

## Bangalore Machine Tools

Making of machine tools in India developed in three major locations: Bombay-Pune Belt, Bangalore and in Punjab. The trigger for machine tools in Bangalore came initially from the existence of large number of ordnance factories around the military establishment that sprang at Bangalore during and after the World War II. Later in the 50s creation of a number of Public Sector Undertakings [PSUs] only increased the pace of growth of the machine tool manufacturers. During the 50s and 60s domestic machine tool manufacturers were protected against competition from imports through the system of custom duties. Further FERA of 1973 ensured that only indigenous manufacturers could operate within the domestic market. Technical institutions like Central Machine Tools Institute [CMTI], Indian Institute of Science [IISc], Nettur Technical Training Foundation [NTTF] etc sustained the growth of the machine tools industry.

Collapse of the Soviet Union 1989 was a blow to the export of machine tools that had developed in the intervening period. The opening up of the economy in 1991 and the consequent entry foreign products, foreign companies and competition made life miserable for the machine tool manufacturers also. In 1999 there were 125 machine tool manufacturers with an aggregate turnover of Rs 250 crores [ US\$ 56 million] accounting for 40 % of India's machine tools output. 90 % of this output was consumed in the domestic market. The recession of the mid-90s brought the inadequacies of the industry to the fore:

- a. Poor Market Access. Smaller machine tools manufacturers had very little market reach; they did not have any brand name nor any sophisticated marketing set up.
- b. Poor Competitiveness. Compared to the foreign suppliers that entered the market, the small machine tool manufacturers lacked in every aspect of technical, marketing and strategic skills.
- c. Inadequate Linkages with larger manufacturers. Larger machine tool manufacturers empanelled smaller only on the basis of their capability and confidence. The smaller one had not worked on these lines earlier.
- d. Weak Institutional Framework. Due to subsistence level of operations and due to inadequate organizational overheads, the smaller machine tools manufacturers had not developed network with the institutions.

This is the situation when UNIDO came in with its cluster strategy. The objective of the Cluster Program was to make the cluster of machine tools manufacturers of Bangalore globally competitive. The Program employed the following interventions:

- a. Market Promotion. Individually none of the members had the resources nor resources to do effective marketing. So group approach was suggested. Initially only a small group agreed to pitch in the resources. This group hired the services of a consulting firm and focused on quality up-gradation, common brochure, common marketing. Signs of success prompted other small firms to create similar consortiums
- b. Acceptance as Vendors. Small firms with limited facilities could not become vendors of larger firms. The Cluster Program tried to get rating for its

members as competent vendors. So an agency was hired under the Cluster Program to rate the small firms about their technical capability. After fair amount of persuasion the larger firms agreed to explore partnership and gradually the confidence was built leading to the growth and development of the cluster.

### Floriculture Cluster at Pune

Floriculture industry is nascent in India; in Maharashtra it evolved around Pune and the surrounding districts. In 2002, about 100 greenhouse-operated farmers were cultivating gerberas and carnations in about 25 hectares. They accounted for a turnover of Rs 120 million and employed 500 persons. They catered to the domestic market. There were also another 16 larger corporate farms spread out in 65 hectares, accounting for Rs 800 million turnover and employing about 1600 persons. They produced carnations and Dutch roses. The only association worth its name was Western India Floriculture Association. This is the scenario at which UNIDO Cluster Development Program [CDP] was initiated.

The major problems were diagnosed as

- a. *Low margins.* The business was capital intensive since it had to create the greenhouse infrastructure. The operating costs were high due to the costs of fertilizers, pesticides etc. Market linkages were not adequate resulting in poor price realization. High operating cost and poor market linkages.
- b. *Quality and Productivity related Issues.* Inability to control the quality and costs of inputs, inability to protect against pests, sub-optimal agricultural practices, absence of cold-chain, inadequate R&D/training support, absence of proper linkage with institutions etc were the main factors.
- c. *External factors.* High international freight costs, high cost of power and diesel, and competition from countries like Kenya were the main external factors

The UNIDO CDP defined its vision as enhancing the business potential of the cluster and capability building of the farmers. The intervention objectives were identified as increasing the area under cultivation, better market access, building infrastructure, diversification, institutional linkage etc.

The program got initiated through series of meetings and exposure visits to institutions R&D labs and each others facilities. Once trust has been built among the farmers, small network of farmers were created and the program got gradually introduced. The major interventions were:

- a. *Increase in the value-realisation.* 75 % of the farmers got networked; they started common procurement of inputs. They started common marketing initiatives to distant domestic markets with significant results. They were also able to negotiate with bulk traders for the domestic as well as export markets.

- b. *Quality and productivity Issues.* The networks established better relationships with R&D and training institutions. Regular training programs were conducted on various aspects; a specialized institution – Horticulture Training Centre - was established at Telegaon. Banks, Technical consultancy organizations also started networking with the cluster.

Buoyed by the good tidings and performance of the cluster, Telegaon Floriculture Park was created by MIDC[ Maharashtra Industrial Development Corporation] under the Agri-Export Zone of the Ministry of Commerce Govt of India. The cluster at Pune has grown into a major floriculture cluster catering to domestic and export markets in a big way