Considering Civil Society Participation in GIAHS Conservation in the Digital era: A Case study of Crowdfunding Campaigns in Tokushima, Japan

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Background 1/2
GIAHS Conservation at the Forefront of Super-Aging (or Shrinking) Societies

Fig. Japan’s population from 1920 to 2010, with population projections out to 2060
SOURCE: MIAC, Japan 2018

Fig. Japan’s population structure by age group

Bio diversity crises in Japan

- Major causes of bio diversity crisis in Japan (Ishihama 2016)
  - Overuse of natural resources
  - Underuse of natural resources
  - Alien species
  - Global warming

Fig. Trend of Moving-in Population Overrun (1954-2014)
Agenda
How can we (re) organize Civil Society Participation in GIAHS Conservation?

Promote urban-rural migration

Past model

Rural population (permanent/strong commitment) - rural resident

Urban

Commitment/Participation

non-resident (tentative/weak commitment)
- tourists and other consumers in urban area

Interest/Loyalty

strong
weak

resident population

strong
weak

Fig. urban-rural migration
Agenda
How can we (re) organize Civil Society Participation in GIAHS Conservation?

- New stakeholders/actors in rural revitalization
- How can we define them?

Urban
- Weak
- Commitment/Participation

Rural
- Permanent/Strong commitment
- Rural resident

Fig. conceptual model of non-resident rural population
(based on Ministry of Internal Affairs and Communications Japan 2017)
Aim of this Presentation

- Considering Possibility of Crowdfunding Campaign as a tool for citizen participation in GIAHS Conservation
- ‘the strength of weak tie (Granovetter 1973:1377)’
  - “The personal experience of individuals is closely bound up with large-scale aspects of social structure, well beyond the purview or control of particular individuals”.
- Examine the impact of crowdfunding on wildlife management of GIAHS site in Tokushima.
Overview of the Area: Nishi-Awa Steep Slope Agricultural Heritage System, Tokushima Japan
Landscape of Nishi-Awa

- The villages are distributed across the mountainside.
- The elevation of these villages is approx. 300–700 m.
- The slope gradient is 30–40°.
- The inhabitants of the lowlands call this mountainous area “sora,” meaning “sky.”
- The area’s inhabitants have employed steep-slope agriculture instead of terrace farming.
Geological features

- The land of Japan sits on **plate boundaries**
  - Subject to serious **earthquakes**

- Located in **the central mountainous area of Shikoku Island**

- These mountains sit along **the Median Tectonic line**
Coping with hazards

(1) Fracture Zone formation

(2) Landslide/Collapse

(3) Soil formation

(4) Agricultural land use

Fig. Geological cross-section
Slope gradient and stability

Habitation in this mountainous area requires adaptation to the geological and climatological environment.

Fig. Distribution of villages
Using *kaya* straw to prevent erosion

Covering the ground with *Kaya* straw stored at conical hay stacks (*koeguro* or *guro*)
| Various farming implements are used to reverse the soil erosion and crush the gravel into soil | Reversing the soil erosion by using an unique farming implement ‘sarae’ | Making farming implements by local blacksmith |
Indigenous crop diversity

**Millets**
(finger millet, sorghum, foxtail millet, common millet, Japanese millet)
→ 40 varieties in total

- Corn
- Potato
- Buckwheat
- Cucumber
Communal land for *kaya* straw

**Plants:** 282 species

**Insects:** 241 species

**Birds:** 28 species

The communal land used for *kaya* straw cultivation supports various kinds of wildlife.
Socio-cultural practices
OTSUCLE: Academic Crowdfunding Site
Founded by Tokushima University, Japan
A Case of Crowdfunding Campaign

- **Project objective**
  - Commodify exterminated deer
  - Decline the costs of wildlife management in Tokushima

- **Period**
  - 2017.10.7-2017.11.12

- **Goal**
  - half a million JPY

- **Result**
  - 0.9 million JPY from 100 donors
How can we create the interest of potential participants?
### Spacial Distribution of Donors

#### Residential place of Donors (10/6-11/2)

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<th>Tokushima Residents</th>
<th>University staffs</th>
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- **Residents from other area**: Green bars indicate the number of donors from other areas.
- **Tokushima Residents**: Yellow bars indicate the number of donors from Tokushima.
- **University staffs**: Orange bars indicate the number of university staffs.
Creating the network of Interests
Challenge

- Crowdfunding campaign created the network of interests
- Offered a channel for participation (donating)
- Further Participation?

Fig. conceptual model of non-resident rural population

(non-resident population)
- (tentative/weak commitment)
  - tourists and other consumers in urban area
- (continual/intermediate commitment)
  - urban resident but ‘participate’ in rural governance
- (permanent/strong commitment)
  - rural resident

Commitment/Participation

Urban
- weak

Interest/Loyalty
- strong

Non-resident
- weak

Rural
- strong
Conclusion: Possibility of Crowdfunding Campaign as a tool for citizen participation in GIAHS Conservation

- No Sense of Place (Meyrowitz, J. 1985)
  - ‘de-territorialization’
    - Electric media have removed barriers and increased access to previously restricted information.
- Crowdfunding campaign created the network of interests both from the urban residents and residents of other rural areas.
- We should not simply consider crowdfunding as a tool for funding but also as a tool for creating the network of the interests.