

ABSTRACT

This study investigates the role of Science and Technology Parks as a mechanism to promote and strengthen university and industry linkages in developing countries such as Pakistan. The nature and intensity of interaction between firms and universities is studied by concentrating on firms located at Software Technology Parks (STPs) of Islamabad.

The research results indicated that majority of the firms located at the STPs were start-ups which were established at the STPs in the last seven years. 67% of the firms were small firms which have 50 or less employees. Majority of the firms did not have any quality certification; however, half of the firms did have R&D cells in their setups. More than 2/3 of the firms were either exclusively export-oriented or working for both domestic and international markets.

The present study did not find any evidence that STPs of Islamabad are playing any significant role in promoting and strengthening linkages between industry and academia, only 19% firms had linkages with higher education institutions and most of these linkages were human resource (19%) or informal (12.5%) linkages. The firms located at the STP rated "interaction with other firms located at the park" as the most significant potential advantage of locating at the STP, however, interestingly the actual interaction was more with the off-park firms than the on-park firms. Half of the firms also have linkages with the firms located abroad. Presenting at the STP had significant positive effect on the growth of firms in terms of employment, sales and profitability.

Comparison with the similar studies from the other countries revealed that the level of interaction between university and industry in Pakistan is much lower than that in other countries such as United Kingdom, Australia and Malaysia. When the nature of linkages was compared, there was a similar trend for all the countries including Pakistan i.e. human resource and informal linkages were higher than formal linkages.