CHAPTER 1

INTRODUCTION

1.1 PURPOSE AND SCOPE OF STUDY

The study of Recent foraminifera is most fascinating and significant from academic as well as applied point of view. In recent years, therefore, much emphasis is being laid on the studies of these micro-organisms all over the world.

The study of Recent foraminifera helps solving a variety of problems, eg., taxonomy, life cycles, ontogenetic developments, test structure and composition, etc., which are indeed of great value to foraminiferologists working on the various academic aspects of this branch of Geology.

It is a well-known fact that organisms live in perfect balance with environment. Evidently, many fossil organisms resemble their living counterparts in forms, composition, habits, etc. Foraminifera, like other groups of organism, are highly susceptible to environmental changes. Therefore, the ecological data obtained from the study of foraminifera in modern seas is of utmost significance in deducing the paleoecology of the sediments which contained their fossilized ancestors. Being very
sensitive to environmental stress, they are now being increasingly used to carry out pollution studies along the coastal areas.

In spite of their small size, foraminifera play significant role in oceanographic and paleoceanographic studies. Their distribution pattern provides a better understanding of sea level fluctuations, sub-marine topographic irregularities, migration of shore lines, shifting of substrates, water currents, sea-floor spreading and a host of other aspects. Lately, the thrust of oil exploration in India is on offshore regions, and recent finding of oil at Bombay High and nearby regions has encouraged oil geologists to search for oil in other offshore regions of the country. In this context, it is all the more necessary to study the Recent foraminifera from Indian coasts for a better understanding of fossil assemblages of these regions.

In view of the foregoing advantages of the study of Recent foraminifera, the author undertook a detailed study of foraminifera from the west coast of India. Unfortunately, offshore samples were not available and, therefore, present work had to be restricted to the sandy beaches dotting the western shore-line of the country, stretching from Bombay in the north to Kanniyakumari in the south.
In view of limited time, only the systematic part of the foraminiferal study, effects of pollution, latitudinal variations and affinities of foraminifera are the concern of the present study.

It is hoped that this modest beginning will pave the way for future workers on Recent foraminifera from the Indian coasts which is still in infancy in this country.

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