

Agroforestry and Sustainable Vegetable Production in Southeast Asian Watershed: A Baseline Study

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Introduction

A baseline study was conducted to provide an analytical basis for socio-economic impact assessment of integrated vegetable-agroforestry systems. The data generated by this study is being used for economic analysis of vegetable farming, specifically: (a) analysis of the current of demographic data of farmers, and (b) analysis of the current of vegetable farm practices in social and economic.

Working hypothesis of the study is that the socio-economic characteristics of farmers' household influence the type of their vegetable farm system and its economic productivity

The Study Site

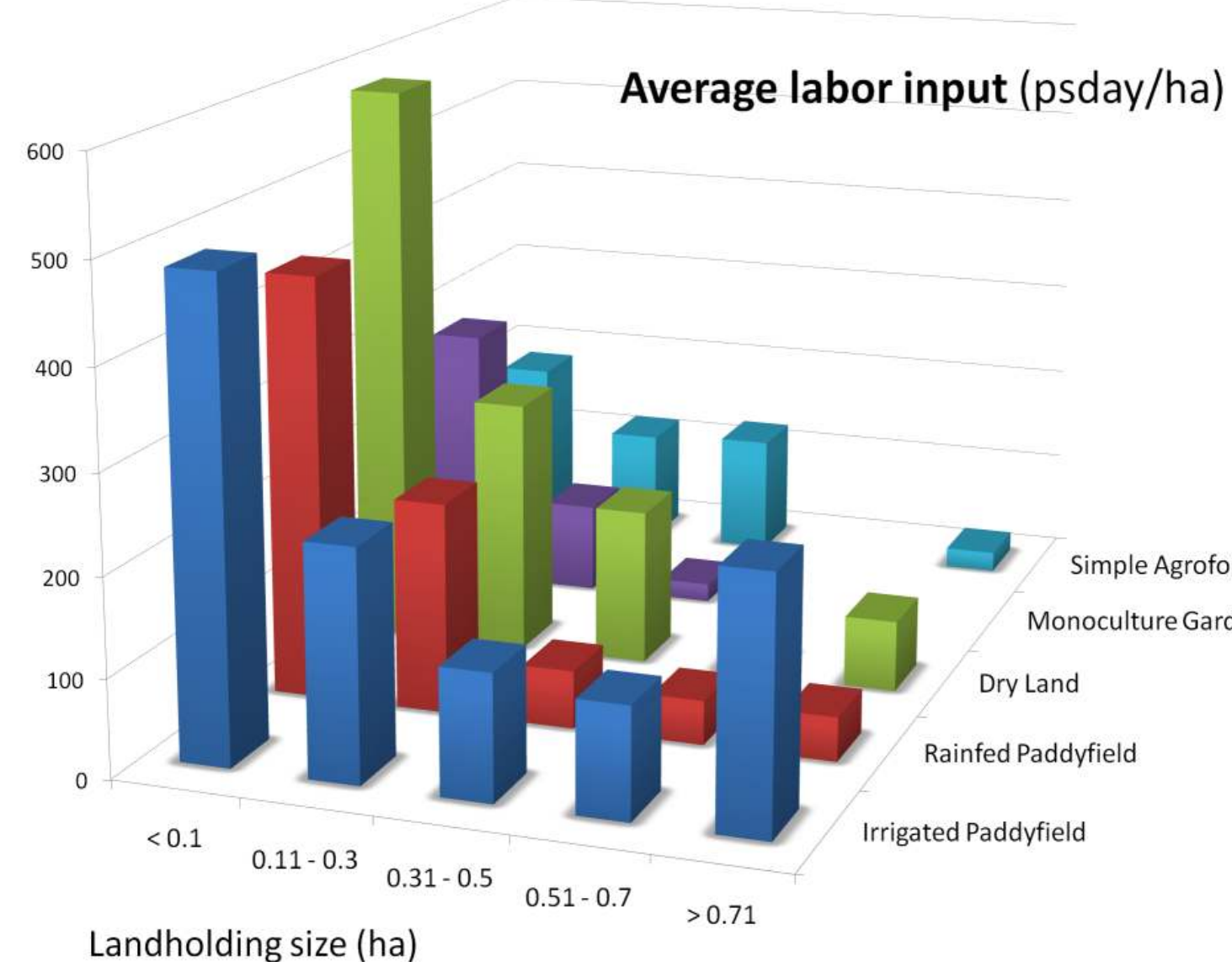
- The study was conducted in three villages (Hambaro, Parakan Muncang, Sukaluyu), in Nanggung sub-district, West Java, Indonesia
- Total area of 109.99 km², 70.223 km² (63.8%) is arable land
- Elevation: 200-1800 masl
- Annual rainfall 3,000 to 4,000 mm
- Average annual temperature 22° C and 34° C

Demography

| | Hambaro | Parakan Muncang | Sukaluyu | Sample Villages |
|--------------------------------------|---------|-----------------|----------|-----------------|
| Family member | n = 62 | n = 63 | n = 60 | n = 185 |
| 1. Total household members (persons) | 343 | 328 | 289 | 960 |
| 2. Sex Ratio | 112 | 105 | 98 | 105 |
| 3. Household Size | | | | |
| 1-4 | 34% | 33% | 48% | 38% |
| 5-8 | 52% | 64% | 43% | 53% |
| > 9 | 15% | 3% | 8% | 9% |
| 4. Average family size | 5.5 | 5.2 | 4.8 | 5.2 |
| 5. Nuclear Family Member | 96% | 95% | 96% | 96% |
| Age Structure | | | | |
| < 15 | 35% | 24% | 34% | 31% |
| 15-65 | 63% | 72% | 63% | 66% |
| > 65 | 2% | 4% | 3% | 3% |
| Average labor force per household | 3.5 | 3.8 | 2.9 | 3.4 |
| Dependency Ratio | 59% | 38% | 59% | 51% |

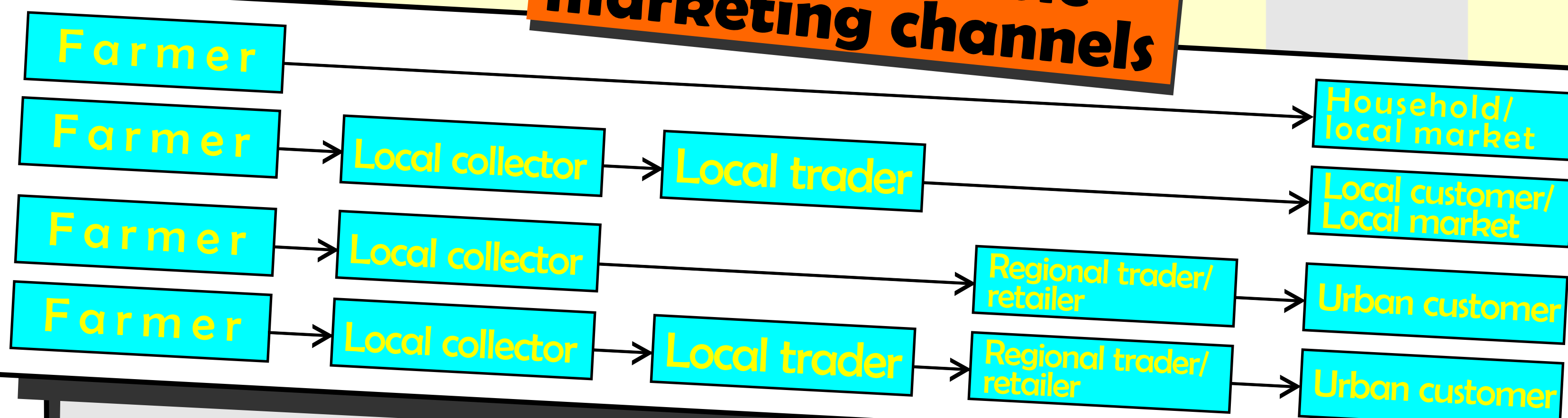
- Most of the respondents (59.4%) engaged in agriculture as their main occupation
- About two-fifth of the respondents also engage in off-farm activities for additional income.
- Educational attainment, 5.9 % of the respondents were illiterate, and most of the respondents (87.6%) never went beyond elementary level. Primary school enrollment rate is also low (87.8%)

Farming System

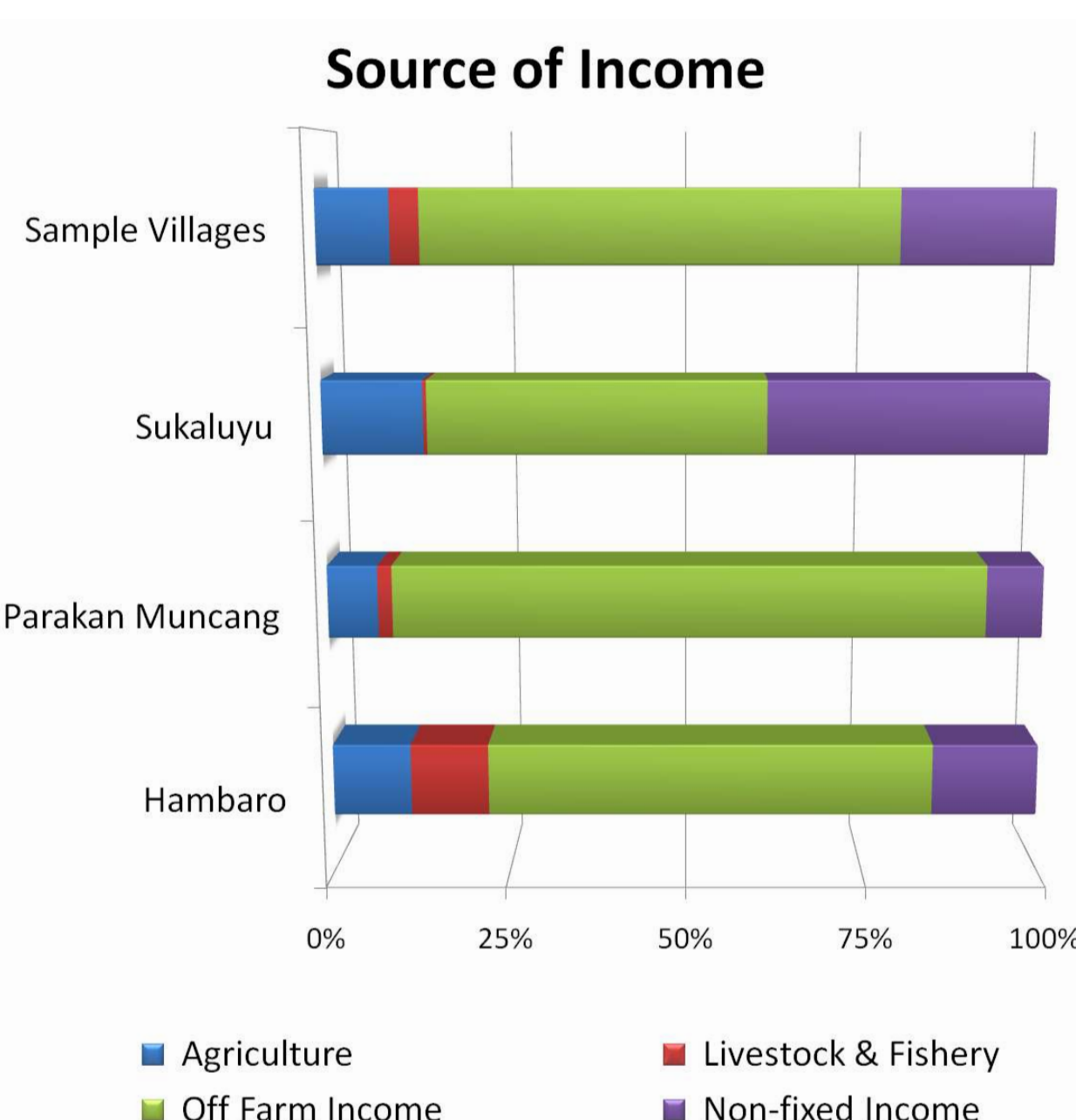


- Agricultural land controlled by the surveyed household is comprise of rice fields, dryland agriculture, monoculture gardens (ex. cassava, cucumber), and traditional multispecies tree gardens
- Species mostly cultivated by farmer in dryland and simple agroforest plots : banana (*Musa sp.*), long bean (*Vigna sinensis*), cucumber (*Trichosanthes cucumeroides maxim*), *kucai* (*Allium tuberosum*) and string bean (*Phaseolus vulgaris*)
- Farmers who have larger area of agricultural land, without a sufficient amount of labor tend to practice less labor intensive agricultural systems, such tree-based systems

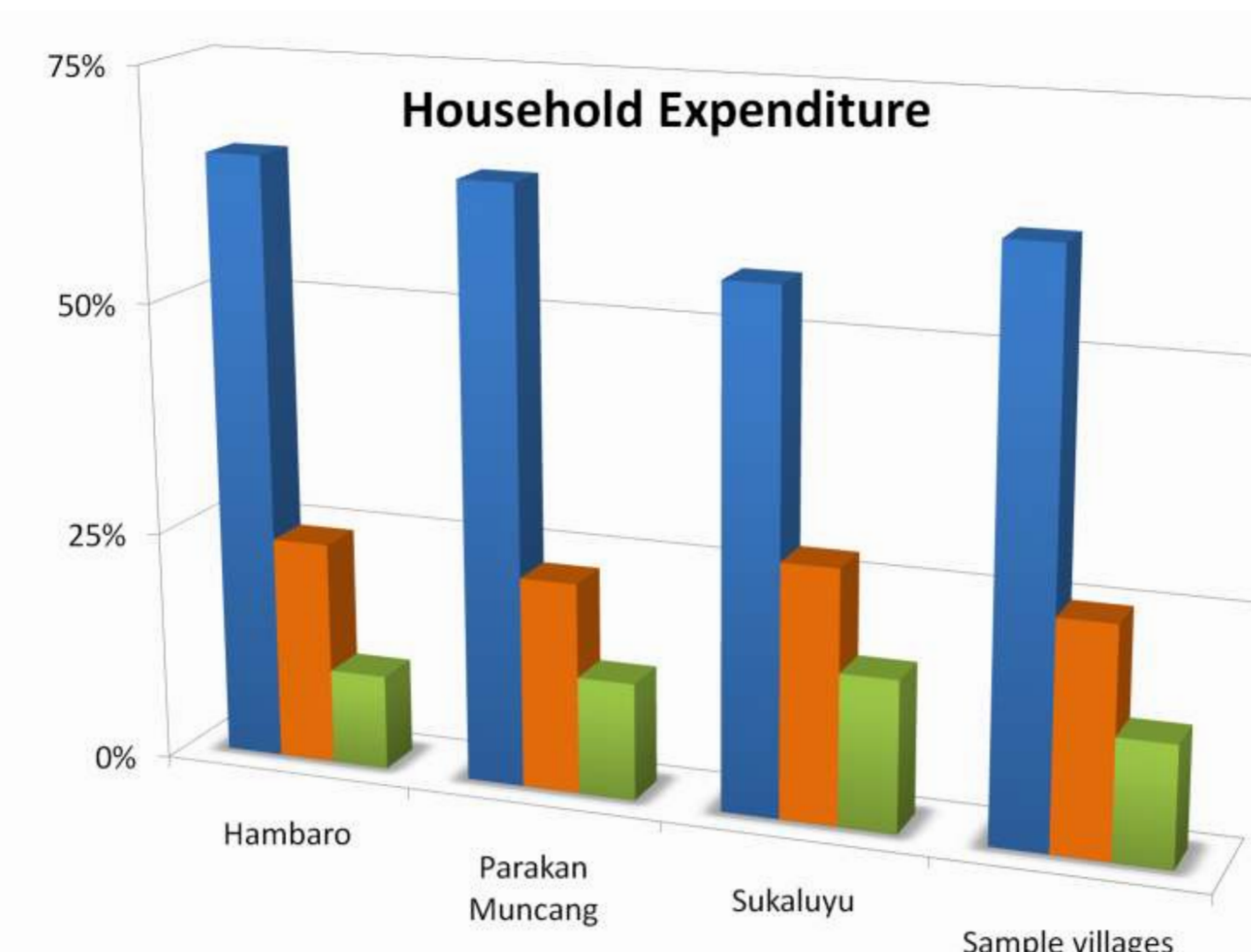
Fruit & vegetable marketing channels



Income & Expenditure



- Agricultural activities alone contribute 14% to the total households' income
- More than half (52%) of the surveyed household are below poverty line
- Average expenditure per households is lower than average family income



Further information:

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