

by all members of the family, with only minimal use of hired labour. But landlords with inadequate labour supply resort to leasing their orchards during the picking season to tenants, who are paid in kind by taking one third of the olive crop.

After the crop is picked some of it, usually the better fruits, are selected for making pickles. It is estimated that about 6000 tons are used in pickling, and the rest go for oil extraction (often over 80 percent of the crop). Pressing of olives is done by machines which vary considerably in efficiency. Practically all olive presses charge against their services in kind, usually by deducting 9 - 11 percent of the olive or oil output. Oil extraction rate varies from 22 - 32 percent of the pressed fruits depending, among other factors on the quality of pressing machines, and on the average it falls around 26 percent. The resulting oil is bottled in tin cans of 17 kg capacity.

#### Profitability situation

More than any other type of agriculture, evaluation of olive profitability in the West Bank setting is riddled with complications which render such a process difficult. There are so many variations in production techniques that it would be practically impossible to give really accurate figures for profitability which take into consideration all attributes bearing on costs and returns of olive farming. In lieu of a comprehensive study which takes all variables into consideration, this research has attempted to ascertain the profitability of olives in just the dominant patterns of olive culture. Sampled farmers were selected from major production areas as follows: Tulkarm 9, Jenin 4, Nablus 7, and Ramallah 5. Very small orchards of below 3 dunams were

excluded from the sample, since their economic parameters are too diversified to quantify in such a non-specialized profitability study. The results of this study are summarized in Table (VI-5).

The vast majority of olive farmers have inherited orchards which are too old (at least from owners' points of view) to justify worrying about rearing costs, because such costs have been long amortized. Furthermore, olive farmers find it meaningless to talk about fixed costs arising from interest on fixed investment (mainly the market price of orchard land) for two main reasons. Firstly, they are unwilling to consider selling their land even for the sake of better investment opportunities. Secondly, the kind of land grown with olives is usually so marginal that it is often worthless to convert it to an alternative type of farming. In areas where conversion is viable, farmers do not hesitate to make the shift.

A similar argument applies to labour. Being a typically labour-intensive tree, much of the olive's labour needs are mobilized from family members who command a negligible opportunity cost. Again, this is another item of costs which farmers would not take into account when ascertaining olive profitability. When family members sell their services in the local market (eg. a ploughman ploughing his orchard), then it is deceiving to ignore ploughing costs, because they are real enough, though not paid out of a farmer's pocket.

The cost of picking poses different problems. On about 30% of all olive orchards picking and pressing is undertaken by tenants against a share of one third of the olive oil output. In this case owners are exempted of all picking expenses.