

# Vulnerability Assessment of Smallholders in Pagar Alam, Indonesia

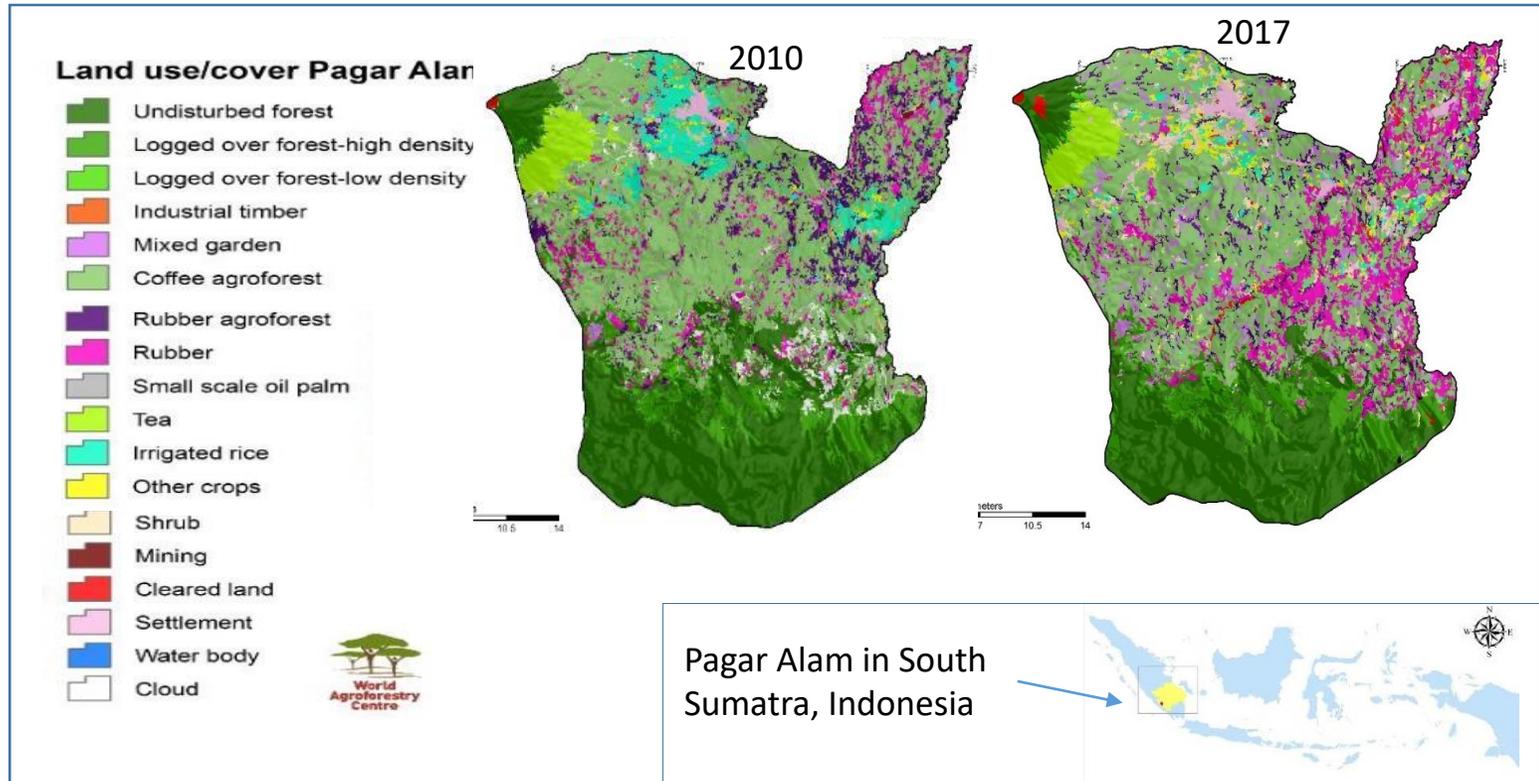
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September 2019



# Pagar Alam Upland Region - Indonesia

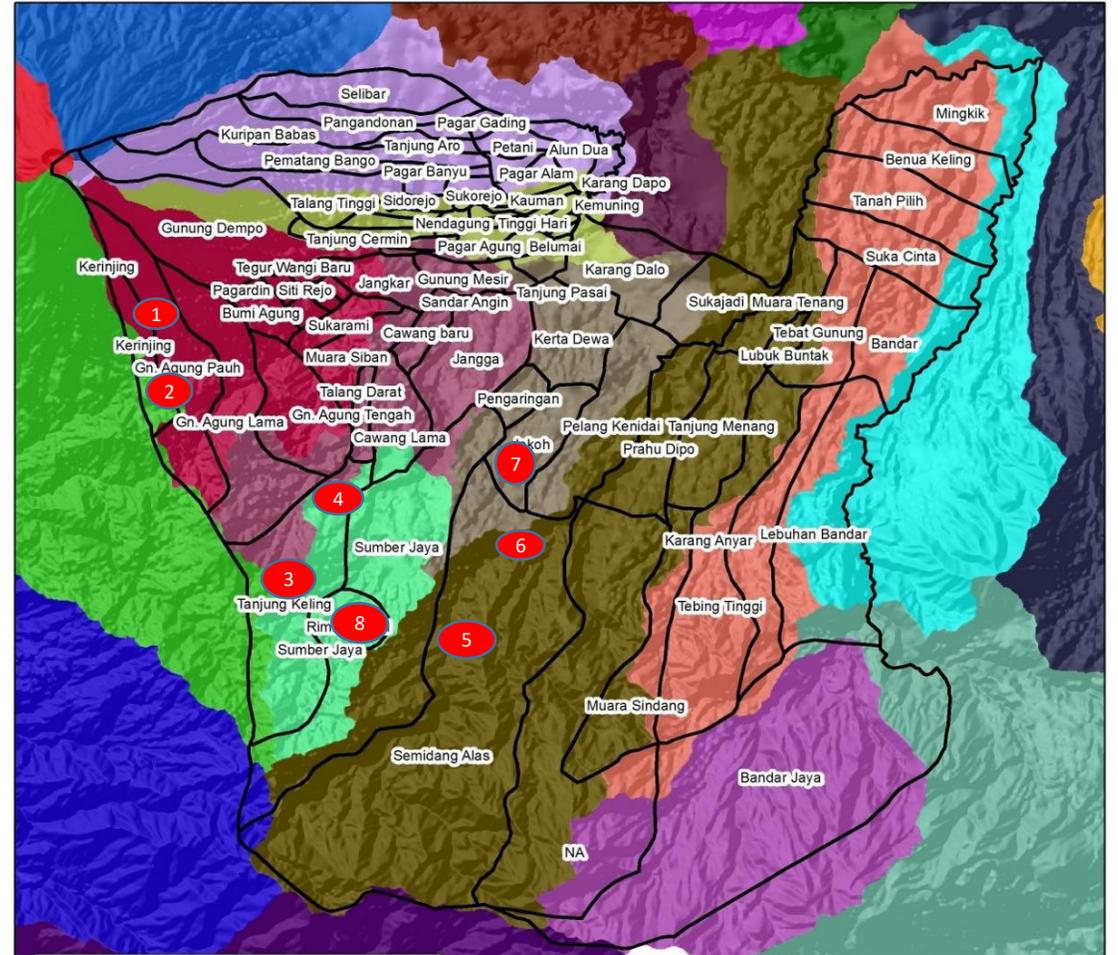


- 68,000 ha, 38% protected forest area\*
- Upstream area of Musi Watershed of South Sumatra
- 135,000 persons, 70 % work in agriculture
- GDP from agriculture: 23% of the total GDP



# Vulnerability Assessment

- **In-depth interviews (25 persons)**
  - 11 government representatives
  - 13 Community leaders
- **Focus group discussions (8 upland villages)**
  - Female and male smallholders groups
  - 173 participants (132 male and 91 female smallholders)



Colours represent sub-catchments

— Village boundary

● FGD location

# Major issues in Pagar Alam

## 1. Forest tenure conflict

Tenurial conflict between farmers and authority in the forest border  
Coffee and horticulture smallholders 'encroached' the protected forest

## 2. Reservoir construction for ricefield irrigation

The government plans to facilitate land-use conversion of 3,200 hectares coffee agroforestry to irrigated rice fields (5% of the district area)

## 3. Low quality coffee product

No incentives for farmers to produce high quality coffee through improved farming practices.

Seasonal crops recently replaced coffee farming, including in the sloping land



# Landscape Characteristics

Key-informant interviews & observation



## Target respondents:

- City government authorities
- smallholders (local and in-migrants) with different farming systems

## Scope of interviews:

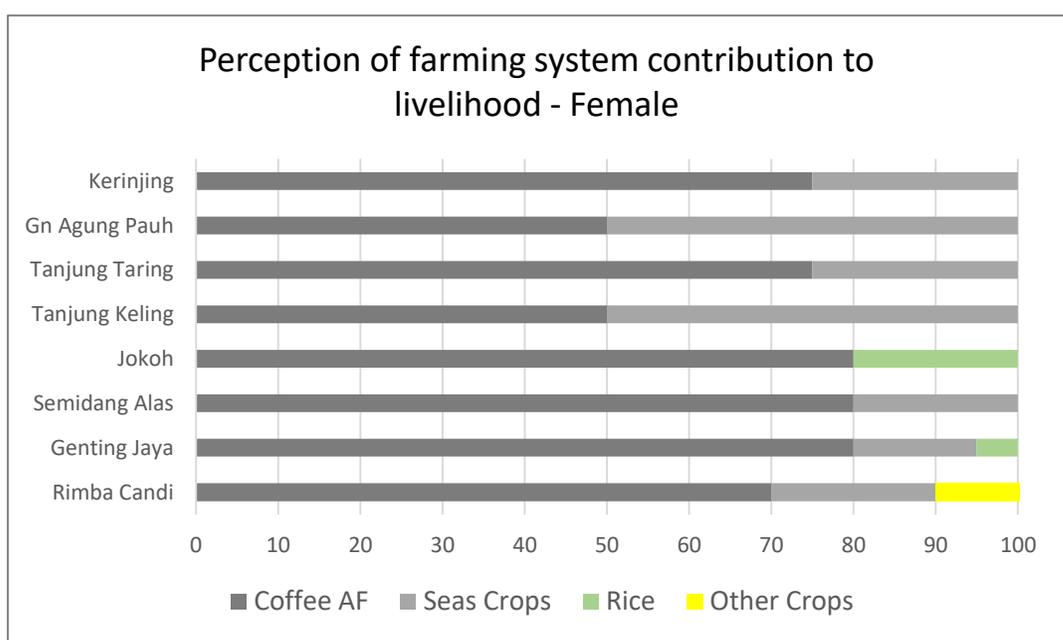
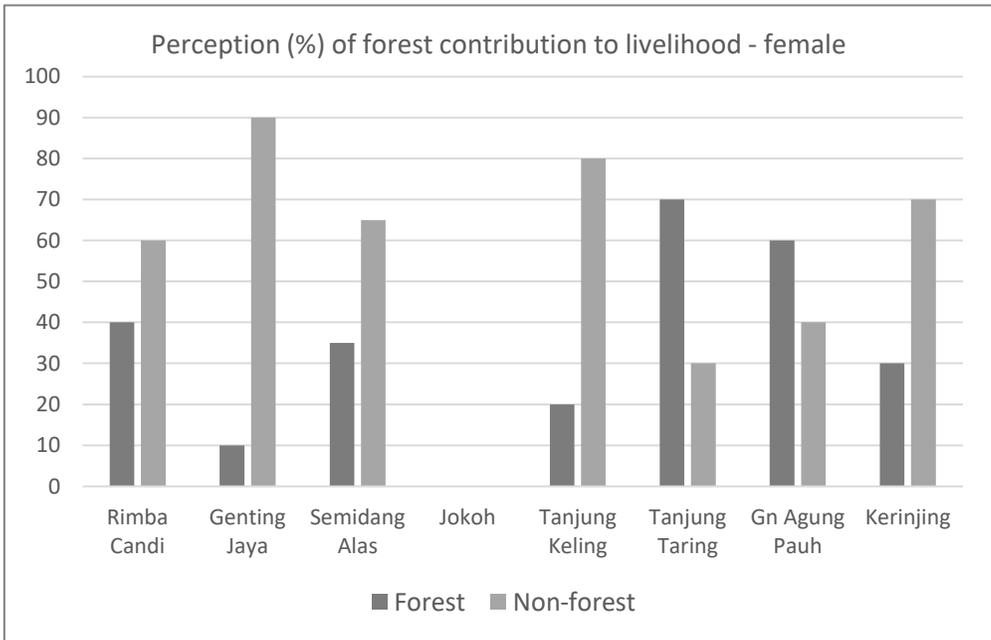
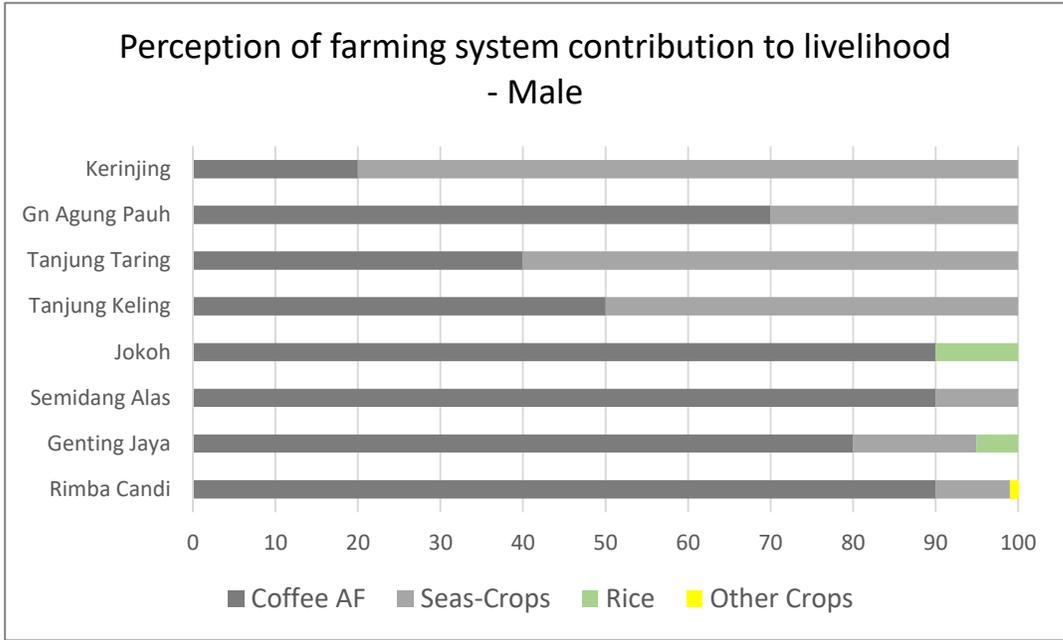
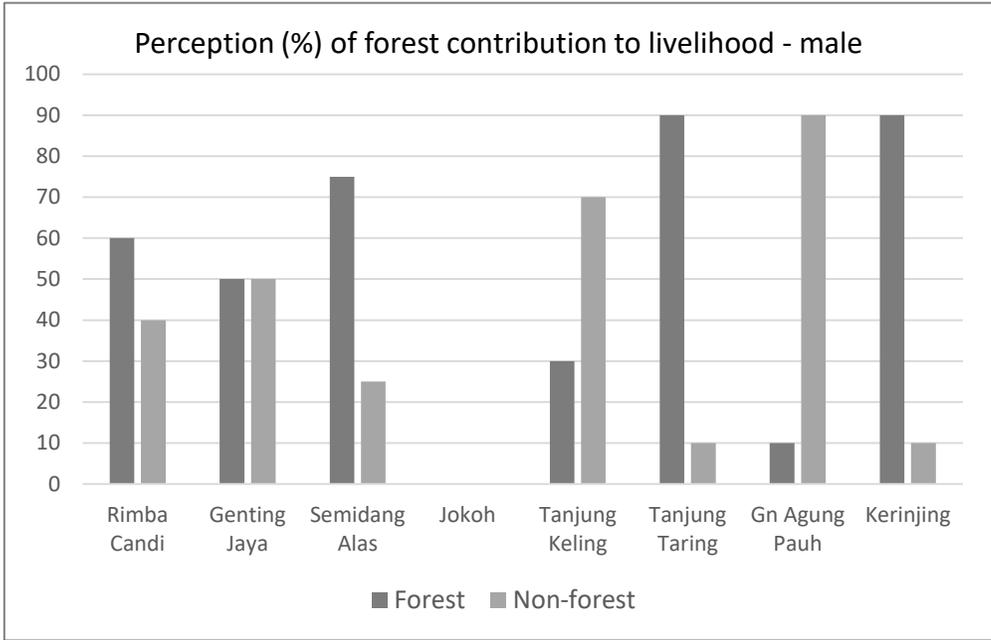
- Farm livelihood activities and strategies of farmers with different farming systems
- Forest utilization
- Existing agriculture and environmental issues
- Major policies in natural resources management and agriculture
- Socio-economic and environmental shocks and stressors (vulnerability)

# Livelihood strategy

Focus Group September 2018

- Predominantly coffee farming, although gradually replaced by seasonal crops
- Farmers prefer both farming systems, although land availability limit diversification strategy
- Overall forest-land contribution is diminished
- Female perceive less forest-land contribution to livelihood
- KII and FG findings: farmers gradually prefer short-term income (seasonal crops) than coffee





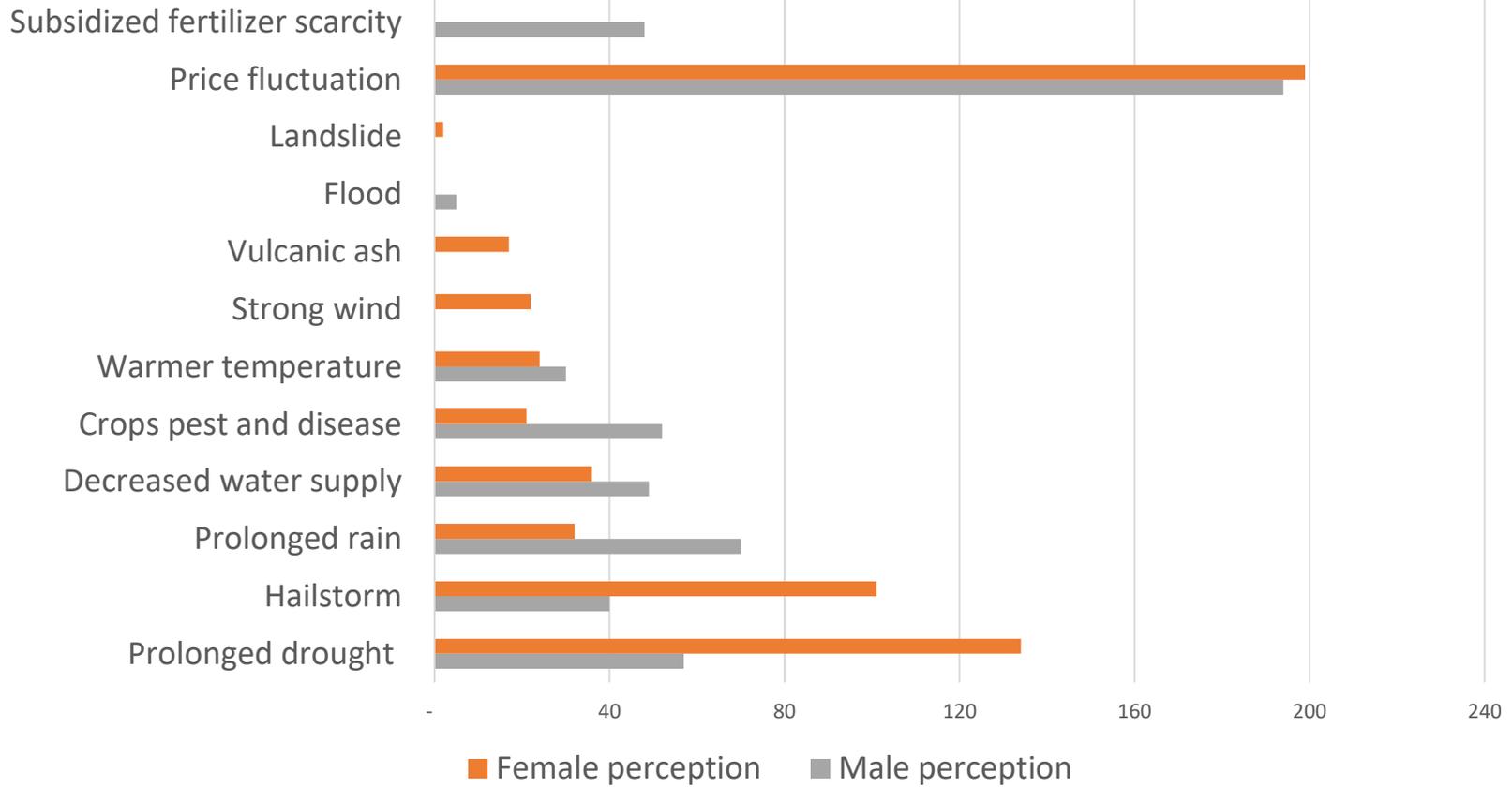
# Vulnerability

FOCUS GROUP 16 – 26 September 2018

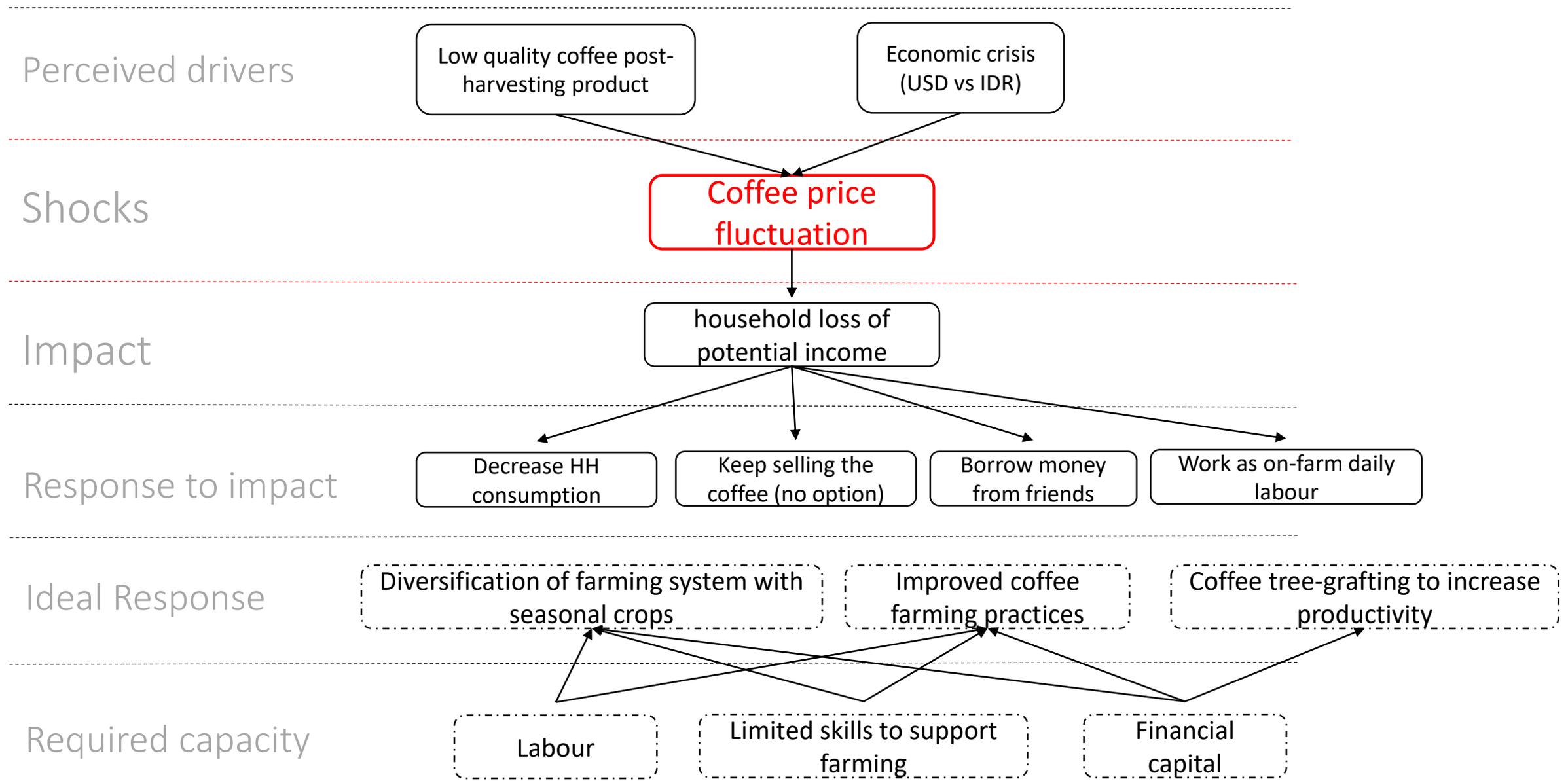


- Major shocks come from commodity price fluctuation that occur more frequently
- Other major shocks indicate the changing climate
  - Female perceived prolonged rainy season
  - Male perceived prolonged drought & more frequent hailstorm
- Seasonal crops as the alternative responses to shock

### Perception on the local Shocks and Stressors (All villages)



# Coffee smallholders' shocks, drivers, impact and responses in Pagar Alam



Source: Focus group discussions and Interviews

# Conclusion

- In Pagar Alam, smallholders' dependency to forest and forest lands were gradually diminished. The 'encroached' protected forest areas were still cultivated mainly with tree-crops, and recently gain support from the government through the Social Forestry program
- **Coffee price fluctuation** and **changes in climate pattern**, such as prolonged drought and rainy season, were perceived as the major shocks that negatively influence smallholders livelihood
- There is a tendency for replacing coffee agroforestry with vegetable crops, including on the sloping land, to pursue short-term profit
  - The conversion could contribute to exacerbate the changing climate and further risks, such as soil-water degradation
- Coffee smallholders were dependent to the local middlemen, with a very limited bargaining power towards the price, due to their coffee production quality

# Recommendation

- Smallholders require incentives to maintain their coffee agroforestry and reduce the increasing preference towards intensive vegetable farming
- Improve the coffee farming practices, to achieve better quality and productivity and cope with changing climate pattern
- Smallholders need to access better coffee market, raising awareness about the benefits and potential profits from sustainable coffee farming
  - ICRAF and NedCoffee are currently working with local champion farmers to pilot the capacity building activities in Pagar Alam
  - A workshop on sustainable coffee for local coffee stakeholders in Pagar Alam would be organised to raise stakeholders' awareness and initiate entry point to a wider coffee market. This workshop invited Dr Surip Mawardi, an international Coffee Expert from **Starbucks Farmers Centre** as the resource person, representing global coffee market