is relatively more significant than the role of olives in northern districts. Again, this poses an important parameter for development planners.

Husbandry practices

a. Types of husbandry There are four patterns of raising sheep and goats in the West Bank namely, Bedouin flocks, village flocks, fattening of lambs, and indoor raising of improved strains. The first two types are

by far the most common.

Bedouin flocks are usually larger in size, ranging from 100-150 head versus 10-50 for village flocks.¹ Their share of total population is also larger, but their productivity is generally lower due to Nore pronounced marginality of pastures. Unlike the situation in village flocks where most owners practice other lines of agriculture, Bedouins rely heavily on their livestock for their whole livelihood.

Fattening of lambs is carried out on a very small scale and with mixed results. The same is true of indoor raising of improved Strains. More experience is needed to demonstrate the profitability of both systems under local conditions. Profitability of village sheep flocks will be evaluated later in this chapter.

b. Varieties

There is only one dominant variety of sheep in use, called Awasi, Which is a fat-tailed strain characterized by modest milk production (average 100 litres per year), good meat quality (not heavily impregnated with fat), and coarse wool. The productive

potential of this strain is not noticeably high but it is characterized, on the other hand, by a marked tolerance to the local environment, dominated by frequent droughts, scanty pastures, and poor nutrition.

Israeli livestock farms raise another locally-bred variety called Assaf (a cross between Marino and Awasi), which is characterized by a much higher milk production potential (about 400 litres per year), but it is far more demanding in terms of nutrition and husbandry. The results of experience accumulated over the past five years demonstrate clearly the superiority of Assaf over Awasi in flocks raised in closed sheds, while their performance was very poor under more common nomadic conditions.

Regarding goats, the most common variety is Sa'aneen, which is a Solid black strain characterized by extreme ruggedness and striking tolerance to ecological variations. They are relatively more tolerant than Awasi sheep, and therefore they are raised in areas with marginal grazing potential. Their milk production is low (80 litres per year), their meat is less fatty, and their tails are considerably smaller. Farmers use a different breed, called Shami, for indoor goat raising. Its colour is basically white, and it is characterized by a much higher milk production (150-200 litres a year) and a higher rate of twin births. The availability of Certified goats from near-by Israeli sources has helped increase the number of improved Shami goats raised on the West Bank. While there is little question about the superiority of this strain, it is so demanding on husbandry practices that it cannot be Considered as a substitute for the indigenous Sa'aneen strain.

^{1.} Fathi Tawfig, The West Bank Livestock Sector, (Ramallah: Department of Research and Extension, 1980) - an unpublished paper, p 5.