

| Indicator name | | Risk and policy assessment indicator |
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| <p>Japan case study five years moving average.</p> | | |
| Prepared by | International Centre for Water Hazard and Risk Management (ICHARM), Public Works Research Institute (PWRI) | |
| Example | WWDR2, Chapter 10, Figure 10.7 | |
| Rationale | The ability to assess the efficiency and effectiveness of national public policies for flood mitigation could identify gaps and weaknesses in policy and thus lead to policy revision thus improving disaster preparedness and saving lives and property in the future. | |
| Position in DPSIR chain | Response | |
| Definition of indicator | Assessment of the efficiency of public policies for flood mitigation in terms of actual impact on physical, social and economic features of flood disasters. | |
| Underlying definitions and concepts | Flooding Public policies: government-decided strategies for reducing flood impacts | |
| Specification of determinants needed | Responses: budget allocation (in flood policies) Driving force: precipitation Pressure: urbanization (in flood-prone areas) Impact: <ul style="list-style-type: none"> total economic loss (of flooding) total inundated area (link with calculation of total loss) vulnerability of property to flood | |
| Computation | Compilation of statistical data to produce a 5-year moving average with graphic representation | |
| Units of measurements | Standardization of determinants (0 to 1 scale) | |
| Data sources, availability and quality | Insurance companies and Ministry of Finance & Economy Ministry in charge of investment in flood mitigation and related works Ministry in charge of land-use planning (incl. municipal services) Flooded areas: aerial pictures and remote sensing products National hydrological and meteorological services Global coverage database: CRED, UNEP/GRID, GAME, Red Crescent/Red Cross | |
| Scale of application | Initial scale of application is nation-wide (government-decided public policies). Possible application to sub-national scales (e.g. provincial) | |
| Geographical coverage | Global, although in some cases, national statistical resources (e.g. natural, social and economic data) might be flawed, biased or inaccurate. | |

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| Interpretation | The set of indices developed by PWRI helps assess the sectoral impact (and hence relevance) of public policies aimed at flood mitigation. Through monitoring these elements one can identify achievement and gaps in public policies |
| Linkage with other indicators | Indicators or surrogate indices already existing in the field of flood mitigation, land-use, public administration and finance, etc. |
| Alternative methods and definitions | The definition of this indicator rests on statistical data and analysis. A complementary, user-based assessment of flood policies (e.g. perception of improved safety) could be developed. |
| Related indicator sets | Indicators or surrogate indices already existing in the field of flood mitigation, land-use, public administration and finance, etc. |
| Sources of further information | Contact: UNESCO PWRI Center for Water Hazard and Risk Management, PWRI, Japan, Dr Tarek Merabtene, tarek55@pwri.go.jp |
| Other institutions involved | Other line agencies involved in Japan include: <ul style="list-style-type: none"> • River Bureau, Ministry of Land, Infrastructure and Transport (MLIT). • Ministry of Finance • Ministry of Health • National Institute of Land and Infrastructure Management (NILIM, Tsukuba) |