

**Supplementary table 1.** Participatory rural appraisal (PRA) study sites, localization, and the number of farmers interviewed in the Dosso region of Niger.

Department	Village	Geographical Coordinates	Number of farmers participated in the focus group discussions (FGDs)		Number of farmers surveyed	
			Male	Female	Male	Female
Dogondoutchi	Dan Kassari	13°43'24.50"N, 4°22'55.20"E			5	6
	Kieche	13°29'19.23"N, 4°0'13.83"E			7	13
	Matankari	13°46'0.05"N, 4°0'16.15"E			11	8
	Bozarawa Kore	13°39'4.79"N, 4°1'14.99"E	11	12		
Dosso	Agali	12°57'5.55"N, 3°11'2.20"E			3	17
	Koissey	12°54'4.16"N, 3°11'43.50"E			20	
	Dey tegui Niondou	13°3'34.08"N, 3°6'38.23"E			3	7
	Dey tegui Noma	13° 9'10.56"N, 3°4'27.49"E	15	16		
Gaya	Tara	11°53'57.20"N, 3°20'2.53"E	15	16	10	10
	Tanda	11°59'17.79"N, 3°18'50.74"E			8	9
	Sia	12° 6'32.56"N, 3°17'32.95"E			7	1
	Koaga	11°57'50.33"N, 3°20'22.05"E			4	1
Total number of farmers			41	44	78	72
Grand total				85		150