IMPROVING AGRICULTURE ECONOMY IN SINDH (Introducing New Fruits Crops on Private Farms)

By M.H. Panhwar

- During the past 20 years we have been working on introducing new fruits, nuts and industrial crops and have succeeded in introducing commercially eleven new fruit crops namely: peaches, nectarines, lychee, seedless grape fruits, apple, grapes, guava, fig, longan and pomegranate of 25°-37'N near Tando Jam. These 11 fruit crops are now grown commercially and marketed.
- We introduced jojoba, jatropha and buffalo gourd, three industrial crops in Sindh on our farm near Tando Jam many years back. However these three crops suit desert area of Sindh better than irrigated or water-logged areas and therefore they have not been expanded commercially. We helped the government of the Punjab to introduce jojoba in Cholistan in 1987/8
- Before proceeding to introduce all these crops, we collected more than 12,000 books and bulletins on all these crops and prepared hand-books for growing them. When the plants or seeds were imported and established the hand books were revised as per experience gained and difficulties faced during the establishment. We have 21 such manuals ready for press.
- We initial experiments showed success, we expanded the operations on commercial scale. In the year 2000 we are producing all eleven fruit crops commercially and marketing them.
- We have a number of varieties of guava from Brazil, South Africa, Florida and Hawaii (USA), many of them are pink inside and out-side and some of them are excellent for processing.
- We have eleven varieties of peaches and two of nectarines which suit climate of Sindh.
- We have three varieties of apples evolved in Israel for their climate, but they also suit climate of Sindh.
- We have seven varieties of lychee of which three are from our own breeding program and one from USA one from Hawaii, and two common

varieties of Pakistan. Our own breeding program has produced one seedless lychee, one low-chill and one large size variety.

- We have three varieties of longan.
- We have introduced six varieties of pomegranate from USA, Spain and Australia and two of our own selections.

Proposal for propagation on farmers fields.

- In brief except 3 varieties of lychee and two of mango bred by us, the rest can be immediately grown on other farmers fields.
- For the varieties of mango and lychee bred by us, we have to register them under "Intellectual Property Rights", before we release them from our farm in 2001.
- We propose to help farmers of Sindh to grow these crops.
- We are in a position to train the growers and their farm-managers to raise these crops commercially.
- We have seven trained managers who are graduates and post-graduates, in agriculture, agriculture engineering, civil-engineering, economics and commerce. They handle different operations like; plant propagation, transplanting, nutrition, irrigation, plant-protection, harvesting, packaging and marketing and also training the workers. These managers can train the growers and their staff. Limited quantities of plants can also be supplied.
- Of the mango fruit varieties grown, we have nineteen cultivars, two of which are out of our own breeding program and others are imported. The varieties are such that mango fruit can be harvested from 1st May to 15th September and thus extending the season of harvest over 4 ¹/₂ months.
- We have four varieties of seedless pink color grape fruits having pink juice. They would replace existing seeded varieties of Pakistan, which are not acceptable for export.