" PROJECTS MUST RESPOND TO LOCAL NEEDS AND PRIORITIES TO ENSURE THAT ALL SOCIAL GROUPS, INCLUDING WOMEN, ARE HEARD AND INVOLVED AT ALL STAGES. PROJECTS ONLY SUCCEED WHEN LOCAL COMMUNITIES FEEL THAT THEY OWN AND CONTROL THEM. "

physical outputs. And it is essential to respect and build upon local knowledge, experience, and perceptions rather than dismissing them in favour of imported "expert" solutions.

The terms "participation" and "sustainability" have become almost worn out by over-use in this rural development context, and they are in fact intimately linked. At times "sustainability" has meant little more than that a development achievement should endure for some time after the closure of the project which gave birth to it. We find it more useful to think in terms of two separate but related concepts: durability and sustainability. Durability refers to the technical lasting power of an improvement. What is the lifespan of a well or pump? For how long will a shelterbelt hold back sand? And so on. Sustainability refers to its social, institutional, and economic viability. Will the village have the organisation, skills, funds, and commitment to manage the well, pump, or shelterbelt? Is the tenure status of the shelterbelt secure or liable to give rise to conflict? And so forth. Sustainability in this sense implies the close involvement of the community in the identification, design, implementation, and management of projects.

Sand Dune Stabilisation Design

In the Ed Debba area farmers had already experimented with a range of techniques for control of sand encroachment with varying degrees of success. Sand dune stabilisation experts who visited the area tended to dismiss farmers' efforts as ill-conceived or even futile. It was suggested that to continue with these methods could lead to delays in calling in the necessary expertise and resources to implement a proper programme of works. There was scepticism over the capacity and willingness of rural people to take effective measures.

The farmers and SOS project workers together began to define their sand stabilisation practice through a process of dialogue, adaptation,

IRRIGATION METHODS CAN RANGE FROM THIS PUMP/FILTRATION STATION AT THE DESERT PLANT NURSERY OF AL- AZHAR PARK IN CAIRO TO WATERING PLANTS BY HAND FROM ROPE-AND-BUCKET WELLS.

and practical trial and error. Yet it was for a long time worrying to note how far the techniques developed by farmers and the project differed from the standard practices in the literature. Communities, groups, and households preferred to implement specific priority projects to protect valued sites. These projects could not ignore the basic physical principles of sand dune stabilisation if they were to succeed, and thus did not diverge greatly from the more pragmatic examples given in the literature. But the apparently piecemeal progress of the work and its relatively short-term aims continued to attract expert criticism.

In the hyper-arid climate of Ed Debba, all planting depends on irrigation. The cost of irrigation in terms of capital and operational costs of pumps, wells and canals, transport of water, labour, and time, is the key constraint to re-vegetation. Villages or households consider tree-planting in broadly economic terms: how much water will the trees require, for how long; how much will it cost in time, labour, and inputs; what will be the returns? The feasibility of irrigation and the quantity of water available at a given site define the number of trees which can be planted in a given time. Farmers therefore choose