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(SAVITA SINGH)
The transfer of technology from developed to developing countries has been a matter of intense debate and controversy. Traditionally, it was believed that a developing country would be able to enhance its technological capabilities and growth process by importing technology from the developed countries. It was considered a valuable means of accelerating development process and saving valuable time and energy in the developing countries. However, the practical experiences of these countries portray a different picture. Indeed, the developing countries' requirements for technology imports have further gone up over the years. At the same time the falling per capita income and its uneven distribution in these countries demanded a fresh analysis of the whole process. Questions were raised about the kind of technology being transferred, the terms and conditions of technology transfer and technological dependence of developing countries. The present study focuses on the various dimensions of issues in North-South technology transfer taking petrochemical projects in Gulf Cooperation Council Countries as a case study.

In particular the study is concerned with the several dimensions of issues in North-South technology transfer as shaped by the peculiar characteristics of the GCC Countries' economies. The GCC countries share with other developing
countries a number of constraints in the acquisition, adaptation, assimilation and absorption of technology. At the same time, they significantly differ from other developing countries in terms of resource endowment. Hence, their choice of technology is also different.

With the emergence of a new international form of division of labour, the technology transfer debate entered into a new phase where cooperation between developed and developing countries has become a prerequisite for the growth of both categories of countries. The present study attempts to analyse the technology transfer issues in the changed environment. The following hypotheses have been proposed to make a beginning --

1. Petrochemical industry being the leading sector is going to be the pace setter of the technological development process in the Arab Gulf countries.

2. Given the restructuring taking place at the global level in the petrochemical industry, the gulf region is likely to emerge as a significant production site for base chemicals.

3. Issues in technology transfer in the petrochemical industry in the Gulf region is affected by the oligopolistic nature of the world industry.
4. Gulf petrochemical plants (base chemicals) are intended to be vertically integrated with the global industry, therefore it is likely to influence the growth of indigenous technological base.

5. Given the socio-economic stratification and demographic structure of the region, the petrochemical projects in GCC countries will continue to depend on external inputs for their maintenance and growth and the process of technology transfer is likely to be restricted by these constraints.

6. Given the resource base and cost structure, the GCC petrochemical projects are likely to face competitive disadvantage at least in the short term. But a suitable technology policy premised on the growth of indigenous technology, if necessary acquiring a regional profile, can enhance the competitive strength of the industry and in turn, the development process of the region.

The study has been divided into five chapters. First chapter introduces the debate on North-South technology transfer and gives a brief survey of literature on the topic. The second part of the first chapter focusses on the petrochemical industry, its characteristics, global
restructuring of the industry and the relevance of these issues in the petrochemical industry.

Chapter two attempts to analyse the rationale behind the GCC petrochemical production. It also gives a profile of the petrochemical projects in the GCC countries.

Chapter three discusses the various dimensions of technology transfer in GCC petrochemical projects. Taking note of the peculiar features of GCC economies, this chapter attempts to explore the form acquired by these issues in these countries specifically in the petrochemical projects.

Chapter IV examines the efforts made by the GCC countries as articulated in their technology policy with special reference to acquisition, absorption and technological generation.

Chapter V is an evaluation of the proposed hypotheses. It illustrates the major issues involved in the industry in GCC countries having its ramifications on north-south technology transfer in general.

As the study has been conducted outside the GCC countries, the non-availability of data becomes a major limitation of this study. The study is primarily based on United Nations Documents and has been complemented by discussions with knowledgeable persons at UNIDO (Vienna) and OPEC (Vienna).