

EXPLORING GANDHIAN SCIENCE : A CASE STUDY OF THE KHADI MOVEMENT

by

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Submitted

in fulfillment of the requirements of the degree of

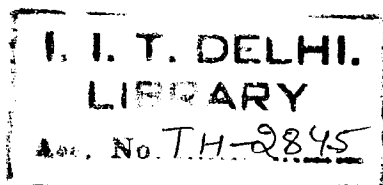
Doctor of Philosophy

to the



**INDIAN INSTITUTE OF TECHNOLOGY, DELHI
HAUZ KHAS, NEW DELHI – 110016**

SEPTEMBER 2001



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CERTIFICATE

It is certified that the thesis entitled “**Exploring Gandhian Science: A Case Study of the Khadi Movement**”, being submitted by **C. Shambu Prasad**, to the Indian Institute of Technology, Delhi for the award of the degree of **Doctor of Philosophy**, is a record of bonafide research work carried out by him. C. Shambu Prasad has worked under my guidance, and supervision for the submission of the thesis which, to my knowledge, has reached the required standard.

This thesis, or any part thereof, has not been submitted to any other University or Institute for the award of any degree or diploma.



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ACKNOWLEDGEMENTS

I am deeply grateful to my supervisor, Dr. Amrit Srinivasan, for her cooperation and guidance throughout the study. She has been very understanding and patient with my engineering and social activist backgrounds and has been with me as I learned from my mistakes, gently reminding me of the larger picture as I often got lost in my khadi archive. I also thank the Head of the Department and other faculty of the department for their support.

Several people have freely shared their work and experiences without which this work would not have been possible. I thank Mohan Rao and the weavers of the Rashtra Chenetha Karmika Samakhya for sharing with me their struggles, Naginbhai Salaria of the Khadi Gramodyog Prayog Samiti who freely shared the sole copy of the full set of the *Ambar* journal, Ramakrishna and Kannan of the AU-PPST Centre for Traditional Sciences and Technologies, Chennai for the innumerable technical and other insights on the textile industry, and Uzramma and Annapurna of Dastkar Andhra for field insights on handloom and khadi production. Swaminathan first introduced me to the CD-ROM of Gandhi's collected works and I am grateful to him for access to it. I also thank the staff of the Teen Murti Memorial Library.

I have received enormous support and encouragement from a long list of people who have contributed to tiding over several personal crises. Prajit Basu offered his hospitality to us at a very crucial time, as did Arun Kumar and Kundu later. Special thanks to Rukmini Sampath (*patti*) for her more than generous hospitality throughout my stay at Delhi. I thank Sanil, Chakravarty, Soumitri, to name but a few of the

faculty who have been very supportive in ensuring logistical support. Vijaychariar - the netaji, has been a close friend who helped me find my bearings in Delhi. Ajay Sahay, Purnima Rai and many others have made Delhi enjoyable. Maruthi and Chitra have been very helpful in providing editorial assistance at extremely short and impossible time frames. Dilip and Annapurna too have given their useful comments.

I dedicate this work to my late father, C. Ramakrishna Sastri, who was keen that I pursue my PhD. My wife Sai Sudha has been a great source of support and encouragement as we went through several ups and downs. I thank little Teja for adding colour to our lives, and to amma, anna and akka.

C. Shambhu Prasad

ABSTRACT

This thesis is a sociological study of science in the khadi movement, the popular socio-political movement for the revival of hand-spun and hand-woven cloth (khadi) initiated by Gandhi in 1918. By locating the khadi movement within the larger frame of Gandhian science, this study seeks to recover the missing element of science in Gandhian studies and the missing Gandhi in science studies in India. At another level this study seeks to reconfigure the notion of khadi as a mere symbol of freedom by explicating the Gandhian notion of the experiment – *Prayog* – and highlighting its continuing significance for understanding the crisis in contemporary textile production in India. The first chapter places the study vis-à-vis the literature on Gandhian studies, the social studies of science and earlier works on khadi. The reason for using the ‘khadi archive’ as the field is also explained. By presenting a detailed examination of Gandhi’s writings on science, chapter 2 challenges the popular representation of Gandhi as anti-science and highlights elements of his method. The contributions of community workers like Maganlal and others in the early spread of the movement is examined in chapter 3 as also the emergence of the Ashram as a laboratory. In chapter 4, the Gandhian notion of innovation is explored through the various experiments on the charkha initiated both within the movement and in the public domain through the Charkha Prize competition. This is followed by an examination of the khadi method behind the technical and institutional experiments of the late thirties and early forties. Chapter 5 demonstrates how the khadi movement was able to extend *prayog* beyond the historical Gandhi by continuing to challenge the statist understandings of science in independent India following upon Gandhi’s death. Chapter 6 shows how this model was stifled and eventually ruptured due to the contrasting research vision of ‘official’ khadi under the KVIC (Khadi and Village Industries Commission). The study concludes in chapter 7 by pointing to the khadi movement as ‘science in civil society’ – a science that can provide solutions to the contemporary crisis of suicides by cotton growers on the one hand and starvation deaths by handloom weavers on the other.

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