



# Promotion Methods of Mutual Assistance for Snow Removal Activity on the Community Roads through the Communication among the Residents of the Local Settlements

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**NOZOMU MORI**

National Institute for Land and Infrastructure Management  
Ministry of Land, Infrastructure, Transport and Tourism, Japan  
E-mail address: [mori-n2zq@nilim.go.jp](mailto:mori-n2zq@nilim.go.jp)



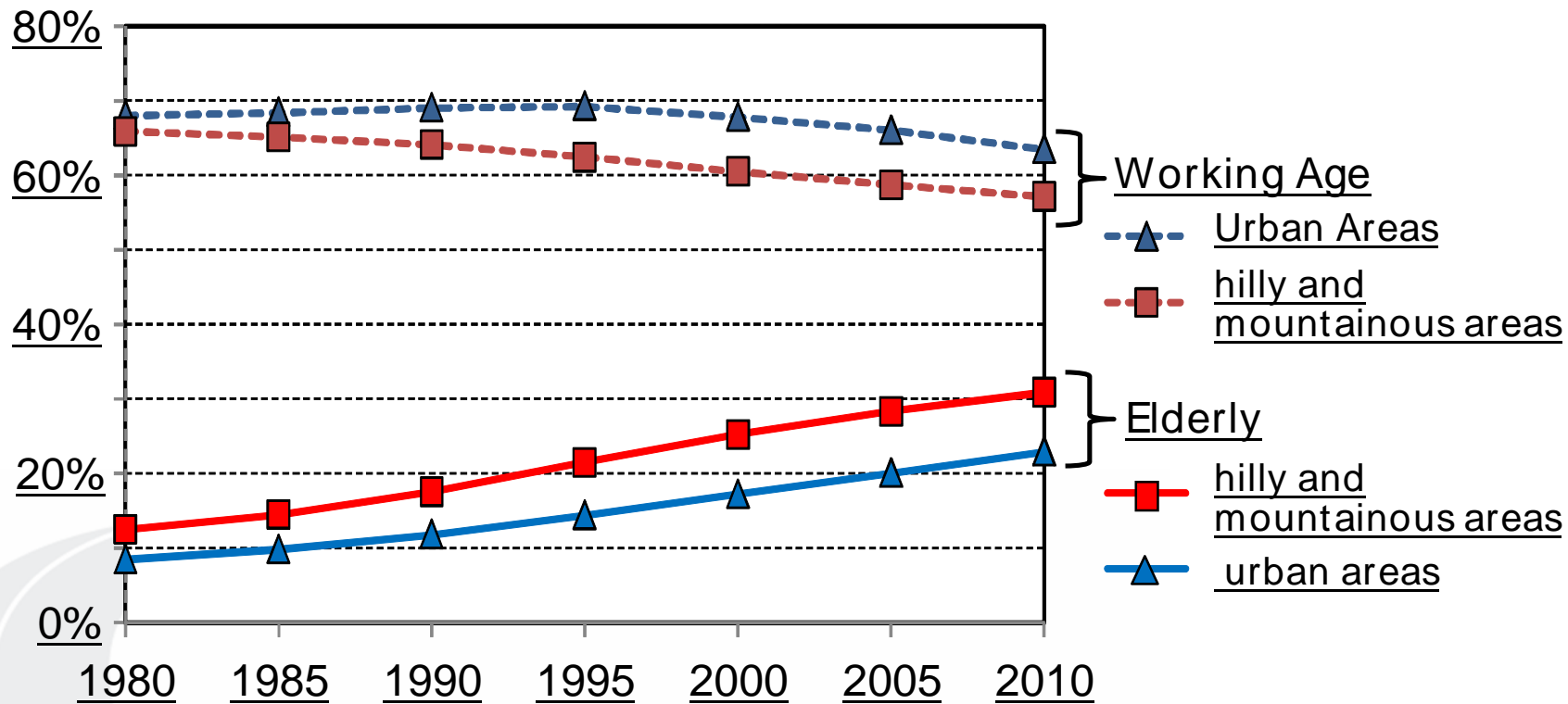
## 0. CONTENT

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1. Background
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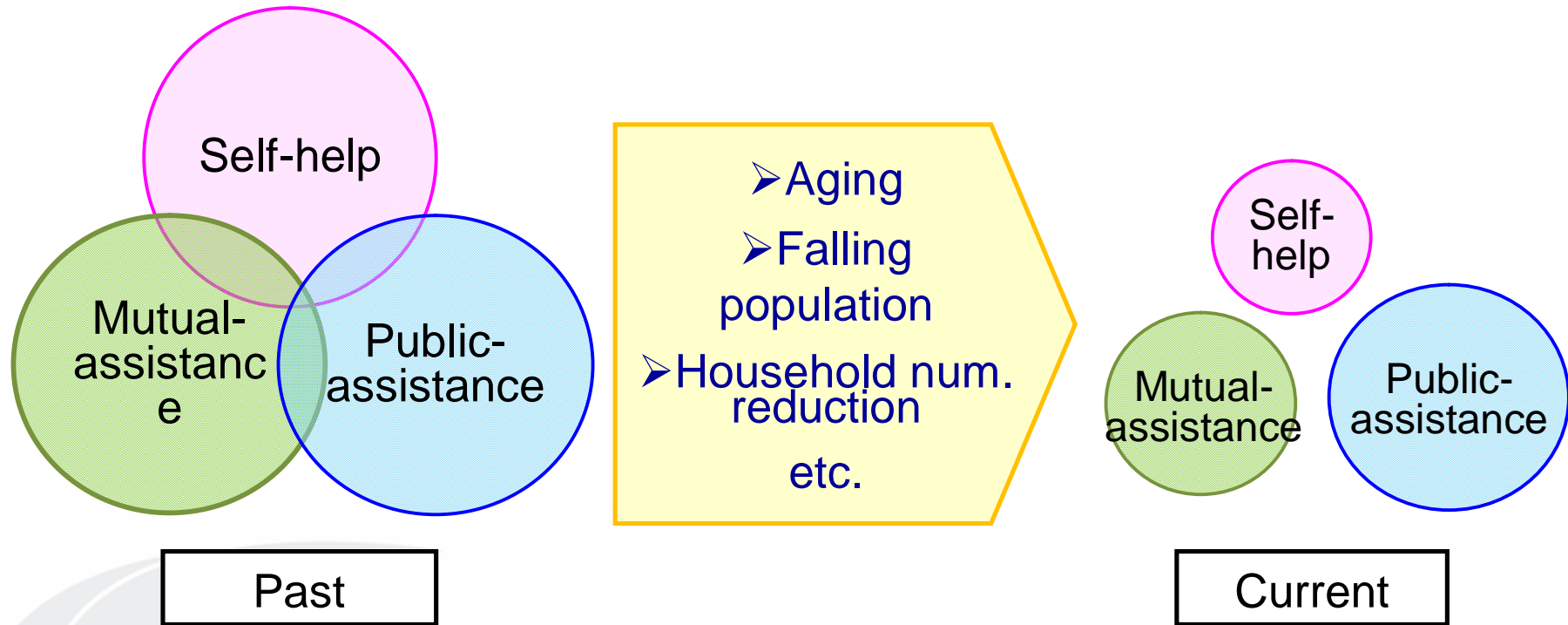
# 1. BACKGROUND

## Aging and falling population



Changing Working Age Ratio and Elderly Ratio

# Weakened Mutual Cooperation Relation



Weakened Mutual Cooperation Relation

## Furthermore

- Severe Financial Situation of Central and Local governments
- A snow removal contractor's management vitality fall

## 2. PURPOSE

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### For Community Residents

Inevitable decline of snow removal by public administrations



Movement to conduct snow removal by themselves



Activities to Improve their Mutual Assistance Capability



Making up for the declining capacity of administrations

To make these movements actual and effective;

- Clarification of the state of snow removal on their community roads and the tasks
- Preparation of countermeasures to resolve these tasks based on the existing communication methods  
by residents in the settlement themselves.

In this research;

- To hold workshops (below referred to as “WS”) in five districts in hilly and mountainous parts of heavy snowfall areas
- To Create a manual on WS methods to improve mutual assistance capabilities

### 3. RESEARCH METHOD

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#### Carried Out Measures

- Implementation of WS for Residents in Five Settlements
- Implementation of Snow Removal as Trial by Mutual cooperation
- Follow-up and Review the Trial





## Conditions of Five Areas

	□ Osugisawa	□ Kamihinokinai	□ Hirokunai	□ Seidayama	□ Hachioji
Maximum Snow Depth (average)	1.0~1.5m	1.5~2.0m	0.5~1.0m	Over 3m	1.5m
Population	310	647	609	57	85
Area	0.2km <sup>2</sup>	87.6km <sup>2</sup>	3.9km <sup>2</sup>	0.4km <sup>2</sup>	10.1km <sup>2</sup>
Elderly Ratio	9.0%	41%	33%	44%	54%

Elderly Ration of Japan: 25%

# Implementation Flow

**1st Workshop**



**2nd Workshop**



**3rd Workshop**



**Trial**

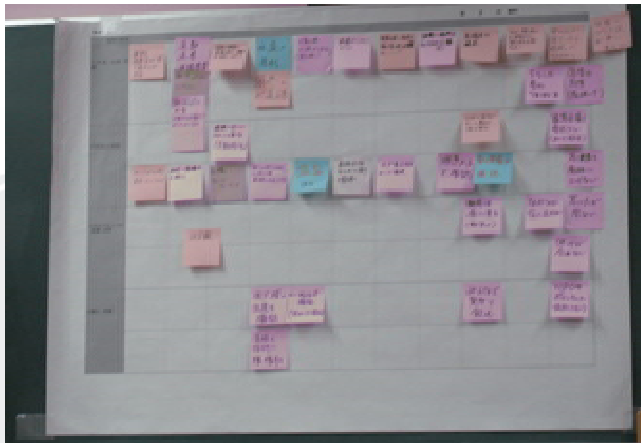


**Follow Up**

## 4. HOLDING the WSs, TRIAL and FOLLOW-UP

### 1st Workshop

- Clarify and share local problems and study countermeasures
  - Anxiety, worry, problems
  - Desirable responses
  - Difficulties and obstructions concerning response
  - Precautions or preparationsby simulation sheets and local maps to share information



(a) Clarifying anxiety, etc.



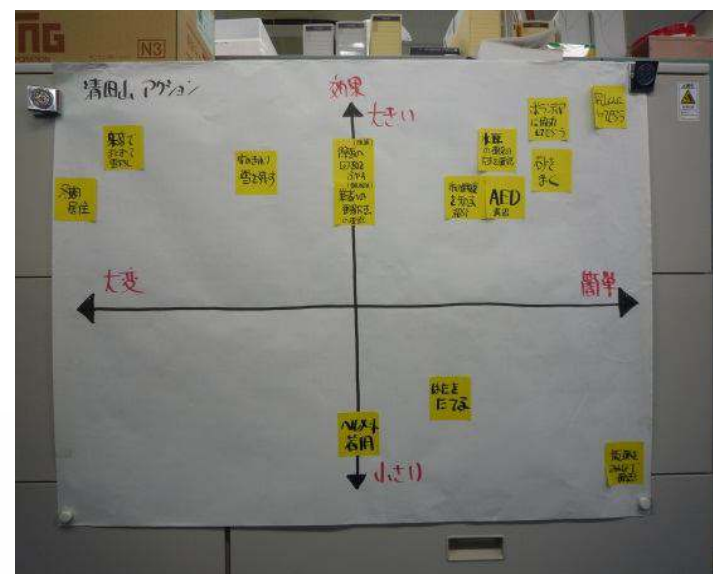
(b) Mapping Dangerous Spots

## 2st Workshop

- Deeply explore the problems and expand the study of countermeasures



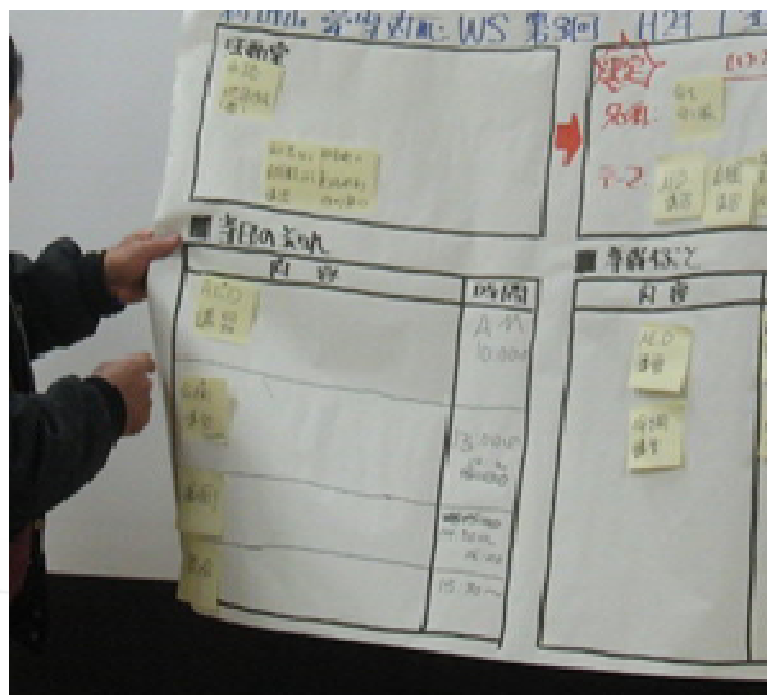
(a) View of Study



(b) Prioritization of Countermeasures

## 3st Workshop

- Prepare an implementation plan



Preparing Implementation Plan



**Trial**

Implement the Plan



Support by Volunteers



Snow Removal of inside of the drain



Snow Removal by Machine

- Review the measures taken and corroborative study

### Contents of Follow-up Survey

(1) Report of the previous season

- Activities
- Contents of discussion

(2) Exchange of opinions

- Change of the area by activities
- Proposal for the coming winter

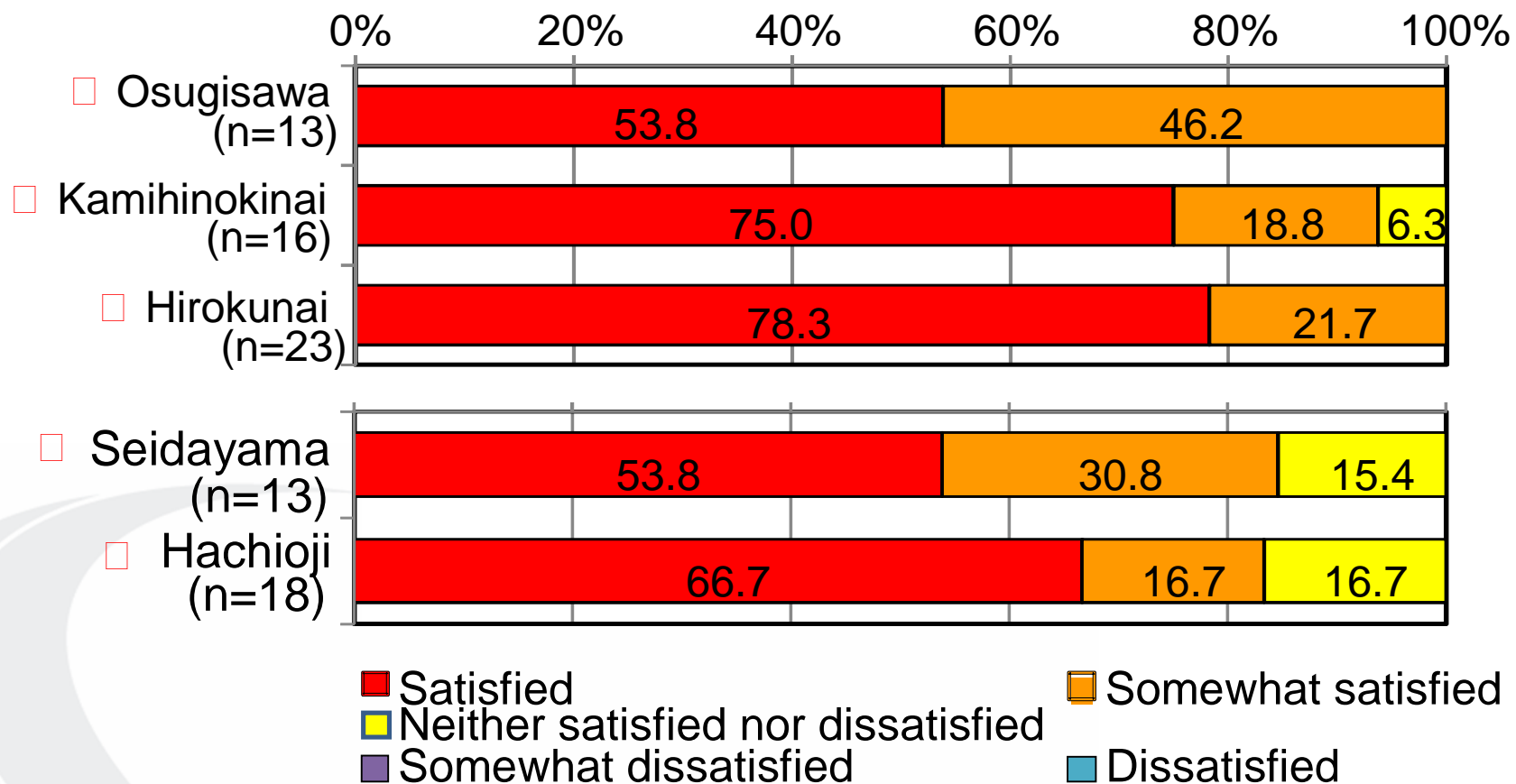


Exchange of Opinions



## 5. EVALUATION

### High Degree of Satisfaction of Participants



Activities to be undertaken for snow in the area in the future  
from questionnaire survey

- Study of snow accidents prevention and emergency medical care and life-saving activities
- Creating an emergency liaison network linking residents, administrations, and snow removal companies
- Strengthening organizations to support snow removal in the area
- Removing snow cooperatively with people of the area

## 6. SUMMARY

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### Effectiveness of WS

- Deep understanding of the regional snow problems for not only local residents but also intermediate support organizations, experts, and administrative officials participated in the WS.
- Planning the countermeasures for themselves against regional snow problems clarified by themselves with learning special knowledge in spite of understanding difficulties of snow problems.
- Trying and Having experience of carrying out countermeasures planned by themselves.

# Contents of HANDBOOK

(1) About the Handbook

(2) About Heavy Snow

Countermeasure

Workshops

(3) WS Program by Step

**豪雪対応ワークショップ 手引き (第1版)**

雪問題の解決による地域防災力の向上と、地域での話し合いのプログラムや実践事例をまとめたハンドブックです。

2. 豪雪対応ワークショップとは

豪雪対応ワークショップとは、雪に関する地域特有の問題解決策を、見つけるための住民の話し合いの取組です。

【概要】

- 豪雪対応ワークショップは、6つのステップから構成されています。
- 事前準備は春・夏にかけて実施します。
  - 地域の雪問題の状況や住民相互のコミュニケーションを促進します。
- ステップ①からステップ③までは昨年実施することを基本とします。
  - ステップ②までは地域の課題や対策を話し合い、ステップ③は、その冬の豪雪対策の予防を目的と前にも実施します。また、大雪対策の有効性確認の多い時期に実施します。
- ステップ④は翌年度に実施します。
  - ステップ④は繰り返しを行います。
  - 乗り回りの場を設けることが活動を継続させる。
  - 雪害時の担当職員には、雪害発生の当初からステップ④に巻き添えすることが求められます。
  - 活動地域が複数ある場合、共同での「活動報告」を行います。

ステップ④ 対策を実践する

ステップ④では、地域住民がまとめた対策案を参加者主導で実施してもらいます。ワークショップの一つの到達点を実施することで、地域の取組として発展・継続させることの必要性に気づいてもらうことが目的です。対策案の実践方法は様々ですので、本手引きでは実践例を示します。これらを参考に各地域に合った方法でステップ④を行なって下さい。

【実践事例①】 仙北市広久内地区

○日 時 平成23年2月13日(日) 9:30 ~ 14:00 (天候 晴れ)

○集合場所 広久内林家会館

○参加者数 地域住民30名(案内チラシを地区内で同封し、参加者を事前に募集・登録)

○実施内容 豪雪対策の試行実験(2班構成・各2チームで活動)

- 地域の暮らし、安全対策
- 高齢者世帯の住宅周辺の除雪、遊歩道の確保
- 防火水槍、消火器等の除雪
- 試行実験の結果報告

振り返り

- 班発表
- 班発表の趣意、コーススタディの経過等の説明
- 防災ゲーム(クロスロード)

○使用機材 除雪用スコップ、スノーダンプ、小型除雪機(トラクター)

○後援加入 参加者全員に対して普通傷害保険(レクリエーション)に加入

小型除雪機と連携した除雪作業 防火水槍(消火栓)の除雪作業

HANDBOOK

*Thank you for your kind attention*