

Supplementary Materials:

Farms or Forests? Understanding and Mapping Shifting Cultivation Using the Case Study of West Garo Hills, India

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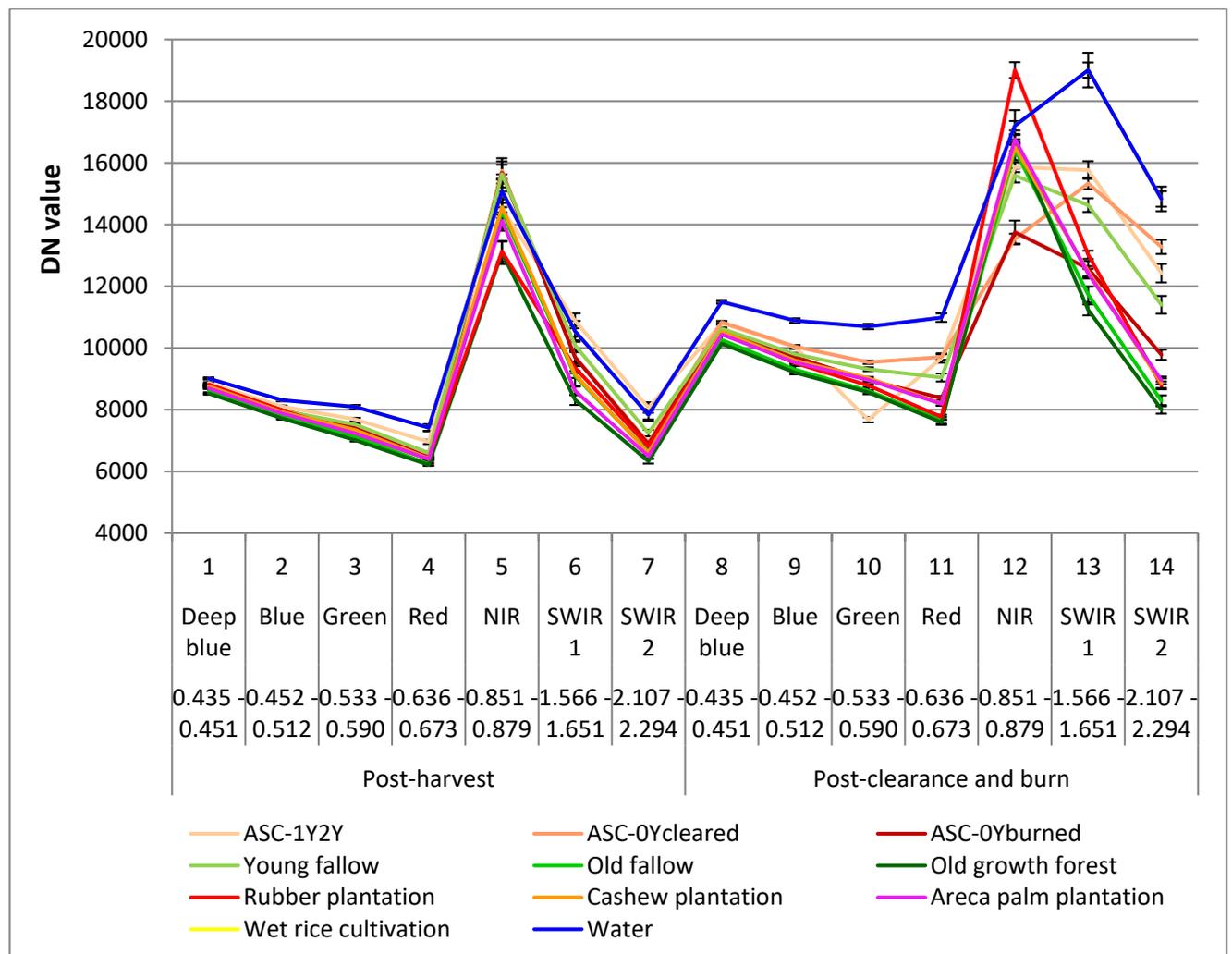


Figure S1. Differences in spectral signature of the two year-long different land-use classes (showing standard error around the mean of the DN value for ground data pixels) in the Landsat 8 OLI sensor in the two-season stacked image corresponding to the post-harvest and post-clearance/burn data collection periods (ASC=active shifting cultivation).

Table S1. Land-cover classes and their description, local names used in Garo, and the corresponding land-use classes used in the classification.

	Land-cover class	Description	Garo orthography	Land-use class
1	1 st year cleared active shifting cultivation field	New fields cleared towards end of summer (Mar-Apr)		
2	1 st year burned active shifting cultivation field	New fields burned towards end of summer (Mar-Apr)	<i>a·dal</i>	
3	1 st year post-harvest active shifting cultivation field	1 st year harvested fields after monsoon (Oct-Nov)		Active shifting cultivation
4	1 st year field cleared or burned for 2 nd year planting	1 st year harvested field cleared for 2 nd year of cultivation (Mar-Apr)		
5	2 nd year active post-harvest shifting cultivation field	2 nd year harvested fields after monsoon (Oct-Nov)	<i>a·brenng</i>	
6	Young fallow	3-10 years since previous clearing	<i>a·jri</i>	Fallow
7	Old fallow	10-20 years since previous clearing	<i>a·jri/ burung</i>	
8	Old growth forest	Multi-tier vegetation >20 years since previous clearing	<i>burung</i>	Old growth forest
9	Cashew trees	Monoculture stands of commercial cashew (<i>Anacardium occidentale</i>) plantation	<i>cashew bagan</i>	Cashew plantation
10	Areca palm trees	Monoculture stands of commercial areca palm (<i>Areca catechu</i>) plantation	<i>gue bagan</i>	Areca plantation
11	Rubber trees	Monoculture stands of commercial rubber (<i>Hevea brasiliensis</i>) plantation	<i>rubber bagan</i>	Rubber plantation
12	Wet rice cultivation	Intensive wet rice cultivation in the valleys	<i>a·pal</i>	Wet rice cultivation
13	Other cultivation	Small separate fields of tea, banana, orange, etc.	<i>cha bagan, terik, kumila bagan</i>	Other cultivation
14	Water	Combined land-cover classes of all rivers, streams, rivulets, and other water bodies like lakes and tanks.	<i>chibima (river), chiring (stream)</i>	Water

Table S2. Number of ground data polygons and corresponding pixels used for training and accuracy assessment.

Land-use class	Training set		Accuracy assessment	
	Polygons	Pixels	Polygons	Pixels
ASC-1Y2Y	38	4689	41	1260
ASC-0Ycleared	37	5136	30	1299
ASC-0Yburned	15	2893	14	706
Young fallow	58	3799	38	720
Old fallow	8	758	6	155
Old growth forest	43	2081	38	443
Rubber plantation	26	1442	22	238
Areca plantation	40	610	33	75
Cashew plantation	36	1147	30	165
Wet rice cultivation	25	1666	22	467
Other cultivation	14	222	11	37
Water	19	796	17	157
Cloud	8	545	7	86
Total	367	25784	310	5808



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