



Inclusive Disaster Recovery: Strengthening Support Mechanisms for Vulnerable Populations

EASTS AND EASTS-JAPAN JOINT SEMINAR
NOVEMBER 11, 2024

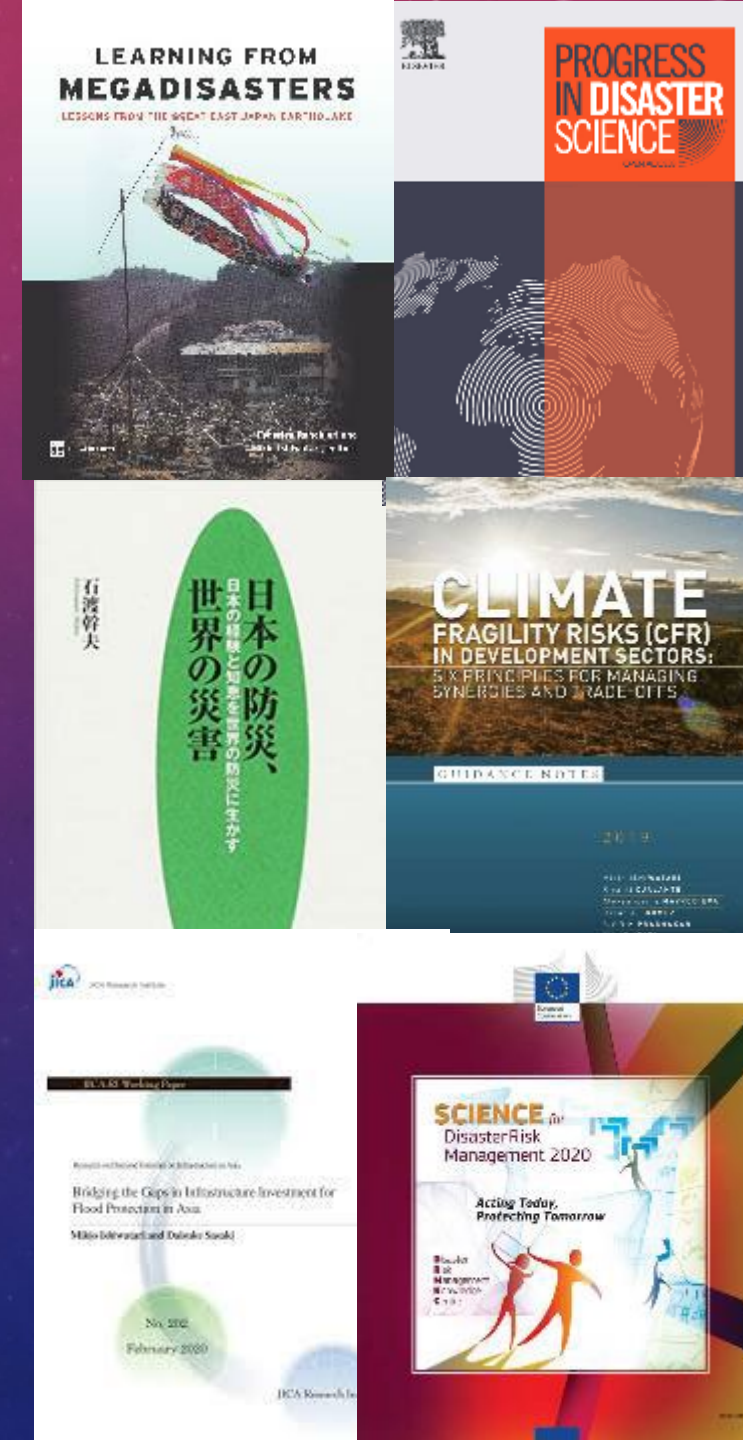
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THE UNIVERSITY OF TOKYO
SENIOR ADVISOR, JICA

SELF-INTRODUCTION

- Japan International Cooperation Agency, Senior Advisor on Water Resources Management and Disaster Management
- 2018- Visiting Professor, The University of Tokyo
- Ministry of land, Infrastructure, Transport and Tourism as engineer for 17yrs
- World Bank, Asian Development Bank

Learning from megadisaster: Lessons from the Great East Japan earthquake, The World Bank

Climate and Fragility Risks in Development Sectors, United Nations University



KEY MESSAGE

Effective disaster recovery demands targeted, inclusive support systems that actively engage vulnerable populations in building resilient communities.

CONTENTS

1. Who are vulnerable?
2. Securing diversity in Recovery process
3. JICA's support
4. Community-based business: business sustainability and community inclusiveness

1. WHO ARE VULNERABLE?

GREAT HANSHIN-AWAJI (KOBE) EARTHQUAKE 1995

GREAT EAST JAPAN EARTHQUAKE 2011

IN THE WORLD

A. VULNERABLE GROUP IN THE KOBE EARTHQUAKE 1995

- Jan 17, 1995
- M7.3
- JPN seismic intensity 7, max.
- Causality: 6437
- Total destroyed 全壊:105,000 houses
- Partial damage 半壊:144,000houses
- Economic damage: 9.9 Trillion JPY





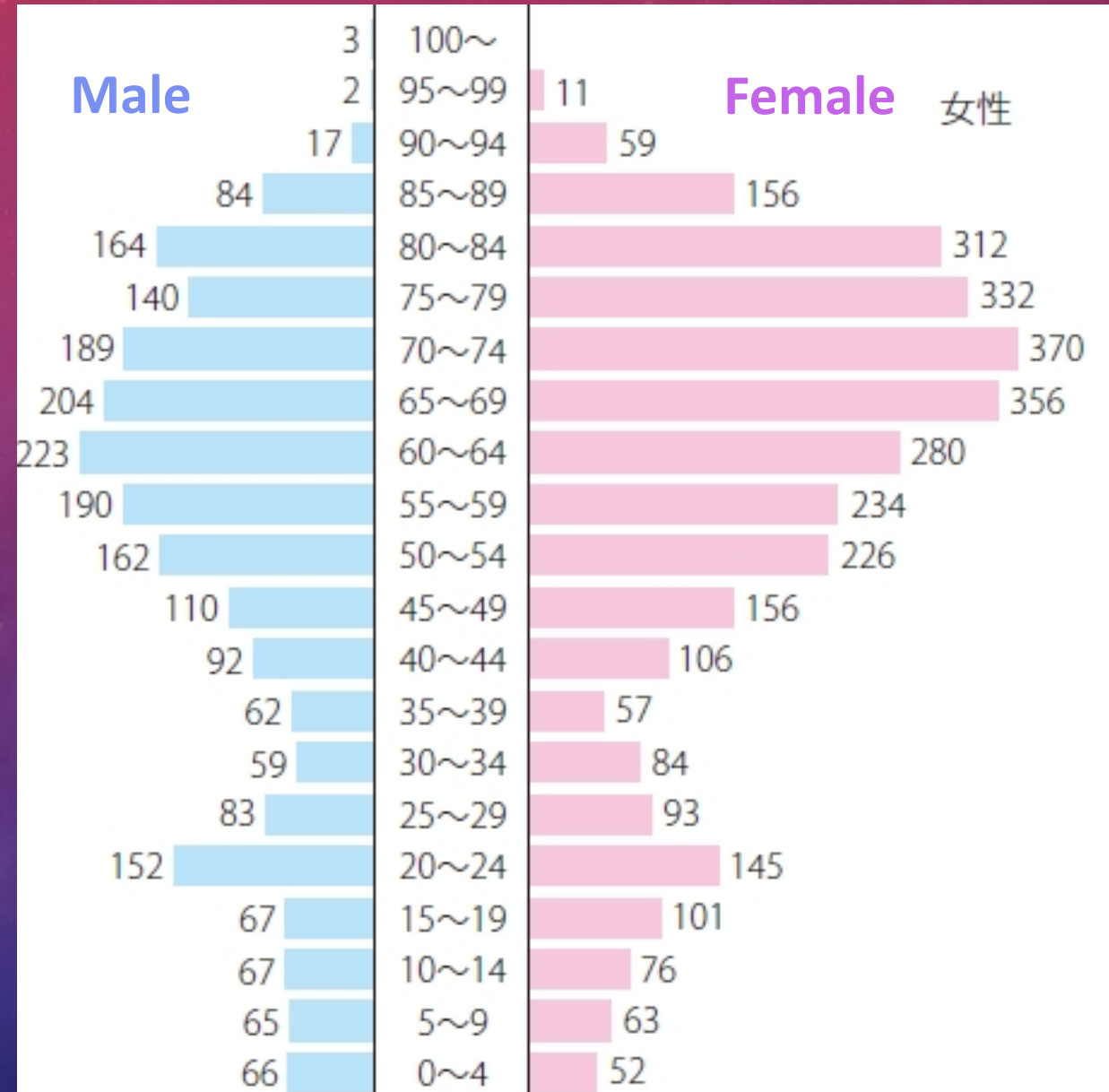
LOW- INCOME

- Death ratio of safety net (生活保護世帯) X5 of average
“culture apartment”「文化住宅」
- If these apartments matched with the current building code, causality would be 200-500.



WOMEN, ELDERLY, YOUTH

- Female X 1.4 to Male
- >60 53% : X 5-10 to other ages
- 20-24yrs



広報誌防災[2019/3/5閲覧]

<http://www.bousai.go.jp/kohou/kouhoubousai/index.html>

性、年齢別（5歳階級）死亡数（出典：兵庫県医師会）

AT TRANSITION SHELTER 仮設住宅

1996 survey

- 70% < 3 million JPY income
- 30% < 1 million JPY
- 10%: Safetynet 生活保護世帯
- 42% >65 years
- 21 %: Single

Solidarity death became social issue

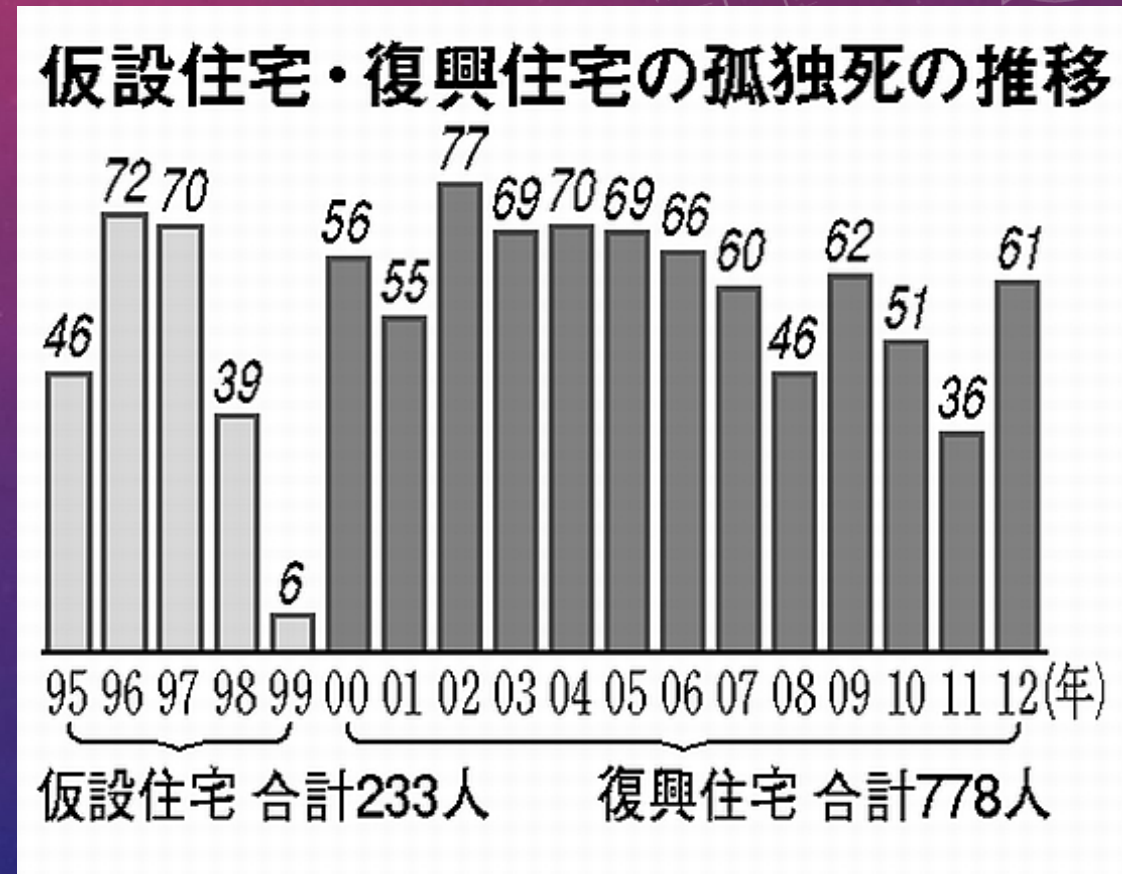


SOLITARY DEATH, DYING ALONE

孤独死

Single elderly men

- No job
- Lack of relationship with family and relatives
- Isolated in a community
- Low-income
- chronic disease
- Alcoholic



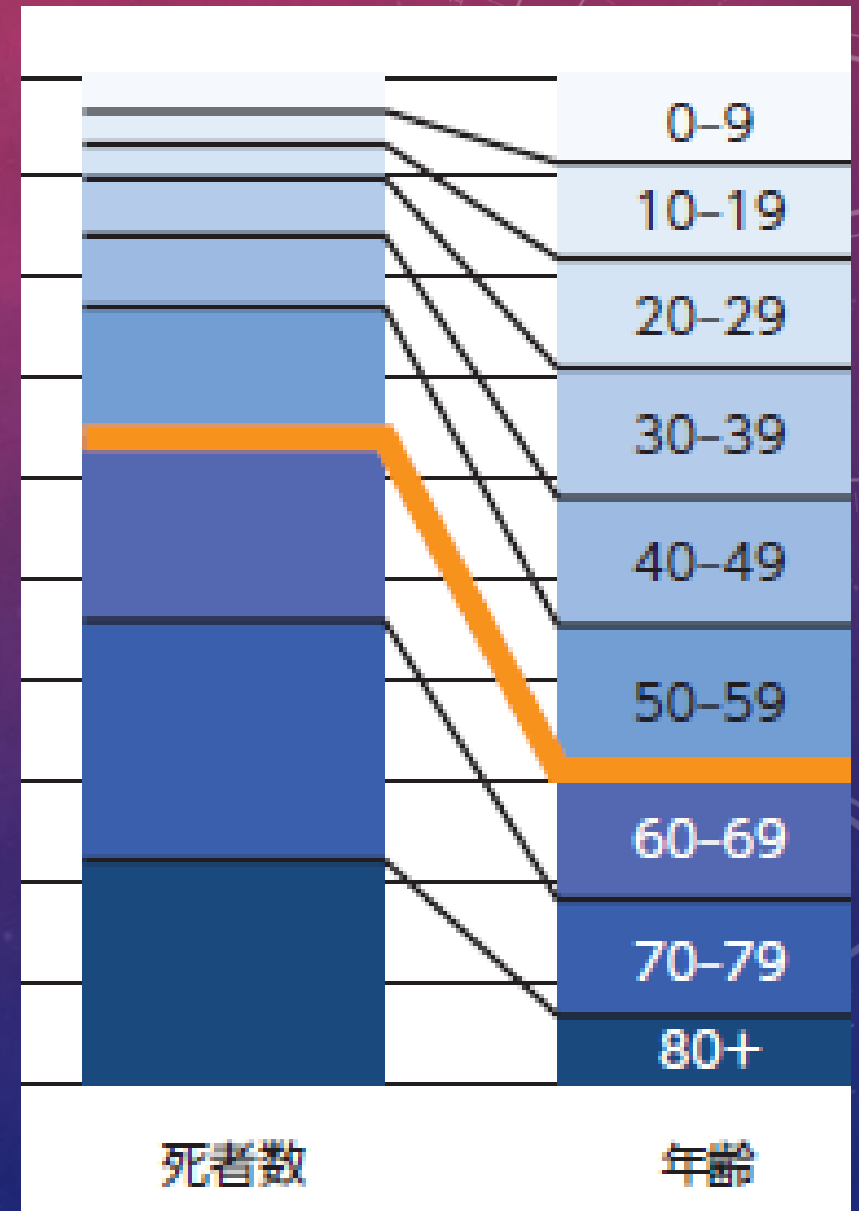
B. THE GREAT EAST JAPAN EARTHQUAKE AND TSUNAMI IN 2011

- M9
- Max. tsunami height: >40m
- > 20,000 people dead or missing
- economic damage 16.9 trillion JPY

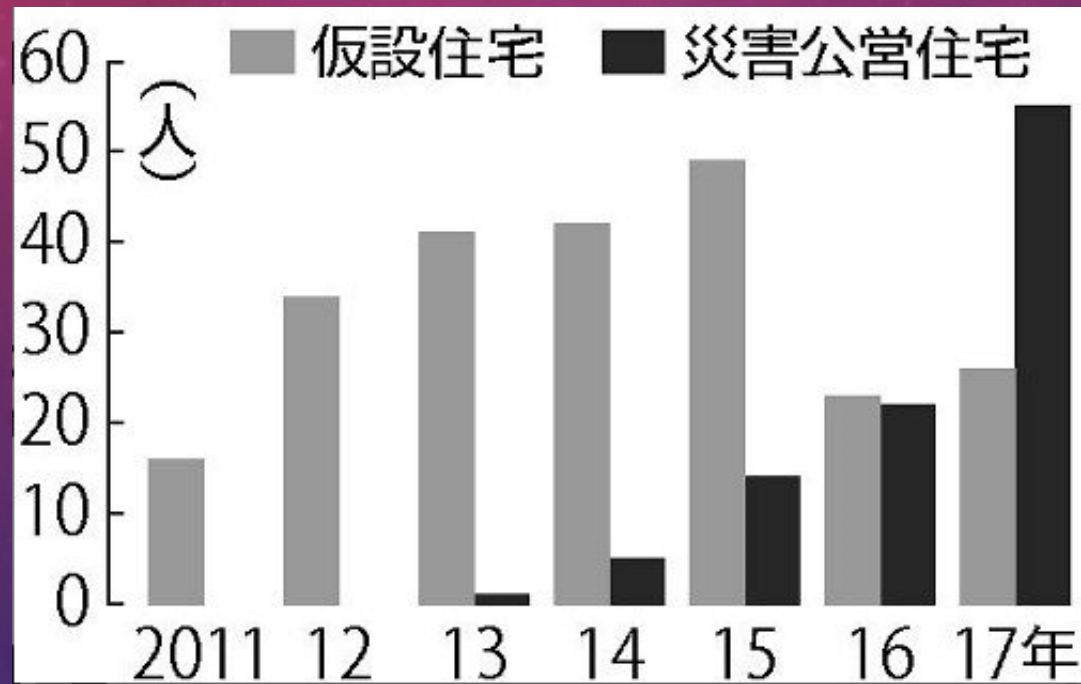


ELDERLY, HANDICAPPED, SINGLE PARENT

- Death 2/3 >60yr
- Death ration of Handicapped X2
- Orphan (Ashinaga Foundation あしなが育英会)
 - Full time employment: 38%
 - No-job: 32%
 - Women headed : 23%
 - No-job : 40%

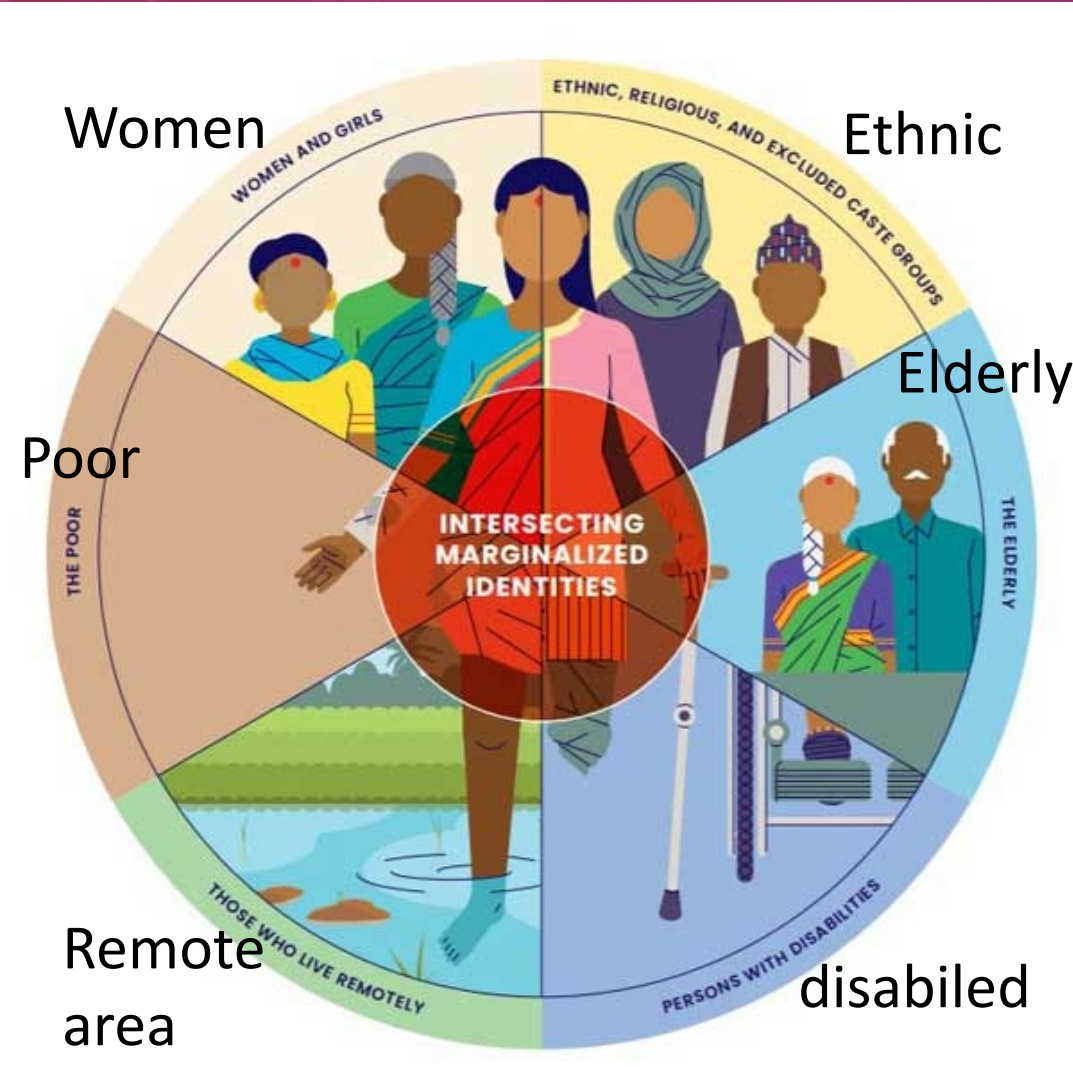


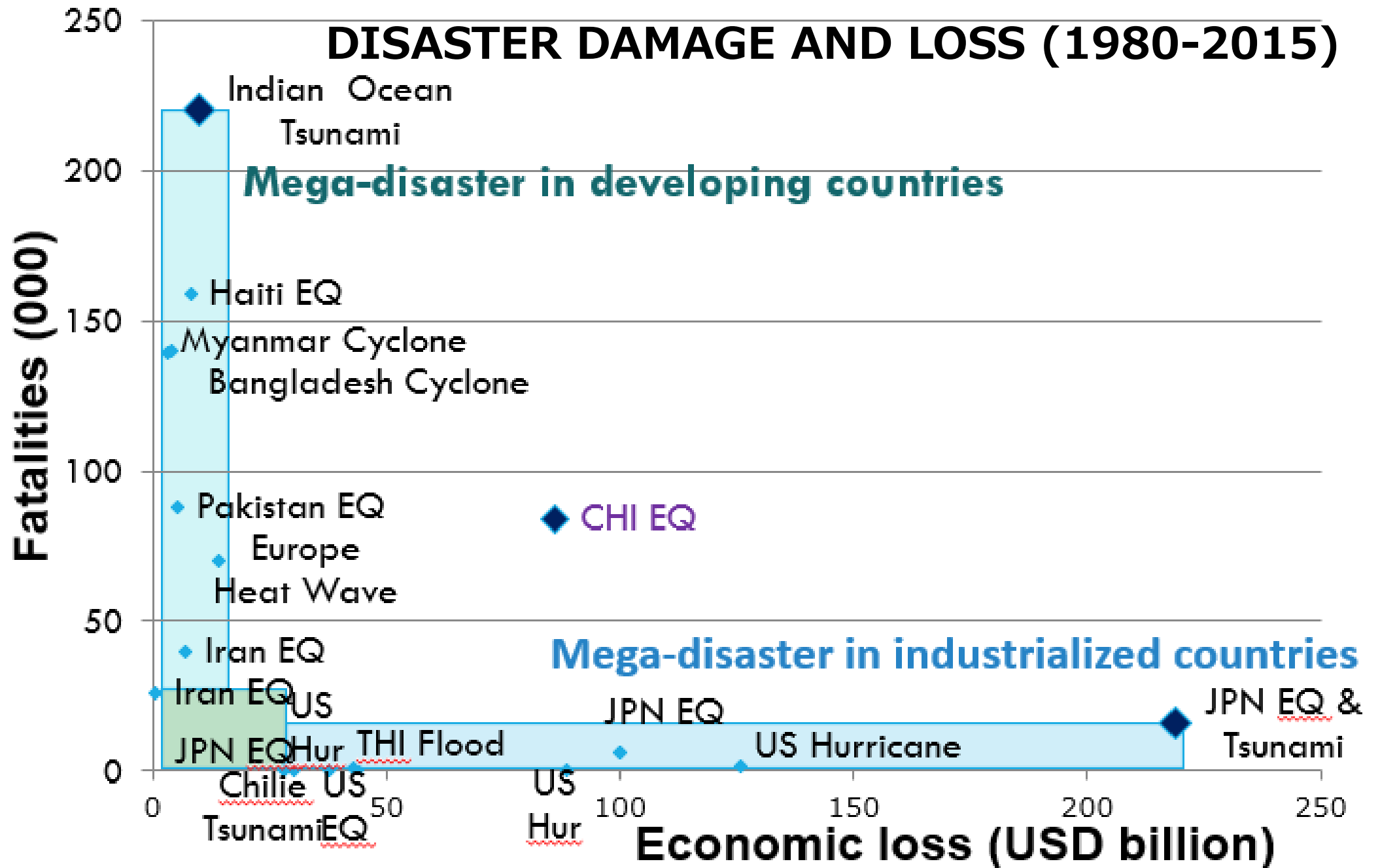
SOLITARY DEATH AGAIN 孤独死



復興住宅「孤立死」急増、プレハブ仮設を上回る[2019/3/5閲覧] <https://www.yomiuri.co.jp/national/20180303-OYT1T50125/>

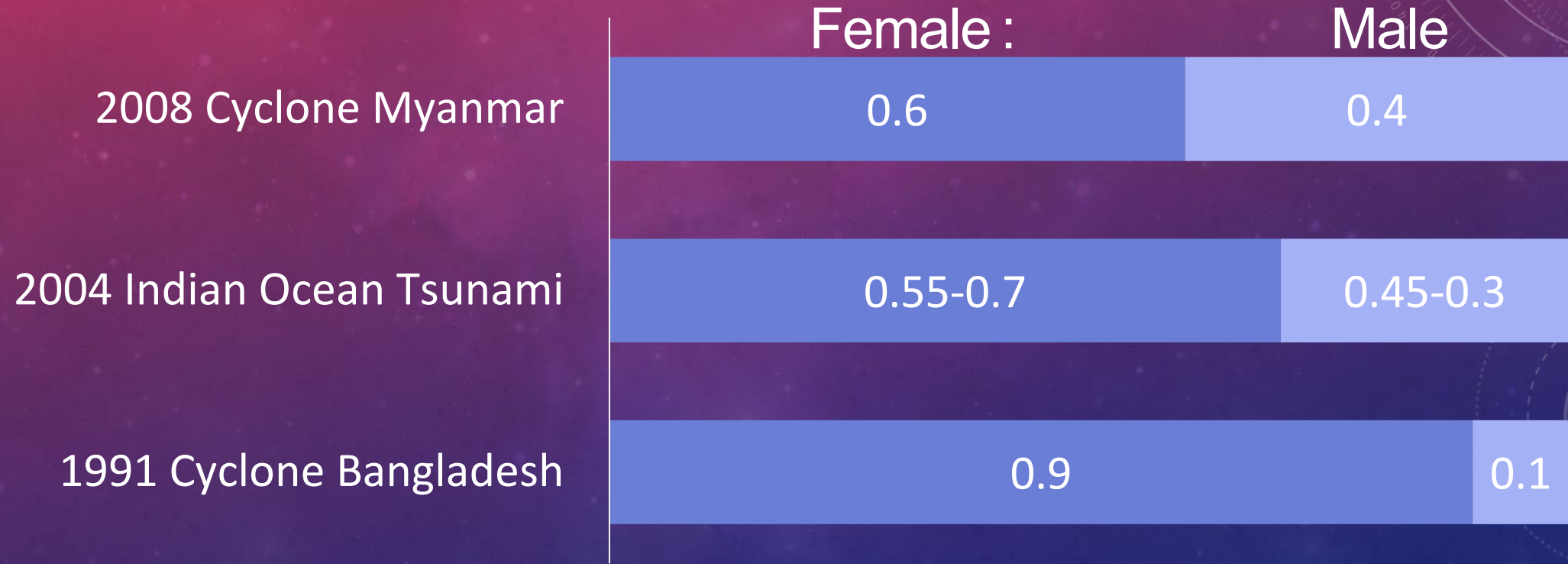
C. IN THE WORLD WORLD BANK POINTS OUT







GENDER



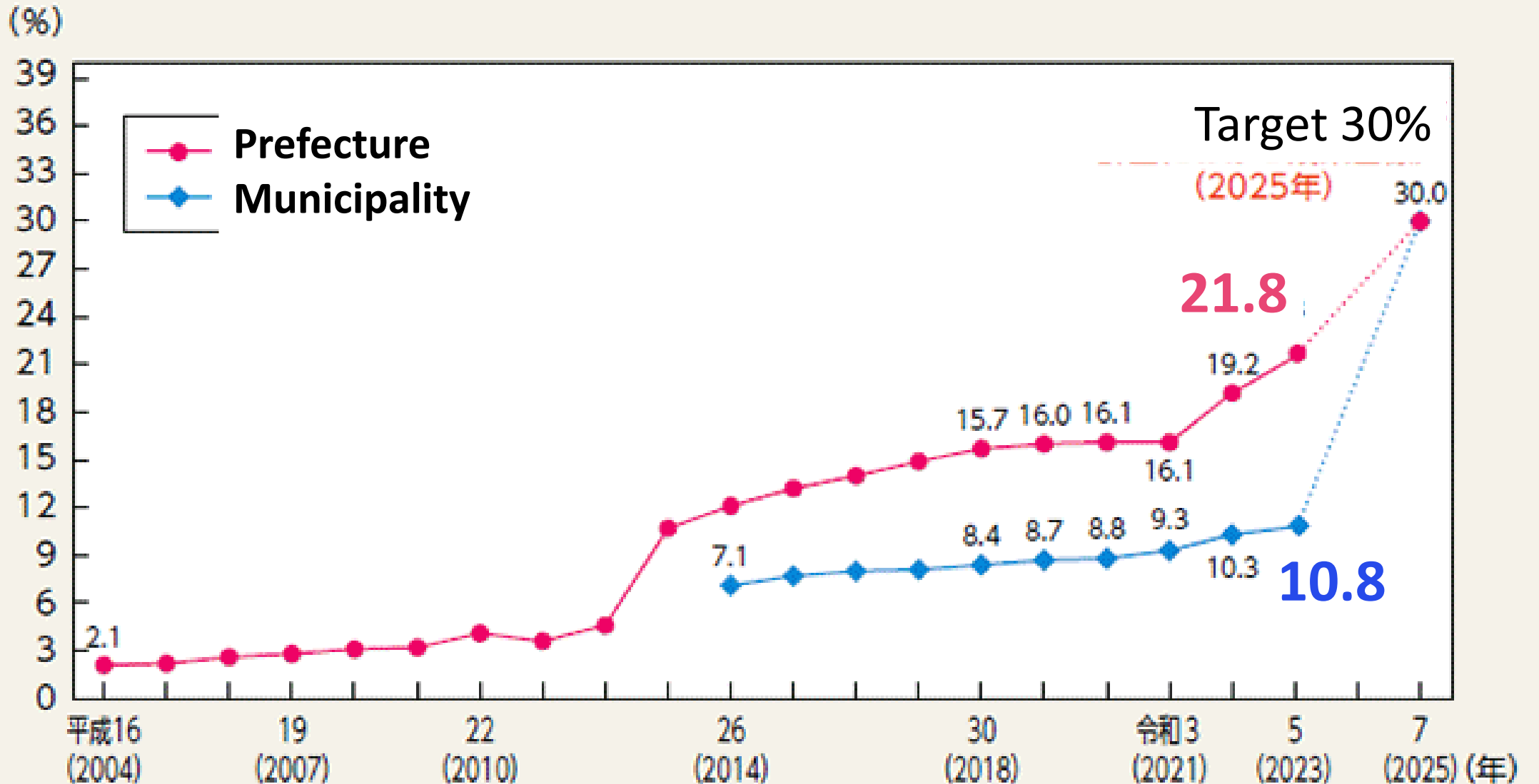
(Author's elaboration based on Trohanis et al. 2011)

2. SECURING DIVERSITY IN RECOVERY PROCESS



BACKGROUND

FEMALE RATIO AT DISASTER MANAGEMENT COMMITTEE IN JAPAN



WHO IS MANAGING EVACUATION SHELTER?

Community leader,
自治会長

Usually elderly man

Can they quickly
understand the necessity
of powdered milk?
Can they properly
distribute sensitive
goods?



HOW'S GENDER AND GENERATION BALANCE AT DECISION MAKING PROCESS?

Community recovery committee

まちづくり協議会

Where are female members or young generation?



WHICH CAN RECEIVE PAYMENT FROM “CASH FOR WORK” ?

炊出し COOKING



CLEANING DEBRIS



FINANCIAL SUPPORT TO REHABILITATION

FISHING BOAT



www.maff.go.jp

FISH MARKET



CASE 1. WOMEN'S PARTICIPATION IN RELOCATION



Kiakami
Ishinomaki

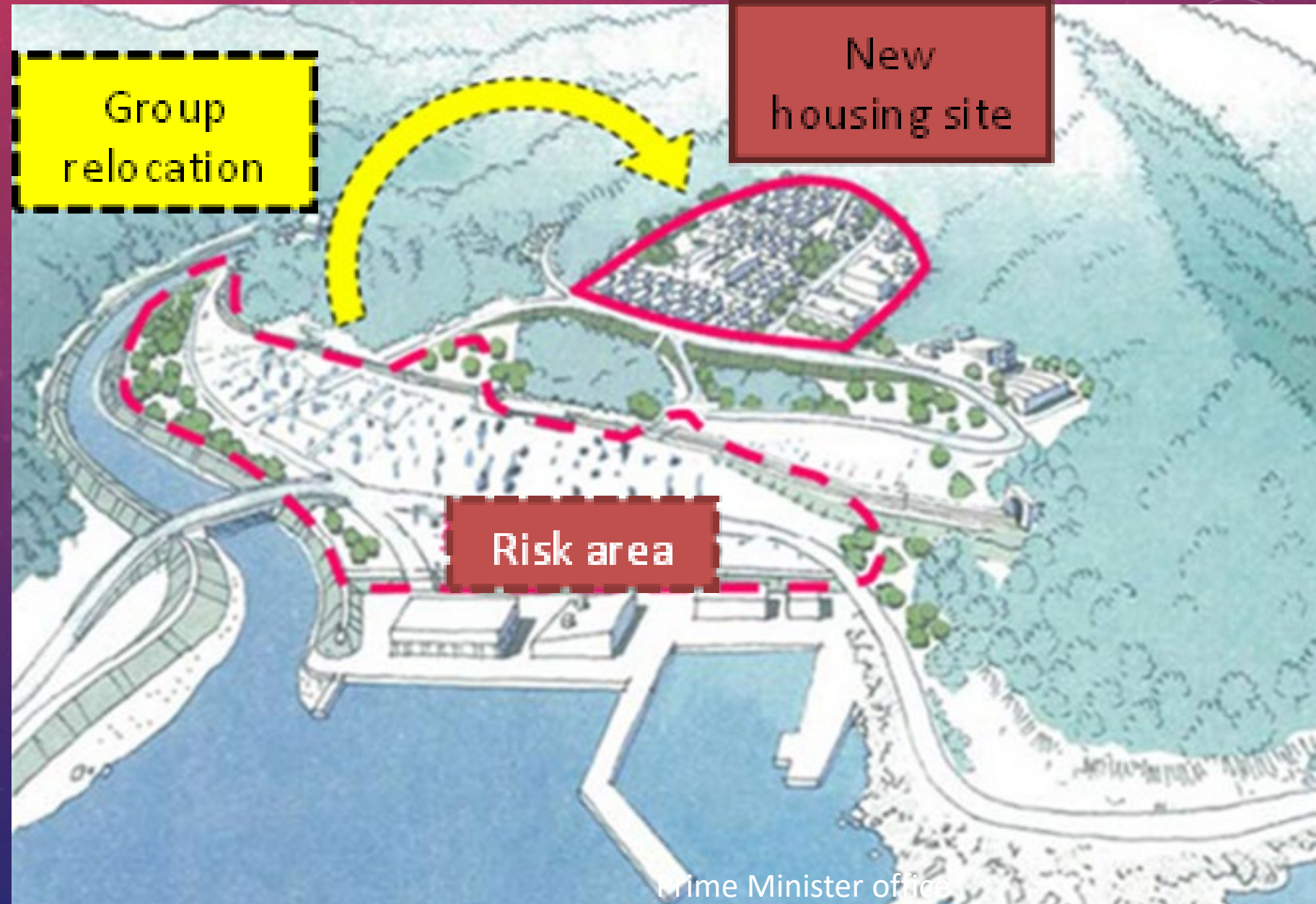
GAR

Global Assessment Report
on Disaster Risk Reduction

2019

Contributing Paper

CONCEPT OF RELOCATION



Group relocation

New housing site

Risk area

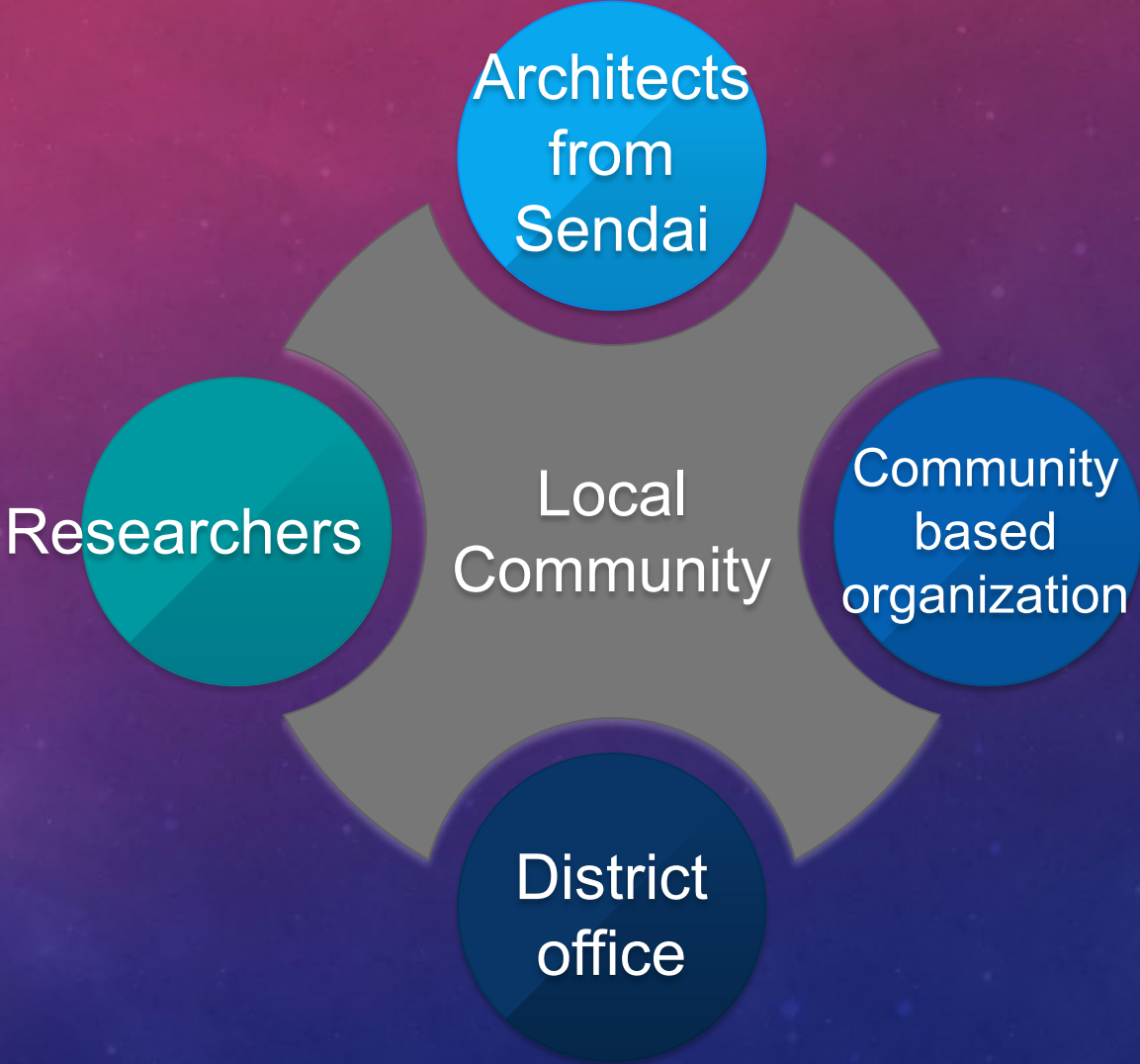
KITAKAMI DISTRICT

Office lost 54 members
among 57, buildings, and
equipment





COLLABORATIVE MECHANISM ESTABLISHED



INTERVIEW SURVEY TO AFFECTED PEOPLE DECEMBER 2011

Concern
Expectation



CONSULTATION
JULY 2013

Layout
Location



北上川
Kitakami River

JIA北上支援チーム案
JIA Kitakami support team proposal

REVISED PLAN
PROPOSED BY
CONSULTANT

Facing to Kitakami
river

オープンスペースを軸に、風景や活気がつながる、公園の様なまち
Axis formed through open area would produce continuous scenery and activities, as a garden city.





DESIGNING HOUSES

Watching each other
Single elderly women
Community green path
Barrier free
Community garden





CASE 2. OYA COAST YOUNG GENERATION'S PARTICIPATION



Source: Miyagi Prefecture

Example
tsunami
dyke



Oya Coast



Oya Coast



Tomoyuki Miura

To preserve sand beach and environment

signature-collecting campaign
Young group proposed revised plan

Consensus building in community



Joint project with road
heightening
with
Michinoeki, Road station



3. JICA'S SUPPORT

TYPHOON YOLANDA, PHILIPPINES



Restarting Livelihood

food processing business
for woman group

- ✓ equipment
- ✓ factory
- ✓ product development



Rehabilitating Food processing factory



Rehabilitating Market place



Sales promotion



Product development
Added value



Rehabilitating day care center
for kids



4. COMMUNITY BUSINESS

BUSINESS SUSTAINABILITY AND COMMUNITY INCLUSIVENESS

“CHALLENGES IN BALANCING BUSINESS LONGEVITY WITH MAINTAINING BUSINESSES’ ROLE AS SPACES FOR SOCIAL INTERACTION AND COMMUNITY REBUILDING”

MATSUMOTO AND ISHIWATARI (2024)



Article

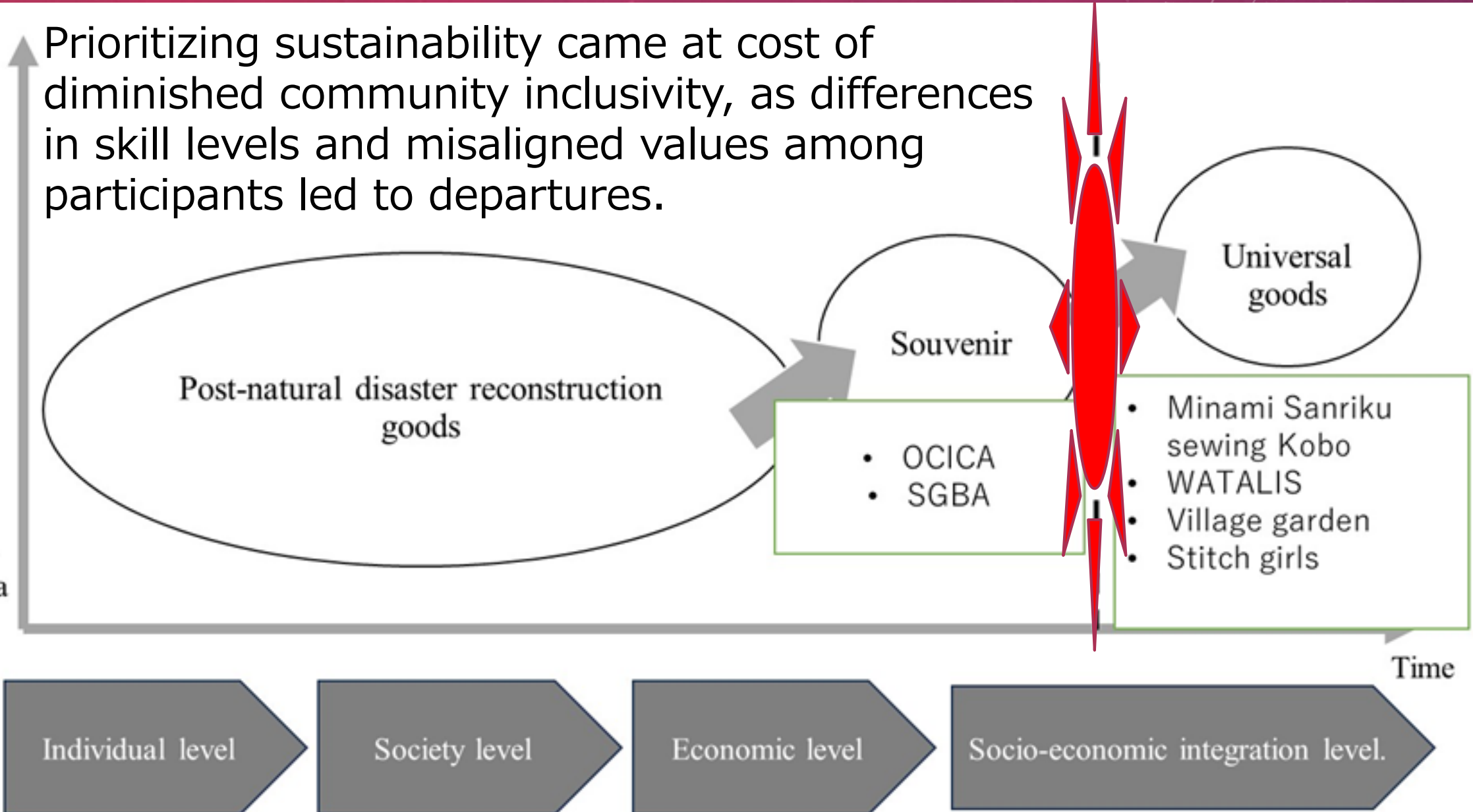
Navigating Sustainability and Inclusivity: Women-Led Community-Based Businesses in Post-Disaster Recovery

HANDCRAFT IN ACHE STICH 刺しゅう

empowering women and
community by promoting
community-based
business



Prioritizing sustainability came at cost of diminished community inclusivity, as differences in skill levels and misaligned values among participants led to departures.



KEY MESSAGE

Effective disaster recovery demands targeted, inclusive support systems that actively engage vulnerable populations in building resilient communities.

WHAT PRACTICES IN JAPAN ARE USEFUL TO
OTHER COUNTRIES?
ISSUE OF RECOVERY

Bureaucratic process お役所仕事

budget requests, project approvals, technical
standards, documentation

Lack of specialists
専門家不足

issue

Procurement
contracts
調達、契約

Structures vulnerable to disasters
災害に弱い構造物

Rajib Shaw *Editor*

Disaster Recovery

Used or Misused Development
Opportunity

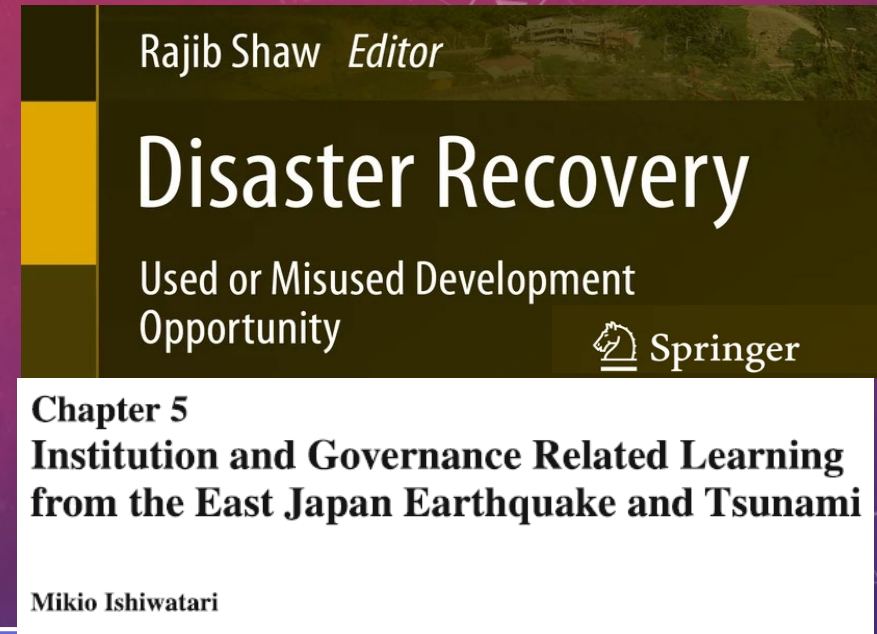
 Springer

Chapter 5

**Institution and Governance Related Learning
from the East Japan Earthquake and Tsunami**

Mikio Ishiwatari

WHAT PRACTICES IN JAPAN ARE USEFUL TO OTHER COUNTRIES?



Quick recovery mechanism including financial support
災害復旧制度

Mobilizing Specialists
TECFORCE、自治体連携

Quick recovery

Pre-agreement Involving private
事前協定

Retrofitting
耐震補強



Photo: Kazuyoshi Nomachi, 2011

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THANK YOU
ありがとうございます

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CASE 3. IBASHO CAFE OFUNATO

- To support elderly
- Supported by US NGO and private sector
- Elderly ratio: 39%
- Relocated to higher ground, 100 houses
- Elderly gathers
- Dining, health care, workshop, festival……
- Financial independent



