

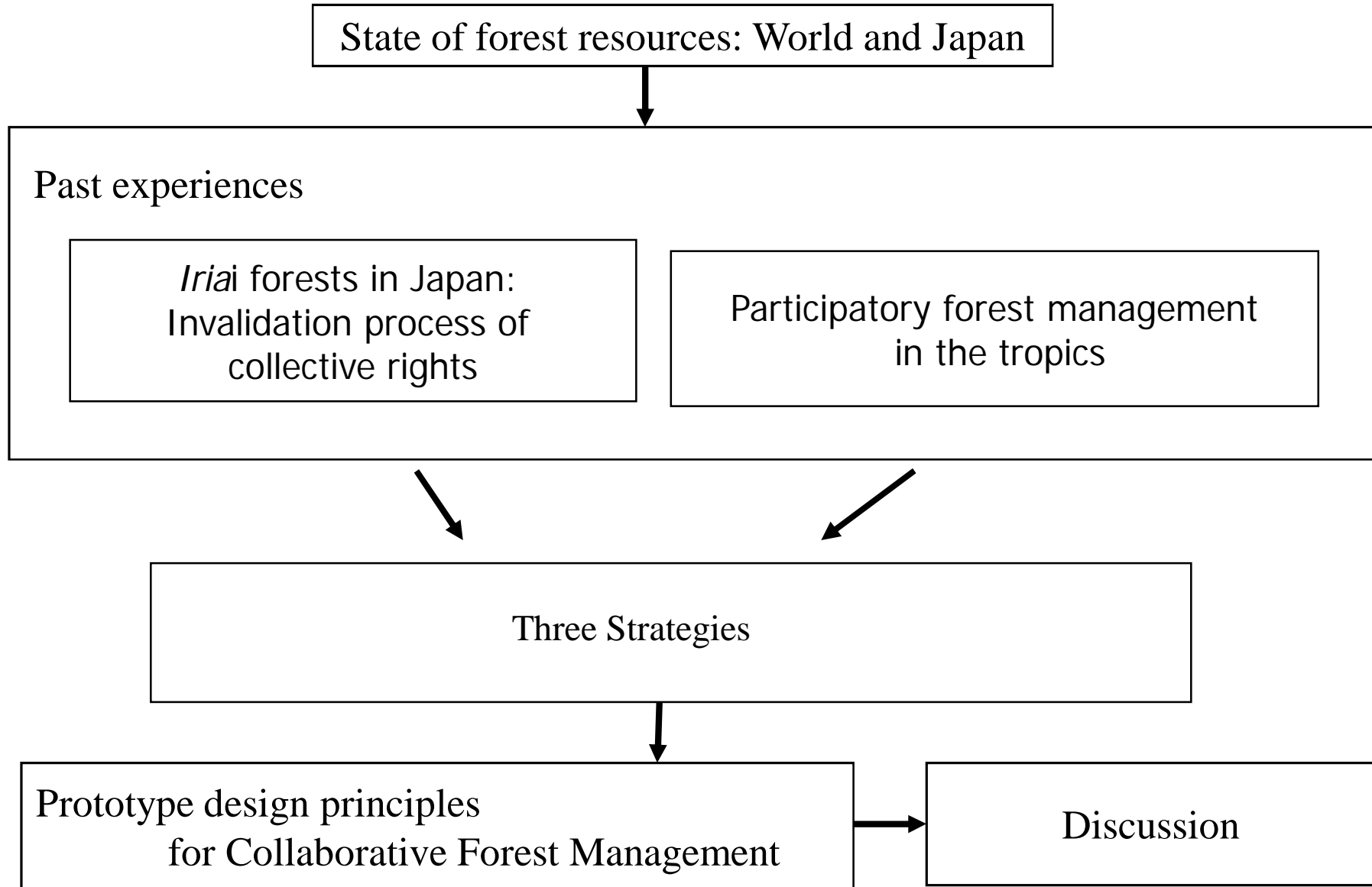
***Collaborative forest governance:  
Experiences, strategies and design  
principles***

Makoto INOUE, Ph.D  
Professor of Global Forest Environmental Studies  
The University of Tokyo

# Objectives of presentation

- To show design guidelines for Collaborative Forest Governance (CFG),
  - which can bridge the local reality with global issues,
  - which can be applicable to many places after their elaboration,
  - which are based on the experience in Japan and the tropics.

# Flow of lecture



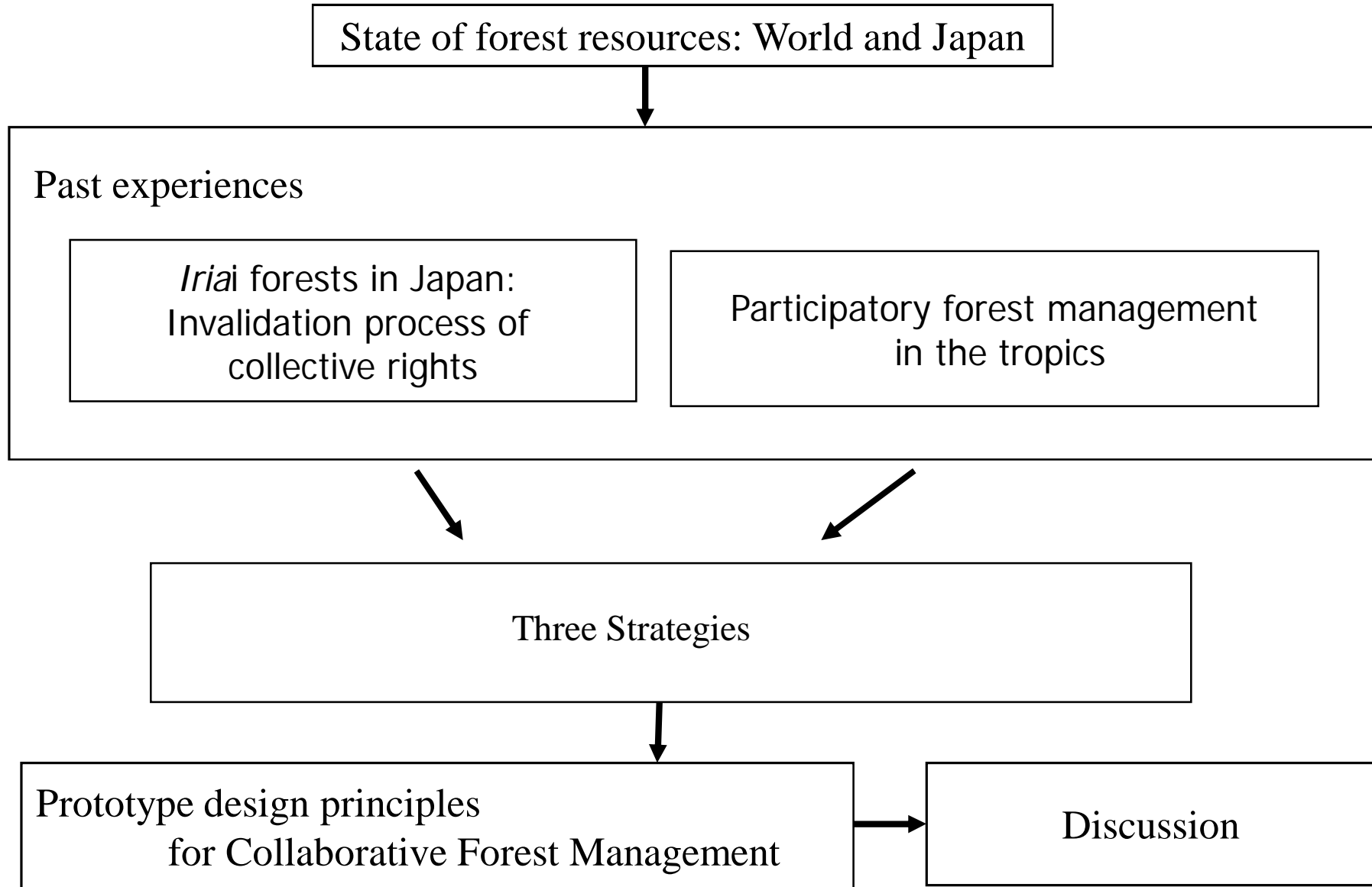
## Global forest resources assessment (FAO, 2010)

- Forests cover 31% of the total land area.
- Total forest area continues to decrease (13 million ha per year), but the rate of net loss is slowed.
- The forest reserves 289 Gt of carbon
- Primary forests account for 36% of forest area, but more than 4 million ha were lost or modified every year in 2000s.
- Plantation forests are increasing but still accounts for 7% of total forest area (especially in China).
- 30% of forest is allocated for production of timber and NTFP
- 80% of the world' s forests are publicly owned, but private ownership is on the rise.

# Forest resources in Japan

- Total area: 25,121,000 ha
- Category by vegetation:
  - plantation forest (41%)
  - natural forest (53%)
  - others (6%)
- Category by ownership:
  - national forest (31%),
  - municipal forest (11%)
  - private forest (58%)
- Proportion of plantation forest by ownership:
  - national forest → 31%
  - municipal forest → 44%
  - private forest → 46%

# Flow of lecture



# Scenery of mountain village in Chichibu, Japan

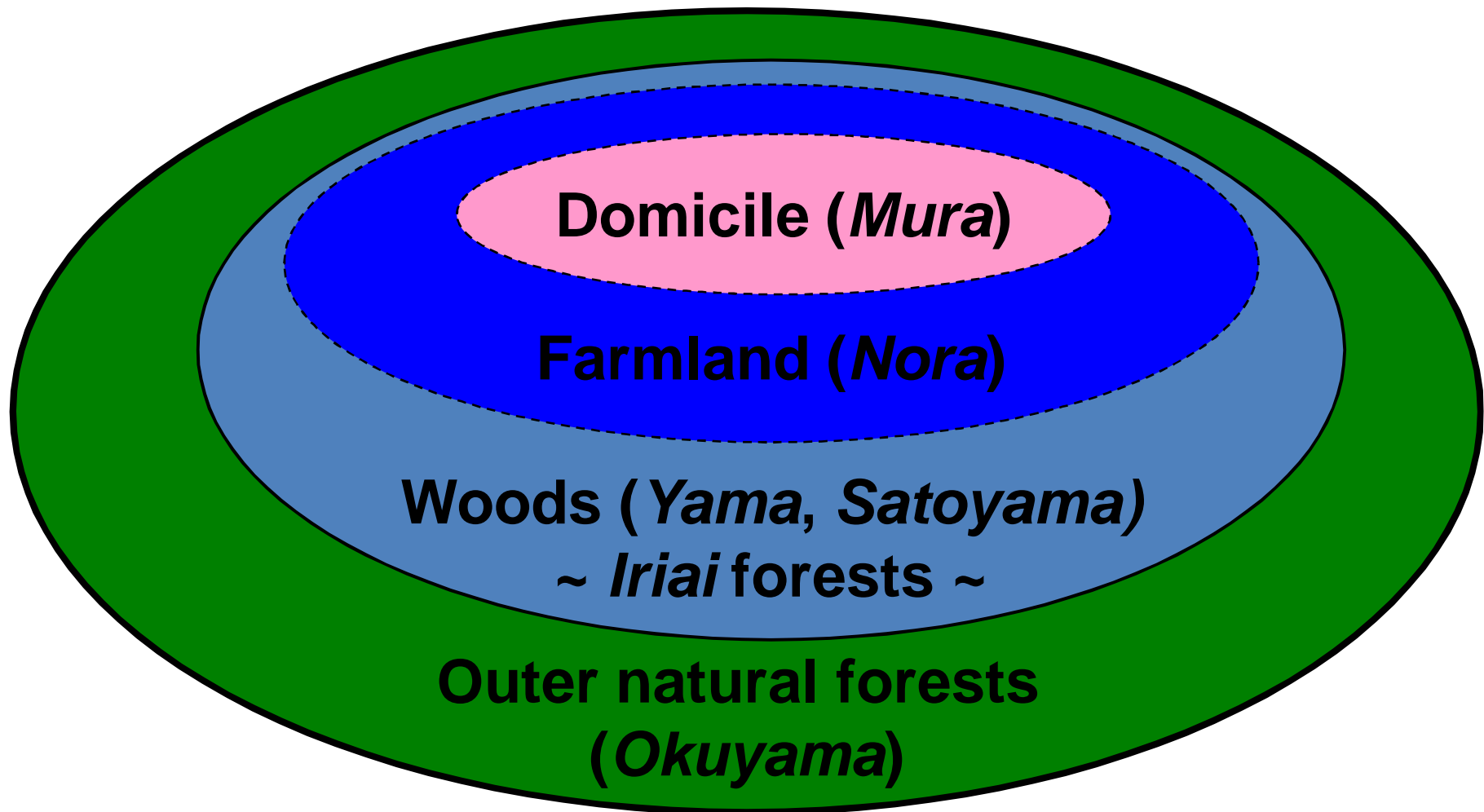


# Ethical dualism of village community (*Sonraku-kyodotai*)

- Closure to the outside:
  - Generated from the need of protecting the common land as physical basis of the community.
  - Then, beneficiaries are limited to the villagers.
- Equality to the inside:
  - Created from the need of making all members be able to reproduce themselves.
  - Examples
    - the same amount of labor force from each household is requested to provide for community service to manage farm road and waterway
    - each household bear the same amount of cost for communal administration
    - each household has equal access to the common land and irrigation.
  - Disproof:
    - not applied to all the village members but limited to the landed farmers
    - equal expense for common purpose is often regressive and unfavorable for the poor



# A sketch of village community in Japan



# Importance of *Iriai* forest in rural livelihood

- More than a half areas were meadows from the end of Edo to the beginning of Meiji period (1868-).
- *Iriai* forest utilization had sustained agricultural production.
  - Sprout/shoot of trees, and twigs (*Karishiki*): green manure for the paddy fields.
  - Grass: compost and manure.
- Use of meadows: thatched roof, pastures
- Use of trees: fuelwood, by applying coppice system with 20 years rotation.
- Edible wild plants, nuts, mushroom, and medicinal herb support the livelihood of the villagers.

# Substance of *Iriai* rights (1): **Definition and category**

- Definition: *Iriai* rights (*Iriai-ken*) are defined as the rights for the local people to use and manage the *Iriai* forests collectively.
- The Civil Code of 1896:
  - Article 263: the group of *Iriai* right holders has exclusive ownership of the forestland (*Kyoyu-iriai ken*)
  - Article 294: the group has collective usufruct over *Iriai* forest that stands on the land owned by other individual(s) or entities (*Chieki-iriai-ken*)

## Substance of *Iriai* rights (2):

### **Specific feature**

1. *Iriai* rights shall follow the custom in each locality (*Iriai* rights and forest-use patterns varies from place to place)
2. *Iriai* rights shall be acknowledged to the residents living in a concerned hamlet (a household loses its *Iriai* rights when it moves out of the locality)
3. *Iriai* rights shall not be acknowledged to an individual but to a household
4. *Iriai* rights shall not be inherited
5. *Iriai* rights shall not be transferred to others
6. *Iriai* rights shall not be registered (land ownership of *Iriai* forests can be registered legally)
7. *Iriai* rights shall be effective as long as the collective forest management is continued.

## Substance of *Iriai* rights (3):

### **Four types of forest-use patterns**

1. Classical collective use: right-holders can enter any part of the *Iriai* forest to collect forest products in accordance with their own rules → next slide.
2. Corporate use: right-holders collectively harvest *Iriai* forest products to generate income for common use, while access by individuals is prohibited.
3. Individual use: each right-holder uses a segmented part of *Iriai* forest (*Wariyama*) but cannot sell her/his land.
4. Contract use: all right-holders retain collective ownership and can lease *Iriai* forest to another party for harvesting timber or other benefits.

# Substance of *Iriai* rights (4):

## Rules for Classical Collective Use

1. Regulation in terms of period: The date of starting mowing (*Yama-no-kuchiake*) was clearly determined. For example, cutting and collecting *Karishiki* was generally started just before the rice planting.
2. Regulation in terms of object: Usually logs were prohibited to cut.
3. Regulation in terms of the volume: The amount of grass to be cut by a person is limited to an extent he/she could shoulder at a time.
4. Regulation in terms of the number of people: Only one person from a household could be permitted to enter to the *Iriai* forest at a time.
5. Regulation in terms of tool: Only sickle for mowing and hatchet for felling logs were permitted.
6. Regulations in terms of purpose: The logs were permitted to fell only for self-consumption.

# Substance of *Iriai* rights (5):

## **Other notes**

- *Iriai* rights consist of
  - (1) the rights of management/control/disposal held by an *Iriai* group or a corporate
  - (2) the usufruct held by individual members of the group
- Non-farmers, collateral families, and new settlers usually did not have the *Iriai* rights. It means that only the feudal landed farmers have the *Iriai* rights.

## Policies to invalidate *Iriai* rights (1): **To create state property**

- Identification of *Iriai* forest with state property
- In line with the demarcation of forest land ownership into national and non-national land in 1874
- For the purpose of increasing land tax revenue.
- Many *Iriai* forests were nationalized.



## Policies to invalidate *Iriai* rights (2): **To create municipal property**

- Identification of *Iriai* forest with municipal property.
- In line with two big mergers of municipalities in 1888 and 1953.
- But many villagers rejected to hand over their *Iriai* forests.
- The *Iriai* forests not handed over to national and municipal government are categorized as 'hamlet forests' (*Buraku-yuu-rin*): legally owned by various bodies such as association, public corporation, individual, group of individuals, shrine, and temple, which are *de jure* private forests accordingly, but *de facto* *Iriai* forests in reality.
- Then a compromising program to allow villagers to maintain their rights to manage *Iriai* forests by establishing a new legal entity or financial ward (*Zaisan-ku*).
- Then a program again: to integrate the hamlet forests into municipal forests, from 1910 to 1938, on the condition that villagers' usufruct is sustained.
- Substantial proportions of *Iriai* forests were reclassified as municipal forests.

## Policies to invalidate *Iriai* rights (3): **To create private property**

- Decisive program to invalidate *Iriai* rights was introduced in 1966.
- To facilitate collective forestry operations for efficient forest production.
- Forest Producers' Cooperatives (FPCs) established: consisting of former *Iriai* right holders
- *Iriai* rights under this program were invalidated.
- Owners of former *Iriai* forests after privatization: FPCs (49%), individuals (33%), groups of individuals (17%), other bodies (2%).
- Around 7,301 *de facto Iriai* forests, totally 780,000 hectares, are still retained and scattered in Japan.
- Table 1: Characteristics of modernized forest ownership and *Iriai* rights

**Table 1. Characteristics of modernized forest ownership and *Iriai* rights**

	<i>Iriai</i> group	FPCs	Financial Ward	ANAs
Legal basis	Civil Code (Articles 263, 294)	Forest Cooperatives Law (Articles 93-100)	Local Autonomy Law (Articles 294- )	Local Autonomy Law (Article 260)
Characteristics	Group of <i>Iriai</i> right-holders	Cooperatives for effective forest management	A portion of municipality for the benefit of residents	Residents' group
Membership	Locally recognized households residing in the village	Individual investors	Locally recognized residents in the hamlet	All residents in the hamlet
<i>Iriai</i> rights	valid	invalid	valid (by judiciary) invalid (by administration)	uncertain
Registered land ownership	an individual, individuals, hamlet, municipality, prefecture, state, etc.	FPC	Property Ward	ANA
Profit	following the custom	distribution among individuals	use as management fee for the ward	use as management fee for the association

Sources: Yamashita (2006), Murota and Mitsumata (2004), Takei et al (1989)

Recent policy:

## **Authorized Neighbourhood Associations (ANAs)**

- ANAs was established in accordance with the 1991 revised Local Autonomy Law.
- *Iriai* right-holders can register ownership of *Iriai* forest land.
- Validity of *Iriai* rights: uncertain
- Because of independency of forest policies, forest policymakers ignored their relevance despite its importance.

## **Economic difficulties of both *de facto* and former *Iriai* forests**

1. Cutting off the relationship between forest and farmland because farmers began to buy fertilizer such as bean cake before the Second World War.
2. Sharp decrease in demand for fuelwood due to energy revolution or use of fossil fuel after the Second World War.
3. Rapid increase of timber import due to cheaper price since the 1950s, then longtime low-priced domestic timber afterward.

→ Longtime depression of forestry sector.

# Emergence of “forest volunteer”

- Since the middle 1980s, city dwellers started visiting rural areas to help manage forest as “forest volunteer” for their own recreation as well as for social justice.
- The number of “forest volunteer” increased afterward; some of them acquired technical knowledge and skills in forestry.
- *De facto* and former *Iriai* forest owners and outsiders are seeking collaboration to manage the forest, even under the condition that their livelihood doesn't depend on the forest anymore.

# Box 1: Land Use Policy in Japan

- A new National Land Law (2005)
  - Amendment of Comprehensive National Land Development Law (1950)
  - Farewell to a doctrine of development
  - Adoption of doctrines of local autonomy, safe and peaceful life in depopulated rural area, environmental conservation, and partnership between state and local governments.

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## Box 2: Urban Planning Law (1968)

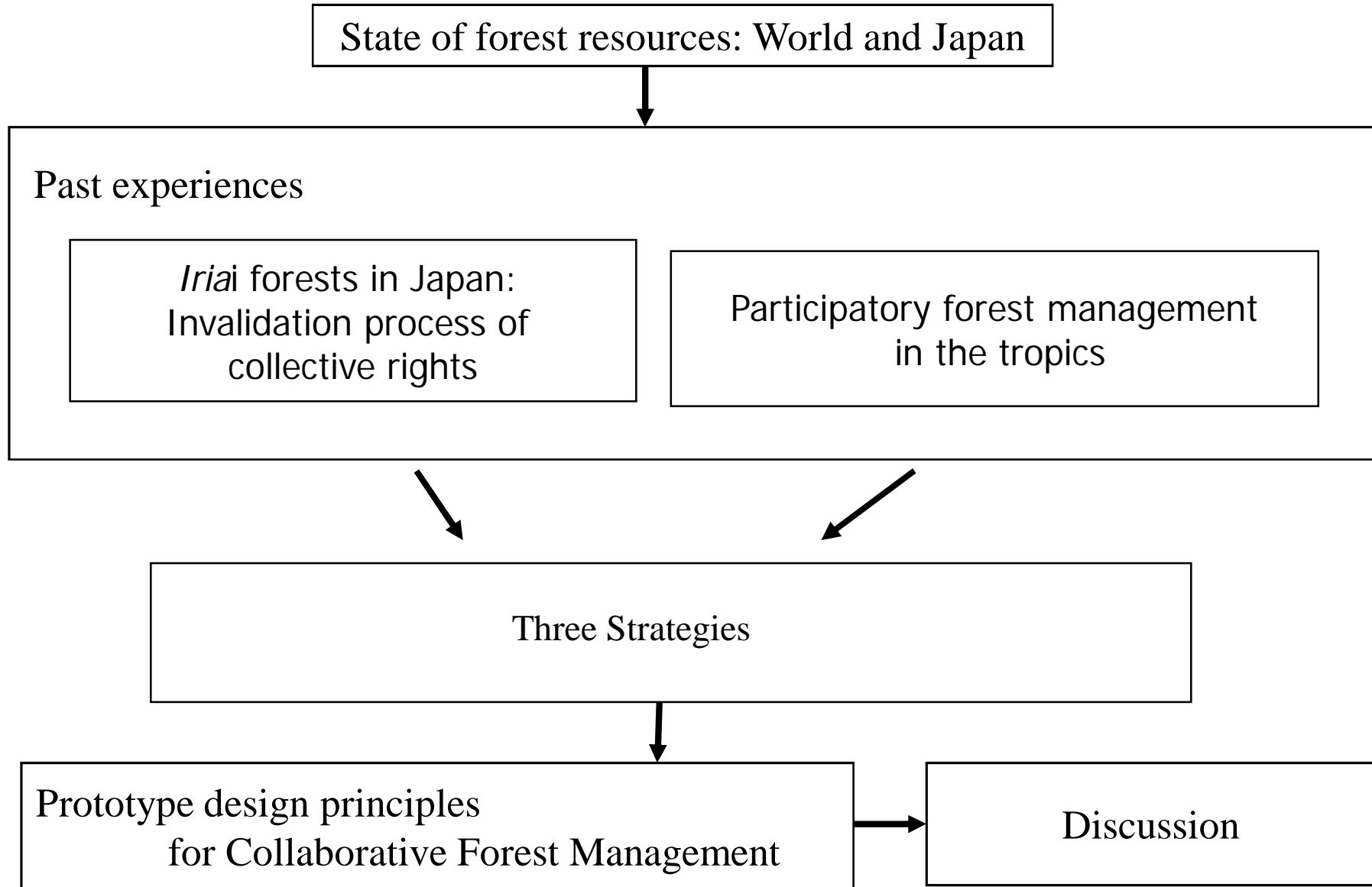
- An urbanization (promotion) zone
  - Conversion of land use from agriculture to other purposes is easy
- An urbanization control zone
  - Prohibited to construct houses, etc. on farmland
- Unclassified urban planning zone



## Box 3: Land are and population by land category in Japan

	Land area	Population
An urbanization (promotion) zone	1.43 million ha (3.8%)	85.09 million (67.1%)
An urbanization control zone (prohibited to develop farm lands)	3.73 million ha (9.9%)	12.05 million (9.5%)
Unclassified urban planning zone	4.82 million ha (12.8%)	20.79 million (16.4%)
Outside the urban planning zone (agricultural and forestry area)	27.81 million ha (73.6%)	8.94 million (7.0%)
Total (Japan)	37.79 million ha (100%)	126.87 million (100%)

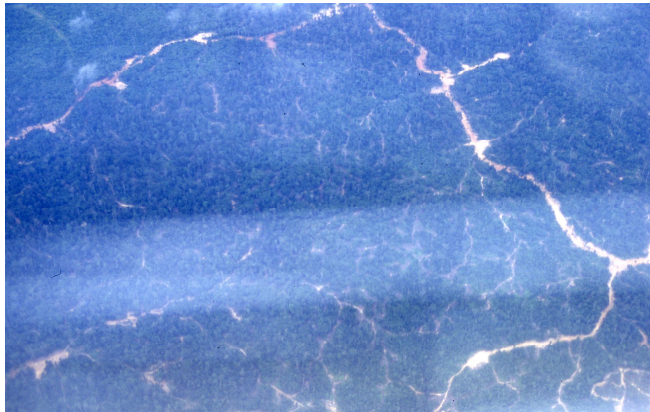
# Flow of lecture



# Swidden agriculture in East Kalimantan



# Timber production in East Kalimantan



# Plywood production and export



# Failure of autocratic forest governance in the tropics

- Assumption: The state is the best forest manager, because it applied scientific management systems.
- Executive agents of the centralized forest management: Professional foresters consisting of government officers and experts of private companies.
- Dominant discourse: "One of the most important causes of deforestation is slash and burn agriculture that is practiced by ignorant and poor local people".
- The local people were considered to be obstacles or constraints to forest management.

# Customary Forest Management: A case of the Bahau



A village of the Bahau

- Utilization forest (*tana belahan*):
  - free-access by villagers
- Reserved forest (*tana mawa*):
  - forest products extracted only when approved by the leaders

# Participatory forest management: emergence and difficulties

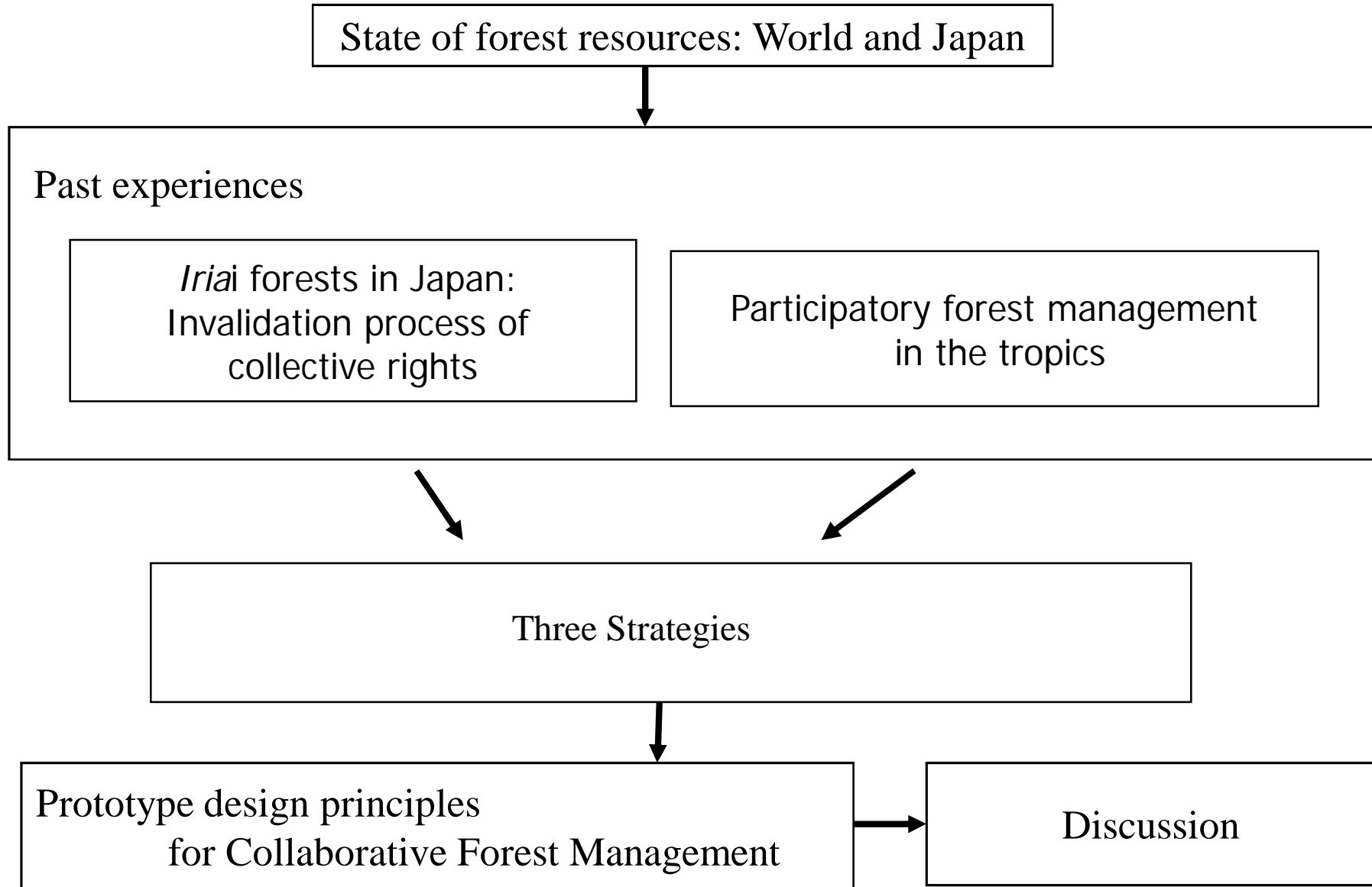
- Participatory forest management programs such as “social forestry” and “community forestry” be introduced as a new paradigm since the late 1970s.
  - Facing difficulties because of the neglect of urgent and short-term local needs and sabotage by local people.
  - Not easy to overcome “foresters’ syndrome” .
  - Not all local people have developed appropriate local resource management systems based on traditional local knowledge.
- People need support, in terms of skills for forest management, appropriate budget, formation and intensification of social capital, by reliable outsiders such as NGOs, local governments and scientists.



# An old Bahau woman



# Flow of lecture



# Three strategies for sustainable resource use & management (1)

- **Resistance strategy** (Localization strategy)
  - People do not adapt to globalisation and mostly refuse involvement by outsiders in order to preserve their autonomy.
  - To re-construct the local system characterized by “**autonomy**” and “**reciprocity**”.
  - Resource use is embedded into the livelihood of the people.
  - Expected focal actor: village community with exclusive membership
  - Attribute: closure

# Three strategies for sustainable resource use & management (2)

## ■ **Adjustment strategy** (Globalization strategy)

- People assimilate the benefits of globalisation.
- To design the open system characterized by “publicness”.
- Local resource and environment: be valued in broader social welfare, separated from the context of the livelihood of the local people.
- Expected focal actor: associations formed in civil society such as NGOs, who have immanent conflict with the local people.
- Attribute: openness

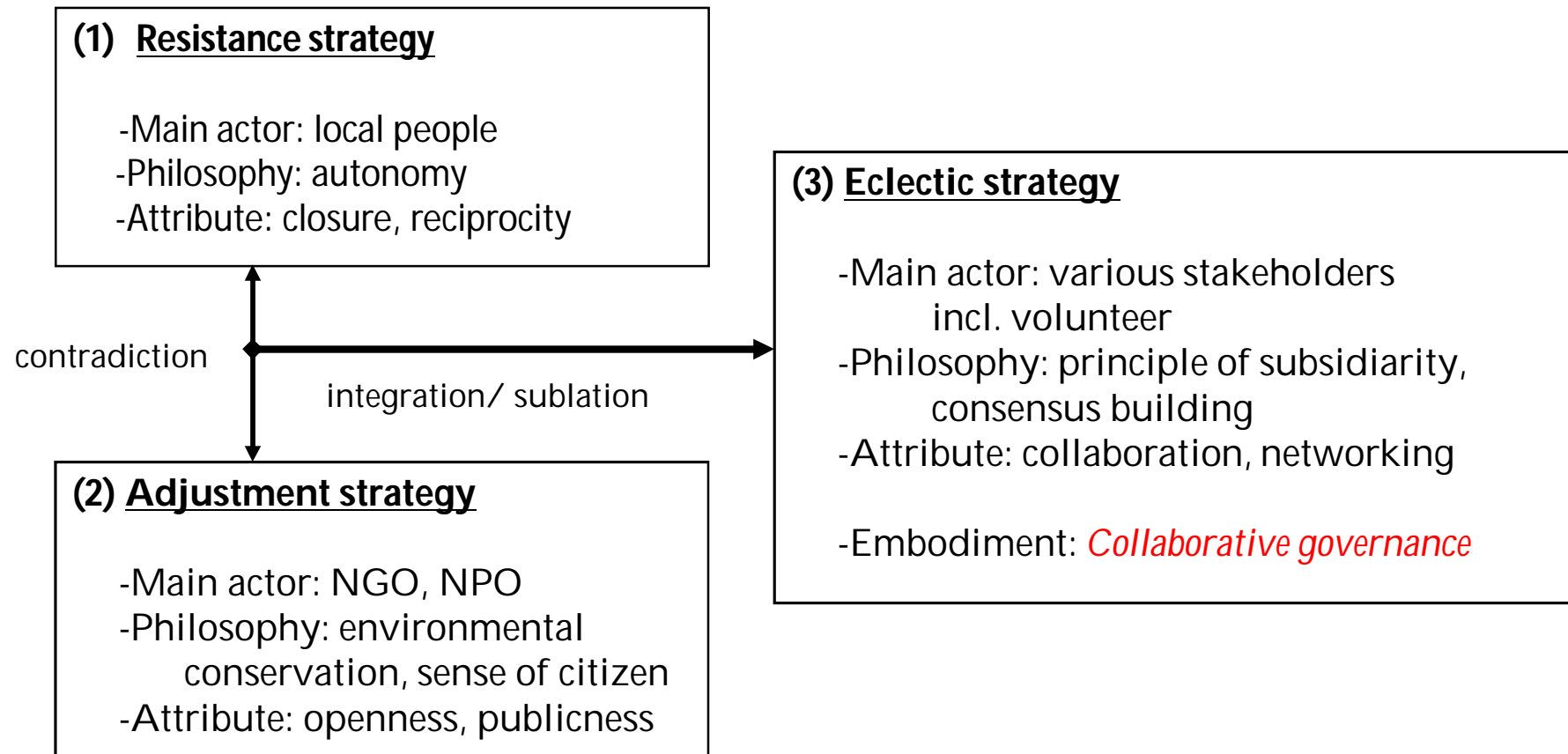
# Three strategies for sustainable resource use & management (3)

## ■ **Eclectic strategy** (Glocalization strategy)

- A compromise that incorporates a partial resistance strategy and limited adjustment strategy.
- Integration of closure/openness, and inherent/universal values
- '**Collaborative governance**' (*kyouchi* in Japanese) of natural resources could be achieved under this strategy.
  - ◆ Definition: the system for natural resource management which is organised through collaboration among various stakeholders who have a range of interests in local resource use and management.

# Governance

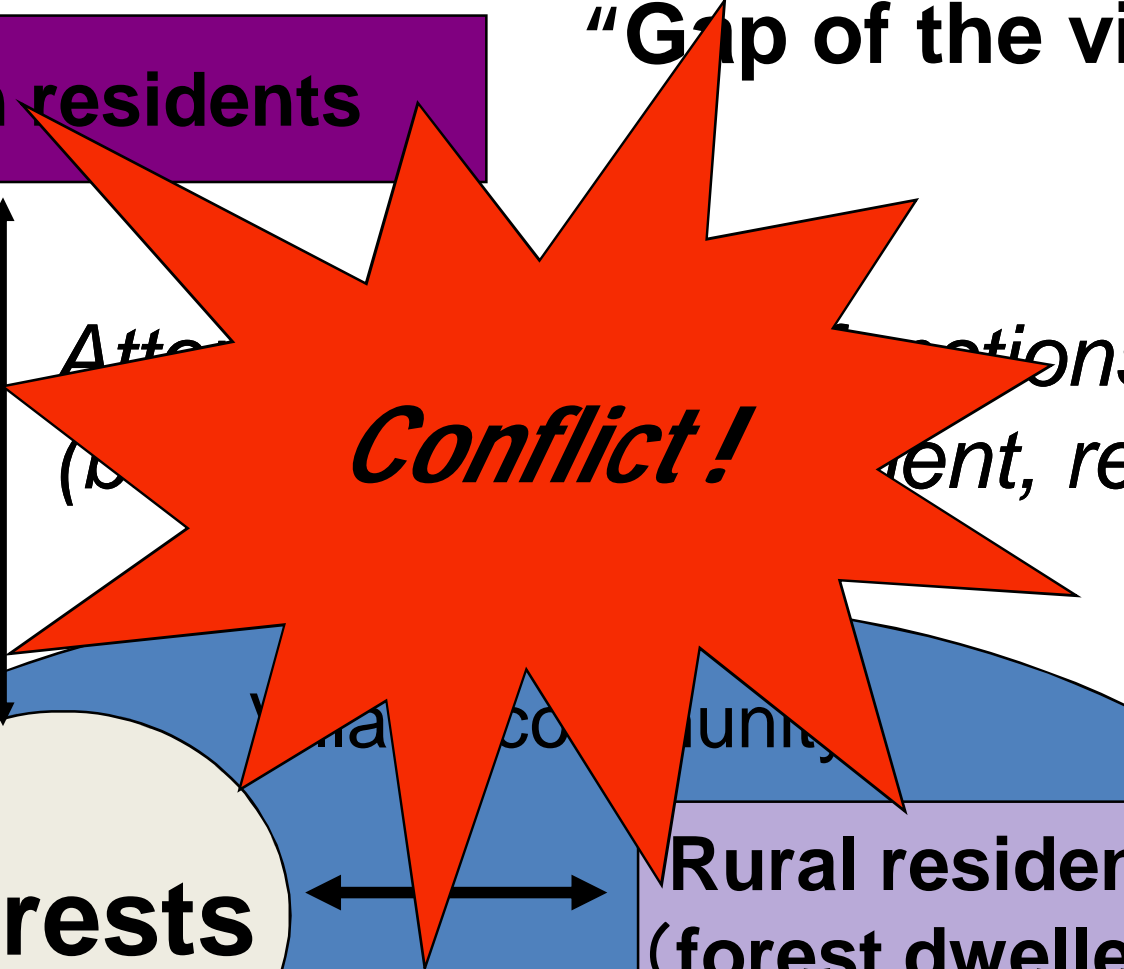
- Definition:
  - The setting, application, and enforcement of the rules of the game (Kjaer, 2004)
- Legitimacy
  - To be legitimated if they are stable.



**Fig.1: Collaborative governance  
as an eclectic strategy for resource use & management**

Urban residents

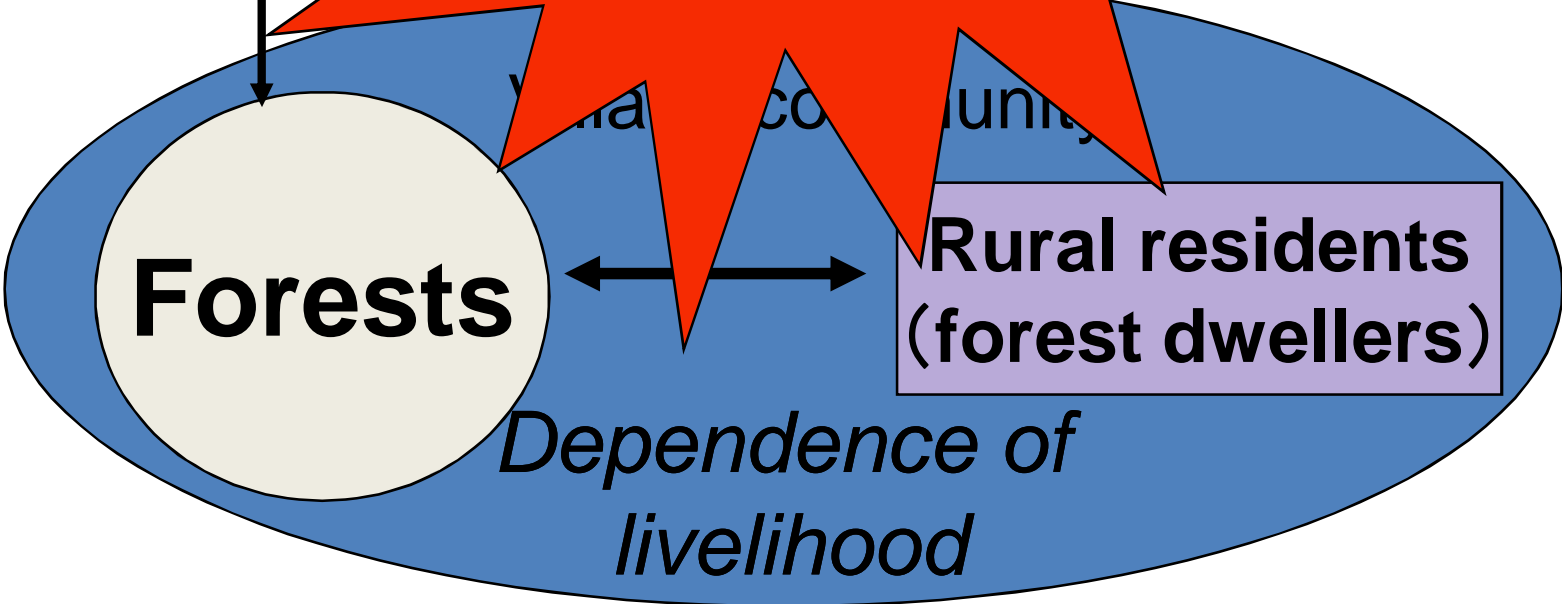
"Gap of the viewpoint"



Attentions  
(p

ations

ent, recreation)



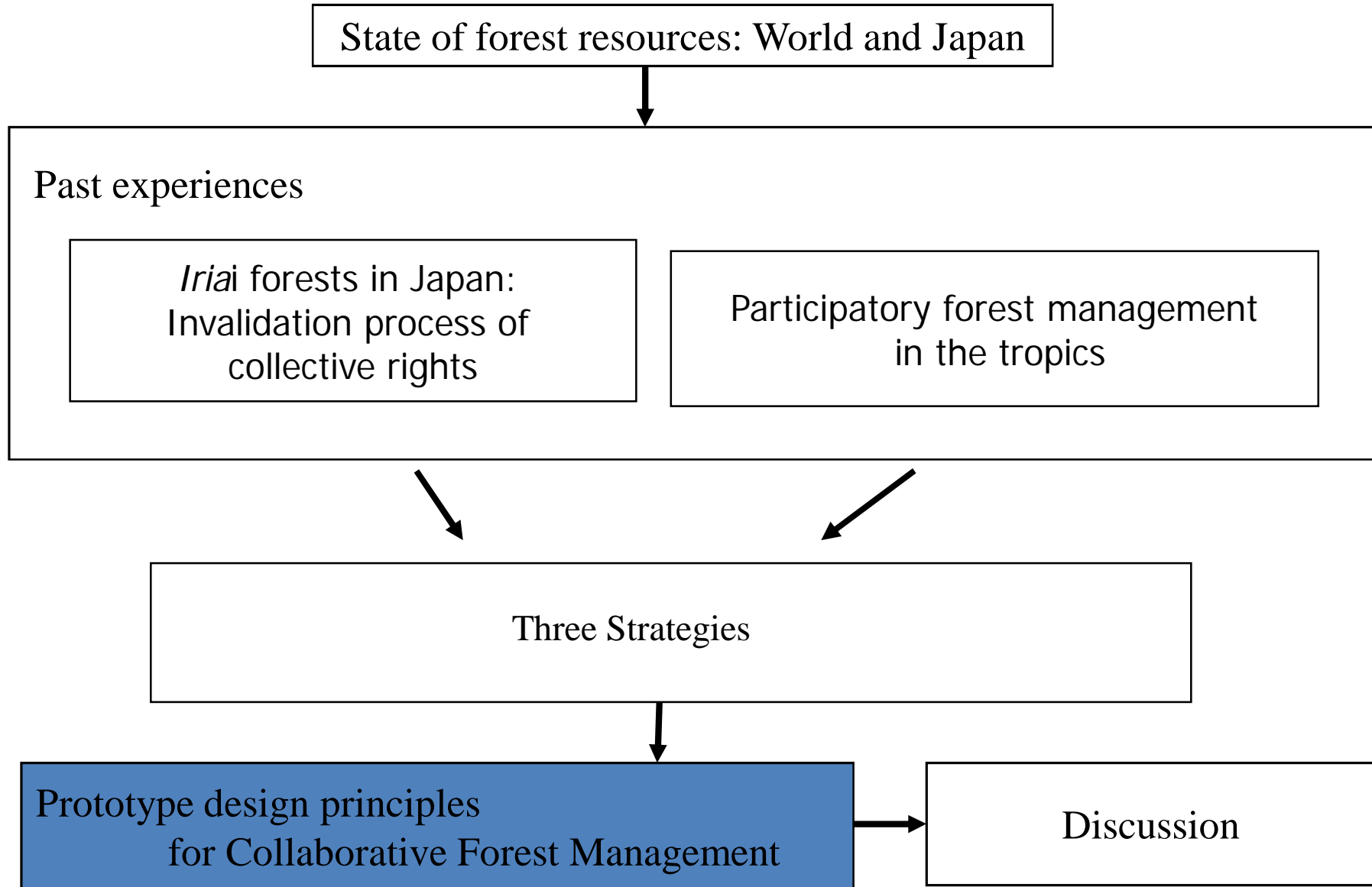
Forests

Rural residents  
(forest dwellers)

Dependence of  
livelihood



# Flow of lecture



# Prototype design guidelines

- To tackle the barriers for the 'eclectic strategy' (glocalisation strategy), Inoue (2009) proposed 9 prototype design guidelines for collaborative governance of forests.
- Those guidelines (*kyouchi* principles) were derived from and evolved out of the design principles for CPRs (Ostrom 1990; McKean 1999; Stern et al. 2002; Ostrom 2005).

# Prototype design principles for CG (Inoue, 2008)

- Design principle 1 (Degree of local autonomy): Unless the local community have no autonomous function, there is room for designing CFG in accordance with the degree of local autonomy.
- Design principle 2 (Clearly defined resource boundary): Demarcation of resource boundary is often difficult task because of obscure ownership.
- Design principle 3 (Graduated membership)
- Design principle 4 (Commitment principle)
- Design principle 5 (Fair benefit distribution): Benefit distribution is not necessarily equal but fair in accordance with cost bearing.
- Design principle 6 (Two-storied monitoring system): The core members of CFG monitor whether other members obey the rule. Then local government monitor whether the rule itself is appropriate for sustainable forest management by scientific way.
- Design principle 7 (Two-storied sanctions): The core members have responsibility, which is supported by the local government.
- Design principle 8 (Nested conflict management mechanism): Informal conflict resolution in the community → Informal intercession by the local government → Formal mechanism at local and national level
- Design principle 9 (Trust building): For cooperation with outsiders, forming, maintaining, and strengthening social capital is essential.

## ***"Graduated membership"*** ***of executive management body (1)***

- Firstly 'open-minded localism' is required, in which local people consent to open their resources and environment to outsiders.
- Then some of the local people act as **core members** (first-class members), who have the strongest authority and co-operate with other **graduated members** (second- and third-class members), who have relatively weaker authority.
- This principle agrees well with the principle of subsidiarity, whereby the larger-scale political and administrative unit only supplements the smaller-scale unit or basic autonomous unit.

***"Graduated membership"***  
***of executive management body (2)***

- Having a clear and graduated membership boundaries implies exclusion of non-members.
- As such, executive bodies should deal with the exclusion issue to ensure fairness and to acquire legitimacy from relevant stakeholders.

## ***“Commitment principle” for decision-making (1)***

- ‘Commitment principle’: a principle for decision-making in which the authority of stakeholders is recognised to an extent that corresponds to their degree of commitment to relevant activities.
- Under this principle,
  - local people who often enter and care for the forest  
→ expected to have greater power over the decision-making process;
  - outsiders who say a lot without doing much  
→ provided less power;
  - and the conscientious outsiders who devote their time or money to local forest management  
→ given more power

## ***“Commitment principle” for decision-making (2)***

- Decision-making is not done on an equal basis (with one-person, one-vote ballots,) but should be regarded as fair, equitable, and just by the stakeholders.
- The scale of the arena or the numbers of members for decision-making should be limited appropriately, because all members should recognise the approximate degree of commitment each other.

# Difference from co-management

- Co-management:
  - Referring to a management perspective
  - The term is utilized regardless of the actor occupying the central role
- Collaborative governance:
  - Referring to a policy perspective
  - Local people-led co-management in which local people command at least 50% of the decision-making authority.



*The end*

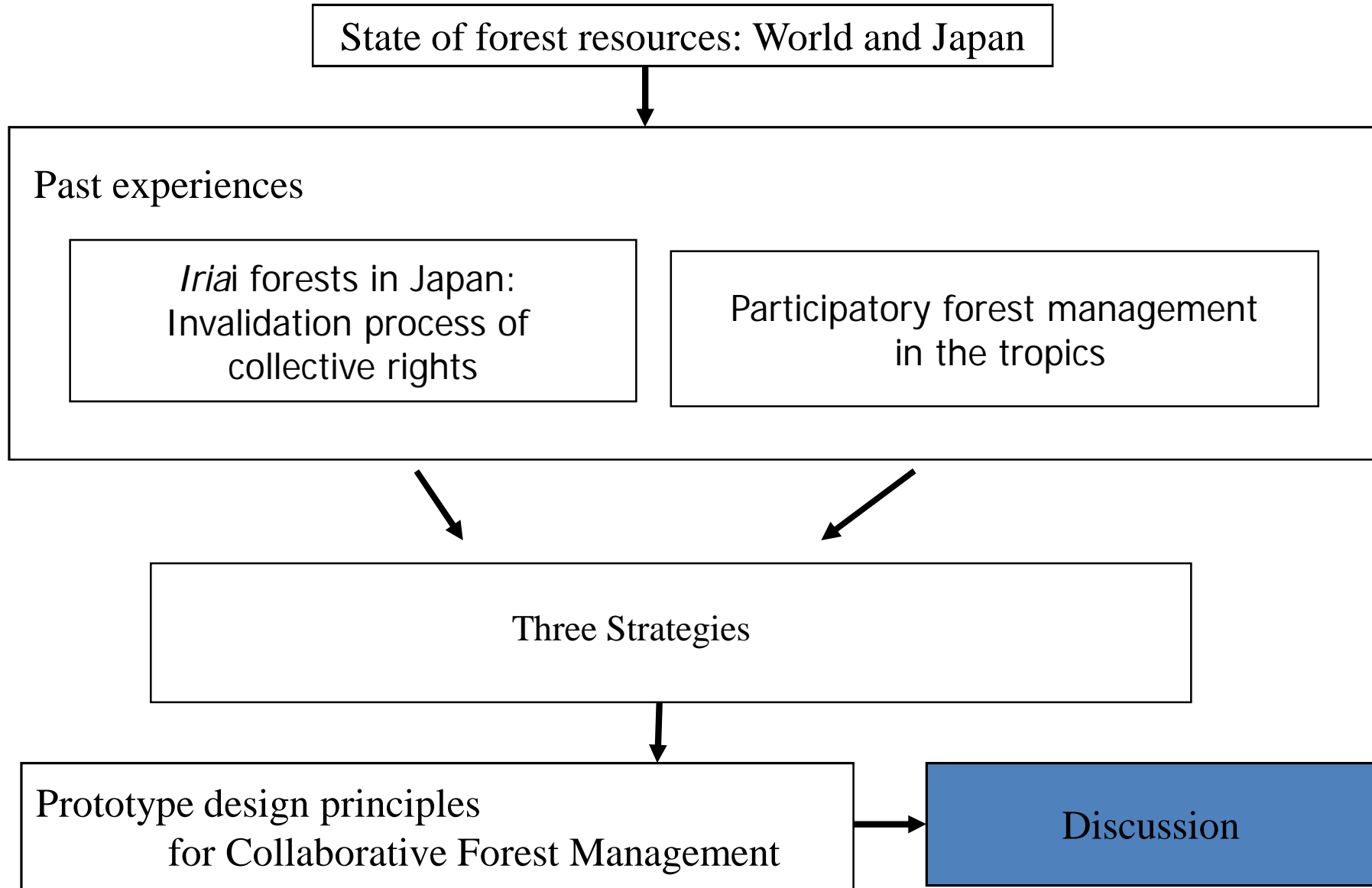


Children in Laos

# My hobby: Karate-do



# Flow of lecture



# Literature

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