

Promoting Industry Academia Linkage for Developing the Knowledge Based Enterprise Sector: A Case Study of D. I. Khan

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Abstract

This study is mainly focused on the need of industry – academia linkage by considering the case of Dera Ismail Khan, a city of Khyber Pakhtunkhwa. Paper highlights the problems faced by the industrial estate of D.I.Khan and also gives suitable and practical suggestions for the above mentioned linkage like proper organization of linkage programme, apprentice ship programme, promotion of physical infrastructure, teachers training programmes, sponsorship of industrial units and re structuring of syllabus.

Key Words: *Industry, Academia, D. I .Khan*

Introduction

University –industry linkage is really an imperative for the progress and prosperity of the nation. It is essential to identify the areas of collaboration, co-ordination and mutual support between the two basic sectors for sustainable national progress. The level and nature of academics and research has always played an important role in the process of development and is a common practice in the developed countries.

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All the renowned scholars of various disciplines have established the fact that research in socio-culture and economic variables is crucial for the purpose of development in every sector of the national economy, especially industry which is the main indicator of growth. Charles (2003), Cooke (2001), Nelson (1993, 2004), Kitgawa (2004) studied that universities (or higher research) play a crucial role in the promotion of regional and national economic development. They stressed that universities should be facilitated according to market demand. And the universities, in turn, can offer an enlightened guidance for the further growth & development of the industry.

Cohen et al (2002) and D' Este and Patel (2007) empirically proved that through joint research programmes and working of university and professional colleges' students in industrial units may promote university industry linkages and can be beneficial for both sides.

Wu (2000) empirically studied the need of university- industry research co-operation for Taiwan. He contended that this research would be helpful to achieve the objective of knowledge based economy, since at this stage Taiwan is moving from labor intensive to knowledge intensive economy.

This study mainly deals with industrial estate of D.I.Khan and focuses on the problem of city industrial sector and also gives suggestions for the promotion of industry academia linkage in this underdeveloped area. Table 1&2 gives the detailed profile of small industrial estate of D.I.Khan and number of various industrial units established here.

Table 1. Profile of Small Industrial Estate of D.I.Khan

Serial no.	Name	Small Industrial Estate, D.I.Khan.
1	Location	Tank road

2	Total area	29.5 acres
3	Total no. of plots	141
4	Size of plots	A/1000 B/5000 sq.ft
5	Price of plots	Rs.10 per sq.ft
6	Total no. of plots allotted	139
7	Total no. of plots not yet allotted	2
8	Total no. of units in operation	10
9	No. of units closed	36
10	Total no. of units under construction	Nil
11	Infrastructure facilities	Available

Source: Directory of Industrial Establishment, 2007.p xii.

Table 2. Units Established In Small Industrial Estates, D.I.Khan

S./N0	Nature of units	Total number of Units
1	Cold storage	4
2	Furniture	2
3	Soap	8
4	Rubber & plastic goods	4
5	Marble	2
6	Electronic goods	1
7	Other metal products	2
8	Aluminium	2
9	Vegetable ghee	1
10	Flour	6
11	Sugar	3
12	Rice	11
13	Dal	2
14	Ice	21
15	Textile	1
16	Paper & paper package	1
17	Pharmacy	1
18	Cement based	3
19	Total	73

Source: Directory of Industrial Establishment, 2007.p xii.

Problems in D.I.Khan Industry

Let us dilate upon some problems that are faced by D.I.Khan industry:

1. Industries in D.I.Khan are not well equipped with advance technology. So their products are not up to the international standards and cost of production is too high as well.
2. Personnel are not skillfull.They are lacking of managerial skills, most of the owners are illiterate; they have no knowledge of modern business techniques.
3. Industrialists have given no attention to scientific researches on various problems that are faced by industries.
4. Industrial setup is usually manual, which leads to increase in cost level of the firm.
5. Socio-cultural and physical infrastructure is not well developed to support industrial setup.
6. Disturbed political situation of the city is also a major hurdle in the way of investment. Despite so many government relaxations and subsidies, no one is ready to take a risk.
7. Quality assurance of the product can be acceptable in the market. At present local market has low demand due to the low purchasing power of the customer.
8. Inadequate or improper use of various promotional activities.
9. Although government has given subsidies to promote investment, yet it has not given any attention to awareness and training programs for business class.
10. Electricity is the only source of energy in D.I.Khan for the industrial set-up, which is very costly and causes high cost of production. Scheduled and non scheduled load-shedding has also adversely affected the efficiency of industrial sector.
11. Chamber of commerce and industry is not playing its role in the industrial development in D.I.Khan.

Suggestions for the Promotion of University-Industry Linkage

There is abundant literature and relevant data on the pace of industrial development in Khyber Pakhtonkhwa, particularly in D.I.Khan. With the establishment of linkage program the rate of investment can be accelerated and also friendly atmosphere for the industry can be promoted.

We understand that there is inherent correlation between various sectors of economy, such as agriculture, health, education and social welfare. This needs to be understood because we have a very good model of micro as well as macro development projects. On the basis of analysis of topic we can make some important suggestions, which can be further discussed:

1. The linkage program as conceived by the experts should be properly organized and executed. The recent history of G7, G8 reveals this integration. It can be further developed and implemented.
2. The students of universities and professional colleges may be offered apprenticeship in various banks, textile firms, telecom firms, pharmaceutical companies, keeping in view of their specialization.
3. The curricula of universities need to redesign for the purpose of linkage. For this purpose opinion of industry experts can't be ignored.
4. Through continuous research in socio-cultural variables the university can contribute to industrial climate, which is necessary for the promotion of productivity and efficiency. Management sciences, social sciences and pure sciences are the relevant fields and could be helpful. Industries are abbrative in

the total social atmosphere. The great potential of human resource can be strengthened by the University for the absorption in the industry. Trade and transaction at local and national level is a major factor, which can be promoted through the linkage program.

5. In underdeveloped areas, the pace of industrial development is very slow and staggering. The reason is clear. There is a lack of enterprise and suitable opportunities for investment. Even if there is strong and robust enterprise the investment is hesitant because of lack of physical infrastructure, comparatively longer gestation period and uncertain market. This phenomena is visible and measurable in southern districts of Khyber Pakhtonkhwa, particularly, D.I.Khan.
6. Teachers must have sound industrial background and should be in touch with the industry. They should have update knowledge of industrial setup and technology problems faced by different industries.
7. Various institutions like banks, HEC, NGOs, industries etc should also sponsor various research projects conducted by university students in order to encourage research environment.
8. Specialization/departments in universities should be introduced keeping in view of industry requirements e.g. specialized in sugar, rice, flour; food processing etc can be introduced in public and private sector universities of D.I.Khan. When students will work in these industries, they will get more valuable knowledge. Since new blood is more energetic and more visionary they can offer us better ideas for the improvement of industrial efficiencies.

9. Advance courses and training programs can also be introduced in universities for industrial personnel to improve their knowledge, skill and attitude.

References

- Charles,P(2003) . “Universities and Territorial Development: Reshaping the Regional Role of UK Universities”. *Local Economy*, Vol, 1, No. 18. pp. 7-20.
- Cohen,M. Nelson,R. and Walsh,J,P (2002). *Links and Impacts: The Influence of Public Research on Industrial R &D*”. *Management Science*, Vol, 48. No.1.pp. 1-23.
- Cooke,P(2001). *Regional Innovation Systems, clusters and the knowledge economy*” *Industrial and Corporate Change*, Vol, 10. No.4. pp. 945-74.
- D’Este,P and Patel,P (2007). “University Industry Linkage in Uk: What are the Factors Underlying the Variety of Interactions With Industry?”. *Research Policy*, Vol, 36. No.9.pp. 1295-313.
- Kitagawa,F.(2004). “Universities and Regional Advantage: Higher Education and Innovation Policies in English Regions”. *European Planning Studies*, Vol, 12. No.6 .pp. 835-52.
- Nelson,R.(1993). “National Innovation Systems:A Comparative Analysis”. In (ed), New York, Oxford University Press.
- Nelson,R.(2004).*The Market Economy and The scientific Commons*”. *Research Policy*, Vol, 33. No.3 .pp. 455-71.
- Wu.F.S.V (2000). “ An Empirical Study of University-Academia Research Co-operation –the Case of Taiwan”. Paper presented in Workshop of the OECD-NIS Focus Group on Innovation Firm and Networks , Rome.