

Geospatial Information for the Global Development Agenda

National Perspective: Japan's View

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Global Development Agenda

- 2030 Agenda for Sustainable Development, Sendai Framework for Disaster Risk Reduction, and Outcome of Cop21
 - All are important for the global community.
- However,
 - Why do we need to discuss them at UNRCC-AP?
 - What are they to do with National Geospatial Information Authorities (NGIAs)?
 - ...

Where NGIAs Stand Now

- Common Core Mission of Most NGIAs
 - To ensure accurate surveying throughout the country (Geodetic reference frame maintenance).
 - To ensure the availability of up-to-date, basic national geospatial database (National mapping).
 - ...
- Emerging Trends
 - Technologies have evolved to enable the industry and non-experts to provide geospatial information products and services similar to those provided by NGIAs.

Current Challenges

- Many products and services of the industry have diffused into many parts of the society.
- Many people are now happy with these services and less appreciate the NGIA's work than before.
- Some policy makers even become less confident in making the distinction between NGIA's products/services and those of the industry.

What NGIAs should Advocate

- NGIAs provide **Authoritative/Official, Reliable** geospatial information on which national policies/decisions are to be based.
 - However, just developing and updating geospatial data may not make this message strong enough to reach out to policy makers and the public.

How Best Can It Be Advocated?

- NGIAs need to actually show how NGIAs can support policy/decision making through authoritative/official, reliable geospatial information.
- Formal international agreements can make NGIAs much easier to be involved in policy/decision making processes.

Global Development Agenda

- Both 2030 Agenda and Sendai Framework have recognized the importance of geospatial information in their implementation.
- Countries are to monitor the progress of implementation through a number of indicators based on official data, which provides NGIAs with an opportunity to be involved in policy/decision making processes of high priority issues.

Example: Disaster Risk Reduction in Japan

- Japan is prone to many types natural hazards, which sometimes cause large disasters, claiming thousands of people's lives.
 - Once a disaster takes place, it becomes the top priority of the Government.



Example: GSI's Experience in DRR

- GSI started to work on DRR as early as 1960s.
 - Geomorphological maps have been developed to prepare for floods caused by typhoons.
- GSI has been increasingly involved in the emergency response phase by providing timely and accurate geospatial information on the impact of disasters through prompt actions
 - Over the years, policy makers have growingly recognized the important role of geospatial information and GSI.



Broken Levee and Flood on 10 Sep. 2015



Image captured from 4K video taken by UAV

Two Days after the Levee was Broken



Image captured from 4K video taken by UAV

Before/After the Flood

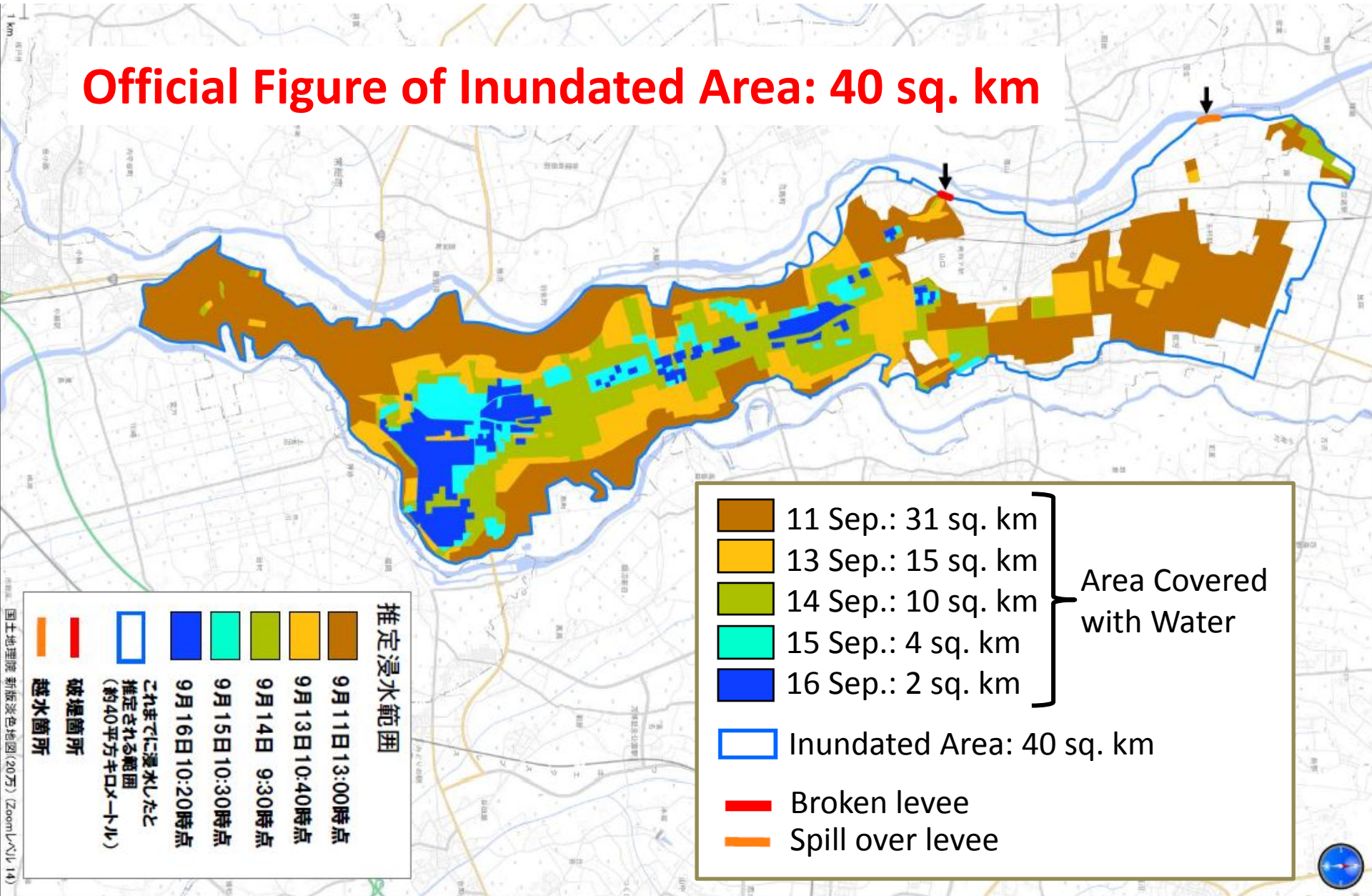


Need of the Government

- Measuring the area of inundated land.
 - Simple task anybody could do.
- Government doesn't want to have multiple figures on the same parameters.
 - Single official figures are needed for subsequent decisions like how many drainage pumping machines and workers are to be deployed.
- If GSI didn't provide it, others must have done it.

Measuring Impact and Recovery

Official Figure of Inundated Area: 40 sq. km



推定浸水範囲

9月11日13:00時点
9月13日10:40時点
9月14日 9:30時点
9月15日10:30時点
9月16日10:20時点

これまでに浸水したと推定される範囲 (約40平方キロメートル)

破堤箇所
越水箇所

11 Sep.: 31 sq. km
13 Sep.: 15 sq. km
14 Sep.: 10 sq. km
15 Sep.: 4 sq. km
16 Sep.: 2 sq. km

Inundated Area: 40 sq. km

Broken levee
Spill over levee

Area Covered with Water



Lessons Learned

- Just developing, updating and providing geospatial information, though they are very important work of NGIAs, don't necessarily make policy makers apply it for their decisions.
- We need to understand the policy makers' need to find out what we should deliver to them through the interaction with them in their decision making/problem solving processes.
 - In the case of disasters, this sometimes requires GSI for hard working to meet their need, but results in much recognition of the importance of geospatial information by the policy makers and the media, and above all contributes to disaster risk reduction.

Summary

- Both *2030 Agenda for Sustainable Development* and *Sendai Framework for DRR* has clarified priority issues to which NGIAs could contribute.
- Each NGIA is called to interact with policy/decision makers to find out their need, and to deliver what they need, particularly official figures, by applying the geospatial technology.

Thank you!!