



Adaptive System's Coupling in The Development of Community Forest

Tatik Suhartati ¹, Ris Hadi Purwanto ²,
Agus Setyarso ³ and Sumardi⁴

Background

Community Forest in Yogyakarta Province develop fastly (in 2006 → 28.630 ha to 2015 → 67.426 ha; increase about 135 %)

There are several external and internal interventions

The dynamic of the situation generated adaptive power.

Community in managing forests adaptive to the environmental condition, needs, and market

Community Forest and livelihood → inseparable part (couple systems)

State of Problem

There is a need for identifying the dynamics of coupled systems between community forest and livelihood

There is a need for determining components that driving the couple systems

AIMS of RESEARCH

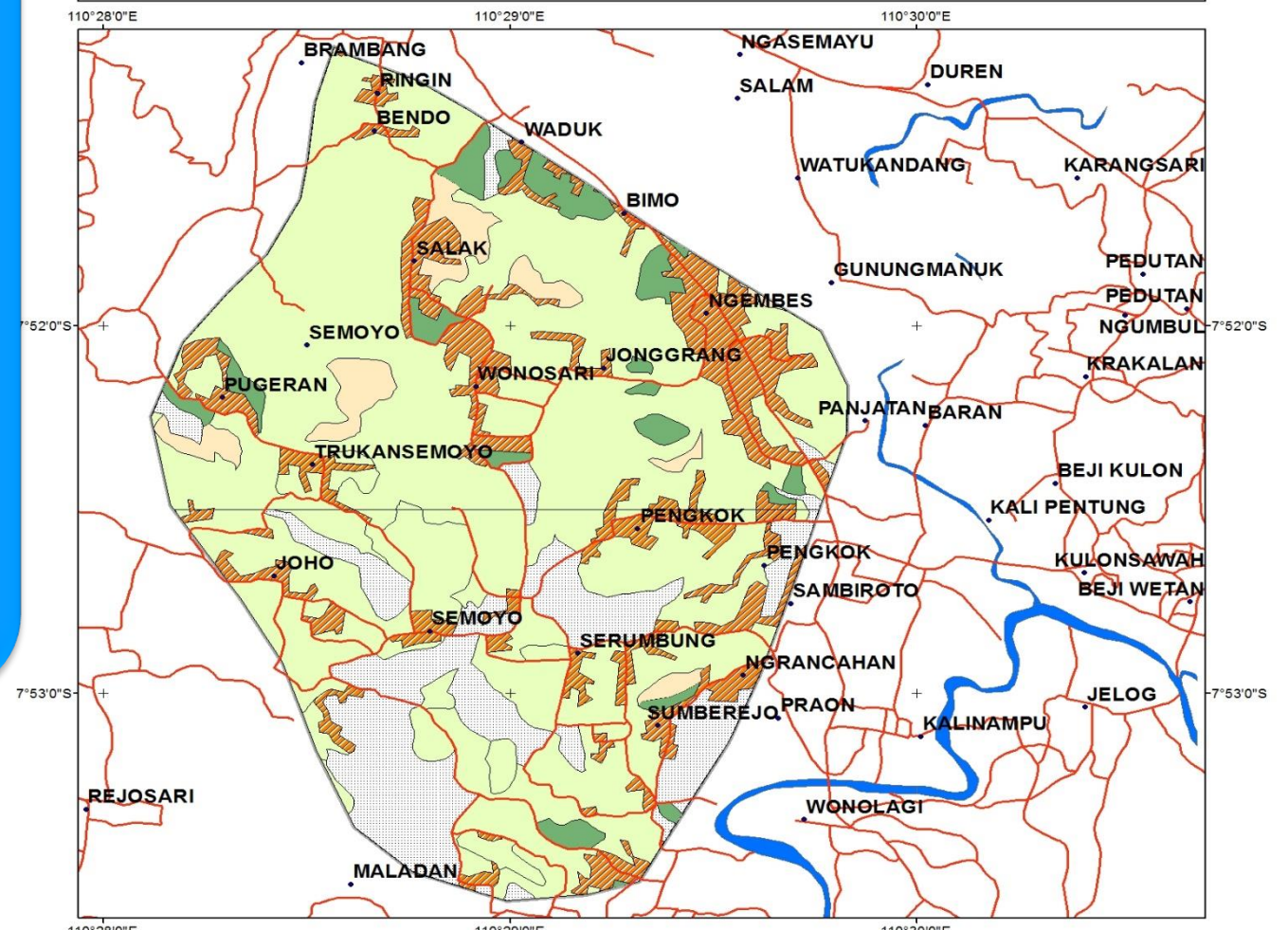
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graph LR; A[1. redefine community forests based on the current condition] --> B[2. find components which have adaptive power to move the coupling system between community forest and livelihood system as a complex system]; B --> C[3. formulate feasible scenarios for policy intervention to generate strategies that accelerate the contribution of community forests in the livelihood];
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PETA PENGGUNAAN LAHAN DESA SEMOYO KEC. PATUK, KAB. GUNUNG KIDUL



Legenda

- Jalan
- Permukiman
- Sawah
- Ladang
- Perkebunan
- Semak Belukar
- Sungai
- Batas Desa Semoyo

0 0,25 0,5 1 Kilometers

Sumber Peta :
- Peta RBI Skala 1 : 25.000,
Bakosurtanal (BIG), 2002

Provinsi
D.I. Yogyakarta

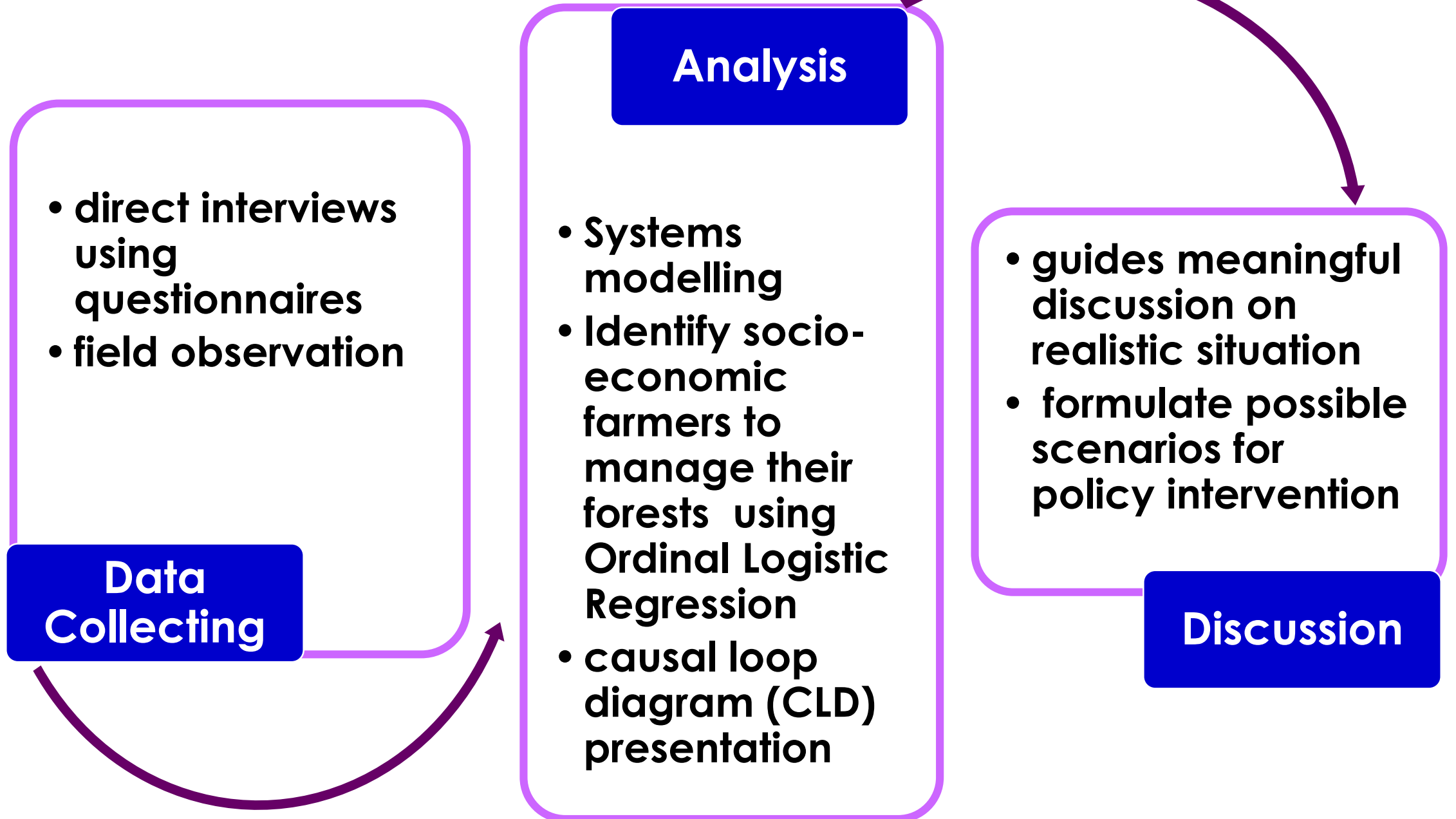
SAMUDERA HINDIA

0 10 20 40 Kilometers

Semoyo
Village,
Patuk
District,
Gunungkidul
Regency,
Yogyakarta
Province,
Indonesia

LOCAT
ION

Research Methods



Redefinition of Community Forest

located
in private
lands

must create
microclimate that is
different from the
surrounding
environment

must have
subsistence,
commercial, and
conservation
purposes

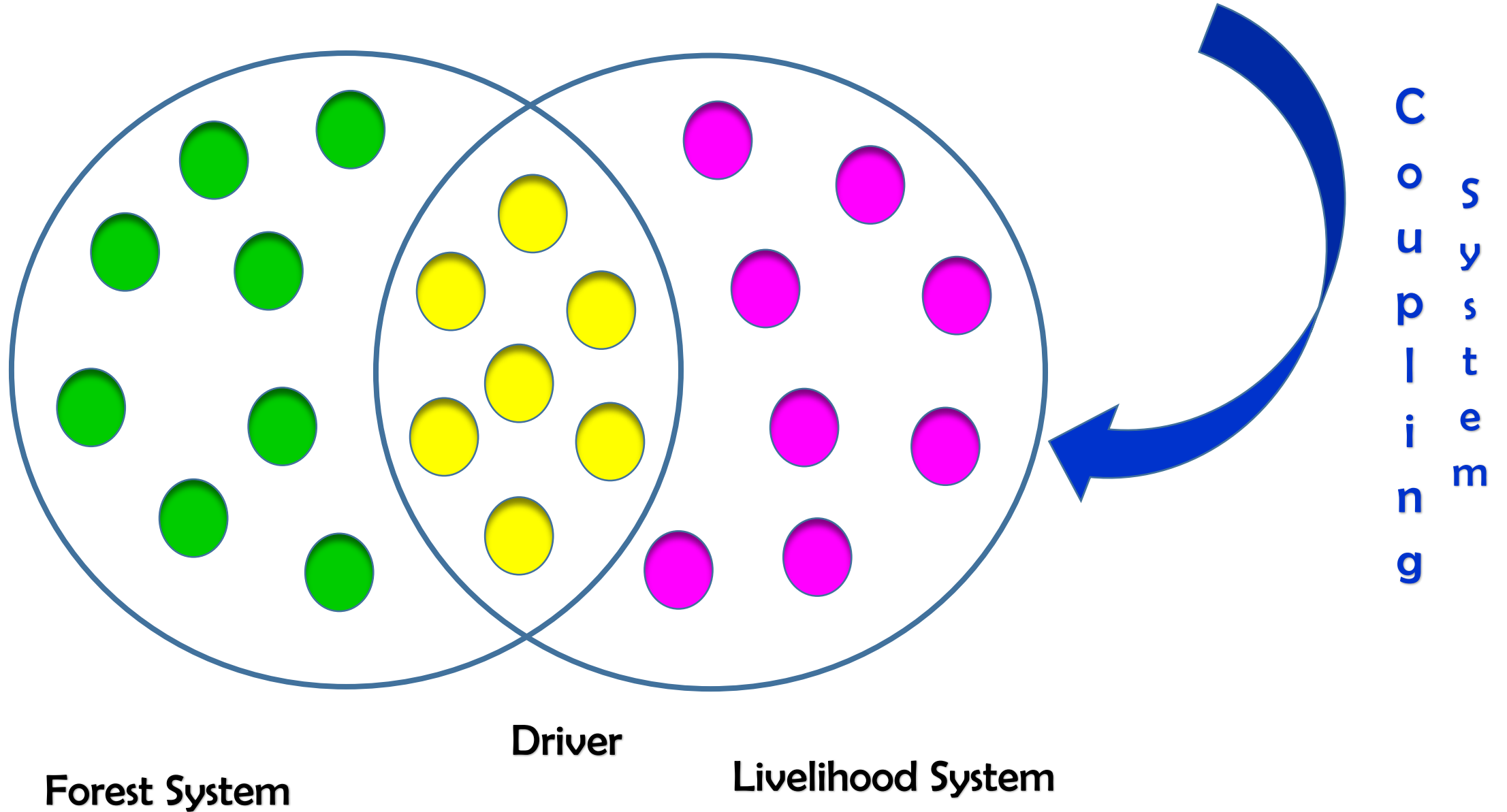
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characterize biophysical conditions
in the form of trees (timber, non
timber, fruit plants) that can also be
combined with agricultural crops (as
well as livestock)

family or
institutional-based
management,

managed by the communities
based on local self learning
and/or new technology that
has been introduced

Basic Systems Modelling

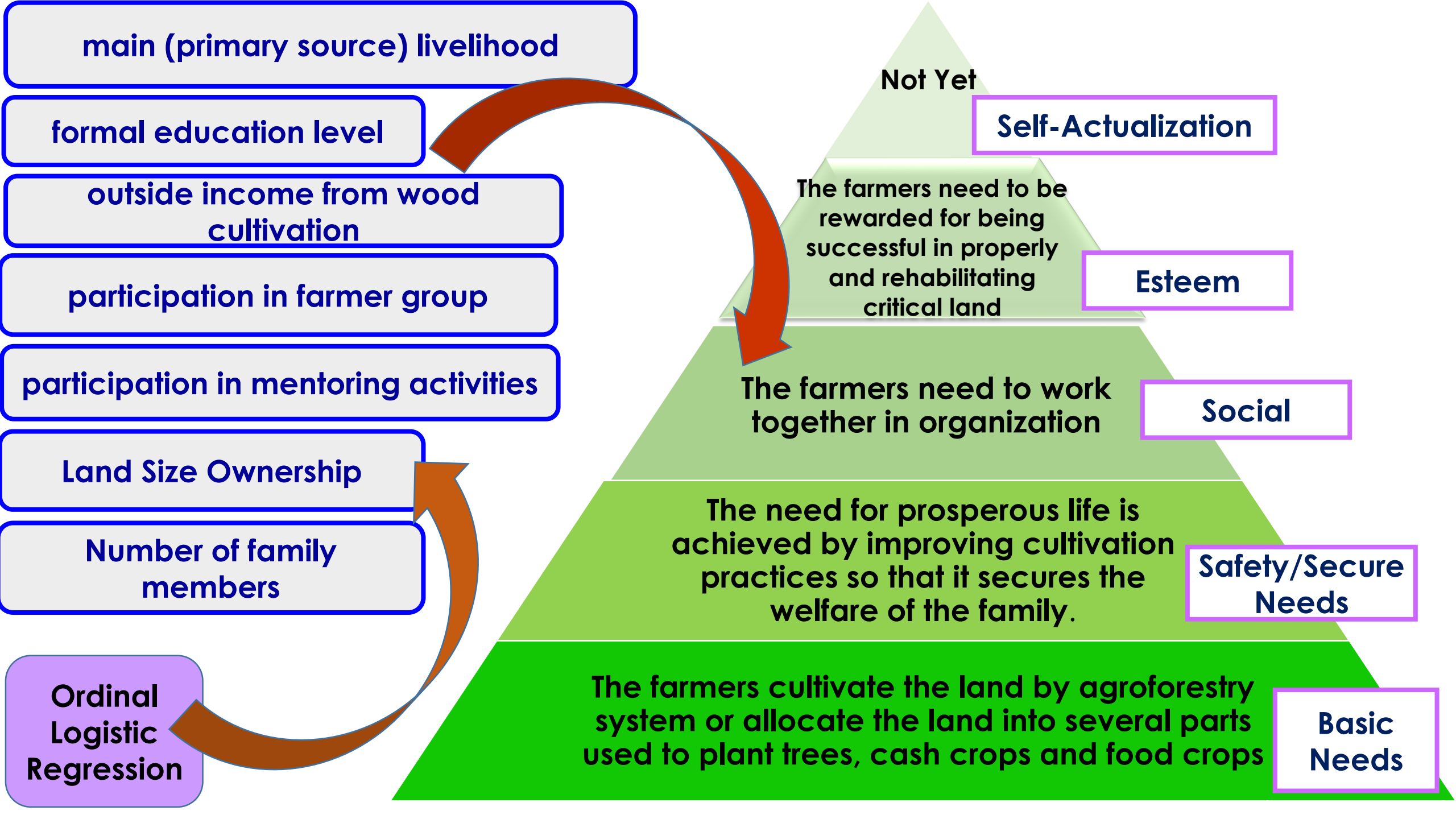


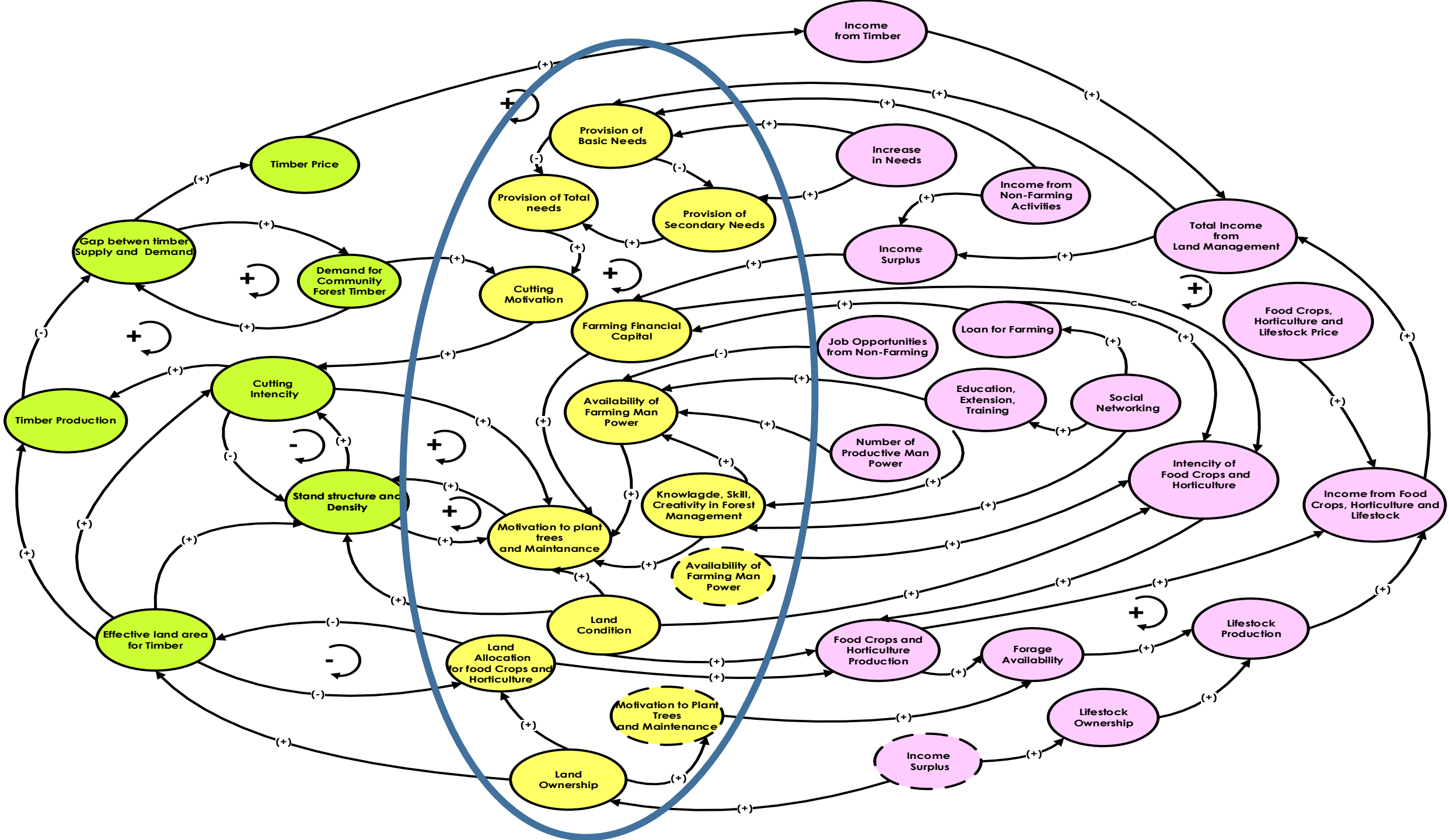
Discussion

Community Forest Development

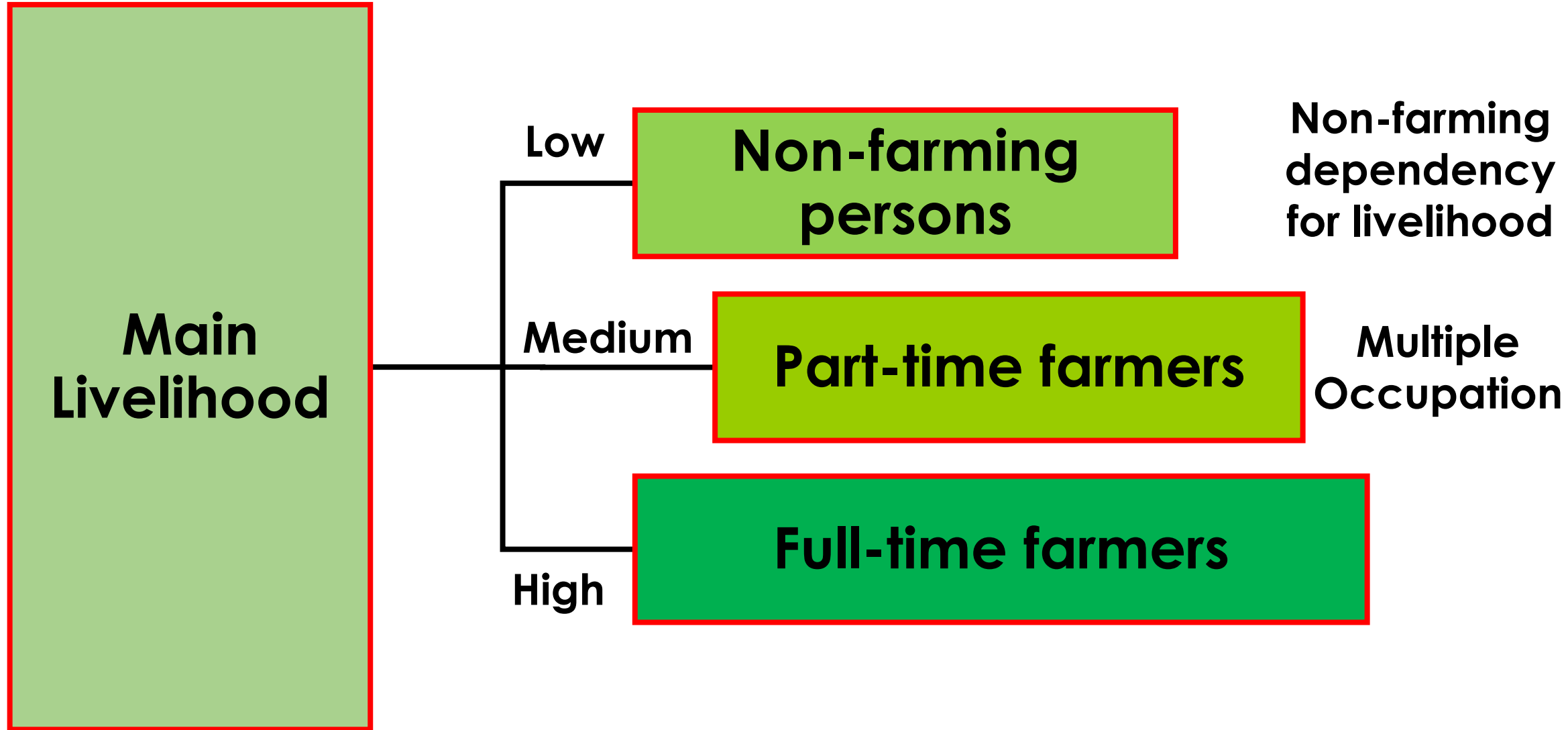
MOTIVATION







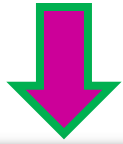
Identification of adaptive coupling system





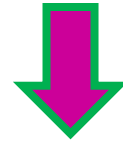
Possible scenario for community forest development

Non-farming persons



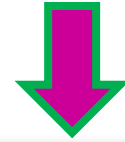
Government assistance should be carried out building capacity towards professional business of farmers (not anymore as subsistence level)

Part-time farmers



Focused government assistance in intensive agroforestry community forest cultivation

Full-time farmers



- Government may provide assistance in intensive agroforestry community forest cultivation
- Community forest farmer groups are activated to support the development of knowledge management;
- Financial assistance may be provided without troubling household balance

Conclusions

Community forest is a system which always in the coupled state with and adaptive to the different systems of livelihood

The power of systems' coupling between community forest and livelihood has its potential to generate most feasible scenarios for policy intervention, as well as generating strategy to accelerate the contribution of community forest to the improvement of the quality of livelihood depending on degrees of coupling.

THANK YOU

