

## **Disaster Recovery Index-DiRex: Measuring the Extent of Recovery of Disaster-impacted Communities**

### **1. Background Information:**

UNDP Indonesia with the assistance of BCPR has supported Indonesia National Disaster Management Agency (BNPB) in recovery practices and policy formulation of Indonesia in the past six years through Disaster Risk Reduction based Rehabilitation and Reconstruction (DR4) Project. The continued technical assistance has resulted in, among others, official policy documents in key areas of such as (i) general recovery guideline; (ii) recovery assessment; (iii) recovery planning and budgeting; (iv) recovery implementation through direct community grants; and (v) recovery monitoring. The respective documents have been sanctioned by BNPB through a number of decrees by the Head of the National Disaster Management Agency.

With regard to recovery monitoring, the GOI methodology and instruments have mainly focused on the delivery of recovery programs funded by GOI. This approach, while useful to trace the delivery of programs by relevant service providers, does not fully report on the substantive progress and results at the crisis-affected community. To address this shortcoming, UNDP has supported a multi-stakeholders initiative since 2012 to develop a new methodology and instrument to measure the actual level of recovery of the affected community. The instrument is called DiRex (Disaster Recovery Index), initiated in Yogyakarta and Central Java provinces as a part of the recovery responses to Mt. Merapi eruption.

The Mount Merapi underwent a series of eruptions in October – November 2010 and further triggered the cold lava floods that followed several months after the eruption due to the heavy rainfalls during the rainy season. The disasters caused many losses and damaged hard-won development gains. In response to the disaster, GOI launched a recovery master plan on 19 July 2011 through a Presidential decree No. 16/2011. The recovery master-plan covers five selected development sectors, namely housing and settlement, infrastructure, economy, social and cross-cutting sectors.

In the context of post disaster recovery in Yogyakarta and Central Java, a study commencing on September 2012 was undertaken to measure human recovery aspects and community resilience towards disaster risks. The study allows for a deeper analysis of a wide range of sections of the population as they respond to the disaster, including the activities within the rehabilitation and reconstruction programs. A longitudinal household survey will enhance our insights into the pathways that influence people longer term occupational trajectories; their welfare, resilient condition and well-being, their financial circumstances and preparedness. The DiRex has been developed on the results of the recovery survey employing the longitudinal study at the household level. This is considered an effective tool as it requires repeated observations of the same variables of recovery and same people over a long period of time. As a result, the longitudinal studies will accurately observe changes. The longitudinal studies are often used to study developmental trends across the life span and life events throughout lifetimes or generations

The Government of Indonesia highly welcome the initiative to undertake Longitudinal Study and the resulting development of the Disaster Recovery Index based on the findings from the LS. This is evident from the financial contribution of about USD 100,000 made by BNPB (NADM) in supporting the LS and DiRex in the first round. The first round of the LS was completed in 2012 and its DiRex result was launched in November 2013, while the second round is being completed. The GoI finds DiRex a useful tool to inform the NADM and other stakeholders on the level of progress of recovery of the community in the affected regions, and whether more

investments and remedial actions would be needed among the measured sectors (housing, infrastructure, economy, social, and cross-sectoral projects).

## **2. UNDP support for Longitudinal Study and the development of Disaster Recovery Index-DiRex**

With the funding support of BCPR, UNDP Indonesia provided support for Longitudinal Study through the following initiatives:

- Convening multi-stakeholder consultations to facilitate coordination among key actors for Longitudinal Study such as National Disaster Management Agency, National Development Planning Agency Local DRR Platform, Survey Organization and local governments.
- Providing technical experts in the development of longitudinal study methods and instruments, and in the process facilitating multi-stakeholder workshops and a series of experts consultative meetings;
- Providing technical experts and convening of multi-stakeholder consultations in the formulation of Disaster Recovery Index (DiRex) variables;
- Engaging the members of the Local DRR Platform to conduct the survey listing for affected hamlets in order to determine the sampling areas for the survey;
- Convening multi-stakeholder consultations to develop the analysis and reporting of the Longitudinal Study and Disaster Recovery Index; and,
- Supporting the dissemination of Longitudinal Study and Disaster Recovery Index.

## **3. Scaling up of DRI**

### The Need

The DiRex is viewed by the GOI and other proponents as a breakthrough initiative in assessing the actual recovery of the disaster-impacted population. Although the results of DiRex have been produced, announced and used by local and national government to improve their recovery plan and performance, it is recognized that the methodology still needs further refinement before the instrument can be more widely used.

### The Plan

UNDP is liaising with the National Statistic Agency (BPS) to review the methodology and further piloting the tools in the newly emerging crisis in Indonesia. The discussion with BPS is aimed to adjust the data collection process so that it is compatible with the work and data set of BPS. Following a further piloting exercise with BPS, the tools will be jointly rolled out by BNPB and BPS as a formal instrument in assessing the recovery of the impacted populations. The tools will then undergo a scrutiny to pass the quality control of Indonesian National Standard.

## **4. Objectives**

The objective of DiRex Enhancement is to produce robust and statistically reliable tools in assessing the level of recovery of the disaster affected population.

Outputs of the initiative:

- 4.1. Data set of DiRex tools compatible with that of the national statistics agency;
- 4.2. DiRex passes the quality control of and complies with the Indonesian National Standard
- 4.3. DiRex tools rolled out as an official instrument for post-disaster recovery assessment;
- 4.4. DiRex results disseminated to and used by relevant national and sub-national recovery agencies to improve/adjust the recovery plans and performance.

Corresponding activities to achieve the above outputs will involve, but not limited to, the following activities:

- Consultative sessions with BPS
- Multi-stakeholder consultations
- Refinement of the tools and piloting exercise
- Undertaking longitudinal study to selected crisis affected areas as the basis for DiRex formulation
- Quality control processes and sessions with the Indonesian National Standard committee
- Rolling out of the DiRex results
- Documentation of lessons learned

## 5. Budget

The total budget for this exercise is USD 150,000, with the budget summary breakdowns provided below.

**DRI Budget Plan 2014**

Description	USD
Local Consultants	15,000
Contractual Services-Individuals	30,000
Conferences/Workshops/Meetings	59,000
Travel	15,000
Communication & Audio Visual equipment	10,000
Printing Production Cost	10,000
Supplies	6,000
Miscellaneous	5,000
<b>Total</b>	<b>150,000</b>

## 6. Implementation arrangement

This initiative is aligned with and a part of the on-going DR4 Project, whose project document is attached to this proposal. It shall be contributing to the attainment of Output 3 of the existing on-going DR4 Project, namely:

*'Field application of DRR guided recovery practices, methodologies, guidelines and tools with feedback to the policy framework'*

Under the auspice of DR4 Project, this initiative will be implemented by the Project Management Unit, stationed in the National Disaster Management Agency, being the Implementing Partner of this project in partnership with the Ministry of Home Affairs and National Development Planning Agency. These three GOI agencies and UNDP serve as the Project Board, chaired by BNPB, providing oversight and direction of the project implementation. In addition to its role and function as a member/Senior Supplier in the Project Board, UNDP Indonesia through Crisis Prevention and Recovery Unit provides project assurance for the quality of the project. More detailed information on this arrangement can be seen in the Section VI Management Arrangements of the DR4 Project Document.

## 7. Annexes

**7.1. Proposal Submission Form**

**7.2. DR 4 Project Document Extension**

### **7.3. AWP 2014 of DR4 Project**

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