IMPACT OF POLICIES ON LAND USE: A MIZORAM CONTEXT WITH SPECIAL REFERRENCE TO “LO NEIH”

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“LO NEIH” in Mizo

Site Selection – Ram hual

Clearing of Forest – Lo vah

Drying | Burning – Chapchar | Lo hal

KANGVAR

Partially burned plant debris are stacked and re-burned

"Mangkhawh"


Spatial
heterogeneity


Weeding:
3 times a year


46 plant species, belonging to 18 families (Tripathi et al. 2017)

Sl. No.	Local Name (Mizo)	Botanical Name	Common name (English)	Family
1	Anka-sa	*Spilanthes acmella var. oleracea*	-	Compositae
2	Antam	*Brassica juncea*	Mustard	Cruciferae
3	Anthur	*Hibiscus sabdariffa*	Roselle	Malvaceae
4	Awmpawng	*Luffa acutangula*	Ridged gourd	Cucurbitaceae
5	Bakhawr	*Eryngium foetidum*	Wild corriander	Umbelliferae
6	Bal	*Colocasia esculenta*	Taro	Araceae
7	Balhla	*Musa spp.*	Banana	Musaceae
8	Bawkbawn	*Solanum melongena var. esculentum*	Brinjal/Egg plant	Solanaceae
9	Bawrhsaiabe	*Abelmoschus esculentes*	Lady's finger	Malvaceae
10	Behlawi	*Vigna unguiculata*	cow pea	Papilionaceae
11	Behliang	*Cajanus cajan*	Lentil/Pigeon pea	Papilionaceae
12	Bekang	*Glycine max*	Soyabean	Papilionaceae
13	Bepui	*Lablab purpureus*	Hyacinth bean	Papilionaceae
14	Bepuithlanei/Bepawr	*Psophocarpus tetragonolobus*	Winged bean	Papilionaceae
15	Berul	*Trichosanthes anguina*	Snake gourd	Cucurbitaceae
16	Buh	*Oryza sativa*	Rice	Poaceae
17	Changkha	*Momordica charantia*	Bitter gourd	Cucurbitaceae
18	Chhawhchhi	*Sorghum cernuum*	White durra/sesame	Poaceae
19	Dawnfawh	*Citrullus lanatus*	Water melon	Cucurbitaceae
20	Fanghma	*Cucumis sativus*	Cucumber	Cucurbitaceae
21	Fangra	*Canavalia ensiformis*	Sword Bean	Papillionaceace
22	Fu	*Saccharum officinarum*	Sugarcane	Poaceae

24	Hmarchapui	*Capsicum frutescens*	Hot long pepper	Solanaceae
25	Hmazil	*Cucumis melo var. saccharinus*	Honey-dew melon	Cucurbitaceae
26	Kawlbahra	*Ipomoea batatas*	Sweet potato	Convolvulaceae
27	Lakher Anthur	*Hibiscus sabdariffa var. sabdariffa*	Red sorrel	Malvaceae
28	Lengser	*Elsholtzia communis*	-	Labiatae
29	Mai	*Cucurbita maxima*	Pumpkin	Cucurbitaceae
30	Maipawl	*Benincasa hispida*	Ash gourd/ Ash pumpkin	Cucurbitaceae
31	Mim	*Coix lacryma-jobi*	Job's tear	Poaceae
32	Pangbal	*Manihot esculenta*	Cassava/Tapioca	Euphorbiaceae
33	Pardi	*Trachyspermum roxbhurghianum*	-	Umbelliferae
34	Phuihnam	*Clerodendrum colebrookianum*	-	Verbenaceae
35	Runhmui	*Ocimum americanum*	Wild/ Hoary-Basil	Labiatae
36	Samtawk	*Solanum spp.*	-	
37	Samtawk-te	*Solanum anguivi*	Indian Nightshade	Solanaceae
38	Satinrem	*Solanum spp.*	-	
39	Sawhthing	*Zingiber officinalis*	Ginger	Zingiberaceae
40	Thial bal	*Maranta arundinaceae*	Arrowroot	Marantaceae
41	Thingfanghma	*Carica papaya*	Papaya	Caricaceae
42	Tumthang	*Crotalaria juncea*	Sunn hemp	Papilionaceae
43	Vaimim	*Zea mays*	Maize	Poaceae
44	Zawngtur	*Pueraria montana var. chinensis*	-	Papilionaceae
45	Zo-Purun	*Allium hookeri*	-	Liliaceae















Specialised tools and implements for specific purposes


How long
does it (really) take
to REGENERATE?
How long
can a population

- **Telephonic interview** was conducted
- **Pre-structured Questionnaire** was used
- **A total of 10 villages** belonging to three districts of Mizoram viz. Aizawl, Saitual and Lunglei were randomly selected
- In each villages, more than half of the households/families were engaged in Slash & Burn agriculture

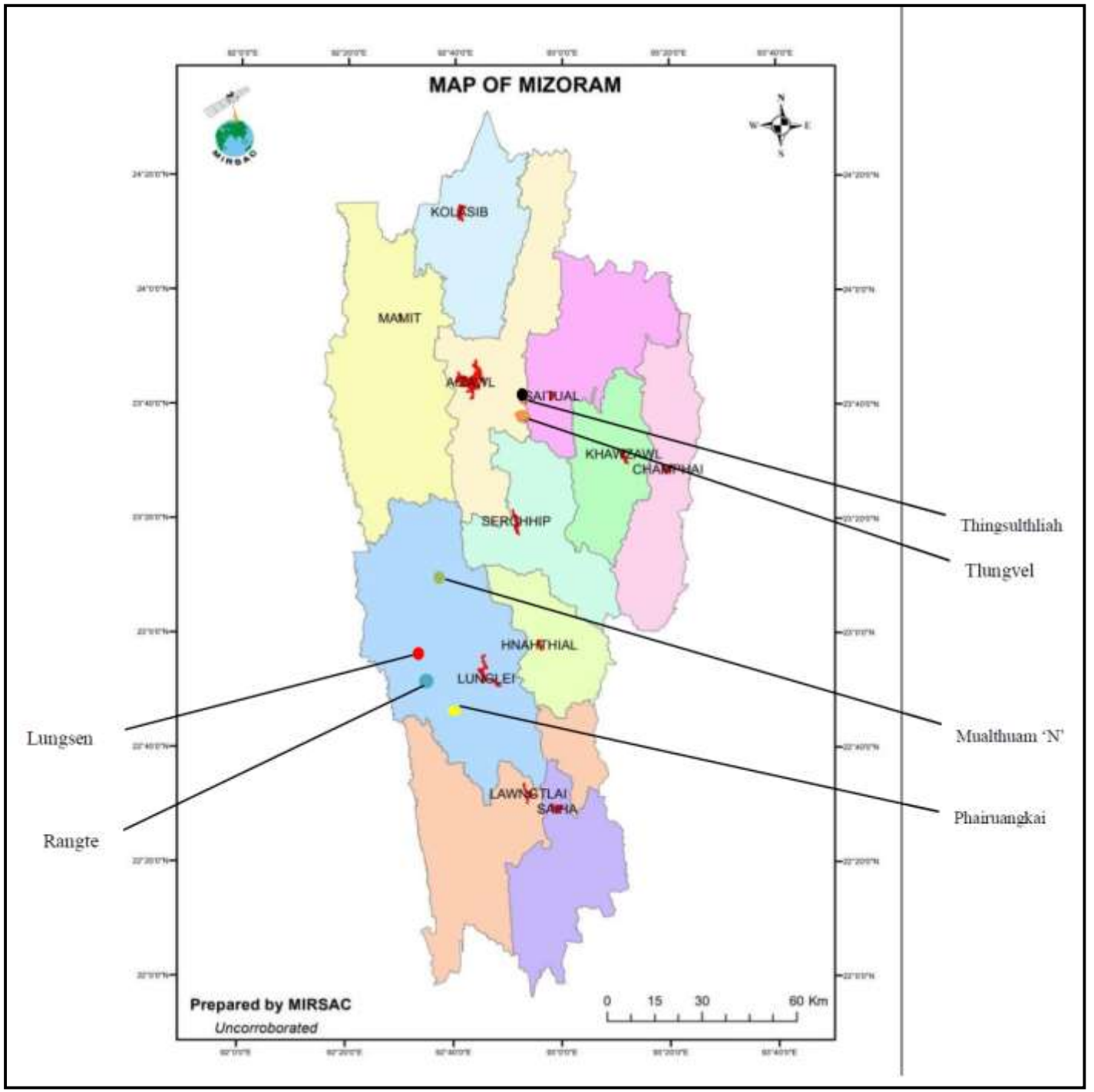


Table: Fallow Periods in different Villages of Mizoram

Sl. No.	Village	Population	No. of Families	Fallow Period (Years)	Types of Land Use	Distance from the Village (km)	Nature of Land holding
1	**Sesawng**	2722	562	**6 – 8**	RF*	3	Temporary
2	**Thingsulthliah**	3402	724	**6 – 10**	RF	3 – 5	Temporary
3	**Tlungvel**	2529	559	**7 – 10**	RF	5	Temporary
4	**Phullen**	1911	380	**7 – 10**	RF	5	Temporary
5	**Thanglailung**	785	144	**7 – 10**	RF	5	Temporary
6	**Lungsen**	2344	508	**5 – 7**	RF	5	Temporary
7	**Rangte**	678	133	**5 – 7**	RF	3 – 5	Temporary
8	**Phairuangkai**	1222	255	**6 – 7**	RF	5 – 7	Temporary
9	**Mualthuam N'**	1387	272	**6 – 10**	RF	3	Temporary
10	**Haulawng**	2227	456	**6 – 10**	RF	3	Temporary

*RF = Regenerated Forest

Land Use Based Economic Policies in Mizoram

Garden Colony

Land use policy

Jhum Control

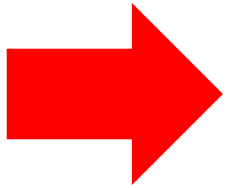
New Land Use Policy

MIP

rNLUP

SEDP

Hand Holding



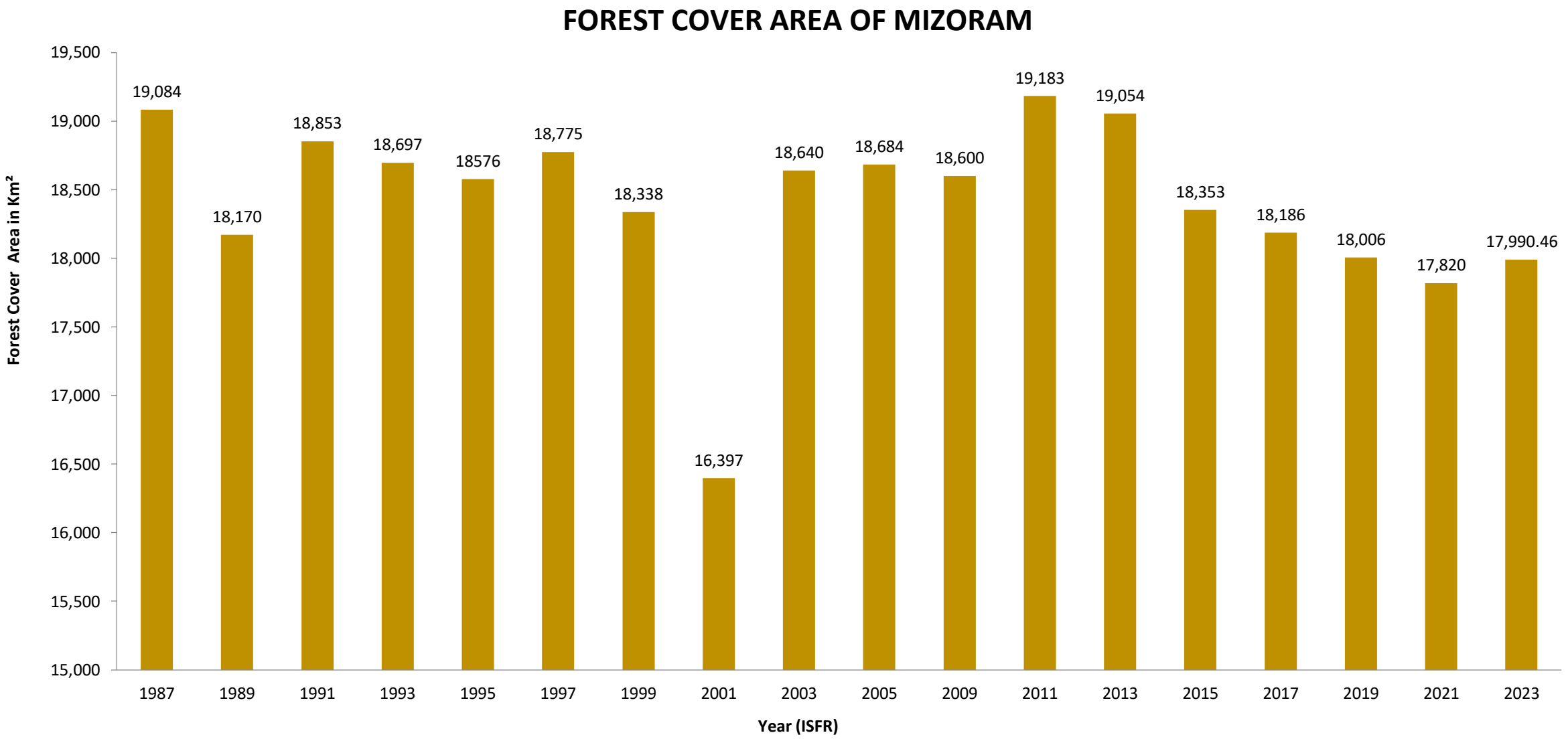
End shifting cultivation

Alternative-permanent means of livelihood for *jhumia*

Restoration of ecological balance

Promoting quality planting materials

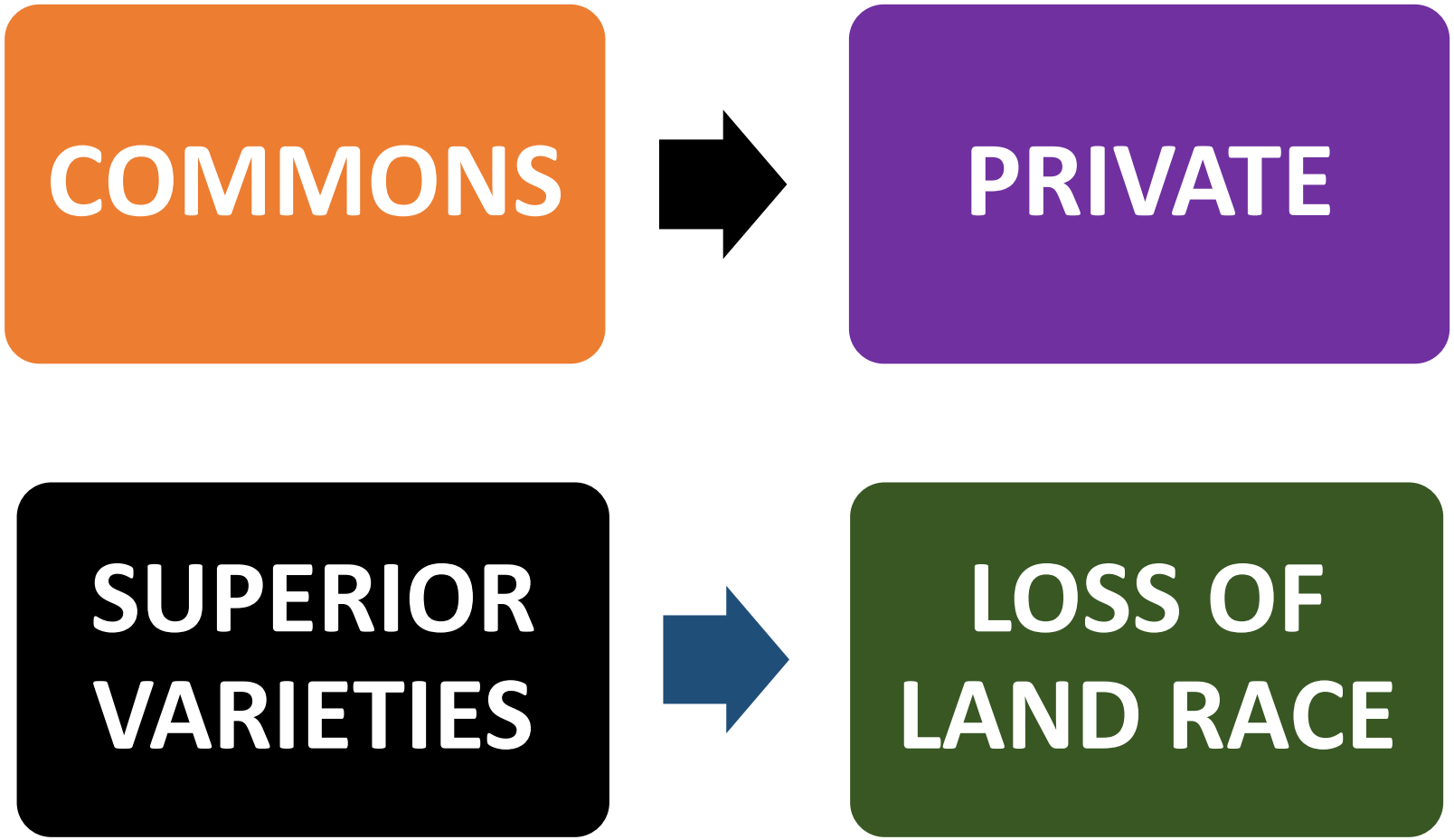
Impact of Policies on forest cover



Forest density and Land Use based Economic Policies in Mizoram

Data Source		Density of Forest (sq. km)			Land Use based Eco. Policies
SFR	Year of Assessment	VDF	MDF	Open	
2003	2001 – 2002	84	7,404	10,942	MIP
2005	2003 – 2004	133	6,522	11,928	MIP
2009	2005 – 2007	134	6,384	12,082	MIP
2011	2009 – 2010	134	6,149	12,900	NLUP
2013	2011 – 2012	138	5,900	13,016	NLUP
2015	2013 – 2014	136	5,700	12,517	NLUP
2017	2015 – 2016	131	5,861	12,194	NLUP
2019	2017 – 2018	157	5,801	12,048	NLUP
2021	2019 – 2020	157	5,715	11,948	SEDP
2023	2021 – 2022	261	8,636	9,093	SEDP

Societal Impact of LUBEP



- The jhumia are well aware of the importance of natural regeneration
- **Sustainability** in which aspect?


POST HARVEST
LAND REFORM
SOLUTIONS (?)
MARKET CHAIN
ANR

Shifting cultivation give a chance of regeneration

- PS Ramakrishnan