CHAPTER 1

INSTITUTION BUILDING: THE CONCEPT AND SCOPE

PROJECT DEVELOPMENT

The present study has been undertaken to evaluate the existing patterns prevailing in technical institutions for girls to make them technicians in the varied fields of technology. Development of technical education in the country has been reviewed as the backdrop and the areas which call for better and gainfully employable positions for women are separated out for detailed study. The background for the present day planning and implementation is critically analysed and supported by the feedbacks from the technicians working in the field, employers of technicians in the industry and from the faculty in institute. Data were collected for the study from three polytechnics. Based on the critical review of the models of the systems, one model most suited to our country in the light of the projected requirement of development has been suggested for the adoption in evolving such centres of training for female technicians. Associated parameters for the upkeep and the development of the institution were studied in detail, and using these parameters, a model of technological institution for females has been suggested.
SCOPE

There was a movement in 1960 for starting women's Polytechnics throughout the country. It was initiated by the Central Government. Inspite of two decades of development, there is little literature available to show what growth has taken place in this area. Hence a study of a few samples has been undertaken. The Western Zone was easily accessible to the author. One polytechnic from each state has taken from the Western Region (with more or less same age). Maharashtra has the oldest Polytechnic.

The names of these Polytechnics under study are:-

(1) Government Polytechnic for Girls, Ahmedabad (Gujarat)

(2) Government Women Polytechnic, Bhopal (Madhya Pradesh)

(3) S.K. Somani Polytechnic, Bombay, (Maharashtra State).

There are four women's Polytechnics in the Western Region. The one at Surat has been left out because it was thought that the performance of ones at Ahmedabad and Surat are more or less the same, since both are in one State.

A review of research for institution building as well as for technical education for women has been done. The
similar facilities in developed and developing countries are also examined. The diffusion of new systems and transfer of technology is dealt with at length.

DIMENSIONS

The external dimensions visualised are idea origination, resources and dependence, strategy, location, environment and industrial development.

The internal components considered are potential development, effectiveness and future capabilities.

METHODOLOGY

The methodology adopted for institutional study is close to Ganesh's work (1980). Here also multiple methods of data collection were applied. The data were collected in three ways:

(1) Analysis of records like basic policy documents of the Government, expert survey reports, commission's report and institution's reports, records and documents etc.

(2) Interviews of principals and past principals.

(3) Collection of data with the help of a format probing the internal dimensions of the institutions.
BOUNDARY PARAMETERS

The institution's performance variables were found out and the process mechanisms were studied. The influence of process mechanism was identified. The feedback was thought of as the breaks to the performance. All the changes in performance were measured with reference to the time. That is, over a period of time the change in institutional performance was studied.

CONCLUSION

A comparative analysis of the data was made. Creativity, innovation, competence and environment were studied in depth. A generalisation was attempted.

REVIEW OF RESEARCHES IN INSTITUTION BUILDING

Institution building as a distinct body of knowledge emerged only after the mid-sixties. The United States Agency for International Development (USAID) (1964) was mainly responsible for providing academic work with the aim of helping developing countries. Pittsburgh, Michigan State, Indiana and Syracuse were the four main American Universities. Esmon, under the inter University Research Program in Institution Building (IURPIB) brought together many researchers. These efforts were put together in the form of a source book by Blaise in 1973.
Eeman in (1964) defines institution building as follows:

"Institution building is defined as the planning, structuring and guiding of new reconstituted organizations which

(a) embody changes in values, functions, physical and social technologies".

(b) establish, foster and protect, normalize relationships and action patterns and

(g) attain support and complementary in the environment".

Institution building universe is visualised, having three basic components; institution variables, transactions and linkages. (Eeman & Blaise, 1964).

There are definitions of institution building which denote specific units. Etzioni (1964) comments on this:

"Institution is sometimes used to refer to certain types of organizations, sometimes institution refers to a quite different phenomenon namely to a normative principle that culturally defines behaviour such as marriage or property. Because of these two conflicting usages, this term has probably caused more confusion than formal organization and bureaucracy together. All three might will be avoided in favour of the simple term organization."
A bridge is provided by Selznick (1957) for sociological and organizational definitions of an institution.

"In what is perhaps its most significant meaning to Institutionalize" is to infuse with value beyond the technical requirements of the task at hand. The prizing of social machinery beyond its technical role is largely a reflection of the unique way in which it fulfills personal or group needs. Whether individuals become attached to an organization as a way of doing things as persons, rather than as technicians, the result is a prizing of the device for its own sake.

From the stand point of the committed person, the organization is changed from an expendable tool into a valued source of personal satisfaction.

These two definitions have led to two distinct streams in institution building, literature, namely the evolutionary and engineering model (Ganesha, 1976).

The institution building model leads to "institutionality" as the end state. Eman (1972) identifies the criteria of institutionality. These are (1) technical capacity (2) normative commitments; the extent to which the innovative ideas, relationships and practices have been internalised by its staff (3) innovative thrusts continually adapt to new
technological and political opportunities (4) environmental image and (5) spread effect; the degree to which innovative technologies, norms or behaviour patterns have been taken up and integrated into the on going activities of other organizations.

Selznick (1957) has summarised the distinction between organization and institution.

"The organization is both a system of consciously co-ordinated activities and a rational instrument engineered to do a job, the institution is a responsive, adaptive organism which is the natural product of social needs and pressures. An organisation is an artificially created system which strives to maximise efficiency and management. The organization in this sense continues to be outside the culture and society in which it functions. The institution, on the other hand, is part of the larger system of the community or the society, although it is a forward looking, adaptive and proactive part of the community. Institution is infused with value and it comes to symbolise the community's aspirations". (Pareek, 1981).

Essman and Blaise (1966) define institutions as "Organizations which incorporate, foster and protect normative relationships and patterns, and perform functions and services which are valued in the environment".
Eanan (1967) subsequently defined institution as "a change – inducing and change protecting formal organization".

Hill (1973) defines institution building as "the process involved in deliberately forming a new institution or reforming an existing one".

Perlmutter (1965) has suggested the development of social architecture as follows:

(1) Concepts concerned with the human dimensions of institution building;
(2) Concepts concerned with the objective reaching process;
(3) Concepts relating the institution to its environment;
(4) Concepts relating to the creation of essential organisation structures;
(5) Concepts that concern the realisation of positive values;
(6) Concepts regarding changes of feelings, anxieties and emotions;
(7) Concepts relating to the general systems model of the organisation.

IUPRIB visualises three components in institution building research; (Eaton 1964 to 1968).

(1) Institution variables like leadership, doctrine (values, objectives, methods) programme, resources and internal structure.
(2) Linkages like Enabling linkages, Functional linkages, Normative linkages and Diffused linkages.

(3) Institutionality denotes that "at least certain relationships and action patterns incorporated in the organisation are normative both within the organisation and other social units and that some support and complementarity in the environment have been attained".

Pareek (1981) described the "cycle model of institution building". The basic components are idea formulation, preparation, innovation, consolidation, multiplication and review. The criteria for the progress of the institution building process are indicated as attention to process, significance of goal and uniqueness of the field of operation, innovative nature, autonomy, generating new values, impact, multiplication of knowhow, linkages and development of people.

Some propositions about institution building by Pareek (1981) deal with institution building as the process of growth and development of organizations. The main components of institution building are visualised as follows:

1. GOALS

Two propositions are visualised:

(a) If the Goals of an organization are perceived as important for the society, then the growth of institution will be smooth.
If the Goals are shared amongst the members, then there are good changes of success of the institution.

2 PEOPLE

Persons in the institution are the back bone of the institution building.

Two propositions are visualised for this:

(a) If the key committed persons are identified in the beginning, then better chances exist for the development of the institution.

(b) For institutional growth, enough trust and autonomy should be provided to the persons working within the institution.

3 STRUCTURES

The structure of the institute determines the resource generation and sustenance of the culture. Four propositions are offered:

(a) It is desirable to spend more time in process in the beginning of the institution's life.

(b) Matrix organization is the ideal one.

(c) When the mechanism to foster and stabilise the tradition and culture is established, the growth of the institution is better.
(d) When the institution builds linkages with its major client systems, it leads to more healthy growth.

4 CULTURE

The culture and traditions of institutions are extremely important. Four propositions are offered for this:

(a) There is a good chance of success for an institution where institute people share common experience and develop homogeneity of thinking in the early life of the institution.

(b) Establishing a mechanism to balance the autonomy of an individual and their collaboration for common goals, helps building an institution.

(c) A balance between autonomy of the institute and its strong linkage with the outside, may lead to a better institution.

(d) The process of self renewal throughout the life of the institution ensures the institution's development.

5 LEADERSHIP

Leadership establishes the culture of the institute, and helps it become self-sufficient and independent. Six propositions are described below:

(a) If a leader is able to give full attention and time to the institute, he will be able to contribute the maximum.
(b) A noncompetitive leader helps in the process of institution building.

(c) A leader who provides autonomy to the people to function, will contribute to effective institution building.

(d) When a leader establishes linkages and attend to the external affairs properly, chances for the success of the institution increase.

(e) A flexible leader is desirable for a smooth growth of the institution.

(f) The success of the institution will depend upon the extent to which a leader is able to dispose the institute which he builds up.

Ganesh (1979) deals with the historical description of the management institutions' development in India. The analysis is done in the following ways:

I \textbf{OVERVIEW}

The Radhakrishan Education Commission in 1948 recommended the creation of new institutions of higher education in technology, agriculture and management. The United States and three other nations were partners in the field of technological co-operation in this project. In the case of building agricultural universities and management institution, the United States was the sole partner. Five institutes of
technology were established at Kharagpur, Bombay, Madras, Kanpur and Delhi. Six US universities helped nine States in India build new agricultural universities. The Harvard Business School and the Sloan School of Management, MIT, helped build the Indian Institutes of Management at Ahmedabad and Calcutta (IIMA & IIMC) respectively.

2 THREE MODELS OF HIGHER EDUCATION

The MIT programme for engineers, based on mathematics and fundamental sciences, was recommended for the IITs. One of the important departures from the MIT model was the increased emphasis on practical training and workshop practice. Specialisation towards the end of the programme was recommended. In the case of agricultural universities the "land grant" university model was not followed anywhere in India. They have a fully integrated programme of college teaching, research and extension education. In case of management education, the IIMs are parallel to the Harvard Business School and the MIT model. The Harvard Business School is meant for training practitioners having a student centered approach. The MIT model is based on behavioural sciences, engineering and physical sciences. Both may stress in autonomy, and are hence outside the limit of traditional universities.

3 BIRTH PROCESSES

(a) IITs:

Before 1945, 11 first degree engineering colleges
existed in India. They were affiliated to their respective universities and governed by their rules and regulations. The aim was to produce maintenance engineers for the government departments. Four IITs, having autonomous status, were started in each region. An "All India Council For Technical Education" (AICTE) was established for smooth development of technical education in India.

(b) Agricultural Universities

Five American Universities collaborated with different agricultural colleges in India. The country was divided into five regions. Agricultural university development could take place during the third five year plan only.

(c) IIMs

In the case of management institutes, it was an easy process. Prof. Robbins (1939) of California University recommended the establishment of management institutes.

4 DEVELOPMENT PROCESSES

IIT, Kharagpur was established on the MIT pattern, while IIT Bombay adopted the soviet pattern. IIT Madras was established with West German aid, while IIT Kanpur was set up with the assistance of nine American engineering colleges. IIT Delhi had British collaboration.

In the case of agricultural universities, an Illinois
team was involved in U.P. and M.P. while the Ohio State University was associated with Punjab, Rajasthan, Haryana and Himachal Pradesh. A Tennessee team concentrated its efforts in Mysore and a Missouri team in Orissa. The Kansas State University helped in the Andhra Pradesh Agricultural University, while the Pennsylvania State University team spent sufficient time with the Agricultural University in Maharashtra. Thus, agricultural partnerships helped in the development of teaching, research and extension.

In case of the IIMs, the IIM Ahmedabad adopted the International Teachers Program and transferred the Harvard Business School culture, while the IIM Calcutta could not be developed as smoothly.

ISSUES AND NEW DIRECTION

The agriculture university experience appears to be quite rich. The core message of these experiences is the development of capabilities and innovativeness. This may not reveal the effectiveness of institutions.

Jiri Nechevajra (1968) in his paper on "Methodological Issues in Institution Building Research" describes the methodological issues in institution building in three parts. In the primary part he describes the sources of the I.B.model,
evaluation cycle, futuristic implications of analysis and a comprehensive analysis. The second part deals with the value dimensions, value hierarchies, blueprint mapping, operation mapping, image mapping, axes of mapping, uses of mapping, time dimension of mapping, time in the institution's life cycle, research design requirements and research core. The final part is mainly concerned with data acquisition, goal analysis, realization analysis and degradation.

Krishnayya and Joshi (1978) discuss the functional aspects of the I.I. They have visualised the design group, its installation, functional areas and its project cycle.

Ganesh (1976) has suggested two models of institution building. The revolutionary model is slow incremental changes due to social interaction, while the engineering model corresponds to new technologies and new institutional form, which is induced deliberately.

Ganesh (1979) has analysed six management institutes. The study has been made with the help of in-depth interviews and analysis of records and documents. The aspects considered to be important for study were institutional performance variables, performance with respect to time, performance versus processes and performance change pattern.

The four processes - birth processes, development processes,
renewal processes and institutionalisation processes were studied indepth for all the six institutions and rating was done based on comparison.

Ganesh (1979) has also reported on management education institutions in India. The model consists of five concepts: context, capability development, innovative thrust penetration and process mechanism. Implications for planned change at the micro-system (social change) and micro-system (institutional change) level are discussed in detail.

Lynton and Thomas (1979) had suggested that the institution building framework can effectively deal with institution environment transactions which are more mutual and reciprocal. They have emphasised the need for attending to the effective management and its various linkage relationship.

Pareek (1981) defines institution building as "the process of establishing or transforming an organisation into an integrated and organic part of a community in a way that will help the organisation play a proactive role in projecting new values and become an agent of change in the community". The term institution building has also been used for the process of internal development of an institution. Ganesh (1979) has proposed a model which covers diffusion
process (one expert source develops several institutions) and self renewal process (internal development within the institution).

Lynton and Pareek (1978) offer a model of an education institute having five stages as birth, identity, growth, maturity and development. Each stage crisis is present and there is resolution for each dilemma in the development of the institution.

Pareek (1981) has discussed in detail the processes concept in various contexts. He has discussed the institutional processes like planning, decision making, etc. Diffusion and utilisation of knowledge and some propositions of institution building have also been discussed.