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FAO'S METHODOLOGY FOR DAMAGE AND LOSS ASSESSMENT IN AGRICULTURE

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Abstract

One of the key aspects of reducing economic loss from disasters consists in a comprehensive analysis of the impacts generated and their associated cost. Detailed assessments of overall loss and damage are regularly carried out by governments and multilateral organizations following large-scale disasters using different methodologies. However, when applied to agriculture, these assessments often fail to capture the specificities of the sector and result in an imprecise or under-estimated evaluation of disaster impact. This hampers adequate agricultural disaster risk reduction (DRR) policy and planning, and leads to under-investment in resilient agriculture. The Food and Agriculture Organization of the United Nations (FAO) has developed an agriculture-specific methodology, which provides a framework for identifying, analyzing and evaluating the impact (damage and loss) of disasters on the sector. Seeking to standardize disaster impact assessment in agriculture, FAO's Damage and Loss methodology corresponds to universal norms, commitments and collective action at the global level, while remaining flexible enough to be applied in various country/regional contexts. The tool serves both national policy and planning needs as well as the post-2015 international resilience agendas, including the Sendai Framework for Disaster Risk Reduction (SFDRR) and Sustainable Development Goals (SDG).

Keywords

Disasters, agriculture, damage and loss assessment, FAO methodology, SFDRR, SDG, Sectoral DRR/DRM

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1. Introduction

Over the past decades, disasters have struck developing and developed countries alike, with growing frequency and intensity. The number of recorded disasters, along with their associated economic and social impacts has been increasing significantly at global as well as national and local level. For the decade between 2005 and 2015, economic loss from disasters in developing countries is valued at USD 580[1] billion, over 70 percent of which is associated with climate-related disasters. (CRED, 2018).

While the more immediate impacts of disasters – in terms of fatalities and destruction of critical infrastructure – are given the highest prominence within the Disaster Risk Management (DRM) discourse, the impacts on agriculture remain poorly analyzed and seldom quantified. Yet agriculture tends to be one of the main economic activities in developing countries, contributing on average between 10 and 20 percent of national Gross Domestic Product (GDP) in lower-middle-income countries and over 30 percent in low-income countries. In some cases in Africa, the agriculture sector is the backbone of the economy, contributing up to 39 percent (the Niger) or 41 percent (Ethiopia, Mali) to national GDP (World Bank, 2017). Recurrent and prolonged natural hazards and disasters, such as drought, floods, storms, spread of pests and diseases and saltwater intrusion, can have a devastating impact not only on agricultural livelihoods, but can lead an entire economy into recession. At the microeconomic level, disasters often lead to declines in agricultural employment and/or wages among farmers and farm laborers and income redistribution due to loss of arable land and eroding livelihoods. Disturbance of the economic system often brings social insecurity, especially in circumstances when food systems are being disrupted. On the other hand, risk-resilient agriculture plays a key role in balancing the social, economic and environmental aspects of development while providing durable employment, sufficient income as well as decent living and working conditions for smallholder farmers and rural populations (FAO, 2018).