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## How non-asset-based disaster loss models better quantify risk: A case study of coastal flooding in the Philippines.

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Conventional disaster loss models measure risk and impact solely based on the volume of assets potentially lost to a disaster. While asset-based metrics are useful in providing an overview of the immediate physical losses, they neither fully capture the disparate impacts on different social groups nor the knock-on impacts that people continue to experience post-disaster. The problem with relying on asset-based metrics alone is that it leads to decisions that gravitate towards the protection of asset-rich areas as they seemingly have more to at risk. In doing so, it obscures the protection needs of asset-poor regions, and in extreme cases, could further exacerbate impacts and issues of inequity. Since one of the main goals in disaster risk modelling is to effectively inform disaster risk reduction strategies, the approach decision makers use to quantify risk matters. This is especially important in geographies that experience both high levels of disaster risk and inequity. In this study, we highlight the utility of 'non-asset-based' disaster loss models for equitable planning outcomes through the following contributions: (1) A literature review comparing the types of existing non-asset-based disaster loss approaches; (2) An applied comparison of the conventional asset-based approach and select non-asset-based approach(es) for the case of coastal flooding in the Philippines. We use this comparison to emphasize the need for better risk and loss metrics for planning and decision-making by demonstrating that moving from asset-based to non-asset-based approaches leads to a shift in municipalities prioritised for protection.