

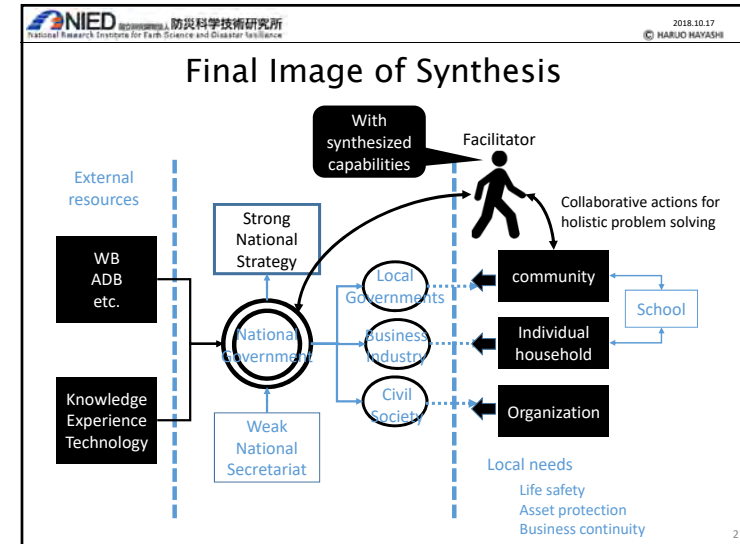
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Break out session 3.3 Synthesis system of science and technology final report

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What the role of facilitator

- Connect external resources and local community
- Empower local community to be sustainable by reducing disaster risk
- Provide proper knowledge, experience, and tools for disaster risk reduction
- Help local leaders to learn a standardized but effective way to improve disaster resilience in terms of life safety, asset protection, and business continuity
- Help local leaders to implement what he/she learned
- Share the experiences and lessons obtained with the people in other areas

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WHAT facilitator will do on site

1. Establishing trust from local stakeholders
2. Assessing Local Risk
 1. Identify the hazards local community faces
 2. Assess the exposure of Community to hazards
 3. Assess physical and social vulnerability of community in relation to hazards
3. Setting Goal
 1. Establish the goals to be achieved through workshop by local stakeholders
4. Developing local solution plan
 1. Finding a set of (or at least one) feasible solution which use local technology, local materials, and local resources.
5. Implementing local solution plan
 1. Help local community solve the problem by themselves with outside assistance
6. Reviewing the whole process as a lesson for future
 1. Design after action review with local stakeholders
 2. Compile the document to record the activities

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- We need to synthesize science and technology on disaster risk reduction to help the abovementioned five steps in terms of knowledge and tools

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Pre-Synthesis

- Policy Briefs approved at the Global Resilience Forum in Tokyo
 - 7 PBs: 4 priorities for action, Interdisciplinary, National Platform, Synthesis
 - 43 recommendations including the description of the backgrounds
- Status Review of the Recommendations by Science and Technology Communities

Policy Brief Title-	Past and/or on-going activities-	Success factors-	Problems in implementation-
Recommendation 1-	-	-	-
Recommendation 2-	-	-	-
Recommendation 3-	-	-	-
.....	-	-	-
.....	-	-	-

- Organizing Participants in Collaboration among STAG, IRDR, GADRI, APRU, SCJ,.....
 - Through the collaboration of the major partners and the Tokyo Forum Co-Chairs, Pre-Synthesis will be implemented in an inclusive way.
- Summary and Preliminary Analysis of the Pre-Synthesis
 - Pre-Synthesis to be submitted to SCJ by the end of January.
 - A preliminary report to be introduced at a side event of the GAR in May 2019.

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Understanding disaster risk-	Past and/or on-going activities-	Success factors-	Problems in implementation-
Root causes and disaster risk drivers-	FORIN project of IRDR-	Studied social processes leading to "risk drivers" -	Needs more integrated approach to involve policy-making and practice -
Root causes and disaster risk drivers-	Study of root causes for the 2004 Indian Ocean tsunami-	Found that causes are lack of tsunami early warning system, lack of knowledge and vulnerabilities -	Findings are not reflected in policy-makers -
Root causes and disaster risk drivers-	Study of root causes for the 2010 Haiti earthquake-	Found that causes are poverty, political instability and lack of building codes -	Findings are not reflected in policy-makers; Root causes still remain-
Root causes and disaster risk drivers-	Study of root causes for the 2011 Great East Japan Earthquake and Tsunami disaster, including Fukushima NPS accident -	Found that causes are under-estimation in tsunami early warning, vulnerability of elderly people, and insufficient assessment of NPS-	Vulnerability still remain-
Collection, analysis, management and use of disaster data-	Establishment of tsunami early warning systems-	Tsunami early warning systems are installed in Indian Ocean, Mediterranean and Caribbean Seas-	Some countries have problem to maintain the instruments and warning systems-
Collection, analysis, management and use of disaster data-	Surveys to residents in Haiti-	Estimated itemized victims from the 2010 earthquake-	Not reflected in official damage estimates-
Collection, analysis, management and use of disaster data-	Collection of data for the 2011 EJET disaster and publication of white paper-	Documented details of the 2011 EJET hazard and disaster -	Data are not fully shared and utilized globally -
Collection, analysis, management and use of disaster data-	Collection of data at World Data Service by NOAA-	Data are collected and exchanged among scientists-	Data are not fully utilized by other stakeholders -

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Draft Plan for Nation's Synthesis

- Background and Goals**
- Purposes**
 - Country
 - International Community
- Goals**
 - Develop an information infrastructure
 - Facilitate dialogue
 - Promote the efforts in 3-(1) and (2)
 - Supports by international community
- Desired functions of the information infrastructure**
 - Function to collect and store information on scientific knowledge and various activities
 - Function to collect and store lessons from past efforts and good practices
 - Function to promote dialogue
 - International cooperation to support individual countries
- Schedule**
 - Development of an action plan: Present-May 2019
 - Implementation Phase 1 (FS): May 2019 to 2020
 - Implementation Phase 2 (Implementation): 2021 to 2023

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What is Online Synthesis System (after)

- **Definition:**
Internet-based system for collecting, analyzing, publishing, reanalyzing, critiquing, and reusing data and information for improving disaster resilience
- **Features**
 - Takes all hazards approach
 - Covers all phases of disaster management
 - Register data and information in the form of either file or web-link
 - Support activities to promote open science for disaster risk reduction
- **Strategy**
 - Organizing wide science and technology communities for accelerating their inputs into decision making and community of practice.
 - Starting with a simple, understandable and manageable system, visualizing the usefulness and benefits in a short period and up-grading the functions responding to users' needs.
 - Implementing pilot studies, sharing success stories among wide community including sponsors and expanding the user community.
- **Stakeholders**
 - General public: most important target
 - Academia
 - Practitioners
 - Governments
 - Industries
 - Civil Society
 - Sponsors

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Contents to be included

- Academic articles: source J-Stage by JST
- Database:
- SNS data (with Geo-location):
- Case studies
- Apps:
- Dictionary connecting words and images & sound for basic concepts on disaster risk reduction

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Future Tasks to be cleared

- Establishing Governance (Legitimacy)
 - Leaders
 - Managers
 - Supporters
- Using right Technology
 - Web-based system
 - Maintenance staff
 - Physical system location
 - Training program
- Establishing SOP
 - How to search data and information
 - How to register data and information
- Looking for Funding
 - "Money eating creature" to maintain
 - Who pays the cost
 - Establishing echo-system

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What we will do today

- Start with Pre-synthesis by SCJ
- Followed by a discussion of
 - "Activities done so far"
 - "Contents to be included"
 - "Things to be cleared"

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