PROJECT REPORT

Botanist Jaykrishnabhai-Life and Contributions by J J Shah.

The above project was sponsored by INSA during the financial year 1997-99. Professor J J Shah, a Fellow of the Indian National Science Academy, was so impressed and moved in reading a book in Gujarati entitled *Vanaspatishastri Jaikrishnabhai* by Bapalal Garbaddas Shah (1931) that he proposed to make an English Translation of this book. The final project report is adapted and modified version based on this Gujarati book.

Jaikrishna Indraji alias Jaykrishnabhai was born in 1849 at Lakhpat Village in Kacch. His father was a Priest and Key Keeper of the village gate. Jaykrishnabhai studied up to fourth standard begging for books, fees and other essential requirements. He left school for the reason that he could not pay school fees. Of course, he learnt English at a later stage when he was in Bombay. He became familiar with Botanical knowledge from the First Book of Botany by Hooker. This self educated Botanist pursued his studies of his own. Later on, his quest for botany was fulfilled by Dr. Bhagwanlal, a well known archaeologist, a lover of plants and an ayurvedic vaid. Jaikrishnabhai learnt botany with his help. He continued his work in botany and came into contact with Dr. Sakharam Arjun, then occupying the chair of botany in Grant Medical and was figured as a well known name in the field. He compiled Vanaspatishastra: Flora of Barda mountain (of 700 pages) in Gujarati language and struggled hard to publish it in the year 1910. He mortgaged jewellery of his wife to publish this book. Jaikrishnabhai was advised to write this book in English by the then Administrator of the Porbandar State, Lord Lely. Jaikrishnabhai said, "the English scholars sitting in Kew Gardens can identify any plants of India and write books on plants of India. But we cannot identify the plants growing in our courtyard. Therefore I have to present at the feet of my countrymen the knowledge by which the English scholars can identify the plants of the different regions of the World" (see the fascimile of his letter written in Gujarati given in the Appendix). But he was surprised and

shocked when not a single copy of his book was sold. He again at the age of 76, dared to publish another book entitled Plants of Kutch and their Utility in Gujarati which contains ninety-nine line drawings. He helped well known people like Dr. Khory (author of Materia Medica), Mr. Birdwood (then Chief Justice, Bombay High Court and author of Flora of Matheran and Mahabaleshwar), Rev. A K Nairne (author of Flowering Plants of Western India). Lt. Col. Kirtikar, the author of Indian Medicinal Plants and Poisonous Plants of Bombay had great regard for Jaikrishnabhai and wrote, "to me you are an authority on the subject, and most reliable person, as regards to identification of plants..., you are my guiding light in Botany." Jaikrishnabhai's knowledge saw light when he was offered the post of Curator of Forests and Gardens in state of Porbandar, where he served till his retirement. He died at the age of 80 on 3rd December 1929. Jaikrishnabhai was very close to Mahatma Gandhi. Gandhiji was aware of his botanical explorations in Gujarat. He, while writing the recollections of his travel of Kuchch, wrote "Sri Jaikrishna Indraji is an embellishment of Gujarat.... he knows every leaf and every tree of Barda. He has so much faith in tree planting that he gives it prime importance." Gandhiji wrote obituary of Jaikrishnabhai in the Journal Navjivan. Jaikrishnabhai founded Kuchchh Tree Plantation Mandal. He had great desire to publish more books but he could not. His incomplete writings includes Medicinal Plants of the Bazaar (Bajarna osedia). He had four to five notebooks full of materials on this subject in the form of notes. He had listed a series of important books for reference work. A book entitled One Hundred Plants (Vanaspatishatak) was almost ready. He was keen to compile a book on Walks and Talks among Plants, as suggested by his friend Chester MacNaghten. We made a full listing of plants of Matherans and wished to publish his Catalogue of Matheran Plants. He also had a desire to publish plants of Girnar and Mount Abu.

His wide knowledge of Plant Science can be understood from the following contents of his famous book *Plants of Kutch and their Utility*-Garden Plants in Cutch, Planting of Forest Trees in Cutch, What is Forestry? *Planting of Cassia auriculata*, Babul Plantation, The White Mangrove (*Avicennia officinalis*), Plantation of Casuariuna, Coconut Plantation and Reclamation of Saline Land.

The report has as many as 26 chapters viz., introduction, his family background and stay in different places, meeting with Pandit Bhagvanlal, acquaintance with Dr. Sakharam Arjun, association with Bhagvanlal, European friends, meeting with Macnaghten, assistance to Dr. Khory, incomplete writings, tree plantation in Kachch, invitations from Malviaji and Mahatmaji, Kirtikar and Jaykrishnabhai, letters to Jaykrishnabhai, correspondence, letters by Jaykrishnabhai, and scientific contributions.

There are six appendics. Appendix VI has a few master line drawings of plants, which Jaikrishnabhai prepared for his book *Plants of Cutch and their Utility*.

The project is published later by Charutar Vidyamandal, Vallabh Vidyanagar.

Shabnam Shukla