intercropped. Likewise, mareeg/zunaari HireeHri was the second most common type regardless of planting strategy. In other words, no real difference existed between these farmers regarding types of sorghums grown. Only 4 farmers in the sample, all in El Kharta, planted more than one type of sorghum, and all of them intercropped sorghum with another crop.

Sorghum cultivation patterns differed in important ways in the three villages. In El Kharta, 93% of the farmers (14 out of 15) grew sorghum, and all of them intercropped it with sesame. No farmer surveyed grew sorghum in a separate stand. Only the mareeg/zunaari varieties were grown in this village, and the early-maturing HireeHri and late-maturing baladi types were grown in equal amounts. In El Geifil, only 40% of the farmers interviewed (4 of 10) grew sorghum. Three of these farmers intercropped sorghum with sesame and one grew it in a separate stand. The mareeg/zunaari varieties were the dominant types grown although one farmer grew a naajaq/feterita type. The major reason for the failure of other farmers in El Geifil to grow sorghum was the difficulty in acquiring seeds. Several farmers indicated that they would have planted sorghum if the seeds had been available.

In Umm Ramad, 80% of the farmers in our sample (12 of 15) grew sorghum, and all of these farmers grew it in separate stands. Sorghum is usually planted in separate stands in this village because the higher amounts of rainfall and clayey soils characterizing this area allow for successful sorghum cultivation. In fact, 20% of all the land cultivated in Umm Ramad was in separate stands of sorghum. This cropping pattern gives this village a unique character when compared to the other two. Mareeg/zunaari varieties were the main types of sorghum grown, with baladi planted more extensively than HireeHri. One farmer did grow a type of najaq/feterita. In addition, two farmers also intercropped sorghum with groundnuts in this village, however, intercropping sorghum was not a common pattern.

The role of sorghum in the farming system found in this area is quite important due to the multiple functions it serves. First, it serves as a food source for farmers, often as a substitute or supplement for millet, and therefore is considered the second most important subsistence crop grown in this area. Second, the stems of sorghum also serve as a food source for both farmers and their animals. The high moisture and sugar content of the stems make it a thirst-quenching energy source in the field where it is consumed in great quantities by farm laborers harvesting crops like sesame. This is especially true in villages where water is in short supply. In

15 Mareeg/zunaari varieties seem to be better suited to the environmental conditions found at El Kharta, such as low rainfall and sandy soils (qoz).

16 Other possible reasons why sorghum is cultivated in large amounts in Umm Ramad are 1) in addition to serving as a human resource, the sorghum stems are a fodder source for the large herds of cattle these people own; and 2) the sorghum is also used extensively in the village to produce mariisa, a locally-brewed beer.

17 Watermelons are often planted with sesame also to serve as a water source for laborers.