

of capital to undertake the necessary investment. It was clear to them, however, that drip irrigation was superior to furrow irrigation. Among these benefits were:

1. Control of soil moisture fluctuations ensuring an early crop and, therefore, higher income at a time of market scarcity;
2. 50 percent water saving compared to furrow irrigation and 80 - 95 percent compared to sprinkler irrigation;
3. Effective leaching of saline soil by continuous emission of water to plant roots;
4. Enhanced use of fertilizers which are fed in soluble form to the plant with the water drip;
5. Significant reduction in the cost of fuel and equipment compared to sprinkler and furrow irrigation (Shoji, 1977:62-68).

All those advantages applied effectively to the conditions of agricultural production in Zbeidat. High salinity, low productivity, scarce water resources, and increasing costs of diesel fuel (for the water pump) and fertilizers were the main problems facing Zbeidat farmers in the seventies. In addition, the declining productivity of their farms did not allow them to avail themselves widely of the opportunities for work in neighbouring Jewish settlements because the maintenance and fixing of furrow canals demanded their attention for most of the year unless, of course, they neglected their land completely -- which some of them had already begun to contemplate.

Throughout the Valley it has been mainly landlords, and not individual owner-cultivators, who have taken the initiative in introducing drip