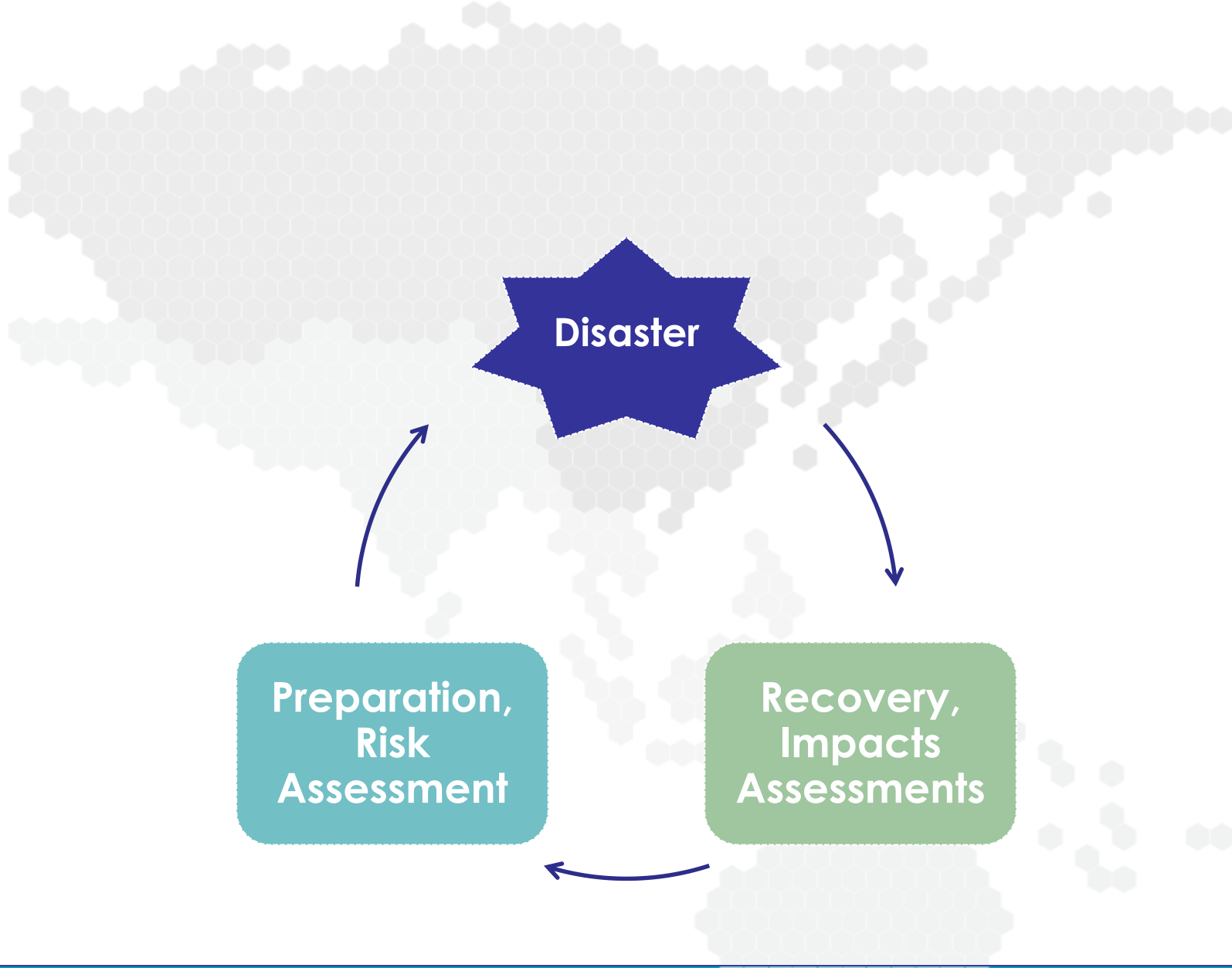




Disaster Risk Reduction Activities

December 3 2019
at Badan Pusat Statistik - BPS
Indonesia





Disaster Risk Reduction Statistics

“a scope of work “aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contributes to strengthening resilience...”

Uses:

- Intl' demand for monitoring investment, especially ODA, for mitigation of disaster impacts
- Cost and benefit analysis between prevention and mitigation versus post-disaster recovery
- Understanding of current investments in order to see the benefits, identify gaps
- Evidence-based decision making:
 - Prioritizing new investments, including *building back better*
 - Insurance
- Estimation of direct economic loss

Existing Functional Classifications in SNA

- Classification Of Individual Consumption by Purpose (COICOP);
- Classification Of the Functions Of Government (COFOG)
- Classification Of the Purposes of Non-profit Institutions serving households (COPNI);
- Classification of Outlays of Producers by Purpose (COPP)

And in SEEA

- EGES (environmental goods and services)
- Land use, Land cover

DRR Activities Classification

Provisional
Purpose-based
classification:

Activity expenditure account (current plus investment)	
1	Disaster Risk Prevention
1.1	Risk prevention in advance of hazardous event
1.2	Risk prevention in or after hazardous event
2	Disaster Risk Mitigation
2.1	Structural measures
2.2	Non-structural measures
2.3	Land-use planning
2.4	Early warning systems management
3	Disaster Management
3.1	Preparedness
3.2	Emergency management
3.3	Other disaster responses
3.4	Emergency supply of commodities
4	Disaster Recovery
4.1	Relocation
4.2	Rehabilitation
4.3	Reconstruction
5	General Government, Research & Development, Education Expenditure
5.1	General government expenditure for Disaster Risk Reduction
5.2	Research & Development, risk assessment, and information
5.3	Education to Disaster Risk Reduction

Satellite Accounting

- Development/rearrangement of classes for measurement, sub-aggregates of complementary elements – e.g. education, tourism, environmental protection,...
 - Common practice: a purposed-based classification system
- Presentation or scope of accounting may vary but underlying SNA measurement principles are not fundamentally changed

Expenditures

- **Final consumption expenditure** is the amount of expenditure on consumption goods and services
- **Gross Capital formation:** the acquisition less disposal of produced assets for purposes of **fixed capital formation**, inventories, or valuables. (savings/investment)
- Expenditure measure of GDP: The expenditure measure of gross domestic product (GDP) is derived as the sum of expenditure on final consumption plus gross capital formation plus exports less imports.

DRR Activities: Examples?

Risk
Prevention

Disaster
Management

Risk Mitigation

R&D, Education
General Government

Disaster
Recovery

OECD.Stat Humanitarian Assistance:

- <http://www.oecd.org/dac/stats/humanitarian-assistance.htm>
- three sectors-Reconstruction Relief & Rehabilitation, Emergency Response, and Disaster Prevention & Preparedness
- OECD estimates 80% of humanitarian assistance goes to conflict-related settings

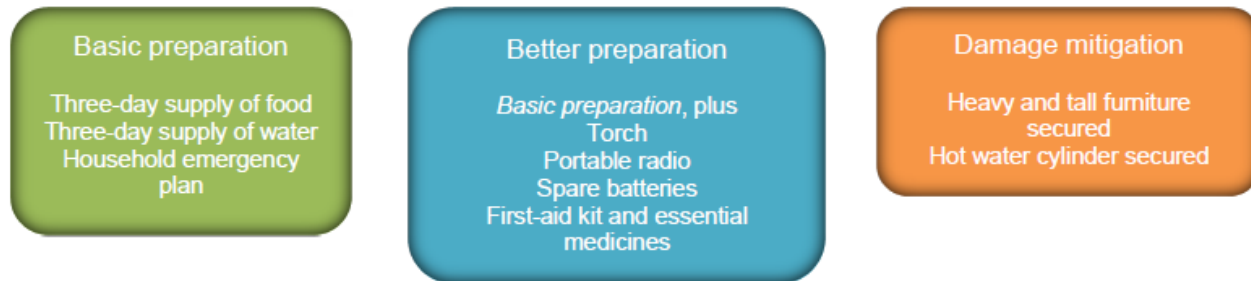
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Household Preparedness

- Define basic preparedness and collect data via census or survey respondents
- For example:

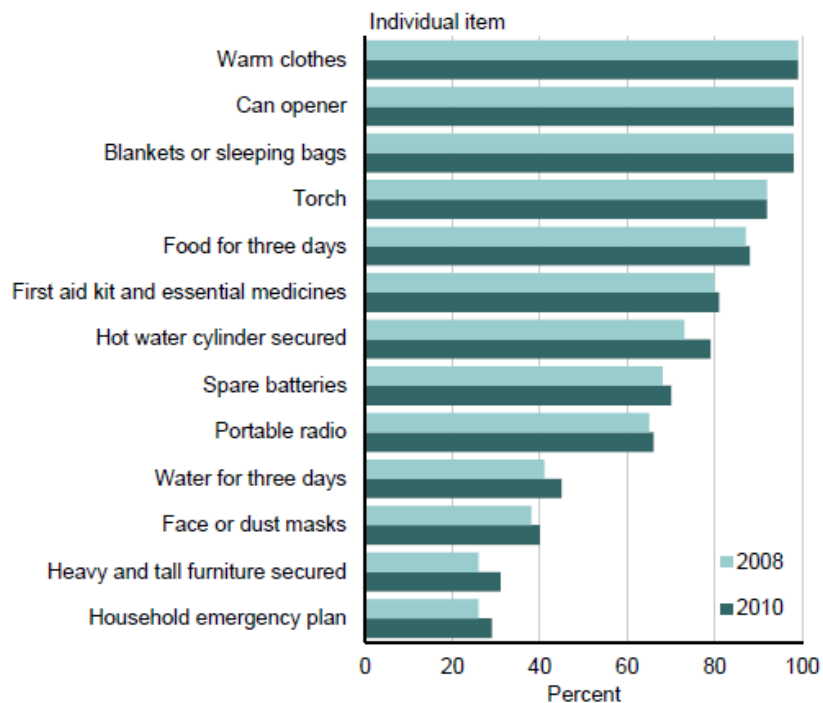
Figure 1

Levels of preparation for a natural disaster



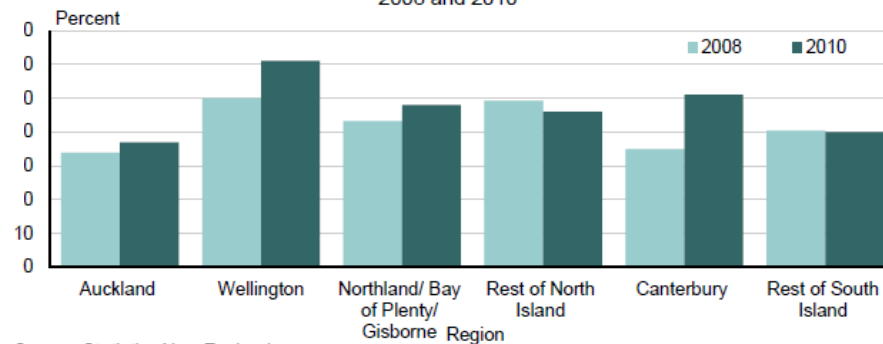
Src.: 2010 General Social Survey, Statistics New Zealand

Natural disaster preparations of New Zealand households 2008 and 2010



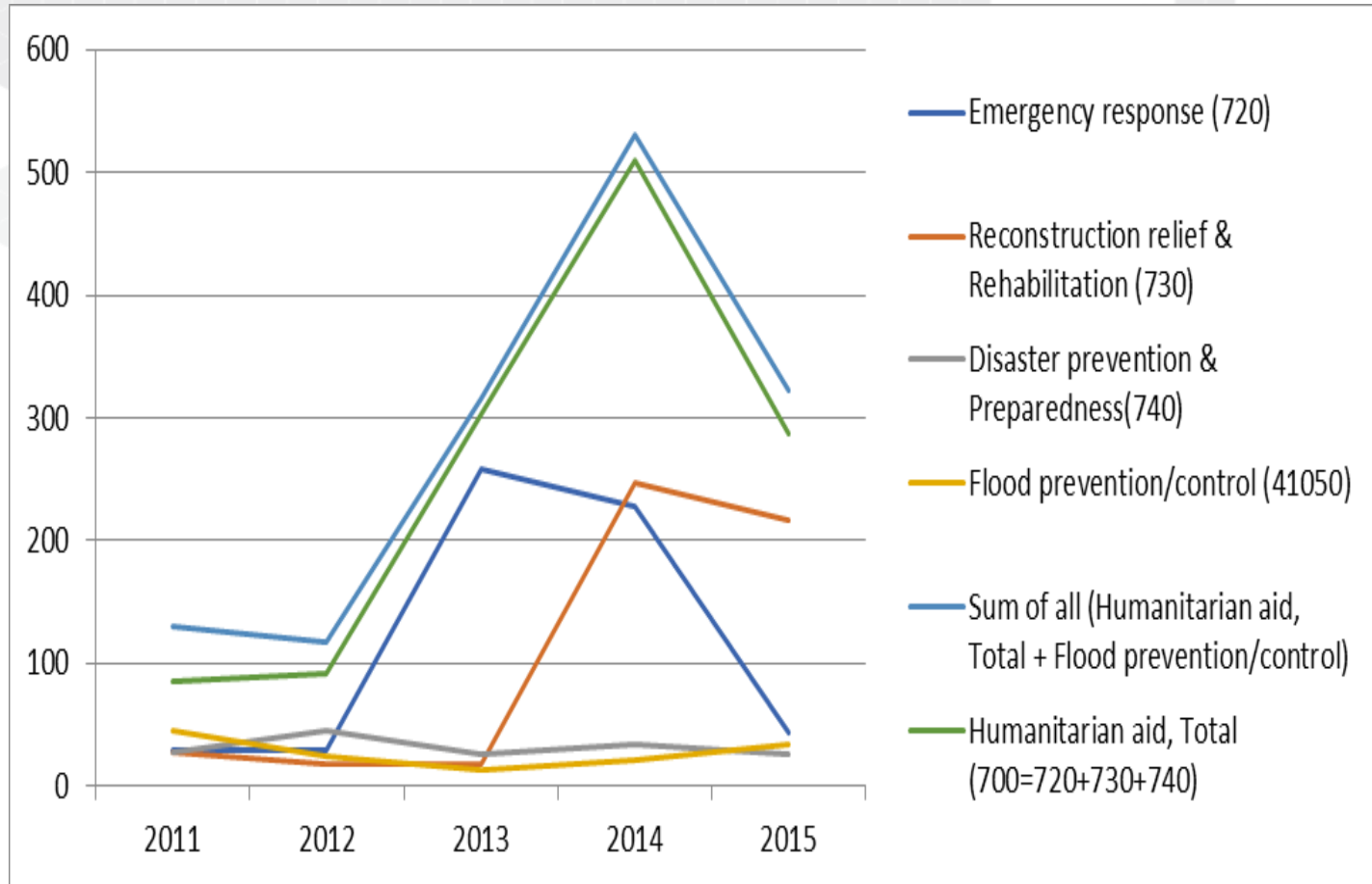
Source: Statistics New Zealand

Households with water for three days By region 2008 and 2010



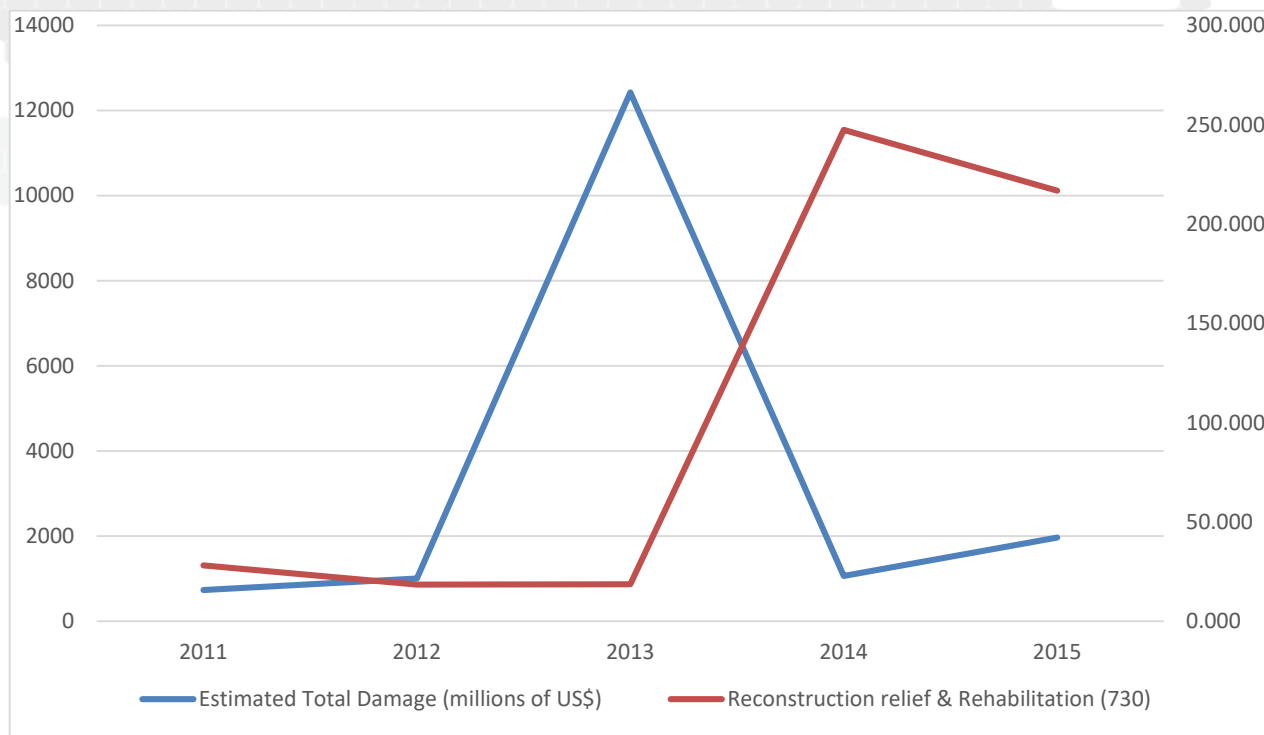
Source: Statistics New Zealand

Sample Time Series for related ODA flows



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Sample Comparison of Damages and ODA Inflows for Reconstruction Relief, and



Source: OECD.Stat and CRED-EMDAT



Thank you!



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