary, whereas in advanced stages a permanent link with insurance and reinsurance companies is required.
- In case of the occurrence of disasters due to natural events, in addition to international assistance, the issuance of public debt and fiscal management changes, governments and citizens can obtain financial resources by contracting insurances on properties. These economic agents serve to diversify risks at various levels and at an international level.
- Regulations on the operation of the insurance market and its relationship with the State vary according to each national legislation. However, regardless of the obligation to ensure real estate, there are difficulties in the revaluation process.

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- Parametric insurance has become an interesting alternative to promote greater coverage in the region. Through this modality, critical thresholds are established as regards the intensity of the phenomena, based on which commitments and forms of payment are agreed.
- Another risk transfer strategy that is emerging in the region is the initiative of the Pacific Alliance countries, in alliance with the World Bank, for issuing financial instruments to cover natural events. Identified as a successful regional integration project, such instruments will allow for greater financial slack and a faster response to disasters.
- On the basis of the regional challenges, issues of broad interest are identified for the work ahead. Estimates in Latin America and the Caribbean indicate that each US dollar invested in prevention saves three dollars in reconstruction efforts, therefore it will be very useful to promote the debates on the incorporation of research and development activities for prevention and disaster risk reduction. Similarly, other issues such as the creation and implementation of more sophisticated financial products for risk diversification, the development of regional insurances, and greater links of governments with insurance companies and multilateral financial organization are equally important.