

### 11.1 Improving of natural grazing pastures.

The quality of natural pastures is often poor due to neglect and overgrazing. Much is needed to be done in this regard, but the potential to do so is severely restricted by existing political and administrative hurdles.

Learning from successful trials by ICARDA and in Jordan, pastures could be materially improved by sowing them with a mixture of forage crops which would thrive under marginal amounts of rainfall (over 250 mm). But such a practice requires some vital complementary services, such as restricting access to pastures during the first year and guarding against excessive grazing in subsequent years.

A practical way to supervise such a project in the absence of a national authority would be its adoption by regional cooperative societies. Cooperatives should fence desired plots before sowing them, carry out necessary cultural practices, hire guards to protect germinating pastures against intruders and divide pastures into plots to permit grazing in rotation. Patronizing flock owners would be charged reasonable fees to help cover part of the maintenance expenses.

It is proposed to start out this project with a pilot trial in Hebron or Jenin on an area of some 1000 donums. The area would be rapidly expanded in subsequent years in view of acquired experiences. The expertise of FAO and ICARDA could be of great help. A good start would be to send one or more technicians from each cooperative for intensive practical

training on ICARDA's experimental farm in Aleppo (Syria).

### 11.2 Promoting forage production on private land.

The Department of Agriculture has demonstrated a pronounced profitability for growing a certain type of forage legume, (Medicago hespida) on cultivable land, possibly instead of grains. Clean fallowing should also be abandoned and land be sown with legume mixtures instead. Furthermore, it may be possible to utilize, for this purpose, land of young olive orchards and emerging plants should preferably be left ungrazed or lightly grazed during the first year.

The resulting forage crop would be very helpful in supporting a larger sheep flock and raising its production potential.

The proposed project calls for a package of services, namely

- a. Intensifying extension efforts in eligible areas. This could be done through extension agents and other technicians employed by voluntary agencies, the Agricultural Development Corporation and cooperative societies. Presumably, these agencies would cover needed costs from their own resources.
- b. Distributing seeds to interested farmers at subsidized prices. The cost of subsidy would also be undertaken by voluntary agencies or ADP.
- c. Provision of mechanized cultural services on farms where area and topography permit. These services would be provided by machine service units mentioned earlier, so no additional capital expenditure would be needed.

### 11.3 Reconstructing cisterns in grazing areas

Availability of sufficient drinking water may play a critical