CHAPTER - I

"... institutions are becoming the focus for a new kind of politics, that is, mobilizing public opinion and working more closely with state and federal legislative bodies and with other key constituencies. They are also learning more about an enlarged concept of the 'management team'.

In short, the political role of the organization leadership responsibility must be reconceived."

- Warren, Dennis (1983)
CHAPTER - I
INTRODUCTION

1.1 Background

The end of the second world war brought many changes, both at the national and at the international levels. At the national level many countries suffered due to the heavy destruction caused by the war. At the international level many new big and small sovereign nations emerged, especially in Asia and Africa. Those who suffered heavy losses due to the war were involved in the reconstruction programmes. Similarly newly emerged sovereign countries had their own priorities for their development programmes due to their different political, economic, social and cultural backgrounds.

Newly independent countries in Asia and Africa had a choice to join either the American bloc and accept the capitalist ideology or the Russian bloc and accept the communist ideology. But there were a number of countries like India, Egypt, Yugoslavia and others who decided to form a third bloc known as the non-aligned bloc.

As a result of the race those countries which joined the American or the Soviet bloc started receiving huge amounts of financial aid and other scientific, industrial, technological and military assistance regularly. In short, the economic development of these countries heavily relied on foreign-aid. The intentions of the third or the non-aligned bloc were completely misunderstood. Their priority was and still is to develop themselves into self-sufficient nations through their own efforts and resources.

An important strategy of the two major blocs was to woo non-aligned countries. Both the USA and the USSR started offering financial and other assistance to the members of the non-aligned group to attract them towards their respective blocs.
During the fifties the developing countries were busy with their economic and industrial development programmes. They realised the need of innovative institutions to serve as a significant part of the infrastructure to be built for a socio-economic face-lift. It was also felt that such institutions could effectively work in the areas like education, culture, religion, science and technology as well. But at that time it was not properly understood how new institutions could be created and firmly planted in the prevalent social environment. We still have limited knowledge of how the social environment react to induction of new values, science and technology.

This was the beginning of an awareness towards innovative institutions and their builders. Building innovative institutions in the developing countries, therefore, became the central theme of the aid policy of the developed countries. And for this purpose a need for guidelines or criteria to assist the third world countries was visualized.

Leadership is considered as a crucial factor for the creation and management of an institution. Bryson and Kelley (1978) suggested a new dimension to understand an organization as a political system which was supported by earlier research of Wamsley (1973, p.18) and Tushman (1977, p.207) where politics "refers to the structure and process of the use of authority and power to affect definitions of goals, directions, and other major parameters of the organization".

In the light of the above context it should be interesting to study an organization as a political system.

At this stage emerged a new perspective in social sciences known as "Institution Building."
Mann (1973, p. 15) described this new perspective thus:

"Institution building is, at present, more a way of thinking about and analysing certain kinds of development efforts and their effectiveness than a way of actually "doing" development. The amorphous nature of institution-building work which recommends the term "perspective" over "model" and "theory" also suggests a somewhat less formal mode of presentation."

This novel concept of institution building was accepted as a means of modernization. The top priority of the developing countries was national development through modernization of their traditional industries and to develop science and technology-based innovative institutions for social change. Basically, the new innovative institutions were promoted as training schools to generate a second generation of scientists, engineers, technologists, educators and managers. There was a risk involved in this process. Combining an innovative element with a traditional societal base might invoke resistance or a hostile reaction towards change.

However, there was no alternative for a developing country as it had to achieve self-sufficiency under the then existing conditions. Therefore, it was accepted that the institution building perspective was the only alternative to attain self-reliance.

In 1947, India achieved independence. A number of areas were identified through which nation building was possible. The major task was industrial development with the help of science and technology as it had economic, political and social implications for the welfare of people. Our first Prime Minister Shri Jawaharial Nehru's vision and wisdom helped achieve these dreams due to his faith in science and technology. During the pre-independence era the British rule had been largely responsible for the creation of a situation
in which the Indian industrialists, scientists and technologists could not play the role of innovators; rather they were forced to preserve whatever was achieved. Research and Development (R&D) was almost ignored and, therefore, industrialisation could not take place, to the desired extent.

On the eve of national independence Dr. Shanti Swarup Bhatnagar, an eminent Indian Scientist, established the Council of Scientific and Industrial Research (C.S.I.R.) in New Delhi. This was perhaps the first major attempt to promote and develop science and technology on a very large scale. The CSIR established a chain of scientific laboratories in different regions of the country.

Another major attempt was made by Dr. Homi Bhabha, an eminent Indian Physicist, who established the Tata Institute of Fundamental Research, Bombay and subsequently, the Indian Atomic Energy Commission. It was the visionary in Bhabha that recognised the importance of nuclear energy for national development.

Dr. Vikram Sarabhai, an eminent Indian Physicist and a visionary scientist, recognised the role of science and technology in national development. Dr. Sarabhai contributed substantially to his own specialised discipline of cosmic rays research, and also to fields far removed from those of his background and experience and provided innovative leadership in a variety of areas. In the short span of 2½ years of his career, Vikram Sarabhai was responsible for the creation of a number of institutions (See Annexure-4), major national scientific and educational research projects and a chain of industrial enterprises. All these institutions reflect felt-needs of a developing society.
It should be immensely interesting to trace the process of institution-building in a developing country like India, with an emphasis on the role of leadership in making it a glaring success. In this respect, I have chosen Dr. Vikram Sarabhai because of his exceptional background and personality and his active involvement in fields as diverse as space technology to performing arts in which he made a mark through setting up numerous institutions.

Two institutions founded by Vikram Sarabhai, namely, 1. Ahmedabad Textile Industry's Research Association (ATIRA), Ahmedabad, and 2. Physical Research Laboratory (PRL), Ahmedabad, have been selected for the present research.

1.2 Objectives

The present study is an attempt to understand the role of leadership and the impact of leadership actions on institution building. It aims at facilitating both theorists and practitioners of this subject to draw lessons from the institution building experiences of a prolific institution builder like Dr. Vikram Sarabhai.

The following are the main objectives of the present research:

1. To understand how Dr. Sarabhai's multiple leadership roles helped in the creation of organizational structures to establish internal as well as external linkages which ultimately resulted in the growth of the institutions under study.

2. To study the leadership style and actions and its impact vis-a-vis institution building.

3. To study the multiple leadership roles and their relationship with institution building and the growth of institutions.
4. To study the impact of leadership style and actions on internal and external environments vis-a-vis internal growth of an 'operating culture' and external societal needs.

5. To draw lessons from Dr. Sarabhai's leadership and his role as an institution-builder, for future institution builders and leaders of organizations.

1.3 Methodology

Basically two methods of data collection were considered useful.

1. In-depth open ended interviews;
2. Analysis of official records and documents.

The following sources of data for interviews were considered relevant:

1. Present and past heads of the institutions
2. Key members, present and past, both of the faculty and the governing councils of these institutions.
3. Key academic and administrative members, both past and present, of these institutions.
4. Family members of Dr. Vikram Sarabhai.

Among the official records and documents, the following were considered important:

1. Annual Reports
2. Internal Records of the institutions
3. Various memoranda
4. Minutes of the various meetings as well as important internal documents
5. Official correspondence
6. Various publications of these institutions
Since the purpose of the study is to understand the role of leadership and impact of leadership actions on institution-building, it was found useful to prepare case studies of two institutions established by Vikram Sarabhai.

Two institutions, namely, 1. ATIRA, and 2. PRL have been selected for the present research. ATIRA was selected because it was the first institution established by Vikram Sarabhai.

In the words of Krishnamachari (1955):

"I had heard about ATIRA from many people. The Prime Minister used to speak of the ATIRA as almost a model research institution among the dozen such research institutions we have in India. I, therefore, came here expecting to see something very big in the way of human effort. I am not attempting to praise my young friend Dr. Vikram, when I say that my best expectations were exceeded when I went round the place. Here is something that is being done in this country, in regard to which nobody has blazed the trail - and the circumstances in which this institution has been brought into being, would probably baffle any ordinary human effort. The establishment of an institution of this nature in Ahmedabad is a recognition of the need for organizing our activities whether in industrial, commercial or management spheres, in matters of employer-employee relations and so on. So far as human beings are concerned unorganized or unplanned effort has no future in a country where the pressure of population is great and standards of living are low. ATIRA is also an example, because something concrete is being done there which others can copy."
ATIRA was established in 1947 when the country had just achieved independence and also it was the year when Vikram Sarabhai had just returned from Cambridge after receiving his Ph.D. degree in cosmic rays. Vikram Sarabhai was only 28 years old and he had no background or any experience of textile industry and he was entrusted the responsibility of starting a textile research institution which was the first of its kind in the country.

PRL was selected for the study because it was the only institution in which Vikram Sarabhai continued his association as a scientist and as head of the institution almost for 24 years. Therefore, it was felt that these two unique experiences will be able to throw more empirical data on the development of these institutions.

My focus, in this study, is on the leadership aspect. And, therefore, it was also felt that one should be able to study these two institutions in a political perspective so that leadership role, both internal as well as external, can be understood in terms of the growth of these institutions.

I would also like to mention one most important point which helped tremendously in the present study is my own relationship with Vikram Sarabhai, my observations, discussions, experiences and understanding - without these personal experiences, perhaps, the present study would have not been undertaken.

1.4 Chapter Summary

In the following section, a brief summary of each chapter of the thesis is given.
1. **Institution-building: A review of literature**

This chapter consists of a review of studies done on institution-building. Two major efforts by Esman (1972) and Ganesh (1978) were made to formulate an institution-building (IB) theory. Esman (1972) coordinated a collaborative effort to conceptualize a common framework of institution building in which a group of scholars in the USA participated. This was done to help the USAID agency to formulate a guideline to assist developing countries of the third world. This attempt was made to translate the IB perspective into a conceptual framework of IB for application purposes.

Ganesh (1978) made an attempt to identify various processes of IB and evolved a General Processual Model of Institution Building. Ganesh (1978, 1979) studied six management education institutions in India. He identified IB processes through an empirical research of development of these six institutions. His model consists of various stages and processes and sub-processes of IB. Thus, it leans towards applicability.

While going through IB literature and also institutions under study, the hypothesis of the study is that the leadership role is the most important as well as critical factor in institution building. It is leadership which plays the major role not only in creation of an institution but also in identifying the appropriate context, origination of mission and the total development of the institution till it achieves institutionality. It is the leadership role which is entirely responsible for creation of internal culture, organization structure, designing of core research programmes and the nurturance of an institution.
Leadership role cannot be considered as one of the so many aspects contributing in the creation of an institution but it is the institution builder who is mainly responsible for birth, nurturance and development of an institution. Therefore, in the absence of earlier IB studies' focus on the key role of leadership in IB, the present research was undertaken.

2. Leadership: A review of literature

In this chapter an extensive review of leadership studies relevant to the present research is attempted. Leadership emergence, development and various aspects of institutional leaders have been discussed in detail. Especially leadership growth, leadership functions and the role of leadership in institution-building have been emphasised.

To gain a meaningful insight from leadership research, the chapter has been divided into three parts, namely, 1. Personality of leaders, 2. Leadership functions, and 3. Institutional leadership.

First part consists of a review of the work of psychologists like William James (1890), Jung (1957), Weber (1968), Kakar (1978), and Erikson (1979). These scholars have mainly discussed various psychological theories of personality, and impact of religion on personality development. Second part consists of a study of the work of scholars like Sinha (1980) and Selznick (1957). These scholars have discussed functions of leadership in different environments. Sinha (1980) evolved a leadership model called 'Nurturant-Task Leader' but still it is to be tested in different environments. The third section comprises
of a review of the work of scholars like Zaleznik (1977), Burns (1978), Bennis (1982) and Greenleaf (1977). These scholars have come out with very interesting and meaningful insights from their research. Zaleznik (1977) attempted to differentiate between Manager and Leader; especially his stress is on visionary qualities of an institutional leader. Bennis (1982) described the role of shared vision in an organization development. Burns (1978) discussed two types of leadership: 1. transactional, and 2. transforming; and their relations with their followers.

3. **Dr. Vikram Sarabhai - The Man**

In this chapter, Dr. Vikram Sarabhai's three careers as a scientist, an Industrialist and an Institution-builder have been discussed in detail. His innumerable achievements as an exceptional Institution-builder are focussed. Various aspects which contributed in development of such an exceptional personality have been described.

This chapter also describes Sarabhai's family background, education, and the environment in which he was brought up. His leadership style as well as his humanitarian approach have been focussed upon.

4.5 **Case Studies of ATIRA and PRL**

In these chapters, case studies of two Institutions under study, namely,

1. Ahmedabad Textile Industry's Research Association (ATIRA), Ahmedabad, and

2. Physical Research Laboratory (PRL), Ahmedabad

have been attempted. These attempts have been made in order
to understand the role and impact of leadership actions on institution-building.

Ganesh's (1978, 1979) General Processual Model (GPM) of institution-building (IB) has been used to understand the role of leadership in IB.

6. Lessons learned

This chapter consists of the following sections:

The first section describes the importance and utility of the study. It also emphasises the need of empirical data on institution-building activities undertaken by exceptional institution-builders like Bhabha, Sarabhai etc.

The second section deals with seven aspects of Sarabhai's leadership actions. They are as follows:
1. Context appreciation and shaping
2. Mission origination
3. Institution-around-men approach
4. Creation of an appropriate operating culture
5. Creating interacting and overlapping clusters of individuals
6. Selection of institutional leadership
7. Showing care and concern for people.

The third section takes into account Vikram Sarabhai's multiple leadership roles vis-a-vis interacting clusters at three different levels:

The fourth section explains the leadership model and its implications. This model is based on five concepts: 1. Primacy and centrality of an individual as the core value; 2. Dominant leadership strategies of networking or creation of interacting and overlapping clusters; 3. Trusting; 4. Caring; 5. Multiple leadership roles vis-a-vis the external environment, the internal environment and the interface between the institution and its external environment.

The fifth section attempts to raise issues for future research.

The research is an attempt to urge both academicians and institution-builders, immersed in the worlds of theory and practice, respectively, to study Dr. Vikram Sarabha's experiences in institution-building as an innovative leader.

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