

## Supporting Information S1

Table: Detailed characteristics of the studied villages

Transects	Sampling Sites	Latitude N	Longitude W	Area type	Main human activities	Distance to nearest water points	Habitats*	Use of pesticide	Presence of LLINs	No. houses	Livestock
Transect 1	Neteboulou	13°34'70.0"	13°47'08.2"	Semi-urban	Agro pastoral	Neteboulou river<1km	corrugated iron	Yes	Yes	111	Ovine, caprin poultry
	Tourema	13°32'75.3"	13°46'47.1"	Rural	Agro pastoral	Gouloumbou river ( 1km)	corrugated iron, thatched roofs	Yes	Yes	14	Bovine, poul
	Gouloumbou	13°27'93.1"	13°42'59.1"	Semi-urban	Agro pastoral & trade	Gouloumbou river (5m)	corrugated iron	Yes	Yes	15	ovine, caprin volaille
	Afia	13°25'68.0"	13°46'18.3"	Semi-urban	Cash crop (Banana)	Gouloumbou river <2km	corrugated iron, thatched roofs	Yes	Yes	503	ovine, caprin volaille
	Temento Malede	13°26'83.3"	13°41'11.9"	Rural	Agro pastoral	Niaoule river à 500m	thatched roofs	Yes	Yes	11	bovin et vola
	Sare Sidy	13°25'35.0"	13°40'77.1"	Rural	Agro pastoral	Niaoule river <3km	corrugated iron, thatched roofs	Yes	Yes	24	bovin et vola
	Sankagne	13°23'17.0"	13°44'58.0"	Semi-urban	Cash crop (Banana)	Gouloumbou <2km	corrugated iron	Yes	Yes	525	ovine, caprin volaille
	Dialiko	13°21'95.1"	13°38'64.5"	Rural	Agro pastoral	Gouloumbou <3km	thatched roofs, corrugated iron	Yes	Yes	122	bovine, ovine caprine, poul
	Nguene	13°21'18.2"	13°40'07.1"	Rural	Cash crop (Banana)	Gouloumbou <1km	thatched roofs	Yes	Yes	55	bovine, ovine caprine, poul
	Koar	13°20'19.16"	13°37'02.86"	Rural	Cash crop (Banana)	Gouloumbou <2km	thatched roofs	Yes	Yes	145	bovine, ovine caprine, poul
Saal	13°16'33.9"	13°36'81.0"	Rural	Cash crop (Banana)	Gouloumbou <2km	thatched roofs	Yes	Yes	93	bovine, ovine caprine, poul	
Transect 2	Tamba Soce	13°46'35.0"	13°40'62.8"	Semi-urban	Agro pastoral	Rainy temporary pools	corrugated iron, thatched roofs	Yes	Yes	50	ovine, caprin volaille
	Djounkore Mafing	13°41'73.5"	13°38'77.4"	Rural	Agro pastoral	Rainy temporary pools	thatched roofs, corrugated iron	Yes	Yes	12	ovine, caprin volaille
	Madina Dian	13°33'96.4"	13°33'71.6"	Rural	Agro pastoral & trade	Rainy temporary pools	thatched roofs, corrugated iron	Yes	Yes	44	ovine, caprin volaille
	Missirah	13°31'53.8"	13°30'81.2"	Urban	Agro pastoral & trade	Rainy temporary pools	corrugated iron, thatched	Yes	Yes	800	ovine, caprin volaille

Barkeyel	13°28'40.47"	13°27'15.62"	Rural	Agro pastoral	Rainy temporary pools	roofs thatched roofs, corrugated iron	Yes	Yes	35	bovine, ovine, caprine, poultry
Gourel Ndiapalde	13°26'17.8"	13°25'53.4"	Rural	Agro pastoral & trade	Rainy temporary pools	thatched roofs, corrugated iron	Yes	Yes	35	ovine, caprine, poultry
Bira	13°24'05.91"	13°28'00.04"	Rural	Agro pastoral	Rainy temporary pools	thatched roofs, corrugated iron	Yes	Yes	131	ovine, caprine, poultry
Badi	13°22'65.3"	13°22'53.3"	Rural	Agro pastoral & trade	Nieriko river <2km	thatched roofs, corrugated iron	Yes	Yes	53	ovine, caprine, poultry
Wassadou	13°21'30.8"	13°20'94.1"	Rural	Agro pastoral & trade	Nieriko river (500m)	thatched roofs, corrugated iron	Yes	Yes	214	ovine, caprine, poultry

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\*the first is more abundant