

The Satoyama Initiative Regional Workshop in Africa
10-12 August 2015
Alisa Hotel, Accra, Ghana

The Satoyama Initiative and Societies in Harmony with Nature: Resilient Socio-ecological Production Landscapes for Africa

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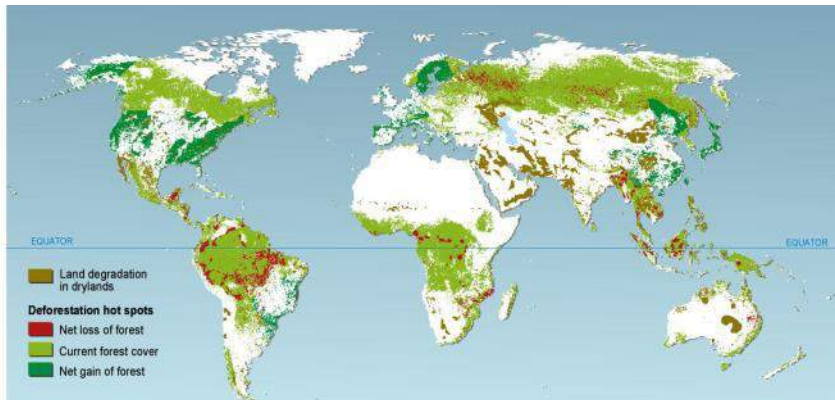
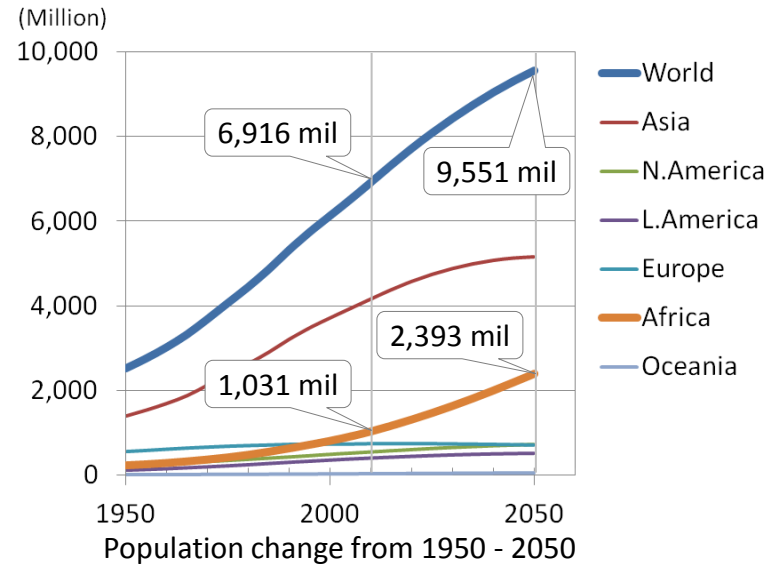
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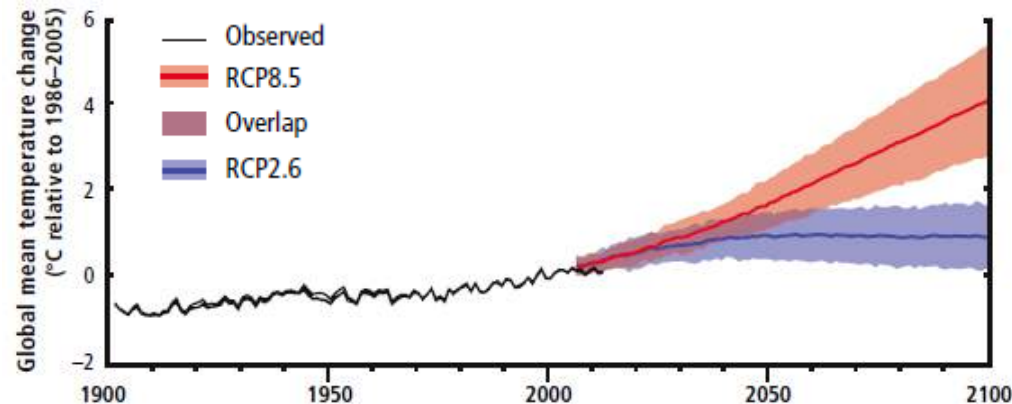
SAToyAMA
INITIATIVE

Interconnected Challenges Faced by the World

- **Population pressure**
 Increasing demand for food, water, and energy
- **Poverty**
 12% living on less than 1.25 US dollars/day (41% in Sub-Sahara Region)
- **Ecosystem degradation**
 Deforestation, land degradation, biodiversity loss, water resource scarcity
- **Climate change**
 Global warming, floods, droughts, wildfire



Deforestation hotspots
 (Source: Millennium Ecosystem Assessment)



Observed and projected future global annual average temperature relative to 1986-2005. (Source: IPCC AR5)

Traditional Natural Resource Management

- **Slash and burn system**
(e.g., *Chitemene*)
- **Shifting cultivation system**
(e.g., *Kebun-Talun* system)
- **Homegarden**
(e.g., *Pekarangan*)
- **Agro-sylvo-pastoral system**
(e.g., *Dehesa/Mondado*)
- **Sacred forest**
- **Transhumance system**
- **Mosaic landscape**
(e.g., *Satoyama* landscape)



Photo: Takeuchi

Chitemene in Zambia



Photo: Takeuchi

Agroforestry in Sudan



Photo: Takeuchi

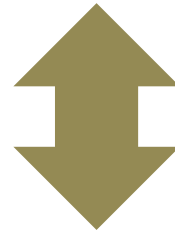
Satoyama landscape

Contrasting Problems



Overuse

- Overexploitation
- Mono-cropping
- Excess use of agrochemicals

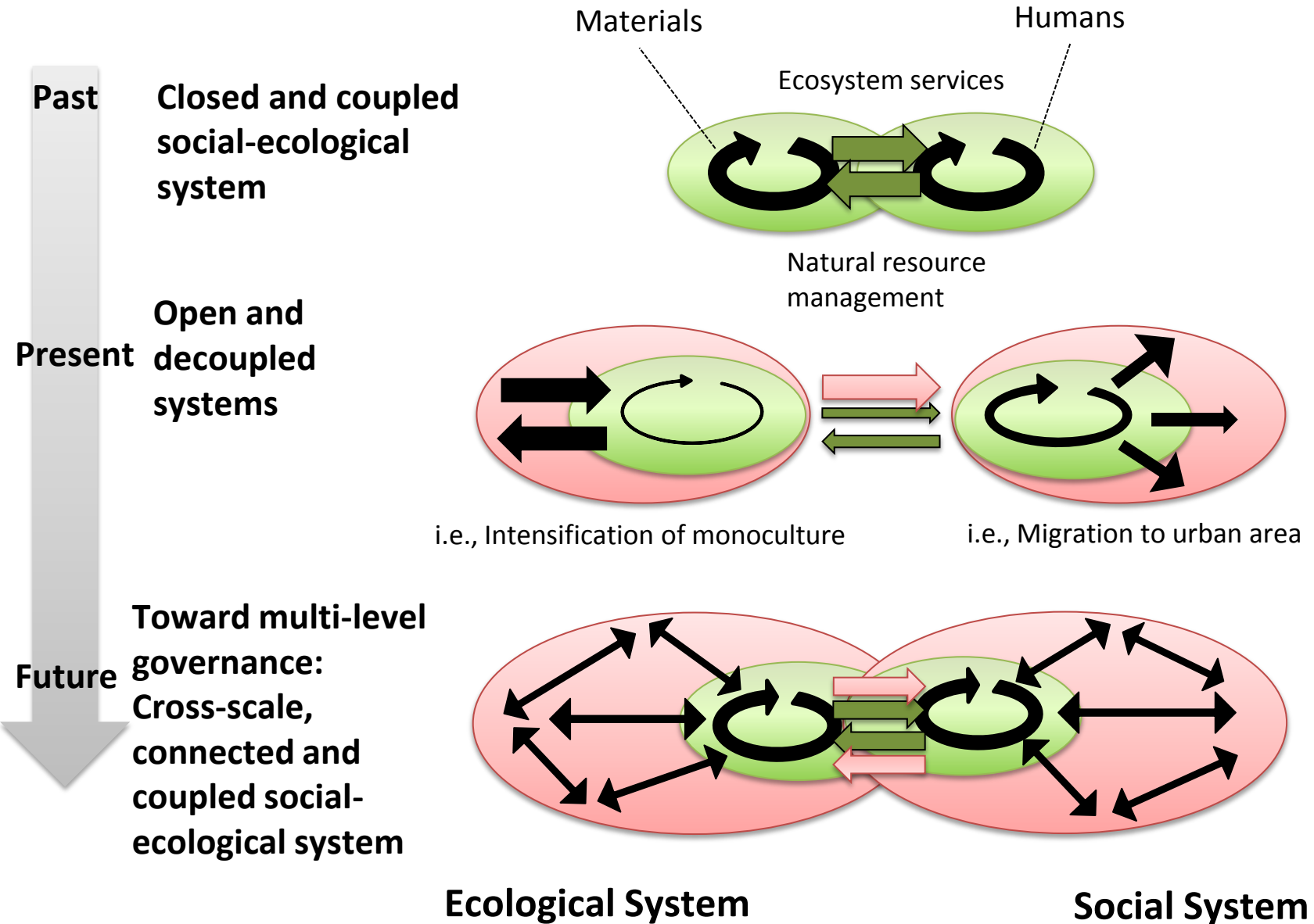


Underuse

- Abandonment of farmland
- Neglect of management of natural resources and related facilities (e.g., irrigation ponds and canals)



Changing Human-Nature Relationship



Research on Enhancing Resilience despite Climate and Ecosystem Changes

Wa West District

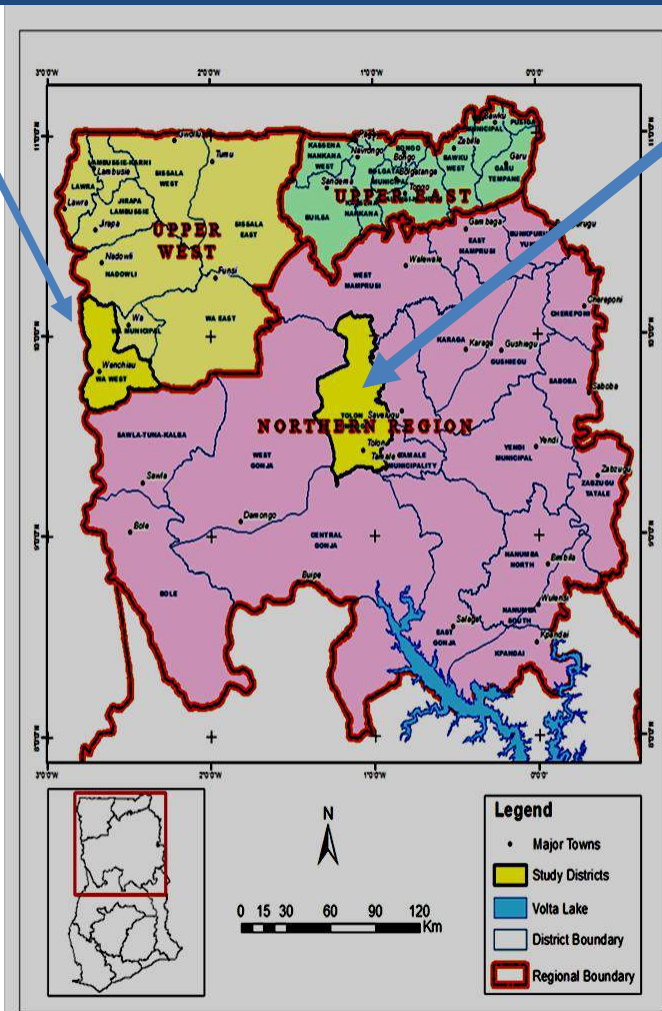
4 flood & drought prone communities

1	Bankpama
2	Baleufili
3	Chietanga
4	Zowayeli



Black Volta, Zowayeli community

Northern Ghana



Tolon District

6 drought prone communities

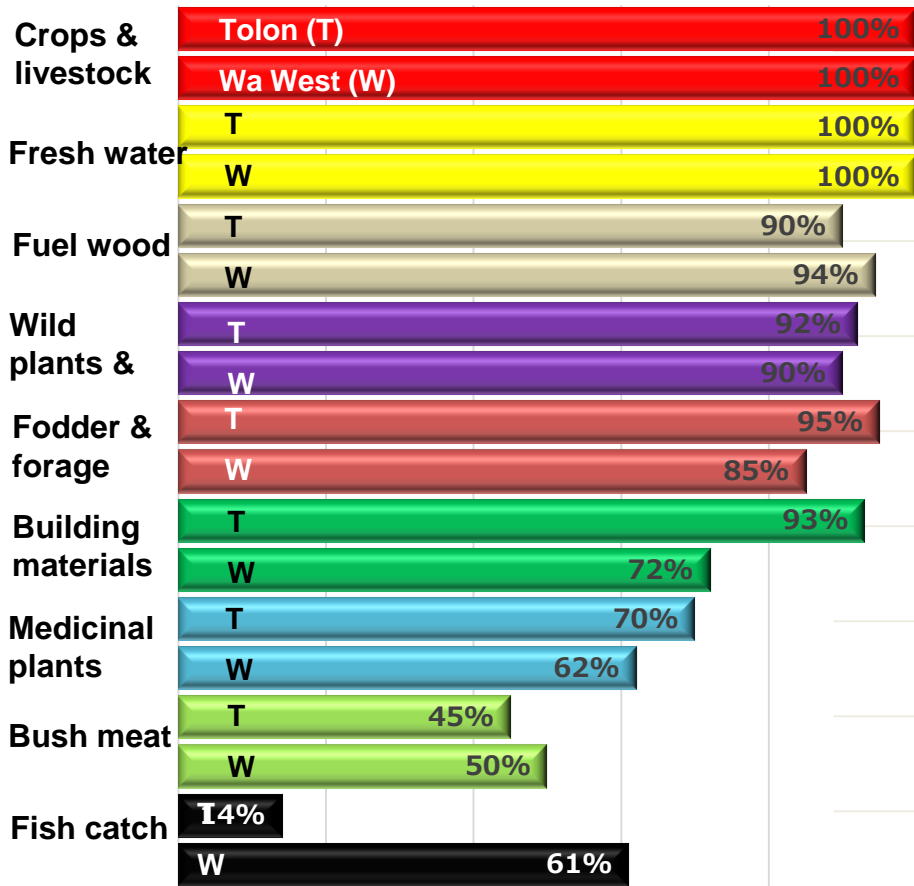
1	Yoggu
2	Kpalgun
3	Daboshie
4	Fihini
5	Zagua
6	Cheshagu



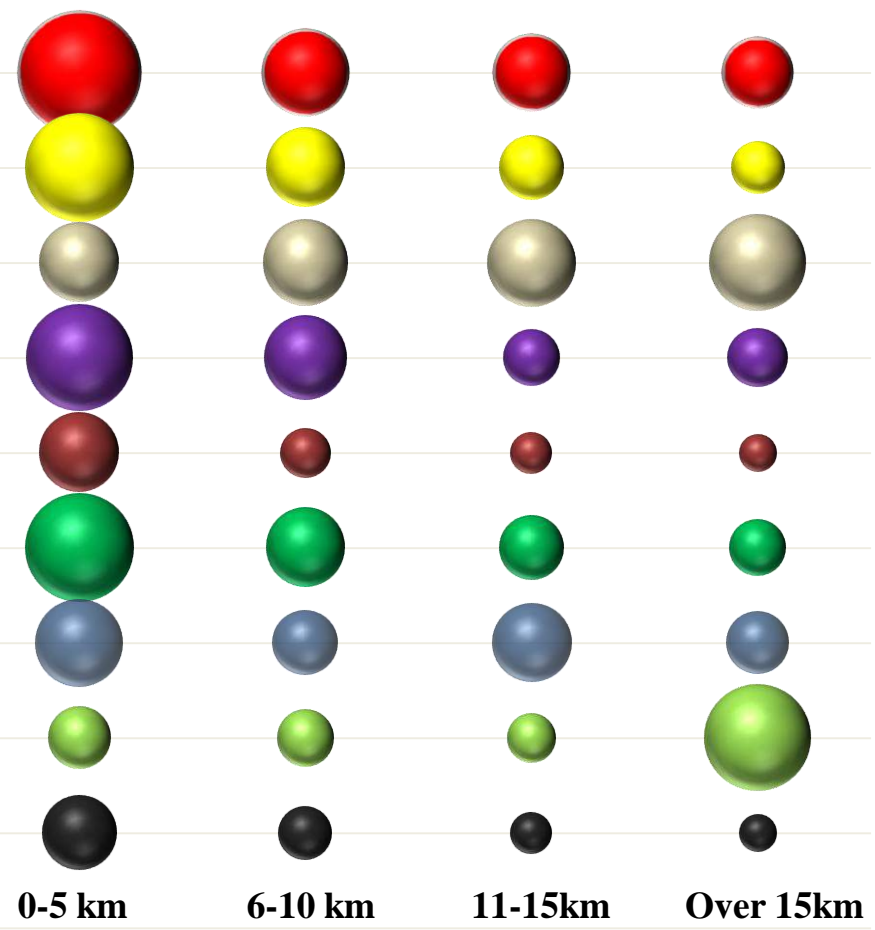
Woodlot, Yoggu community

Regional Ecosystem Services Assessment in Northern Ghana

Household collection & utilization of provisioning services



Distance traveled in km (no. of households)

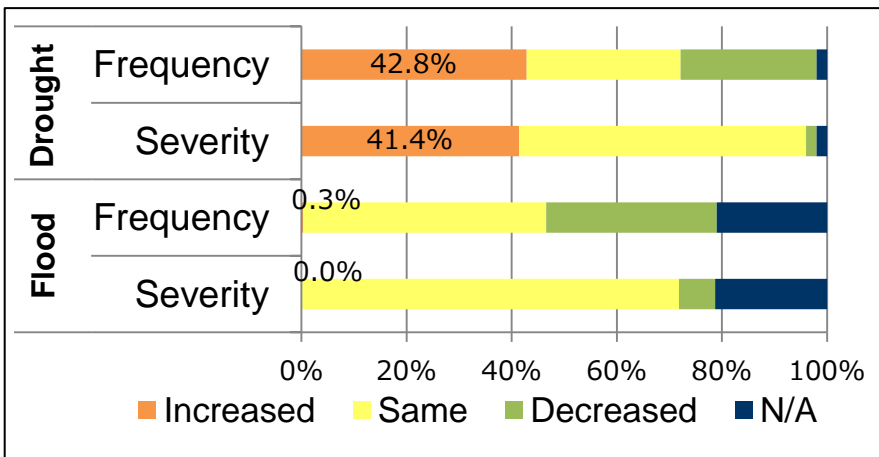


Boafo, Y.A., Saito, O., & Takeuchi, K.: Provisioning Ecosystem Services in Rural Savanna Landscapes of Northern Ghana: An Assessment of Supply, Utilization, & Drivers of Change. *Journal of Disaster Research*, 9(4): 501-515.

Perceptions of Droughts and Floods

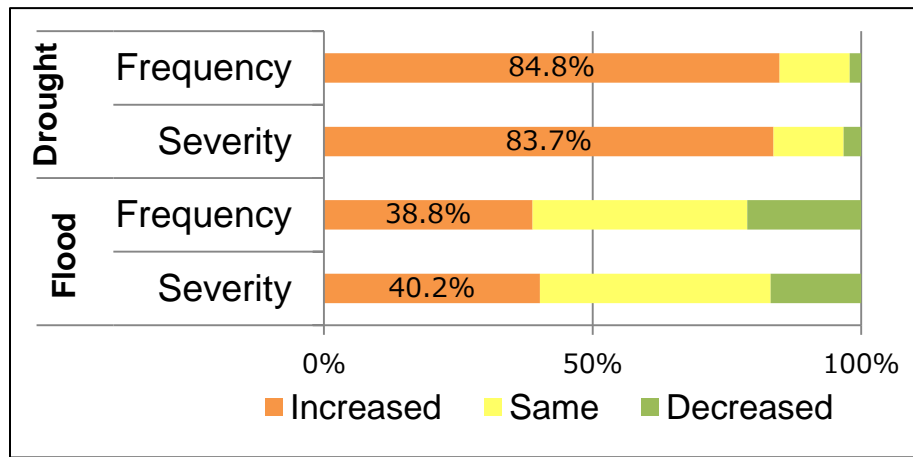
<Tolon District>

Respondents: 174 men + 174 women = **348**
(Covered 40% of all households in study sites)

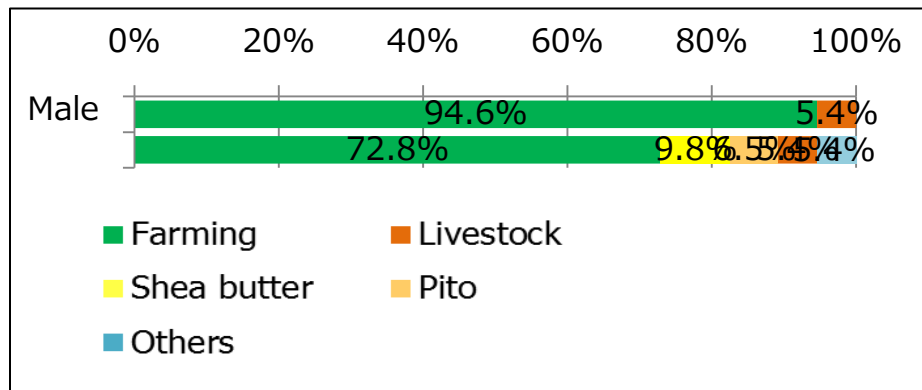
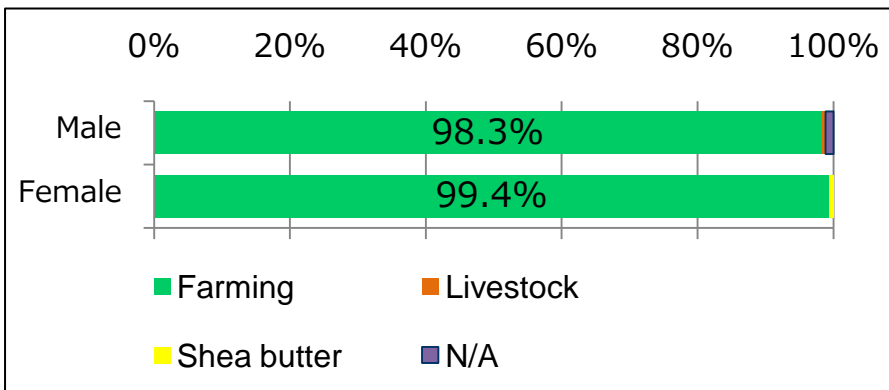


<Wa West District>

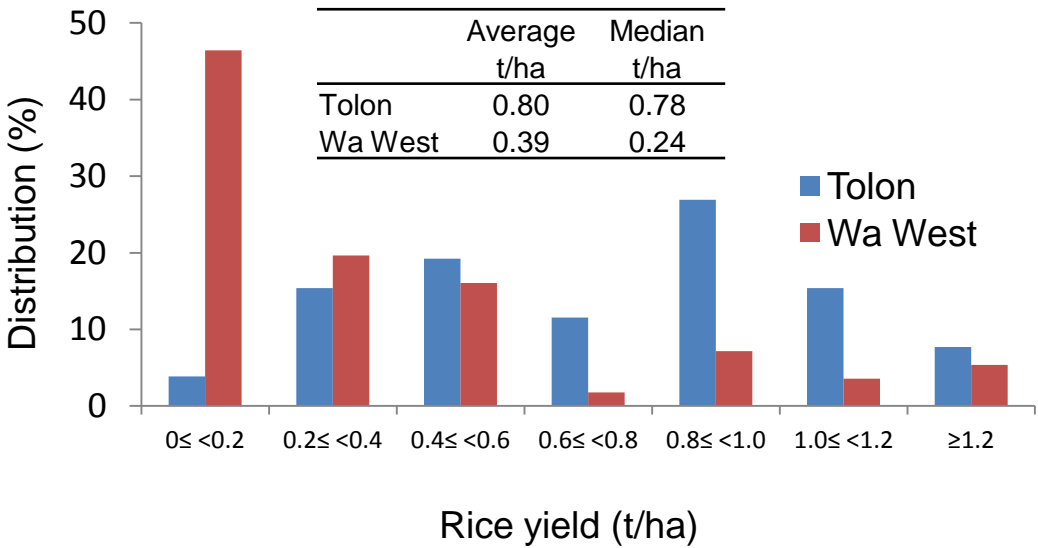
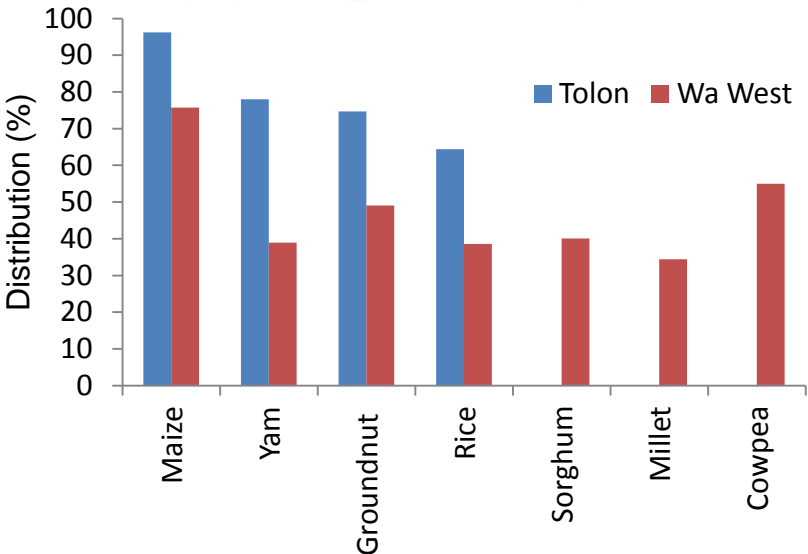
Respondents: 92 men + 92 women = **184**
(Covered 40% of all households in study sites)



Livelihood activities most affected by droughts



Cropping Comparison between Tolon and Wa West



- **Cropping diversification:** Multi-cropping is more commonly implemented in Wa West than in Tolon
- **Rice yield:** Rice yield is higher in Tolon than in Wa West
- **Maintaining diversification while increasing productivity** could be a future direction for enhancing resilience in agricultural production.

The Satoyama Initiative: For Realizing Society in Harmony with Nature

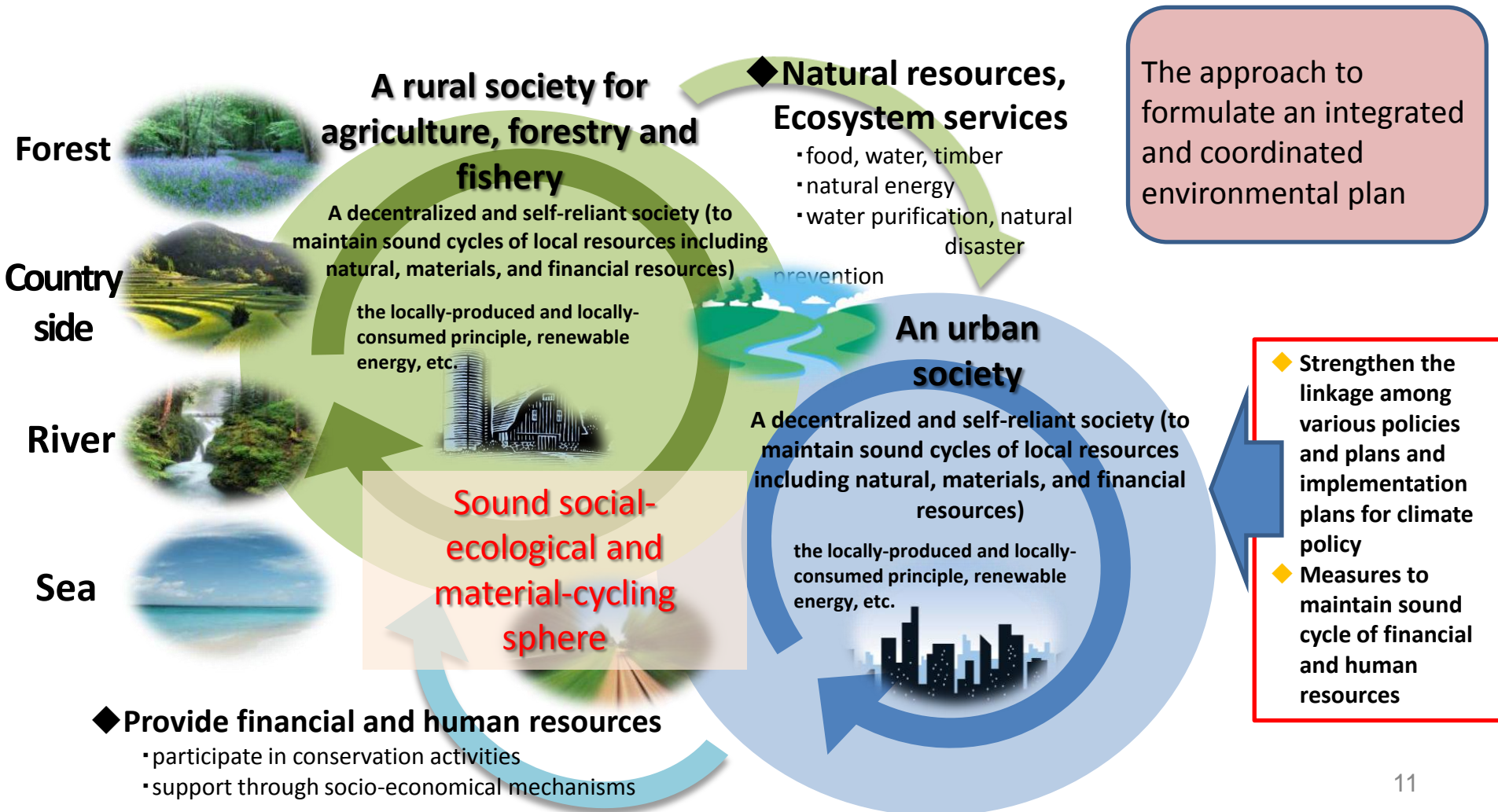
- Aim to conserve and restore **socio-ecological production landscapes and seascapes (SEPLS)**
 - Sustainable production activities
 - Various ecosystem services for livelihood and well-being of people
 - Not only protect tradition but also promote innovation
- Conserve and maintain biodiversity
- Contribute to CBD's second objective: "Sustainable use of biodiversity" .
- The **International Partnership for the Satoyama Initiative (IPSI)** was launched at CBD COP 10 in 2010.



The 5th Global Conference of IPSI (IPSI-5)
Oct 2014 in Pyeongchang, Republic of Korea



Sound Social-Ecological and Material-Cycling Sphere

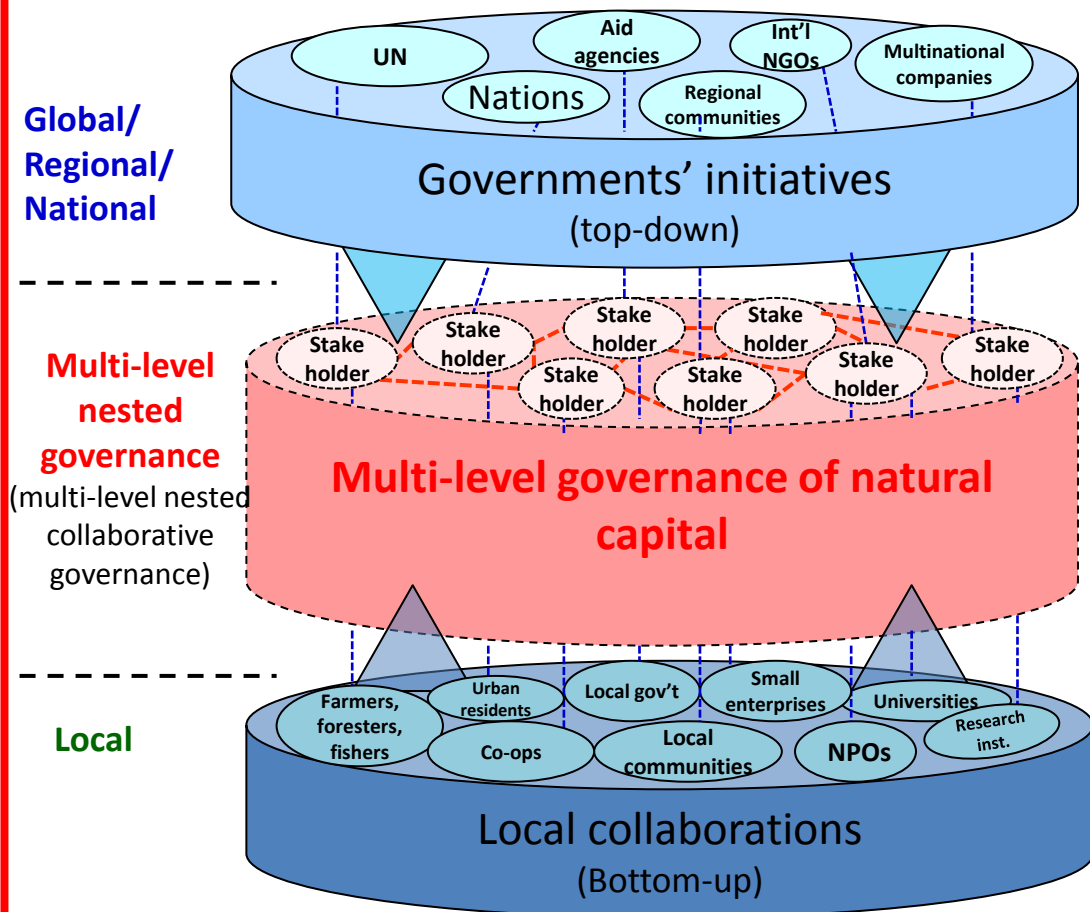


Multi-level Nested Governance of Natural Capital

With the Satoyama Initiative, it is necessary to create mechanisms for collaborative management in order to avoid degradation of **natural capital as stock**, and to promote sustainable provision of **ecosystem services as flows**.

It is necessary to explore new governance (collaborative governance) structures, or “new commons” - to complement traditional commons - where **various stakeholders** engage in horizontal cooperation.

It would be effective to build **multi-level and nested governance structures** that value bottom-up activities at the local level while connecting with global networks.



Mechanism for cooperative management of natural capital based on nested collaboration among different stakeholders

Thank you for your attention.

