



生活復興過程と事前の備え : 阪神・淡路大震災後の 災害対策の変化

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神戸大学 震災復興支援・災害科学研究推進室第8回シンポジウム「阪神・淡路大震災から25年～
私たちは何を学び、どこへ向かうのか～」

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Recovery of affected communities and people and precautionary measures

生活復興過程と事前の備え

阪神・淡路大震災後の災害対策の変化

Changes in disaster countermeasures after the Great Hanshin-Awaji Earthquake



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Damage of the 1995 Great Hanshin-Awaji Earthquake

1995年の阪神・淡路大震災の被害

- **被災者に特に大きな影響のあったもの**

Events that had particularly great impact on affected people

- 大量の老朽木造住宅の倒壊 Collapse of old wooden houses
- 地震後の火災による被害拡大 Urban earthquake fires

- **大きな被害 比較的早期に復旧**

Major damage Relatively early recovery

- 交通網の寸断 Disruption of transportation network
- ライフラインの途絶 Malfunction of electricity and water supply

- **産業被害 → 関連する被災者への影響**

Industrial damage Impact on affected people

- 中小零細の産業 Major damage on Small and micro industries
- 大規模な工場、港湾施設 Large factories and port facilities

What most decided the aspect after the Great Hanshin-Awaji Earthquake?
阪神・淡路大震災後の様相を最も決定づけたのは？

- 震度7という激震(地震地域なのに**科学的事実の傍観**)
Severe earthquake **Ignoring scientific predictions of earthquakes** - despite being an earthquake area
- **耐震性に問題のある建物が多数**
Many buildings without earthquake resistance
 - 大量の住宅が倒壊・焼損 Massive houses collapsed and burned
 - 多くの死傷者(→**直接死**) Many casualties (→ direct death)
 - 多くの人々の苦しい避難生活(→**関連死**)
Distressed evacuation lives of many people (→ related deaths)
 - 大量の仮住まいの必要性和確保の困難性(→**コミュニティ崩壊**)
Necessity and difficulty of securing a large amount of temporary housing(→ No community)
 - 個人への支援体制が無い中での住宅再建
Rebuilding houses without support systems for individuals

What has become important as disaster countermeasures
その結果、課題となったこと → 事前の備え

- 老朽建物の耐震化 Seismic retrofitting
- 交通網・ライフラインの耐震化 Seismic strengthening of transportation networks and lifelines
- 木造密集地の防火対策 Fire prevention measures in densely populated wooden areas
- 災害医療体制の整備 Improvement of disaster medical care system
- 広域支援体制 Wide-area support system
- 産業・施設の事業継続計画 Business continuity plan for industry and facilities
- 災害時要配慮者への支援体制 Support system for people who need help during a disaster
- 仮住まいの供給体制 Temporary housing supply system
- 住宅再建の支援体制 Housing reconstruction support system
- 被災者への情報提供 Information provision system for victims
- 被災者が地域の復旧・復興を検討する体制 System for disaster victims to consider local restoration and reconstruction

備えるには？

How to promote measures?

法的枠組、行政計画
Legal framework,
administrative plan

訓練、地区防災計画
Training, community
disaster preparedness

地域状況の把握
Understanding the
local situation

取り組むべき方向
Direction to work on

地域での取り組み
Local initiatives

知見の不十分さ認識
Recognition of
insufficient knowledge

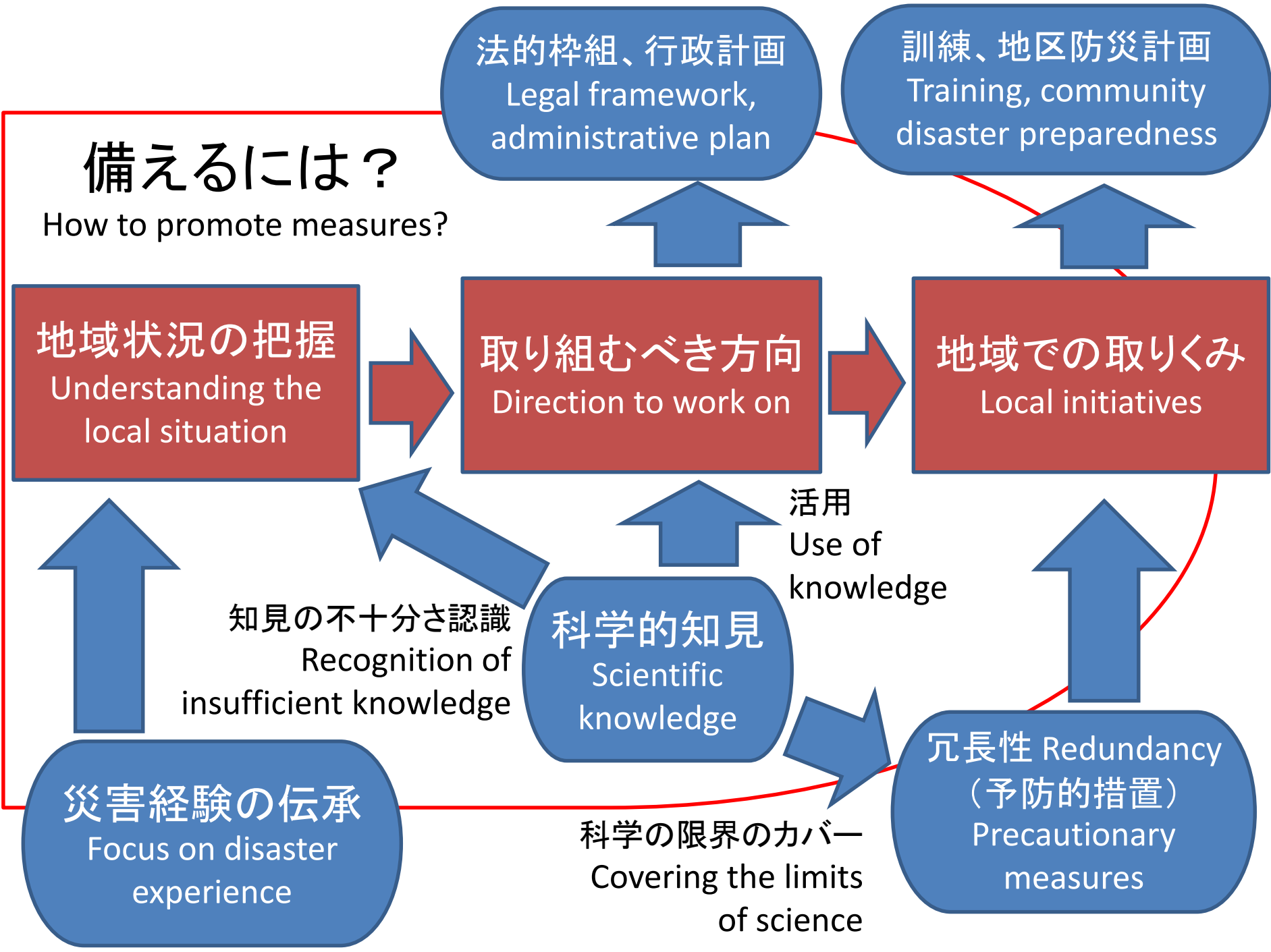
科学的知見
Scientific
knowledge

活用
Use of
knowledge

災害経験の伝承
Focus on disaster
experience

科学の限界のカバー
Covering the limits
of science

冗長性 Redundancy
(予防的措置)
Precautionary
measures



3000人の地域実習 インドネシアのロンボク島

Community training for 3,000 students-Lombok, Indonesia



減災デザインセンター

Center for Resilient Design (CResD)

- **避難所における災害時要配慮者に配慮したデザイン**
Designed for people in need of assistance at evacuation shelters
- **地震火災の危険性がある密集市街地の再生デザイン**
Improvement design of dense urban area with danger of earthquake fire
- **復興まちづくりにおける減災デザイン**
Disaster mitigation design in reconstruction
- **歴史的・伝統的町家がある市街地の安全デザイン** Safety design in the urban area with historic and traditional town houses
- **津波からのレジリエンスに関するデザイン**
Design for resilience from tsunami
- **山麓地域での土砂災害を考慮した地域居住デザイン**
Residential design considering landslide disaster in the foothills area
- **浸水危険地域でのグリーンインフラデザイン**
Green infrastructure design in flood-prone areas