

**Table 1** Landscape of the study areas of Khartoum city: geographical location, types of breeding sites for *Anopheles arabiensis*, human population density and land use

Area	Geographical coordinates	Main breeding sites <sup>a</sup>	Population density <sup>b</sup> (/km <sup>2</sup> )	Agricultural area <sup>c</sup> (ha)	Built-up area (ha)
Arkewit	15°53' N 32°56' E	Water tanks; indoor sites; broken pipes	> 750	0	5000
Soba West	15°49' N 32°67' E	Reservoirs; tanks	> 750	199	4000
Abu'siid	15°59' N 32°45' E	Broken pipes; tanks	> 750	317	4000
Elmaygoma	15°65' N 32°65' E	Canals; pools	101-250	989	700
Esalamanian West	15°36' N 32°45' E	Canals; ditches; pools	101-250	1376	800
Eltamanyat	15°99' N 32°56' E	Canals; pools; ditches	51-100	1113	500

<sup>a</sup>Main types of breeding sites are listed according to their importance: reservoirs = reservoirs of brick-making factory; broken pipes = broken water pipelines; indoor sites = inside houses and public and private institutions; tanks = watertanks in buildings under construction; canals = leaks from irrigation canals; ditches = water ditches on riverbanks; pools = pools inside the planted area.

<sup>b</sup>Population density provided from the census of the Sudan Central Bureau of Statistics.

<sup>c</sup>Crop composition in the study sites included: vegetables (mainly potatoes, onions, egg plant, okra, tomatoes, leafy vegetables, cucumbers and spices), fruits (bananas, citrus and mangoes) and crops (sorghum, alfalfa and maize).