







Research Proposal



Maximizing Landscape Filter Functions under Smallholder Coffee Plantation in Sumberjaya, Lampung

Research questions

- 1. By how much are the watershed functions of a coffee micro catchment differ from a micro catchment under permanent vegetative cover (bush or forest) in terms of runoff and on-site and off-site impacts of soil erosion?
- 2. How much can runoff and soil erosion be reduced under coffee plantation?
- 3. Will government permit an experimental situation whereby farmers can enjoy semi-permanent land tenure by practicing a conservation farming system? What are a set of acceptable provisions to implement such an agreement in terms of measurable effects on watershed functions?
- 4. What is the hypothesized effect of a given set of conservation farming practices on each given slope class that will fulfill the agreed provisions of tenure settlement?
- 5. What is the appropriate blend of farmer-led and researcher-led trials to verify the performance of conservation farming practices that will be implemented?
- 6. Is it practicable to communities of farmers to form groups to develop a plan for their catchment and a farm plan for each farm?

1. Discussion and Negotiation: Central Gov. (MOF, MOHA); BAPPEDA Tk. I and Tk. II Dinas PKT, BPN

2. Predicted effects of practices
•Plot-level: RUSLE

Catchment Level:
 PC-Raster/
 Walnucas/ANSWERS

3. Agreement that this level of management is acceptable to both parties.

5. Landcare groups implement the practices and receive land tenure security

4. Experimental program to validate and refine the combination of practices

6. Paired plot farmer-participatory trial (every farmer in the catchment)

7. Researchermanaged trials
•Plot scale
•Catchment