

# 15 Years of Change: Gender, livelihood and resource access changes in a matrilineal part of Sumatera

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## Background

The theory of induced innovation (Hayami and Ruttan 1985) argue that both technological and institutional innovation that scarce resources occur in response to changing resources endowment. When natural resources became scarce, the property right institution evolved from open access to more individualized ownership. This evolution of tenure often erode women's land right (Lastaria-Cornhiel 1997). This study compared two data set in 1997 and 2013 in the matrilineal inheritance system in Sumatera, Indonesia to analyze the implications for gender equity of different patterns of evolution of land tenure and land use decision

### Land tenure categories

Ownership categories	Owners	Inheritance to	Joint ownership
Lineage	Lineage members	Sisters, nieces, and daughters	Yes
Joint Family	Daughters	Daughters	Yes
Single Family I	Daughter	Daughters	No
Single Family II	Son, Daughter and son	Sons	No
Single Family III	Daughter or son	Daughters and sons	No

## KEY FINDINGS

- Evolution of land tenure from communal land to private land
- The inheritance rule in Bungo for tree crops and bush fallow is land inherited to son only. However, we found the evidence of breaking the rule that indicated by woman also inherited the land.
- Gender income and labor differences, woman income mostly come from annual crops (rice fields and crop fields), where man income come from high-value of commodities (rubber and oil palm).
- Years of completed schooling male and female, increased in the children of respondents' generation in both districts

## Evolution of land tenure from communal land to private land

Lineage ownership has been disappear in 2013. It was replaced by new private ownership under the government program namely transmigration.

Land use by district	Lineage ownership		Joint family ownership		Single family ownership		Private ownership I (purchase)		Private ownership II (clearance)		Transmigrant	
	1997	2013	1997	2013	1997	2013	1997	2013	1997	2013	1997	2013
<b>1. Paddy field:</b>												
Bungo	0	0	65	77	29	18	6	5	0.1	0	0	0
Kerinci	10	0	64	59	6	33	6	8	8	0.1	0	0
<b>2. Tree plots:</b>												
Bungo	0	0	3	0.1	46	30	12	25	39	39	0	6
Kerinci	5	0	2	0.3	62	44	14	21	19	35	0	0
<b>3. Cropfields:</b>												
Bungo	0	0	0	15.2	0	47	0	0	0	8	0	30
Kerinci	0	0	0	0.7	0	59	0	23	0	17	0	0
<b>4. bush Fallow area:</b>												
Bungo	23	0	3	0	42	36	6	17	27	47	0	0
Kerinci	10	0	19	0	43	87	14	1	13	13	0	0

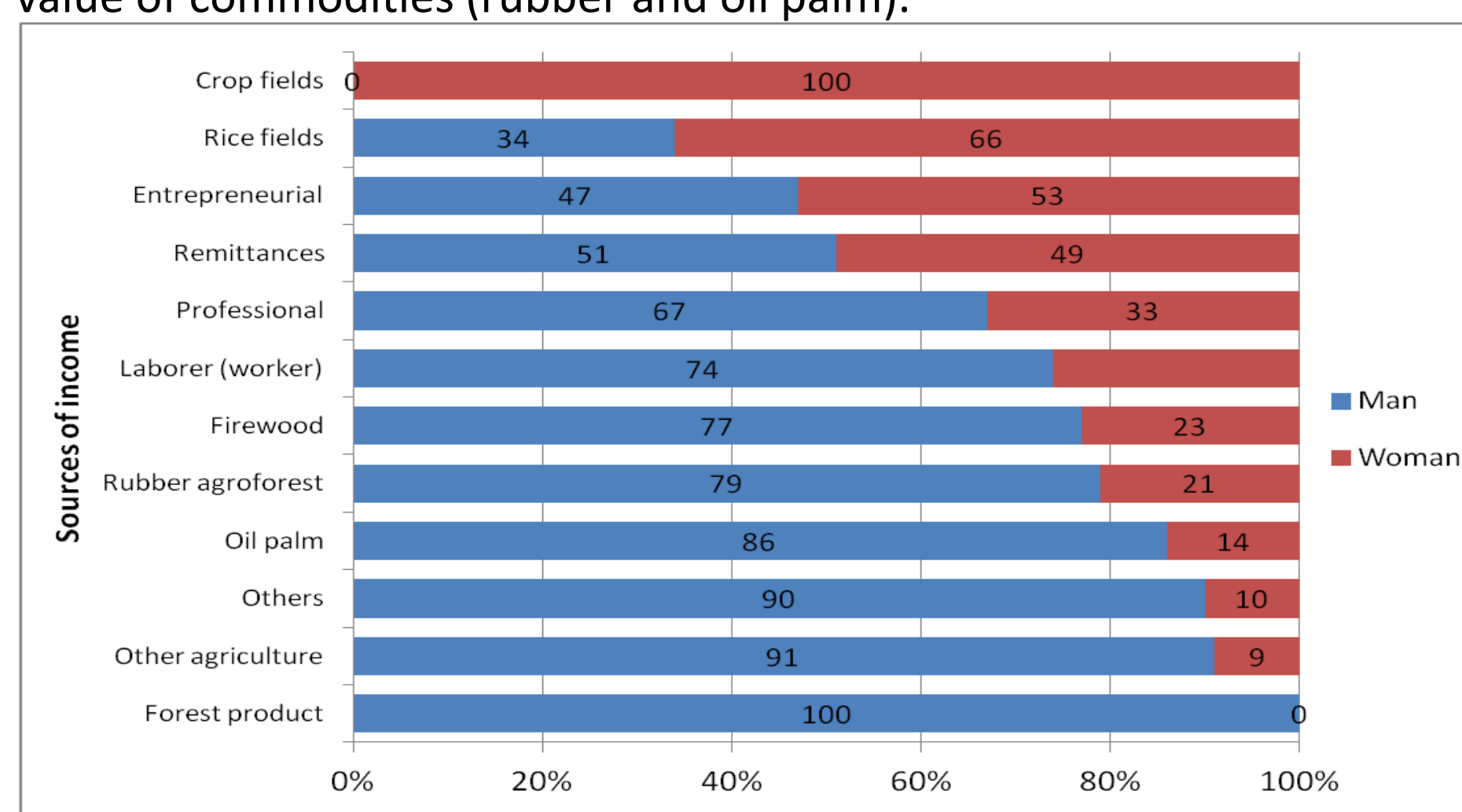
## Inheritance rule has changed: woman obtain more land

The inheritance rule in Bungo for tree crops and bush fallow is land inherited to son only. However, we found the evidence of breaking the rule that indicated by woman also inherited the land.

District	Inheritance	Man (%)	Woman (%)
Bungo	Inheritance rule	100	0
	Expected inheritance	77	23
Kerinci	Inheritance rule	50	50
	Expected inheritance	43	57

## Gender income and labor differences

Gender income differences, woman income mostly come from annual crops (rice fields and crop fields), where man income come from high-value of commodities (rubber and oil palm).



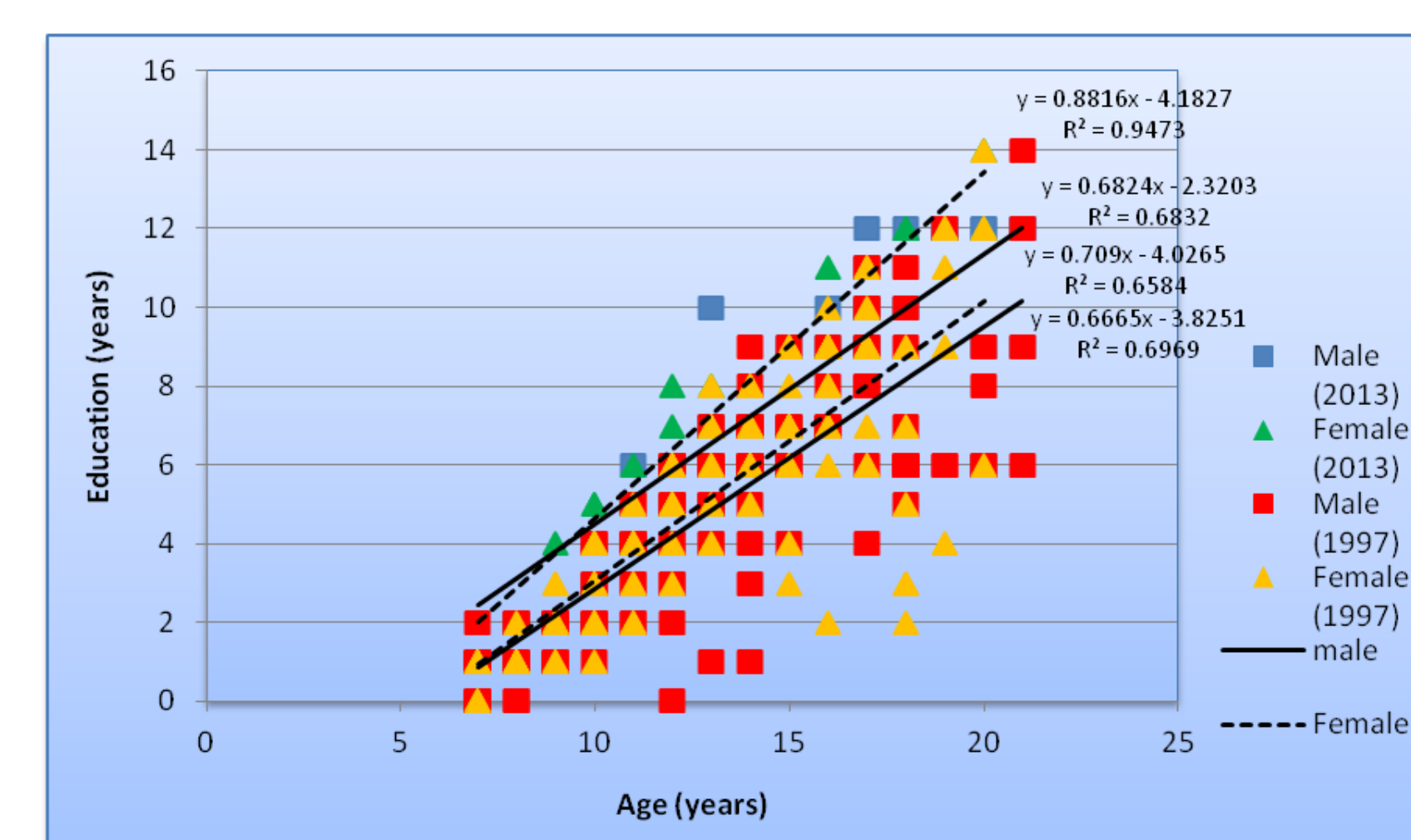
### Proportion of labor input in Bungo District

Type of labor	Wet rice		Upland rice		Young rubber		Mature rubber		Other tree	
	1997	2013	1997	2013	1997	2013	1997	2013	1997	2013
<b>Family labor (percent)</b>										
Men	NA	34	32	0	83	83	91	79	0	86
Women	NA	66	68	0	17	17	9	21	0	14
Total	NA	100	100	0	100	100	100	100	0	100
<b>Total person-days per hectare</b>										
Men	NA	18	150	0	39	2	53	28	0	20
Women	NA	18	150	0	39	2	53	28	0	20
Total	NA	36	300	0	78	4	106	56	0	40
<b>Total labor (percent)*</b>										
Men	NA	28	30	0	68	59	92	81	0	69
Women	NA	72	70	0	32	41	8	19	0	31
Total	NA	100	100	0	100	100	100	100	0	100
<b>Total person-days per hectare</b>										
Men	NA	35	176	0	52	3	95	36	0	27
Women	NA	35	176	0	52	3	95	36	0	27
Total	NA	70	352	0	104	6	190	72	0	54

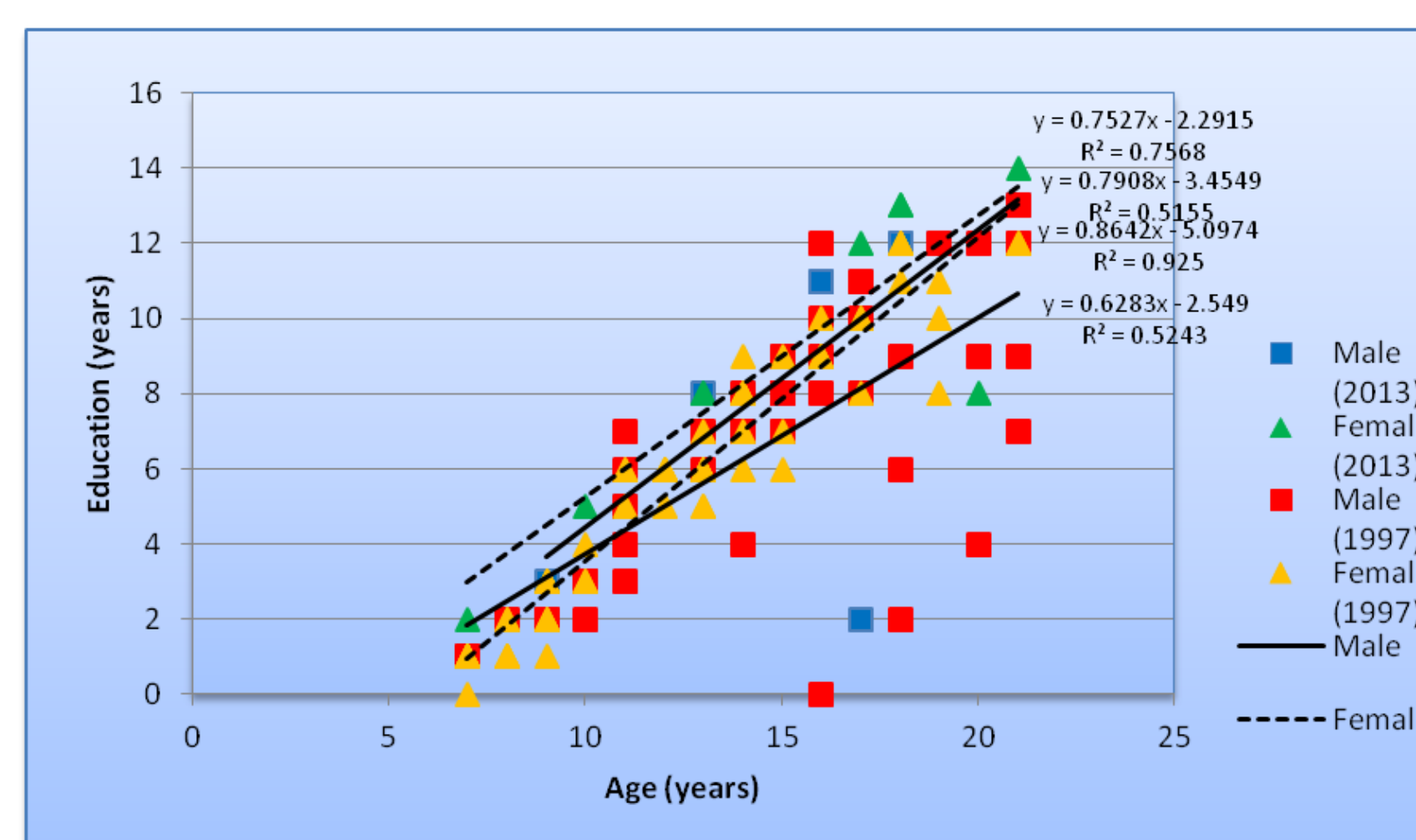
The dominance of the female labor for wet rice and upland rice is consistent with the prevalence of ownership of upland fields and wet rice by women and also conforms to social norms regarding women's role in household food security.

## Years of completed schooling male and female

### Child education level in Bungo (2013)



Years of completed schooling male and female, increased in the children of respondents' generation in both districts.



### Child education level in Kerinci (2013)

## Study sites

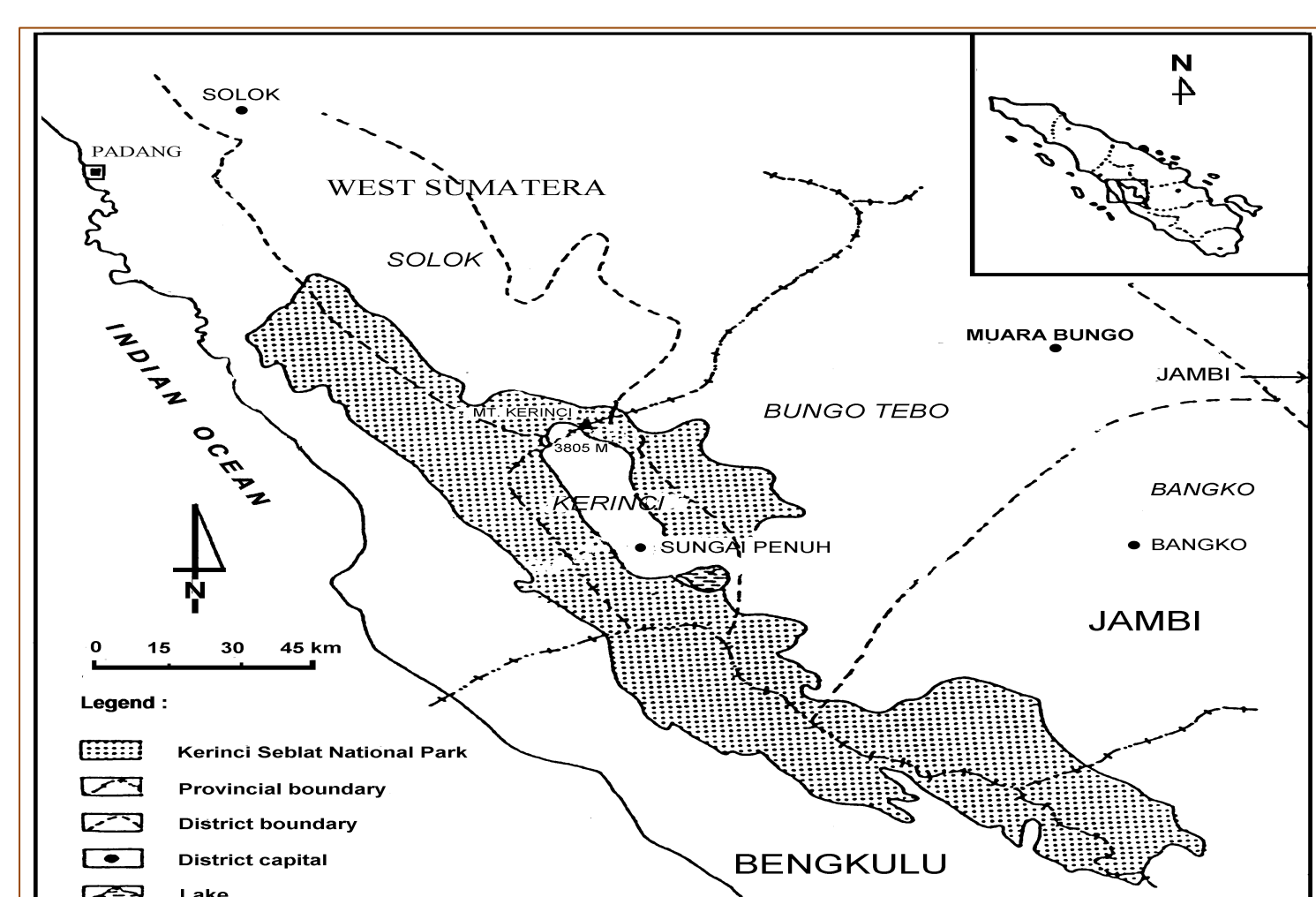
Two contiguous villages are selected in both districts (Jambi Province), in which lowland paddy cultivation and upland agroforestry are the most important farming system. A more collective and matrilineal type of family ownership is common for lowland paddy fields which are surrounded by agroforestry plots or commercial tree plots.

### Kerinci District

Cinnamon is a major tree crops and the most common inheritance practice is for daughters and sons to inherit land equally. Kerinci is the most ethnic group in this area

### Bungo District

Rubber is a major tree crop. Sons commonly inherit upland fields and daughters inherit lowland paddy fields in this region. Melayu is the most ethnic group as the lowest located district.



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