

January 24, 2017

*Lessons from The Kumamoto  
Earthquake of 2016  
for Build Back Better*

**Yoshiaki KAWATA, PhD**

**Director, DRI (Disaster Reduction and Human  
Renovation Institution)**

# Committee Activities on The Kumamoto Earthquake

- **July 29, 2016 : The first Meeting on**  
**Emergency Lifestyle Support Measures based on the**  
**Kumamoto Earthquake Review Working Group**

- **December 5 : The seventh Meeting done**

- **December 20 :**

**I handed an Final Committee**  
**Report to Mr. Jun Matsumoto,**  
**Minister of Disaster Reduction.**



**熊本地震を踏まえた応急対策・生活支援策検討WG  
(主なポイント)**

**Working Group Examination About Emergency  
and Lifestyle Support Measures, Based on the  
Kumamoto Earthquake  
(Main Points)**

## 1. 地方公共団体への支援の充実 Enhancement of Support For Local Public Organizations

- 災害規模に応じた物資供給や人的支援のあり方
  - Goods Supply and Human Support According to the Disaster Scale
- プッシュ型支援における自己完結の徹底
  - Thorough Self-Sufficiency in Push-Type Support
- 市町村の防災体制強化
  - Strengthen Disaster Prevention System of Municipalities
- 災害対応を円滑に進めるための見直し
  - Review to Facilitate Smooth Disaster Response

## 2. 被災者の生活環境の改善 Improvement of the Living Environment of Disaster Victims

- 被災者の速やかな状況把握と支援体制の強化
  - Immediate Knowledge of the Affected People and Strengthening Support System
- 避難所における運営力の強化
  - Strengthening the Administrative Capacity at Evacuation Centers

## 3. 応急的な住まいの確保や生活復興支援 Secure Emergency Housing and Lifestyle Recovery Assistance

- 罹災証明書発行の迅速化のための調査方法効率化やシステム活用
  - Efficiency investigation method for speeding up the issuance of victims certificate and system utilization
- 応急仮設住宅のコスト削減やみなし仮設住宅の活用の徹底
  - Cutting costs of emergency temporary houses, and temporarily utilizing temporary housing
- 住宅等の被害に関する各調査の情報共有等による効率化の検討
  - Considering efficiency improvement by sharing information on each survey on damage of houses

## 4. 物資輸送の円滑化 Facilitation of Goods Transportation

- 輸送システムの全体最適化
  - Total Optimization of the Transportation System
- 被災地が混乱しないよう個人や企業によるプッシュ型物資支援を抑制
  - Restriction of Push-Type Goods Support by Individuals and Enterprises so that Disaster Areas are not Confused
- 物資輸送情報の共有
  - Sharing goods transportation information
- 個人ニーズを踏まえた物資支援
  - Support for Goods Based on Individual Needs

## 5. ICTの活用 Utilizing ICT

- 災害時における官民の各機関が有する情報共有・活用の仕組み
  - Information sharing and utilization mechanism of each public and private organization at the time of disaster
- ビッグデータの活用による屋外避難者の把握のための技術開発
  - Technology development for grasping outdoor evacuees by utilizing big data

## 6. 自助・共助の推進 Promote Self-Help and Mutual Assistance

## 7. 長期的なまちづくりの推進 Promotion of Long-Term Urban Development

## 8. 広域大規模災害を想定した備え Preparation Assuming Wide-Area Large-Scale Disasters

# **1. 地方公共団体への支援の充実**

## **Enhancement of Support For Local Public Organizations**

- **災害規模に応じた物資供給や人的支援のあり方**
  - Goods Supply and Human Support According to the Disaster Scale
- **プッシュ型支援における自己完結の徹底**
  - Thorough Self-Sufficiency in Push-Type Support
- **市町村の防災体制強化**
  - Strengthen Disaster Prevention System of Municipalities
- **災害対応を円滑に進めるための見直し**
  - Review to Facilitate Smooth Disaster Response

## **2. 被災者の生活環境の改善**

### **Improvement of the Living Environment of Disaster Victims**

- **被災者の速やかな状況把握と支援体制の強化**
  - Immediate Knowledge of the Affected People and Strengthening of Support System
- **避難所における運営力の強化**
  - Strengthening the Administrative Capacity at Evacuation Centers

### 3. 応急的な住まいの確保や生活復興支援 Secure Emergency Housing and Lifestyle Recovery Assistance

#### ○罹災証明書発行の迅速化のための調査方法効率化やシステム活用

- Efficiency investigation method for speeding up the issuance of victims certificate and system utilization

#### ○応急仮設住宅のコスト削減やみなし仮設住宅の活用の徹底

- Cutting costs of emergency temporary houses, and temporarily utilizing temporary housing

#### ○住宅等の被害に関する各調査の情報共有等による効率化の検討

- Considering efficiency improvement by sharing information on each survey on damage of houses

## 4. 物資輸送の円滑化

### Facilitation of Goods Transportation

- 輸送システムの全体最適化

- Total Optimization of the Transportation System

- 被災地が混乱しないよう個人や企業によるプッシュ型物資支援を抑制

- Restriction of Push-Type Goods Support by Individuals and Enterprises so that Disaster Areas are not Confused

- 物資輸送情報の共有

- Sharing goods transportation information

- 個人ニーズを踏まえた物資支援

- Support for Goods Based on Individual Needs



## 5. ICTの活用 Utilizing ICT

- 災害時における官民の各機関が有する情報共有・活用の仕組み
  - Information sharing and utilization mechanism of each public and private organization at the time of disaster
- ビッグデータの活用による屋外避難者の把握のための技術開発
  - Technology development for grasping outdoor evacuees by utilizing big data

## 6. 自助・共助の推進

### Promote Self-Help and Mutual Assistance

○家庭内物資を最大限活用する「家庭内循環備蓄」への発想転換

○ Utilize the idea of "home circulation stockpile" to make maximum use of home goods

○住民同士の避難時の声かけ・安否確認や避難生活での物資持ち寄りの推進

○ Calling upon residents' evacuation, promoting safety confirmation and bringing supplies in evacuation

○災害経験豊富な全国NPOから地域のNPOへのノウハウ伝授

○ Knowledge acquired from disaster-rich nation-wide NPOs to local NPOs

## **7. 長期的なまちづくりの推進**

### **Promotion of Long-Term Urban Development**

- **被災時の復興の手法に関するケーススタ  
ディによる事前準備**
- **Preliminary preparation by case  
study on the method of  
reconstruction at the time of  
disaster**

## 8. 広域大規模災害を想定した備え Preparation Assuming Wide- Area Large-Scale Disasters

### ○南海トラフ地震の具体計画等の見直し

Revised concrete plans in the event of a Nankai megathrust earthquake

### ○防災拠点となる建物のより高い安全性の確保を推進

Promote securing higher safety standards for buildings to be disaster prevention bases

1. 地方公共団体支援のあり方

1-1. 物資供給や人的支援等に関するプッシュ型支援策

現状と課題

被災地方公共団体は行政機能低下

- 被災地方公共団体は支援要請や情報収集が困難な場合も。
- 国や都道府県の多様な支援策があるが、全体像が不明確。

困惑する研究機関等による調査・助言

- 研究機関等による調査・助言が被災地方公共団体の混乱を助長しているとの指摘。

○災害規模に応じた物資供給や人的支援のあり方

- 一般災害 : プル型支援 (地方自治体の要請)
- 大規模災害 : プッシュ型支援
- 広域大規模災害 : 十分なプッシュ型支援が困難な可能性  
地域住民や企業を含む、地域の備えが重要

○プッシュ型支援における自己完結型の徹底

(人的支援)

応援側で統括者を設置。自立した支援が可能なチーム派遣  
国・都道府県等が連携し、応援職員の派遣仕組みの構築

(物資供給)

調達から避難所に至る全体最適の物資輸送システム  
自治体への物資輸送管理システムの導入支援

○国の災害体制の強化

- 市町村へのリエゾンの速やかな派遣による情報収集力の強化
- 国と都道府県の職員の合同訓練により、災害時の連携強化
- 災害時の国や都道府県による支援策に関する情報発信 (Web等)

○被災地方公共団体に配慮した調査・助言

- 被災地の状況を踏まえ、負荷のかかる調査の抑制
- 緊急性の高い調査は、関係学会・大学等が調整を行った上で実施。
- 行政機能の低下した地方公共団体では、提案の実現に向けて、共に解決に取り組む等の支援が不可欠。

実施すべき取組

1. How to Support Local Governments

1-1. Push-Type Support Measures Concerning Goods Supply And Human Support

Declining Administrative Functions of Afflicted Local Governments

- Cases where disaster-stricken local governments are unable to request assistance or gather information.
- There are various support measures for national and prefectural governments, but the overall picture is unclear.

Confusing Advice from Research Organizations

- Claims that research and advice by research organizations etc. are promoting disarray of afflicted local public organizations.

○ Goods Supply and Human Support According to the Disaster Scale

- General Disaster: Pull-type support (Request of local government)
- Large-Scale Disaster: Push-type support
- Wide-Area Large-Scale Disaster: Possibility that sufficient push type support is difficult - Regional preparation, including local residents and companies, is important

○ Thorough Self-Sufficiency in Push-Type Support

- (Human support)  
Set up a supervisor on the support side. Team dispatch that can support self-reliance State/prefecture etc. cooperate, construction of dispatch mechanism of support staff
- (Supply of goods)  
Global optimum goods transportation system from procurement to evacuation center  
Support for the introduction of material transport control system to local governments

○ Strengthen the National Disaster System

- Strengthen information gathering abilities by prompt dispatch of liaisons to municipalities
- Strengthen collaboration at the time of disaster through joint training of national and prefectural officials
- Dispatch of information on support measures at the time of disaster in the country and prefectures (internet, etc.)

○ Survey and advice considering afflicted local public entities

- Suppressing burdensome investigations based on the situation in the disaster area
- Investigations with high urgency are conducted after related societies, universities, etc. have adjusted.
- In local governments with declining administrative functions, it is indispensable to support efforts such as working together to realize the proposal.

Efforts to be Carried Out

熊本大学



# 1. 地方公共団体支援のあり方

## 1-2. 市町村の被災状況等に応じた臨機応変な支援策

現状と課題

### 行政機能の回復に時間を要する地方公共団体

- 各機関から様々な支援を受けても、災害業務のマネジメントが進まない場合も。

### 様々な応援の機能による混乱

- 被災自治体に派遣された応援職員が、支援の全体像をなかなか把握できず。

### インフラの復旧にかかる技術的な支援等

- 災害時に発生する物資輸送等の膨大なニーズに対し、港湾の利用調整等において地元の地方公共団体では対応が困難な場合も。
- インフラの復旧では、更なる国の技術的な支援が必要な場合も。

実施すべき取組

### 国・都道府県等が連携した応援の仕組みづくり

- 国と地方公共団体の全国連合組織が協力し人的支援に関する仕組みを構築。
- 被災市町村ごとに応援都道府県を一对一で対応する対口支援方式。
- 都道府県が中心となって状況を把握し、必要に応じて支援の見直し。

### 被災市町村の役割を補完する 応援側マネジメント体制

- 応援側で統括者を設置。その補佐する者や各分野の応援者からなる、自立した応援チームを派遣。
- チームは被災自治体の災害時の組織体制に準じて編成。
- 国の応援職員も、現地災害対策本部の一員として被災自治体を支援。



国や応援都道府県による応援チーム

### 国等による調整や支援機能の強化

- 港湾管理者の要請に基づき、港湾の利用調整等の管理業務を実施できる法的位置づけを国に付与

### 1. How to Support Local Governments

#### 1-2. Supportive Measures According to the Municipality's Disaster Situation, etc.

Current Status & Issues

#### Local public organizations that require time to restore administrative functions

- Even if various organizations receive various types of assistance, there are cases where disaster management does not progress

#### Confusion Caused by Various Support Functions

- Support staff dispatched to affected local governments can not easily grasp the overall picture of support.

#### Technical Support for Restoration of Infrastructure

- Difficulties for local public organizations to respond to the huge needs of transportation of goods generated at the time of a disaster, even with the use of ports and the like.
- In case of infrastructure restoration, cases where further technical assistance of the state is necessary.

### Creating a Framework of Support in Cooperation Between the State/Prefecture, etc.

- Nationwide organization of national and local governments cooperates to establish a mechanism for human support.
- Respond to each afflicted municipality one-on-one with supporting prefectures Branch support method
- Prefectures are the center to grasp the situation and review support as necessary

### Supplement the roles of affected municipalities Supporting organization management system

- Established a supervisor on the support side. We have a self-supporting support team consisting of assistants and supporters in each field.
- The team is organized according to the disaster organization system of the affected local governments.
- The support staff of the country also supports disaster-affected municipalities as a member of the local disaster countermeasure headquarters.

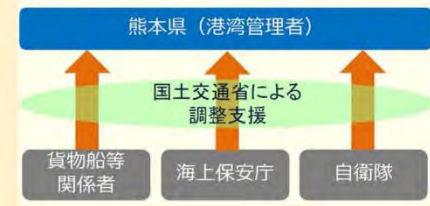


National and prefectural support teams

### Strengthen Coordination and Support Functions by the State

- On the request of the port administrator, grant the country a legal status that can carry out administrative work such as adjustment of harbor usage

〈熊本地震の例〉



- Strengthening mechanisms for technological support, such as disaster restoration work that requires advanced technology for emergency response.



# 1. 地方公共団体支援のあり方

## 1-3. 市町村等の応援・受援にかかる考え方の整理

現状と課題

**応援職員が被災市町村で活用されていない**

- 災害対応を熟知している職員の知見や経験が、被災市町村で活用されない。
- 応援職員は、実施すべき業務内容が不明である等、役割を果たせない。
- 応援側と受援側の連携が不十分で、応援職員や避難者に不満が蓄積。

**応援職員の環境整備が不十分**

- 被災市町村に長期間にわたり派遣された職員のケアが十分なされていない場合がある。
- 応援側が被災地方公共団体に宿泊場所等の確保を求めている場合も。

実施すべき取組

**市町村の受援力の強化**

- 大規模災害時には外部からの支援も前提とした、災害時の体制の構築を支援するための指針となるガイドラインを整備。
- 災害教訓やマニュアル等についての訓練や研修の強化。

**応援職員派遣による応援側の防災力の強化**

- 応援経験のある職員は、発災時に先導的機能を発揮。
- 派遣元の機関の災害対応見直しのきっかけづくり。

**災害対応の標準化・支援システムの整備**

- 災害時には多様な主体の連携が必要となるため、地方自治体が実施する災害対応の標準化の加速。
- 標準化された災害対応をシステム化、発災後の業務の流れの明確化や業務毎の不足人員の推計によるマネジメントを支援。

**被災地方公共団体のニーズと応援職員とのマッチング**

- 応援を依頼する際には可能な限り業務毎の人数を明確化。
- 応援側は専門・災害経験を踏まえた派遣予定職員のリスト化。

**派遣された職員の環境整備**

- 応援機関で完結した応援体制を原則。
- 派遣後も、応援職員等のケアが重要。

【1 準備(震災発生前)】

### 1. How to Support Local Governments

#### 1-3. Organization of Ideas on Support and Sport of Municipalities

Current Status & Issues

**Support Staff are not Utilized in Afflicted Municipalities**

- Knowledge and experience of staff who are familiar with disaster response are not utilized in disaster municipalities.
- Support staff can not fulfill its role, for example, the work content to be performed is unknown.
- Collaboration between the support side and the receiving side is inadequate, so dissatisfaction is accumulated between support officials and evacuees.

**Insufficient Environment For Support Staff Improvement**

- Care for staff dispatched for long periods to disaster municipalities may not be adequate.
- Cases where the supporters are seeking to secure accommodation in afflicted local public organizations.

Efforts to be Carried Out

**Strengthening Municipalities Support Receiving Capabilities**

- Improvement of guidelines that support the establishment of a system at the time of disaster, assuming support from external sources during large disasters.
- Strengthening training and practice for disaster lessons and manuals

**Strengthening the Disaster-Prevention Abilities of the Support Side by Dispatching Support Staff**

- Staff with support experience demonstrate leadership function at the time of disaster.
- Creating opportunities to review disaster response of the dispatching agency.

**Development of a Standardized Support System for Disaster Response**

- In the event of a disaster, cooperation of diverse entities is necessary, so the standardization of disaster responses implemented by local governments should be accelerated.
- Systemized, standardized disaster response. We support management by clarifying the flow of work after disaster and estimating shortage of personnel for each task.

**Matching with Disaster-Affected Local Government's Needs and Support Staff**

- When asking for support, clarify the number of people for each work as much as possible.
- The support side lists the staff to be dispatched based on specialist/disaster experience.

**Environment Improvement for Dispatched Staff**

- In principle, the support system is completed by the support organization
- After dispatch, care of support staff is important.

【1 準備(震災発生前)】

項目	対応項目	実施内容	担当	備考	備考(実施状況)
5	応援の受け入れ	9-1 被災市町村の職員が災害対応に専念できるように、応援職員が受援すべき業務を事前に統一して協力を依頼しておく。	□	□	応援側
		9-2 ヘルプデスク等による災害発生時の受付・案内業務(避難所開設のヘルプデスク)の確保を確保する等の対応。必要に応じて災害発生時にヘルプデスクの業務を応援職員に委任し、業務の分担を明確にする。	□	□	被災側、応援側
		9-3 被災市町村のヘルプデスク業務の確保を支援する。被災市町村の業務に支障をきたさないよう、業務の分担を明確にする。	□	□	被災側
10	物資等の輸送、収納・管理	10-1 被災市町村の物資の輸送(積込場/積込機/トラック/トラック)の確保。必要に応じて被災市町村の物資の輸送を支援する。	□	□	被災側
		10-2 被災市町村の物資の輸送(積込場/積込機/トラック/トラック)の確保。必要に応じて被災市町村の物資の輸送を支援する。	□	□	被災側、応援側
		10-3 被災市町村の物資の輸送(積込場/積込機/トラック/トラック)の確保。必要に応じて被災市町村の物資の輸送を支援する。	□	□	被災側、応援側
11	ボランティアなどの協働活動	11-1 災害ボランティアセンターの設置・受け入れ体制を強化する。	□	□	被災側、応援側
		11-2 災害ボランティアセンターの必要最低限の業務及び業務の分担を明確にする。	□	□	被災側、応援側
		11-3 被災市町村のボランティア活動に対する支援を明確にする。	□	□	被災側、応援側
12	公共インフラ整備の必要	12-1 被災市町村の公共インフラ整備の必要最低限の業務及び業務の分担を明確にする。	□	□	被災側、応援側
		12-2 被災市町村の公共インフラ整備の必要最低限の業務及び業務の分担を明確にする。	□	□	被災側、応援側
		12-3 被災市町村の公共インフラ整備の必要最低限の業務及び業務の分担を明確にする。	□	□	被災側、応援側
14	物資調達等の実施	14-1 被災市町村の物資調達の必要最低限の業務及び業務の分担を明確にする。	□	□	被災側、応援側
		14-2 被災市町村の物資調達の必要最低限の業務及び業務の分担を明確にする。	□	□	被災側、応援側



1. 地方公共団体支援のあり方  
1-4. 円滑な災害担当を進めるための災害救助の見直し

現状と課題

<p><b>災害救助の役割の明確化</b></p> <ul style="list-style-type: none"> <li>● 平常時は道府県と政令指定都市が並列関係にあるが、災害時は政令指定都市が他の市町村と同様に直列の関係になるため、情報ルートの錯綜等が懸念。</li> </ul>	<p><b>災害対応の調査等の費用の周知不足</b></p> <ul style="list-style-type: none"> <li>● 住宅等の被害に関する調査に要する費用について、国の財政支援策が周知されておらず、被災市町村が支援を要請しづらい場合も。</li> </ul>	<p><b>災害救助に係る現地の発想が困難</b></p> <ul style="list-style-type: none"> <li>● 災害救助法は現物給付を前提に、条件が細かく規定。</li> <li>● 物資調達等の現地での意思決定に時間を要したり、結果として公費負担が増加する懸念。</li> </ul>
--	--	--

実施すべき取組

<p><b>災害救助に関する指定都市の役割の明確化</b></p> <ul style="list-style-type: none"> <li>・ 事務委任の活用により、予め政令指定都市と都道府県の役割分担を明確化。</li> <li>・ より迅速で適確な救助の実施のための体制や広域調整の在り方について検討。</li> </ul>	<p><b>災害救助の運用改善に向けた検討</b></p> <ul style="list-style-type: none"> <li>● 災害救助法や災害に関する諸制度に関する平常時の情報提供             <ul style="list-style-type: none"> <li>・ 災害救助法の概要や同法に基づき調達実績のある物資の事例等</li> <li>・ 住宅等の被害に関する調査等、災害対応を進めるための基礎的な業務に関する財政支援制度</li> </ul> </li> <li>● 災害発生後の相談体制の強化             <ul style="list-style-type: none"> <li>・ 発災後速やかな説明会の開催</li> <li>・ 現地対策本部に連絡窓口の設置</li> </ul> </li> <li>● 災害救助の運用改善に関する取組             <ul style="list-style-type: none"> <li>・ コスト削減のために、バ...</li> </ul> </li> </ul>
---	---

1. How to Support Local Governments  
1-4. Review of Disaster Relief to Promote Smooth Disaster Response

Current Status & Issues

<p><b>Clarification of Disaster Relief Roles</b></p> <ul style="list-style-type: none"> <li>● In normal conditions, prefectures and ordinance-designated cities are in a parallel relationship, but in case of disaster ordinance-designated cities become serial relationship like other cities, towns and villages and there are concerns about information route complication.</li> </ul>	<p><b>Lack of dissemination of expenses such as survey of disaster response</b></p> <ul style="list-style-type: none"> <li>● Regarding expenses required for surveys on damages on houses, if the government's fiscal support measures are not known, the afflicted municipalities are unable to request assistance</li> </ul>	<p><b>Difficulties in Local Ideas Relating to Disaster Relief</b></p> <ul style="list-style-type: none"> <li>● The disaster relief law presupposes in-kind benefits, with detailed conditions.</li> <li>● Concerns that it takes time to make local decisions such as procurement of goods, and public expenses burden increases as a result.</li> </ul>
--	--	--

Efforts to be Carried Out

<p><b>Clarification of Roles of Designated Cities Concerning Disaster Relief</b></p> <ul style="list-style-type: none"> <li>・ Clarify the division of responsibilities between cabinet-designated cities and prefectures in advance by utilizing office delegation.</li> <li>・ Consideration of a system for implementing a quicker and more appropriate rescue and a way of wide-area adjustment.</li> </ul>	<p><b>Study for Improvement of Operation of Disaster Relief</b></p> <ul style="list-style-type: none"> <li>● Providing normal time information on disaster relief laws and various disaster relief systems</li> <li>・ Outline of the Disaster Relief Act and examples of goods procured under the law</li> <li>・ Financial support system on fundamental business to promote disaster response, such as survey on damage of houses, etc.</li> <li>● Strengthen consultation system after disaster occurrence</li> <li>・ Hold prompt explanatory sessions after disaster</li> <li>・ Establishment of contact point at local countermeasure headquarters</li> <li>● Study on Improvement of Disaster Relief Operation</li> <li>・ Utilization of voucher tickets and cash benefits etc. for cost reduction</li> </ul>
---	--



## 2. 被災者の生活環境を改善するための措置

### 2-1. 被災者の状況の速やかな把握と対応

現状と課題

#### 被災者の状況把握やケアが困難

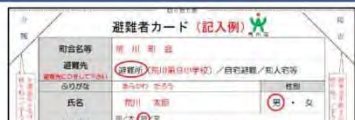
- 指定避難所でも被災者の把握に時間を要した場合も。
- 指定避難所以外の様々な場所に被災者が点在しており、情報伝達やケアも困難。
- エコノミークラス症候群や慢性疾患等により、災害関連死が発生。

#### 被災者情報の速やかな把握

- ・ 市町村において可能な限り速やかかつ網羅的に避難者の名簿の作成を推進。
- ・ 指定避難所外の避難者の状況把握には携帯電話の位置情報等のビッグデータの活用を検討。

#### 指定避難所外の被災者を支えるための取り組み

- ・ 市町村保健医療部門は、保健師や医療チーム等が収集した被災者の健康情報を、集約・整理・分析。
- ・ 医療関係者・NPO等との情報共有の上、協働して被災者への的確な保健衛生支援。
- ・ 医療や保健等の様々な機関が使用する調査票の統一化や被災地方公共団体の定めた調査様式の活用原則の周知。



個人用避難者カード  
(荒川区)

## 2. Measures to Improve the Living Environment of Disaster Victims

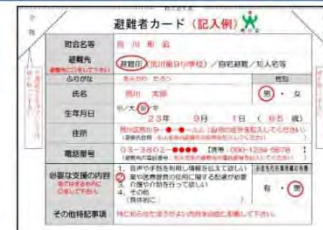
### 2-1. Prompt Understanding of the Situation of Victims and Support

#### Difficulty Grasping the Situation and Care for Victims

- Even in designated evacuation centers, it takes time to grasp the victims condition.
- Victims are spread out in various places other than the designated evacuation shelters, and information transmission and care are also difficult.
- Disaster related deaths occur due to economy class syndrome and chronic diseases.

#### Prompt Understanding of Victim Information

- ・ Promote the creation of a roster of evacuees as quickly and comprehensively as possible in municipalities.
- ・ In order to grasp the situation of refugees outside the designated evacuation shelter, consider using big data such as cell phone location information.



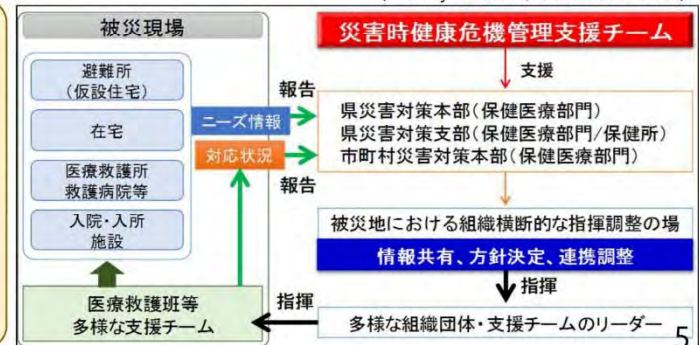
Individual's evacuation card  
(Arakawa district)

Activities of disaster health management support team  
(Ministry of Health, Labor and Welfare)

Efforts to be Carried Out

#### Efforts to Support Victims Outside the Designated Evacuation Shelter

- ・ The municipal health medical departments should consolidate, organize and analyze the health information of victims collected by public health nurses and medical teams.
- ・ Information sharing with medical staff, NPOs collaborate to provide appropriate health and hygiene support for disaster victims
- ・ Communicate the principle of unification of survey forms used by various medical and health care organizations, and utilization of the survey style set by disaster-affected local governments



実施すべき取組



2. 被災者の生活環境を改善するための措置  
2-2. 医療等の専門家や避難所運営等の専門知識を有するNPOとの連携強化

現状と課題

市町村が避難所運営と復旧・復興の両立

に苦慮

- 多数の市町村職員が避難所運営に忙殺され、復旧・復興への行政事務の実施が困難に。
- 住民による避難所の自主運営が実現できない場合も

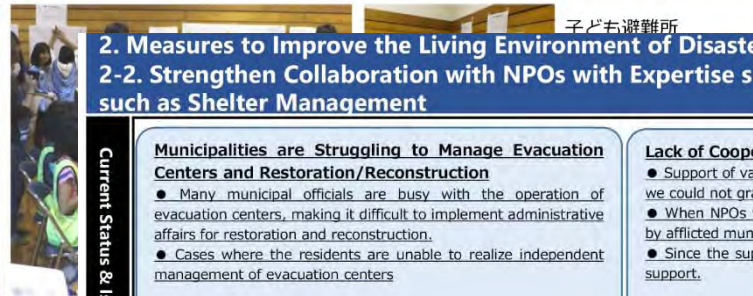
関係者間の連携不足

- 様々な医療等の支援が現地に入ったが、その形態は多様であり、支援活動の全体が把握できず、調整が困難。
- 避難所運営の支援に関するノウハウを有するNPOが被災市町村に受け入れられない場合も。
- 避難所毎に支援体制が異なるため、その支援内容に大きな差が存在。

実施すべき取組

○避難所の自主運営体制の確立

- ・ 住民が主体となって避難所の運営体制を構築し、市町村職員との役割分担を明確化。
- ・ 被災市町村の職員は、当該職員でなければ実施が困難な、復旧や復興に関する事務を優先。
- ・ 発災直後に自主運営ができなくても、一定程度状況が落ち着いた後は、NPO等と連携し、自主的な運営ができるよう働きかけ。



Current Status & Issues

2. Measures to Improve the Living Environment of Disaster Victims  
2-2. Strengthen Collaboration with NPOs with Expertise such as Medical Experts and Expert Knowledge such as Shelter Management

Municipalities are Struggling to Manage Evacuation Centers and Restoration/Reconstruction

- Many municipal officials are busy with the operation of evacuation centers, making it difficult to implement administrative affairs for restoration and reconstruction.
- Cases where the residents are unable to realize independent management of evacuation centers

Lack of Cooperation Among Related Individuals

- Support of various kinds of medical treatment, etc. was introduced on-site, but as it is diverse, we could not grasp the whole of support activities and adjustment is difficult.
- When NPOs with know-how on support for evacuation center management are not accepted by afflicted municipalities.
- Since the support system differs for each shelter, there is a big difference in the contents of support.

避難所運営の支援者等の連携強化

- 避難所運営に関する有識者からなる「避難所エキスパート」の把握と改善等をアドバイスする仕組みを構築
- 市町村は、事前の段階から避難所の設置・運営体制を速やかに実施するため、関係部署や関係団体等との連携を強化
- 避難所運営支援のノウハウを有するNPOの活動事例の共有

Efforts to be Carried Out

○Establishment of Voluntary Management System of Evacuation Shelters

- ・ Residents took the initiative to build a management system of evacuation centers and clarify the division of roles with municipal officials.
- ・ Employees of disaster municipalities have priority over affairs concerning restoration and reconstruction, which are difficult to implement unless they are the staff involved.
- ・ If self-management is not possible immediately after the disaster, work together with the NPO after the situation has stabilized to a certain extent, to encourage self-management.



Child evacuation center Operation camp (Yokohama)

Drills for evacuees and children to think about themselves in managing evacuation shelters

Strengthening Collaboration Among Shelter Management Support Staff

- Establish a "evacuation center expert (tentative name)" consisting of experts on the management of evacuation shelters, and establish a mechanism to grasp the operation status of evacuation shelters and to make improvements even after a disaster, in addition to normal times.
- Municipalities shall establish an evacuation shelters establishment and management system from the preliminary stage and after the disaster, in addition to sharing the tasks of evacuation shelters, in order to implement countermeasures promptly, regularly with related departments and related organizations, and to conduct a regular meeting promptly after the disaster.
- Create a collection of examples of activities of NPOs with know-how on shelter management support and disseminate them throughout the country.



## 2. 被災者の生活環境を改善するための措置

### 2-3. 避難所の生活環境の確保・避難者への適切な情報提供

現状と課題

#### 指定避難所の混乱

- 災害時に、多様なニーズを持つ避難者が大量に避難するため、避難所は混乱。
  - ※ 極度な過密のため、高齢者や女性、子育て世帯への配慮が困難
  - ※ トイレ等の衛生管理や、感染症に備えて隔離スペースの確保が困難
  - ※ ペット同行者について、全ての避難所で十分な対応は困難。

#### 様々な状況変化への対応が困難

- 避難所において、環境改善のための運用の見直しや追加的な対策が困難な場合も。
- 避難者がスペースを確保すると、分離スペースの確保等の追加的な対策が困難な場合も。
- 様々な関係者が情報を個別に持ち寄り、避難者が欲しい情報を的確に入手することが困難に。
- 復興を見据えた道筋が見えず、避難者の不安が増幅している場合も

実施すべき取組

#### 避難所運営に関する事前準備

- 避難所運営の関係者が連携して行う、必要な機能を考慮した利用計画の策定を推進

#### 発災後の避難所運営力の強化

- 福祉避難スペースの不足等が発生した場合、避難所の利用方法の見直しや被災者の移動について、NPO等の力を借りつつ、粘り強く理解を得る必要。
- ・ トレーラーハウスやユニットハウス等の活用も有意義。
- ・ 自衛隊は、大型テント等の提供や入浴サービス等が可能なため、可能な限り、被災者支援を実施。

#### 避難者への対応

- 避難所をやすく
- 市町村(者へ直



手

Current Status & Issues

Efforts to be Carried Out

## 2. Measures to Improve the Living Environment of Disaster Victims

### 2-3. Securing the Living Environment of Evacuation Shelters/Providing Appropriate Information to Evacuees

#### Confusion of Designated Evacuation Shelters

- Evacuation shelters become confused as evacuees with diverse needs evacuate in disasters in large quantities.
  - ※ Due to extreme overcrowding, care for elderly people, women, parenting households is difficult
  - ※ Hygiene management such as toilet and difficulty in securing isolation space for infectious diseases
  - ※ It is difficult to deal with pet companions sufficiently at all evacuation shelters.

#### Difficult to Respond to Various Situational Changes

- Cases where it is difficult to review operation for environmental improvement and additional countermeasures at evacuation shelters.
- Even if evacuees secure space, additional measures such as securing of separation space are difficult.
- It is difficult for various related individuals to bring in information separately and to obtain accurate information that evacuees want.
- Cases where the path to reconstruction is not visible, and the anxiety of evacuees is amplifying

#### Preliminary Preparation Concerning Evacuation Center Management

- Promoting the formulation of usage plans taking into consideration the necessary functions that collaborate among related individuals in evacuation center management

#### Strengthen Shelter Management Ability after Disaster

- When shortage of welfare evacuation space occurs, it is necessary to tenaciously acquire understanding while reviewing the method of using evacuation centers and moving disaster victims, with the help of NPOs and others.
  - ・ The use of trailer houses and unit houses etc is also meaningful.
  - ・ Since the SDF is capable of providing large tents and bathing services, the Self Defense Force will support victims as much as possible.

#### Provide Accurate Information to Evacuees

- Borrowing the power of the operation support person of the evacuation center, manage various information and goods in an easy to understand manner
- Municipalities should offer information on restoration and reconstruction directly to evacuees at various stages.



Handmade bulletin board (Mashiki town)



Trailer house (Mashiki town)



2. 被災者の生活環境を改善するための措置

2-4. 要配慮者の避難を地域で支える仕組み

現状と課題

要配慮者の円滑な避難が困難

- (事例) ●要配慮者の所在が把握できていない。
- 福祉避難スペースなどが無い一般の避難所に要配慮者が避難。
  - 支援者の被災などにより、避難行動要支援者の避難誘導が不十分。
  - 一般避難者が福祉避難所に避難しており要配慮者を収容できない。
  - 施設自体の被災等により福祉避難所が開設できない。

福祉避難所として利用可能な宿泊施設等について十分な活用が図られていない

- 要配慮者が利用可能な施設について、発災後の状況把握は困難。

福祉避難所の課題

- 市町村との連携が不十分で、福祉避難所開設の判断が困難。
- 福祉避難所に一般の避難者が多数避難し、必ずしも福祉避難所としての機能が十分に果たせない場合も。

実施すべき取組

要配慮者の情報の把握や発災後もケアを継続する取り組みの推進

- 災害時には本人同意なしでも避難行動要支援者名簿情報の支援者への提供ができることの周知徹底と地域の団体等との連携強化。
- 保健衛生部局とケアマネージャーや相談支援事業者等との連携による継続的なケア。

要配慮者をケアする体制の強化

- デイサービス施設や宿泊施設等と福祉避難所の確保のための協定締結を促進。
- 発災後、要配慮者の状況を把握し、順次、適切なケアが可能な施設や場所への誘導。
- 福祉避難所に対する地域の協力体制の構築や認識の向上。
- 福祉避難所として利用する宿泊施設等について、短期間や地域コミュニティ単位の活用など、利用しやすい環境を整備。

Current Status & Issues

Efforts to be Carried Out

2. Measures to Improve the Living Environment of Disaster Victims  
2-4. Mechanism to Support the Evacuation of Those who Require Consideration in the Community

Difficulties in Smooth Evacuation for Those who Require Consideration

- (Case) ● It is not possible to grasp the location of persons who need consideration.
- Safety evacuation is required for general evacuation centers without welfare evacuation spaces.
  - Evacuation guidance of evacuation action for persons who require consideration is inadequate due to the support person's disaster, etc.
  - General refugees are evacuating to welfare evacuation centers and can not accommodate persons who require consideration.
  - Welfare evacuation centers can not be established due to the damage of the facility itself.

Issues of Welfare Evacuation Shelters

- Collaboration with municipalities is inadequate, making it difficult to decide to establish a welfare evacuation shelter.
- Cases of evacuation of general evacuees to welfare evacuation shelters, even if the functions as welfare evacuation shelters can not be fulfilled sufficiently.

We Have Not Been Able to Fully Utilize Accommodation Facilities that can be Used as Welfare Evacuation Shelters

- It is difficult to grasp the situation after disaster for facilities that can be used by persons who require consideration.

Promotion of Measures to Care for Persons Who Need Consideration and to Continue Care Even After Disaster

- Spreading knowledge of a list of those who require support during evacuation activities, so that the support workers can act even without the individual's consent during a disaster, and strengthening cooperation with local organizations.
- Continuous care through collaboration with the Department of Health and Sanitation, care managers, and consultation support companies.

Strengthening the System to Care for Those who Need Consideration

- Facilitate creating agreements to secure welfare evacuation shelter agreements with day service and accommodation facilities.
- After the disaster, grasp the situation of the persons who need consideration, and guide them to facilities and places where appropriate care can be taken.
- Building a regional cooperation system for welfare evacuation shelters and improving awareness.
- Improvement of environment for accommodation, such as short term use and utilization of local community unit.

益城町 避難所対策チーム TEL 090-11083-9342  
総合福祉課 9:30~17:00

1週間以上が  
おススメです！

益城町から避難所の皆様へ  
仮設住宅が整備される間、少年自然の家や旅館などにしばらく避難しませんか！  
益城町の避難所は過密状態に陥ります！

- 感染症の危険が高くなります。
- 悪臭のスペースが狭く、ストレスが高くなります。
- 避難の危険が高くなります。
- 活動量が減り、免疫力の低下や便秘につながります。

益城町では、特に高齢者の方、障がいのある方、妊娠中や小さなお子様の避難者の方を対象に下記のような避難所を開設しています。

A	B	C
玉名市・山形市の福祉避難所等 最大16名 (他の避難所についても現在調査中)	天草市下田温泉の福祉避難所 300名程度 (他の避難所についても現在調査中)	宇治市豊野分岐自然の家 最大16名 (他の避難所についても現在調査中)
床の敷き替えや介助が必要 の方が避難できます。	1泊からの宿泊も可能です。毎日出発。 ○1日3食(1泊の場合は2食)付き	世界単位での避難が可能です。 要支援者である必要はありません。
○前泊料 無料 ○要介護者1名と介助者1名が避難 できます。	○要支援者1名との家族は無料 ○障害者のみの避難は1人2,000円(税別) ○毎日無料送迎	○2泊以上1部屋8名程度 ○無料、お風呂あり、1日3食 ○送迎なし、駐車場あり、 仮設住宅建設まで避難できます。
○送迎 あり メリアマネージャーによる確認があります。	○送迎時間 自家・益城町内 14:00、下田発9:00 乗降場: 総合体育館前、広安小、広安西小 保健福祉センター(ほびねす)	

※要支援者: 65歳以上の方、未就学児、障がいのある方、妊娠中の方を指します。介護認定の有無は問いません。  
「仮設住宅」や、「今後の復興の取組」などは、新しい避難所でも情報提供されます！

申込みは電話

"Evacuation for awhile" information leaflet



### 3. 応急的な住まいの確保や生活復興支援

#### 3-1. 応急的な住まいの確保や生活復興支援

課題  
現状と

##### 住宅等の被害に関する各種調査に係る混乱や被害認定調査に要する職員の不足

- 住宅に係る様々な調査に関する違いについて住民の認識が不足。
- 住家被害認定調査に時間を要し、応急的な住まいに関する意思決定が困難な場合も。

実施すべき取組

##### 住家被害認定調査の迅速化

- 住宅等の被害に関して、応急危険度判定の際に記録した調査表の共有等、各調査の情報共有等による効率化を検討。
- 住家被害認定調査の調査員について、都道府県毎に養成・登録する仕組みの構築や、建築関係団体等との連携、間口の拡大による従事者の確保。
- 罹災証明書の現地調査と判定作業の区分化やシステムの活用による、罹災証明書交付の迅速化を推進。

### 3. 応急的な住まいの確保や生活復興支援

#### 3-2. 生活再建のための戦略的な対応

課題  
現状と

##### 応急的な住まいの確保やその後の生活再建が困難な場合も

- 事前の準備不足や状況の変化によって応急仮設住宅の建設に時間を要した場合
- 被災者の中には、最終的に新たな住宅の建設が困難になる高齢者世帯等、最終的に

実施すべき取組

##### みなし仮設住宅の利用促進や応急仮設住宅に係る事前準備

- 民間住宅の活用可能な都市部等ではみなし仮設住宅の利用を促進。
- 応急仮設住宅を速やかに建設できるよう、平常時から、用地の確保計画や必要な仕様について設定すべき。
- 応急仮設住宅に関し、メンテナンスや撤去を含めた全体費用の抑制や自助努力による負担低減。

##### 被災者の生活再建

- 市町村は、応急仮設住宅の継続的に把握する。
- 住宅新規建設が困難な場合は、民間の力を活用し、連携を進めるとともに、
- 応急仮設住宅に必要となる生活再建の観点から必要な自助努力の検討すべきである。

### 3. Secure Emergency Housing and Lifestyle Restoration Assistance

#### 3-1. Secure Emergency Housing and Support for Lifestyle Restoration

Current Status & Issues

##### Turmoil concerning various investigations on damage such as houses and the lack of staff required for damage inquiry survey

- Residents' awareness of the differences related to various housing-related investigations is insufficient.
- It takes time for residential damage assessment surveys, and there are cases where it is difficult to make emergency decisions regarding housing.

Efforts to be Carried Out

##### Accelerate Investigations on Residential Damage

- Consider efficiency improvement by sharing information on each survey, such as sharing the survey table recorded at the time of emergency risk assessment, regarding the damage of houses and others.
- Constructing a mechanism to train researchers in the survey on residential property damage assessment for each prefecture, cooperation with building related organizations, etc. due to expansion of frontage
- Securement of workers.
- Promote the speedy delivery of mitigation certificates by segmentation of on-site certification examination, judgment work, and system utilization.

### 3. Secure Emergency Housing and Lifestyle Restoration Assistance

#### 3-2. Strategic Response for Lifestyle Restoration

Current Status & Issues

##### Cases Where it is Difficult to Secure Emergency Housing or Restore the Lifestyle Afterwards

- Cases where it took time to construct emergency temporary housing due to lack of preparation or changes in circumstances.
- Some victims may have difficulties in finally building a new home, such as elderly households, and ultimately it is difficult for them to rebuild their lives on their own.

Efforts to be Carried Out

##### Promoting the Use of Post-Disaster Public-Funded Rental Accommodation and Preparation for Emergency Temporary Housing

- Promote the use of post-disaster public-funded rental accommodation in urban areas where private housing can be utilized.
- In order to promptly construct emergency temporary housing, plans should be set to secure land and required specifications from normal times.
- In regards to emergency temporary housing, reduce the burden by suppressing the overall expenses including maintenance and removal, and through self-help efforts.

##### Creating a System to Advance Disaster Victims' Lifestyle Recovery Support

- Municipalities need to continually grasp various circumstances of the victims and improve their support systems even after moving to emergency temporary housing.
- As for living support for elderly households where it is difficult to newly build houses, we should consider cooperation with the welfare department, including payment for emergency temporary housing etc.
- For emergency temporary housing, necessary reviews should be done from the viewpoint of suppressing the total cost, including the removal. Furthermore, various methods should be studied to promote public expenditure reduction and to reduce the burden by self-help efforts of victims.



## 4. 物資支援のあり方

### 4-1. 地方公共団体の被災状況を考慮した物資支援

現状と課題

#### 末端までを考えた物資支援の実現が困難

- 熊本県の広域物資拠点が被災し使用不可能に。市町村の地域内輸送拠点や避難所までの輸送を行うにあたり、混乱が発生。
- 複数の物流事業者や自衛隊、地方公共団体、NPO等の多様な主体が物資輸送を担ったが、度々役割分担が変更になり、最適な物流システムの構築が困難。
- 被災地内の地域内輸送拠点では様々な物資を小分けする積み替え作業が困難な場合も。

#### 輸送システムの全体最適化

- 発災直後は、まず避難所までの太い物資輸送の動脈を確保する必要。
- 国と地方公共団体は、物流事業者等と連携し、避難所までを視野に入れた物資輸送の最適化が必要。
- 大規模災害時の物資輸送は、指定避難所や地域内輸送拠点までを原則とし、指定避難所以外の住民には個別に取りに来てもらう必要。

#### 被災地での負担を低減させるための対策

- 被災地内の輸送拠点での積み替え作業を低減させるため、  
※調達段階で、積み替えやすい段ボール箱等の活用  
※広域物資輸送拠点から大規模避難所への直接配送  
※広域物資輸送拠点において避難所毎の物資仕分等についても、検討することが必要。

#### 物資輸送拠点の選定や運営に関する物流事業者との連携

- 広域物資輸送拠点は災害時に速やかに使用できるよう、物流事業者の管理する物資拠点の活用や公的施設の場合は物流事業者の人員の派遣等について協定締結を図るべきである。
- 想定した輸送拠点が使用できない場合に備え、物流事業者の管理する物資拠点をリスト化しておくべきである。



Current Status & Issues

#### 4. Method for Goods Support

##### 4-1. Goods support considering the damage situation of local public organizations

#### Difficult to Realize Goods Support to the End

- The Kumamoto prefecture wide-area supply base was damaged and unusable. Confusion occurred when transporting to the local transportation bases and evacuation centers of municipalities.
- Various entities such as multiple logistics companies, SDF, local public entities, NPOs, etc. have been responsible for transporting goods, but the roles are often changed, making it difficult to construct an optimal logistics system.
- In transportation bases within the afflicted area, even if it is difficult to transship work to subdivide various supplies.

#### Total Optimization of the Transportation System

- Immediately after a disaster, it is necessary to secure an artery for transportation of thick materials to the shelter first.
- The national and local governments need to optimize the transportation of goods in collaboration with logistics operators, etc., with a view to evacuation centers.
- In principle, transportation of goods at large-scale disasters should take place up to designated evacuation centers and transportation bases within the area, and residents at places other than the designated evacuation shelters will need to come separately.

#### Measures to Reduce the Burden on Disaster Areas

- In order to reduce transshipment work at transportation bases within the afflicted area,
  - Utilization of cardboard boxes that are easy to transship at the procurement stage
  - Direct delivery from a wide-area goods transportation base to a large-scale evacuation center
  - It will also be necessary to examine the possibility of goods sorting by evacuation center at wide-area transportation base

#### Collaboration with Logistics Companies Concerning the Selection and Operation of Goods Transportation Bases

- In order to promptly use the wide-area transportation base in the event of a disaster, we should try to conclude an agreement for the utilization of material bases managed by logistics providers, and dispatching personnel of logistics companies in the case of public facilities.
- In preparation for cases where the assumed transportation bases can not be used, the resource bases managed by logistics providers should be listed.



Base location map during the Kumamoto Earthquake

実施すべき取組

Efforts to be Carried Out



## 4. 物資支援のあり方

### 4-2. 避難者に物資を速やかに届ける仕組みづくり

現状と課題

#### 被災地への物資到着状況が把握できない

- 国は支援物資がどの程度届いているか不明であった一方で、地域内輸送拠点や避難所では物資の管理や仕分作業が混乱した。

#### 物資の情報管理システムの構築

- 国や地方公共団体、民間物流事業者、物資調達企業がそれぞれ情報を入力し、情報共有できる物資調達・輸送調整等支援システムを構築。
- 地方公共団体が保有する公的備蓄についても管理するとともに、地域ニーズを把握するためのWebシステム等との連携する。

#### 道路関係情報等を活用した効率的な輸送ルートの検討

- 緊急輸送道路等の重要な道路について、カメラ等の増強による被害情報の迅速な情報収集や通行可能な道路の情報提供の強化が必要である。
- 国は、道路関係情報や給油の状況について情報を集約し、効率的なルートの検討への利用が必要である。
- 被災地への国の緊急物資輸送に用いられる車両に一般車両外の位置づけを付与すべき。

#### 《共有する情報》

- 関係機関の担当者情報 ・ 所属、氏名、連絡先など
- 調達物資に係る各種情報 ・ 物資情報（数量・品目）、拠点情報（納入先・搬出先）  
事業者情報（供給事業者・輸送事業者）、進捗ステータス

#### 大規模災害の発生

地方公共団体からの物資・輸送支援要請情報・政府判断による物資支援情報等

物資調達・輸送調整等支援システム

物資調達

品名	数量	品目	納入先	搬出先	事業者	進捗
食糧	100kg	米	〇〇〇〇	〇〇〇〇	〇〇〇〇	〇
衣類	500件	防寒着	〇〇〇〇	〇〇〇〇	〇〇〇〇	〇
医薬品	100箱	救急箱	〇〇〇〇	〇〇〇〇	〇〇〇〇	〇
その他	〇	〇	〇	〇	〇	〇

Current Status & Issues

#### 4. Method for Goods Support

### 4-2. Creating a Mechanism to Promptly Deliver Supplies to Evacuees

#### Unable to Grasp the Goods Arrival State in the Afflicted Area

- It was unknown to what extent the state had received relief supplies, so the management and sorting of goods were confused at the transportation bases and evacuation shelters in the area.

#### Construction of an Information Management System for Goods

- Building a support system for material procurement, transportation adjustment, etc. where national and local governments, private distribution companies, goods procurement enterprises can input information and share information.
- We will also manage public stockpiles owned by local governments and cooperate with internet systems etc. to grasp local needs.

#### Efficient Transport Route Utilizing Road Related Information

- For important roads such as emergency transportation roads, it is necessary to promptly collect information on damages by strengthening cameras and the like and strengthen information provision on roads that can be taken.
- The central government needs to gather information on road related information and refueling situation, and use it for efficient route consideration.
- Positioning outside the general vehicle routes should be given to vehicles used for transporting emergency supplies to the affected areas.

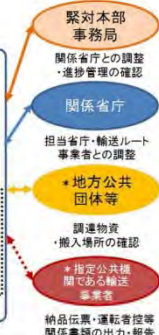
Efforts to be Carried Out

#### 大規模災害の発生

地方公共団体からの物資・輸送支援要請情報・政府判断による物資支援情報等

物資調達・輸送調整等支援システム

物資調達調整シートで各種情報を集約・共有



《Information to be Shared》  
 ○Personnel information of related organizations ・ Affiliation, name, contact details, etc.  
 ○Various information on procurement goods ・ goods information (quantity, item), base information (supplier, destination)  
 Business operator information (supplier / transport operator), progress status etc.

支援物資の迅速な供給

\* 輸送事業者とのオンライン接続は、今後検討

Fig.: Goods procurement and transportation adjustment support system (Cabinet Office)



#### 4. 物資支援のあり方

### 4-3. プッシュ型支援の改善

現状と課題

#### プッシュ型支援の課題や善意の物資支援による被災地の負担

- プッシュ型支援は、被災地に一定程度物資が充足し始めると、地方公共団体の拠点や避難所が支援物資であふれて混乱したり、物資が利用されない場合がある。
- 他の地方公共団体や民間企業、個人等の様々な主体から送付された物資は、受け入れ市町村では、その管理や仕分けが混乱。

実施すべき取組

#### 物資支援手法の適切な切り替え

- 物流・流通の回復状況や地域のニーズに応じて、支援方策を変更。
  - ◇ プッシュ型支援 → プル型支援  
被災者ニーズの把握が可能となった時点
  - ◇ プル型支援 → 現地購入  
スーパーマーケット等の小売機能が回復し、被災者ニーズに対応可能となった時点

#### 被災地が混乱しないよう個人や企業によるプッシュ型物資支援を抑制

- 発災直後は、被災者に必要な支援を速やかに提供する点を重視すべき。個人や企業による物資支援は、被災地内の輸送拠点での仕分けや輸送機関に負担となるおそれ。
  - ◇ 民間企業：物資の提供や炊き出し等について、自社等の輸送手段や社員等による自己完結型の支援を原則
  - ◇ 住民：義援金等の金銭による支援を原則

#### 4. 物資支援のあり方

### 4-4. より避難者ニーズに的確に応えるためのプル型支援・現地購入

現状と課題

#### 避難所の物資ニーズ把握が困難

- 避難所毎のニーズ把握が困難であったため、プッシュ型からプル型への支援の切り替えが遅れた。
- 発災6日後に導入が決定したタブレット端末について、地方公共団体はその使用に時間を要した。

方向性

#### タブレット端末や携帯電話等ICTの活用による現地ニーズの円滑な把握

- 被災地ニーズを速やかに把握するため、タブレット端末や携帯電話から操作可能なアプリ構築。

#### 4. Method for Goods Support

### 4-3. Improvements for Push-Type Support

Current Status & Issues

#### Tasks for Push-Type Support and the Burden of Affected Areas by Goods and Goods Support

- When push type support begins to satisfy the disaster area to a certain extent, the bases of the local public organizations and evacuation centers overflow with the support goods, which may cause confusion or supplies not being used.
- The municipalities accepting the goods that are sent from various local entities such as other local public organizations, private companies, individuals, etc. are confused about their management and sorting.

Efforts to be Carried Out

#### Appropriate Switching for Goods Support Method

- Change the support policy according to the recovery situation of the distribution, and the needs of the region.
  - ◇ Push type support → pull type support  
When it becomes possible to grasp the needs of the victims
  - ◇ Pull type support → local purchase  
When the retail functions of supermarkets etc. has recovered and it became possible to respond to the needs of the victims.

#### Restriction of Push-Type Goods Support by Individuals and Enterprises so that Disaster Areas are not Confused

- Immediately after the disaster, emphasis should be placed on promptly providing necessary support to the affected people. Supplies of goods by individuals and companies may be burdensome to sorting and transportation agencies at transportation bases within disaster areas.
  - ◇ Private enterprises: In principle, to provide self-contained assistance by means of transportation by employees, employees etc., about the provision of supplies and distribution of food, etc.
  - ◇ Residents: In principle, financial assistance such as monetary donations

#### 4. Method for Goods Support

### 4-4. Pull-Type Support to More Appropriately Respond to Evacuees Needs/Local Purchase

Current Status & Issues

#### Difficulty Grasping the Needs of Evacuation Shelters

- Because it was difficult to grasp the needs of each evacuation center, it took time to switch support from push-type to pull-type.
- For tablet devices that were introduced after six days after the disaster, local public entities were not used to using them and it took time to be fully utilized.

Direction

#### A smooth grasp of local needs by utilizing ICT such as tablets and cell phones

- In order to promptly grasp the needs of affected areas, applications that can be operated from tables and cell phones should be built in advance using ICT.



## 5. ICTの活用

### 現状と課題

#### 防災分野のICTの導入が進んでいない

- 災害対応について地域ニーズの複雑化や多様化が進んでおり、行政がその状況を把握し対策を講じるには、膨大な労力が必要。

#### 被災地域や避難者の動向、物資の状況把握等に課題

- 関係機関は様々な情報を所有しているが、組織間での情報共有が進んでおらず、車中泊などの動向や避難所のニーズ、物資の配送状況等の把握が困難。

#### ICTシステムの活用

- 発災後に急増する膨大な業務を効率的に進めるためには、様々な場面でICTの活用が不可欠。
- 災害時に活用するためには平常時から使用しておくことが望ましい。また、システム化にあたってのデータの入出力形式の標準化が必要。
- ビッグデータの活用による被災者の実態把握のためのシステム構築により支援活動を最適化する方策を検討。

#### 官民の関係機関が防災情報を共有・活用する「災害情報ハブ」の推進

- 災害時の情報ニーズや提供可能な情報リソースの全体像を把握するとともに、災害時にどのように共有できるかを整理。

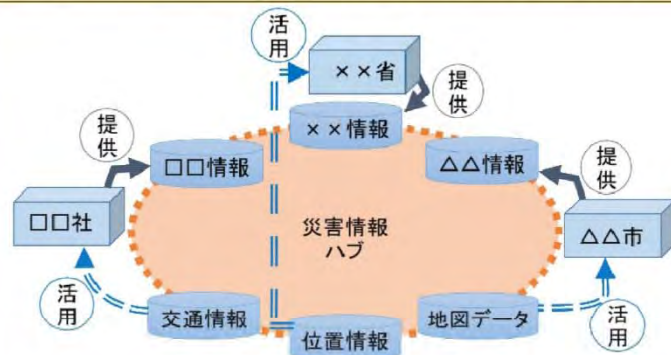


図 「災害情報ハブ」のイメージ（内閣府）

## 5. Utilizing ICT

### Current Status & Issues

#### The Introduction of ICT in Disaster Prevention Fields is not Progressing

- Regional needs for disaster countermeasures are becoming increasingly complicated and diversified, so enormous labor is required for the administration to grasp the situation and promptly implement appropriate countermeasures.

#### Trends in Affected Areas and Evacuees, Tasks for Grasping the Status of Supplies, etc.

- Although related organizations own various information, information sharing between organizations is not progressing, so it is difficult to grasp the trends such as those who spend the night in their vehicle, the needs of evacuation shelters, the state of delivery of supplies, etc.

#### Utilizing the ICT System

- In order to efficiently advance the enormous tasks that increase rapidly after the disaster, it is indispensable to utilize ICT in various situations.
- It is desirable to use it from normal time in order to use it in case of a disaster. In addition, it is necessary to standardize the input/output format of data in systemization.
- Consider ways to optimize support activities by constructing a system to grasp the actual condition of victims by utilizing big data.

#### Promotion of a "Disaster Information Hub" that Public and Private Organizations can Share and Utilize for Disaster Prevention Information

- Understand the information needs at the time of a disaster and the overall information resources that can be provided, and organize how they can be shared in the event of a disaster.

### Direction

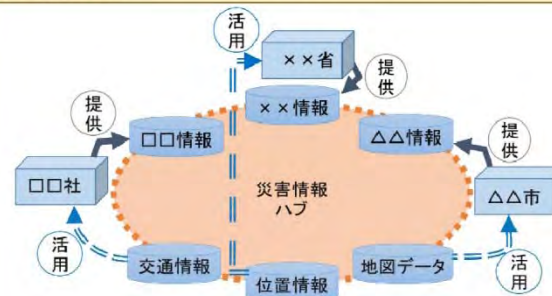


Fig.: Image of a "Disaster Information Hub" (Cabinet Office)



Small unmanned aircraft (drone)



## 6. 自助・共助の推進

現状と課題

### 個人の備えが不十分

- 地方公共団体や住民の備蓄が、発災後3日間の備えとして不十分。
- 家屋が被災した家庭のなかでは、公的支援だけでは、家屋の再建が困難な場合があった。

### ボランティアやNPO等が十分に活動できない

- 避難所運営に関する専門的知見を有するNPOもいるが、地方公共団体にとって初見のNPO等との関係構築は困難。

### 備蓄の推進

- 既存の家庭にある食材等を活用し、不足分のみを揃えたり、日々のストックを多めに確保する等、家庭内循環備蓄方式（ローリングストック方式）への発想転換。

例) 家庭内循環備蓄方式（ローリングストック方式）  
 普段の食事に利用する缶詰やレトルト食品などを備蓄食料とし、製造日の古いものから使い、使った分は新しく買い足して、常に一定量の備えがある状態を保つ方式。



### 住民の助け合い

- 発災直後における自治会等による家屋の被災状況や住民の安否情報の確認、発災後の物資の持ち寄り等、地域住民の共助の推進。

### NPO等の活動しやすい環境整備

- 平常時から地方公共団体とNPO等の連携を強化するとともに、災害時にNPO等が活動しやすい環境整備が必要。

### NPO/NGO等の連携・協働を行うための体制の構築

- JVOAD準備会※が熊本県域（一部大分県含む）で活動しているNPO/NGO等に対し呼びかけ、連携・協働を行うための会議「**熊本地震・支援**」した。  
 ※ JVA

- 以降、  
 ※6月別
- 内閣府  
 熊本県

「火の

## 6. Promote Self-Help and Mutual Assistance

Current Status & Issues

### Insufficient Personal Preparation

- The reserves of local public organizations and residents, for 3 days after the disaster, is insufficient.
- Among families affected by houses, it was sometimes difficult to rebuild houses through official support alone.

### Volunteers and NPOs Could Not Work Well

- Although there are NPOs with expertise on evacuation center management, it is difficult for local public bodies to establish relationships with NPOs upon a first meeting.

Efforts to be Carried Out

### Promotion of Emergency Reserves

- Households can utilize the "rolling stock method" - utilize their existing food stock, buy and store a little more than usual and replenish as necessary.

Ex: a household can utilize the "rolling stock method" - buy a little extra of canned and packaged foods that are usually used. Use them as the expiration date approaches and purchase enough to replace what was used. This will keep the stock at a fixed level.



### Residents Helping Each Other

- The promotion of community assistance by local residents, such as checking the damage situation of houses by self-governing associations and others after the disaster, the safety information of residents, and bringing supplies after a disaster.

### Maintaining an Environment for NPOs to Operate Easily

- In addition to strengthening the collaboration between local public organizations and NPOs from normal times, it will be necessary to develop an environment where NPOs can operate easily in the event of a disaster.

### Establish a structure to collaborate with NPO/NGO etc.

- The JVOAD Preparation Committee called for NPOs / NGOs etc. operating in the Kumamoto prefecture (including part of Oita prefecture) to hold a conference "**Kumamoto Earthquake - Supporting Organization Fire Country Conference**" (hereinafter referred to as "Fire Country Conference") on April 19 (Tue).  
 ※ JVOAD: Nationwide Disaster Volunteer Assistance Organization Network
- Since 9 PM every night, we report and adjust the activity area/activity contents and coordinate work that can complement each other. Number of Participating Organizations: 221 (as of June 5)
- ※ Held every day until June 14th. Since then, held on Tue and Thu every week. We hold a conference to share information between regions on a separate Wednesday.
- The Cabinet Office coordinated with Kumamoto Prefecture to establish the Fire Country Conference, and cooperate with NPOs and prefectures.

A look at the "Fire Country Conference"





## 7. 長期的なまちづくりの推進

災害に強いまちづくりを計画的に進めることが基本であるが、災害により被害が生じた際には復興が必要

事前の準備なく速やかに復興ビジョンを策定することは困難

- 災害からの復興にあたり、基本的なビジョンを早期に作成し、復興まちづくりを円滑に進めるため、復興ビジョンの策定方針などについて事前準備が必要。

### 長期的な観点に基づくまちづくりのための事前のケーススタディと専門家支援

- 市町村は、災害リスクの想定、復興まちづくりの基本的な進め方の検討、検討体制の準備、復興ビジョンの事前検討等に加え、復興まちづくりを担う職員の育成を行っておく必要がある。
- 国は、復興まちづくりイメージトレーニングの手引きや復興事前準備に、市町村に助言できる人材の確保や、発災時に円滑に専門家を紹介

事例) 「復興まちづくりイメージトレーニング」の実施

震災復興では、一刻も早く元の生活水準に戻りたいという個人の「生活復興」の視点と、脆弱な市街地の再生を防止し、良好な市街地として復興させざるべしとの「市街地復興」の視点が食い違うことが懸念される。この課題に対する事前の備えとして、県や市町村が「復興まちづくりイメージトレーニング」を実施する。

- ① 生活
- ② 市街地
- ③ 復興

- 復興まちづくりは、まちの将来を決めるものであり、災害をよりよく共有することに努めながら、計画的に進めていくことが必要。

## 7. Promotion of Long-Term Urban Development

Basic plans being implemented are to create a town that is strong against disasters, however it will be necessary to move forward with town building recovery in the event of damage from a disaster.

It is difficult to formulate a reconstruction vision promptly without preparing in advance

- In recovering from a disaster, it will necessary to prepare a basic vision at an early stage and to promote the smooth reconstruction of the town. However, in order to do so, it will be necessary to prepare in advance for policy to form a vision for reconstruction.

### Preliminary Case Studies For a Reconstruction Community Development Vision Based on a Long-Term Perspective and Expert Assistance

- Municipalities, in addition to the assumption of disaster risk, must look into the basics for reconstruction planning, preparation of an examination system, preliminary examination of reconstruction vision, etc., and also train personnel responsible for reconstruction planning.
- In addition to developing guidance on reconstruction planning and reconstruction preparations, the state should examine necessary systems for reconstruction. Furthermore, they will promote the securing of human resources who can advise municipalities, and the construction of a scheme that allows for the smooth introduction of experts at the time of disaster.

Ex: Reconstruction Town Development Image Training

In earthquake reconstruction, there will be the point of view of "personal living reconstruction" that wants to return to the original standard of living as soon as possible, and the viewpoint of "urban area reconstruction" that wants to restore a good urban area by preventing the regeneration of vulnerable urban areas. There is concern that these viewpoints will be mismatched. The prefecture and municipalities should implement 'Reconstruction town planning image training' as preparations for this problem in advance.

- ① 住民の視点で「生活再建シナリオ」の検討
- ② 行政の視点で「市街地復興シナリオ」の検討
- ③ 双方の視点で「復興シナリオ」を検討



- Reconstruction town development decides the future of the town and it is necessary to promote it systematically while striving to share the awareness of the disaster as an opportunity to promote better town development with residents.



## 8. 広域大規模災害を想定した備え

現状と課題

### 大規模災害への備えの不足

- 大規模な災害の発生時には、想定以上に多数の避難者が発生したり、災害時の拠点施設が被災して利用できない等によって、円滑な災害対応の実施に支障が生じる恐れ。

### 行政機能の回復が困難な市町村

- 発災後になかなか行政機能が回復できない市町村があった他、市町村の防災課が災害対応に忙殺されて、全庁的な災害対応が困難な場合も。

### 大規模災害を想定した備えの強化

- 災害時の拠点となる施設については、発災後に果たす機能を勘案して、建築物の構造の強度の確保や非構造部材の耐震対策等を実施すべき。
- 南海トラフ地震において、想定される支援物資の必要量が円滑に輸送できるよう、実践的な物資輸送戦略を構築すべき、具体的な応急対策活動に関する計画を見直し。

### 受援を前提とした体制整備や業務継続・事業継続のための災害対応力の強化

- 様々な事態の発生を想定し、外部からの応援の受入れを踏まえた災害対応を円滑
- 災害時の業務の優先順位付けを明確にして、最低限必要な通常業務を効率よく行の策定の推進。



被災した宇土市役所

## 8. Preparation Assuming Wide-Area Large-Scale Disasters

Current Status & Issues

### Lack of Provisions for Large-Scale Disasters

- The occurrence of a large number of refugees, more than were expected in advance, and facilities that were supposed to be used in the event of a disaster cannot be used due to the disaster, contribute to the possibility that a smooth execution of disaster response will be hindered.

### Municipalities that Experience Difficulty in Restoring Administrative Functions

- There were municipalities where administrative functions could not be recovered easily after the disaster, as the municipal disaster prevention division was busy dealing with the disaster, and it was difficult for the agency as a whole to handle disasters.

### Strengthening to Prepare for Large-Scale Disasters

- For facilities that will serve as a base in the event of a disaster, it is necessary to ensure the strength of the structure of buildings and take measures against earthquakes, etc. of non-structural components, taking into consideration the functions to be performed after the disaster.
- In the event of a Nankai megathrust earthquake, we reviewed the plan concerning specific emergency measures that should build a practical transportation strategy so that the necessary amount of supposed supplies can be transported smoothly.

### Strengthening Disaster Response Capabilities for System Maintenance Based on Support and Business Continuity

- Establish guidelines to facilitate disaster response based on acceptance of external support, assuming the occurrence of various situations.
- Promote formulation of business continuity plans (municipalities, enterprises) to clarify priorities of tasks at the time of disasters and to efficiently perform necessary minimum regular work.

Direction



Damaged Uto City Hall

