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Research, Innovations and Extension

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of Knowledge (patents filed, published, incubation centre facilities in the HEI to be considered)

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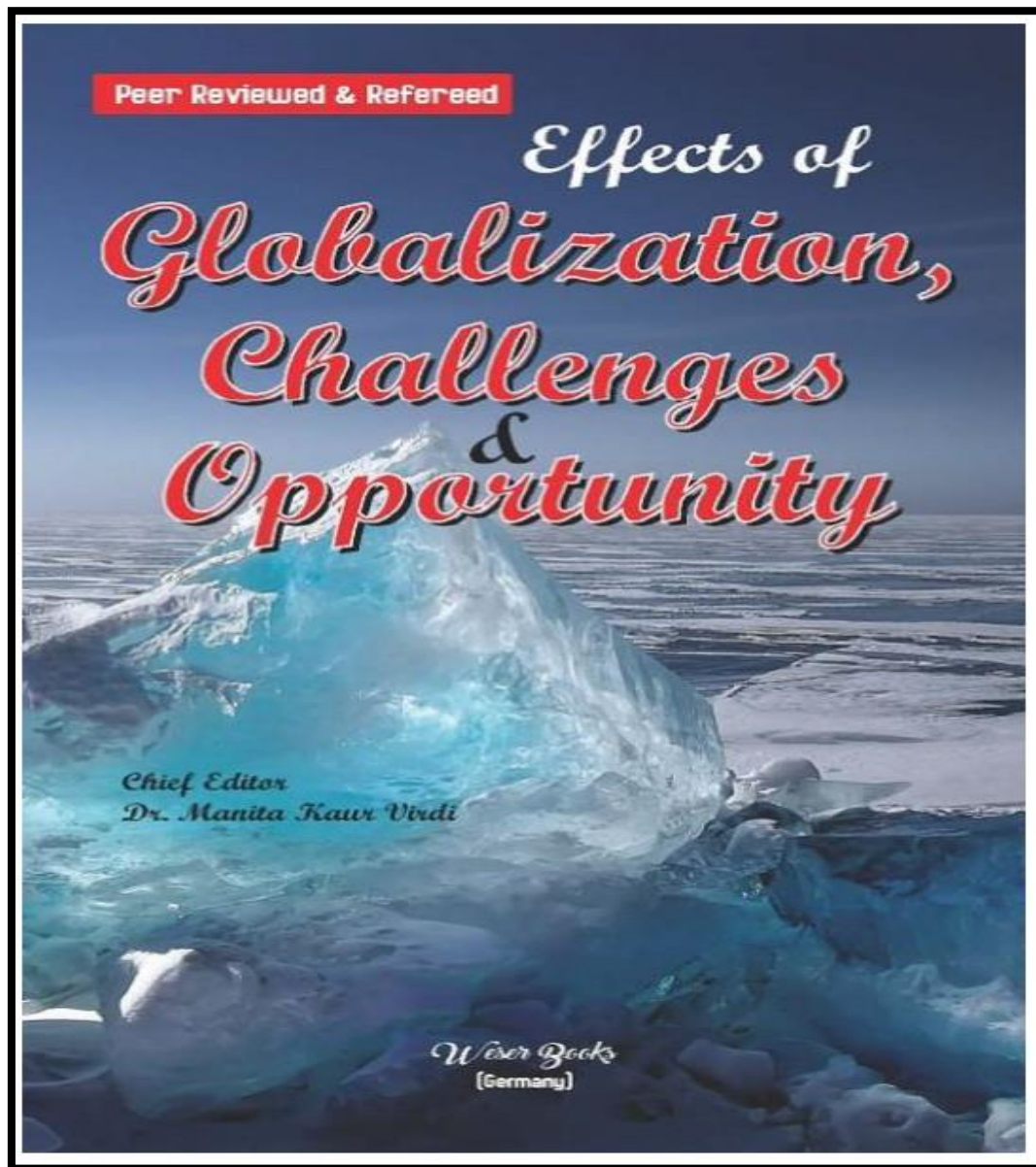
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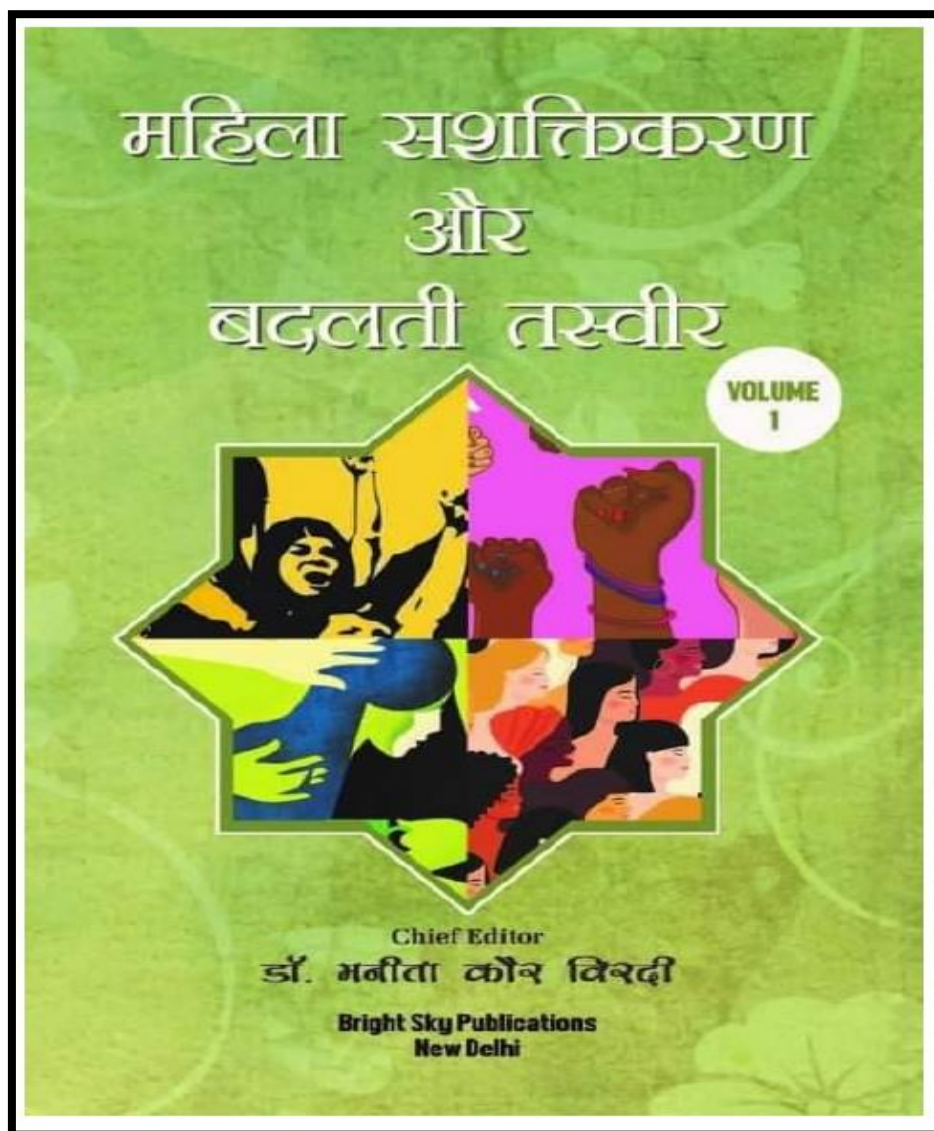
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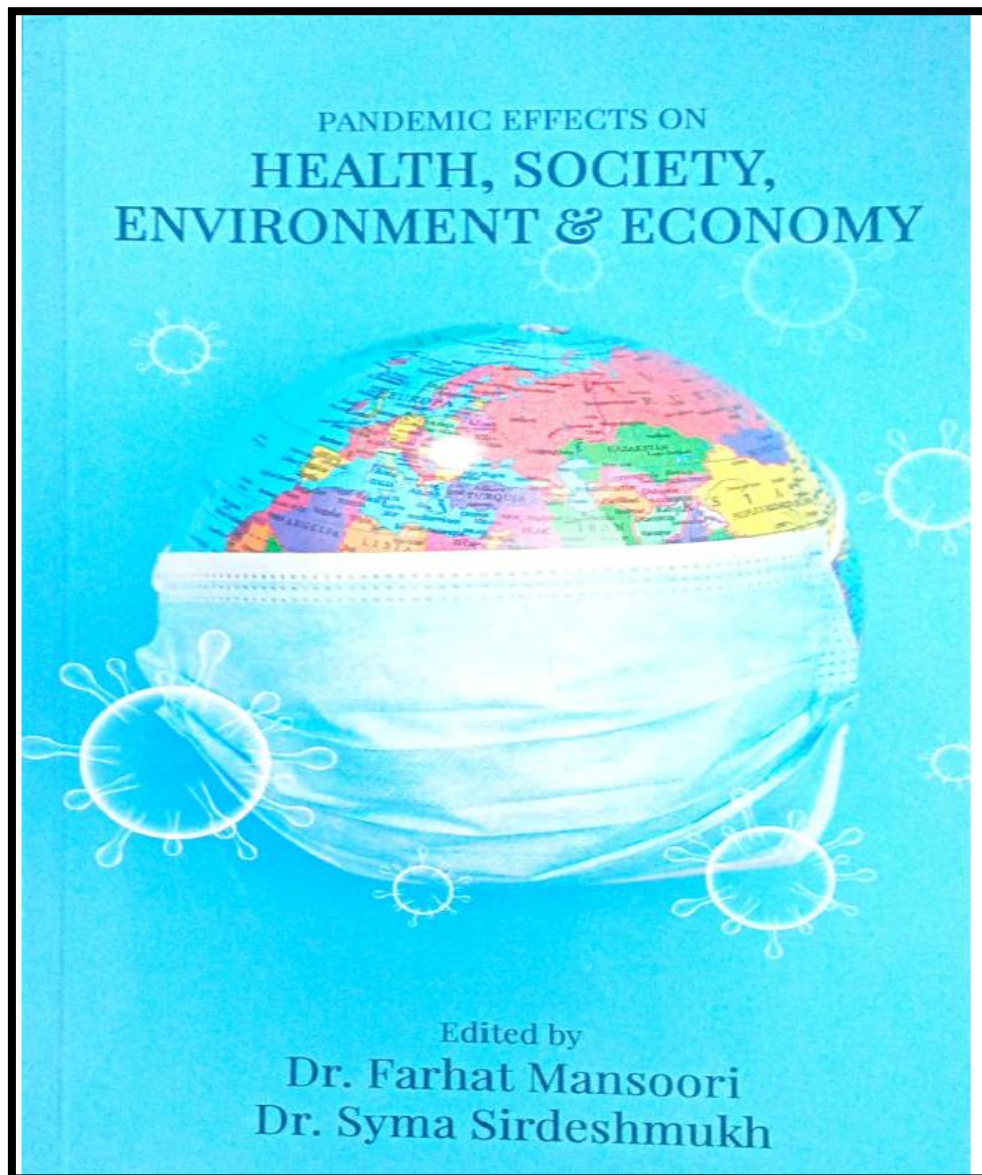
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PANDEMIC EFFECTS ON HEALTH, SOCIETY, ENVIRONMENT & ECONOMY

by: *Dr. Farhat Mansoori, Dr. Syma Sirdeshmukh*



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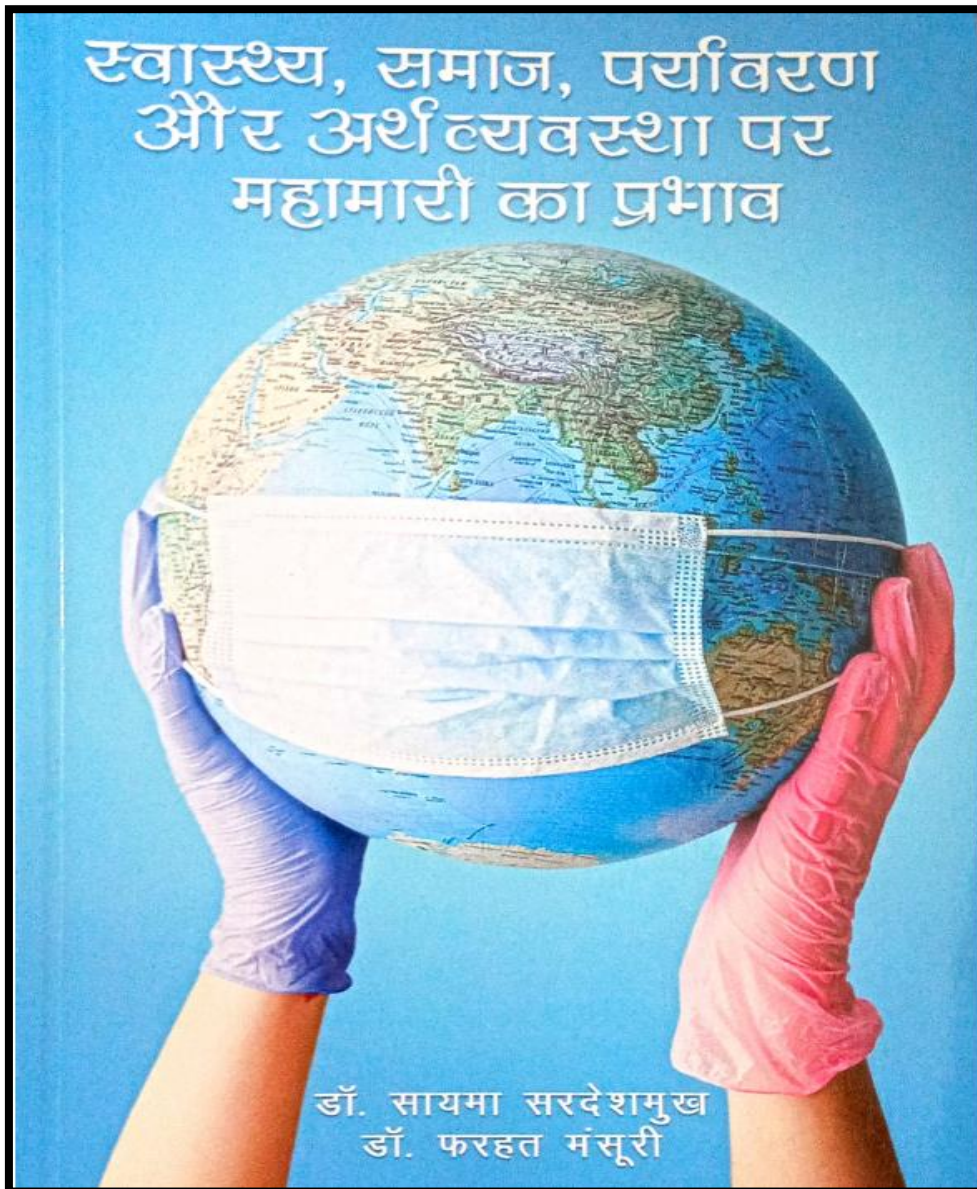
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SVAASTHY, SAMAAJ, PARYAAVARAN AUR ARTHAVYAVASTHA PAR
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by: Dr. Syma Sirdeshmukh, Dr. Farhat Mansoori

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संपादकों के बारे में



डॉ. सायमा सरदेशमुख

बी.ए., एम.पी.एड., एम.फिल., पी.एच.डी.

उच्च शिक्षा विभाग में महिला खेलों के क्षेत्र में अग्रणी भागों में से एक नाम हैं। दो दशकों से शारीरिक शिक्षा विभाग में योगदान दे रही हैं। अपनी खेल यात्रा के दौरान उन्होंने 4 राष्ट्रीय खेलों और 3 इंटर यूनिवर्सिटी में भाग लिया है। वर्तमान में शासकीय महाविद्यालय बरघाट, जिला - शिवनी (म.प्र.) में जूनियर अधिकारी के रूप में कार्यरत हैं। माध्यम विश्वविद्यालय पिडवाड़ा राजस्थान से शारीरिक शिक्षा में डॉक्टरेट की उपाधि प्राप्त की है। उनके शोध पत्र प्रतिष्ठित राष्ट्रीय और अंतर्राष्ट्रीय पत्रिकाओं द्वारा प्रकाशित किए गए हैं। लगभग 100 राष्ट्रीय एवं अंतर्राष्ट्रीय सम्मेलनों, वर्कशॉप, एफ.डी.पी. एवं क्विज में भाग लिया है। अपने अकादमिक मोर्चे और व्यापक कार्य अनुभव के साथ उन्होंने कई राष्ट्रीय और अंतर्राष्ट्रीय सम्मेलनों में भाग लिया है। यह ली और आग की एक सच्ची मिसाल है क्योंकि 20 साल से यह आकाशवाणी चिन्दाड़ा के साथ एक उद्घोषक के रूप में जुड़ी हुई है।
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समाजशास्त्र विषय के सहायक प्राध्यापक के रूप में शासकीय महाविद्यालय विजुआ जिला चिन्दाड़ा में कार्यरत हैं। पी.एच.डी.की उपाधि समाजशास्त्र विषय में समाजशास्त्र एवं समाज कार्य विभाग, बरकतउल्लाह विश्वविद्यालय नोपाल से प्राप्त की। शिक्षा के क्षेत्र में 11 वर्षों का अनुभव है। राष्ट्रीय एवं अंतर्राष्ट्रीय पत्र-पत्रिकाओं में 6 पुस्तक अध्याय तथा 26 शोध पत्र प्रकाशित किये हैं। लगभग 100 राष्ट्रीय एवं अंतर्राष्ट्रीय सम्मेलनों, वर्कशॉप, एफ.डी.पी. एवं क्विज में भाग लिया है। मुख्य रूप से का विषय महिलाओं की समस्याओं पर शोध करना एवं उनके निराकरण के उपाय खोजना है।
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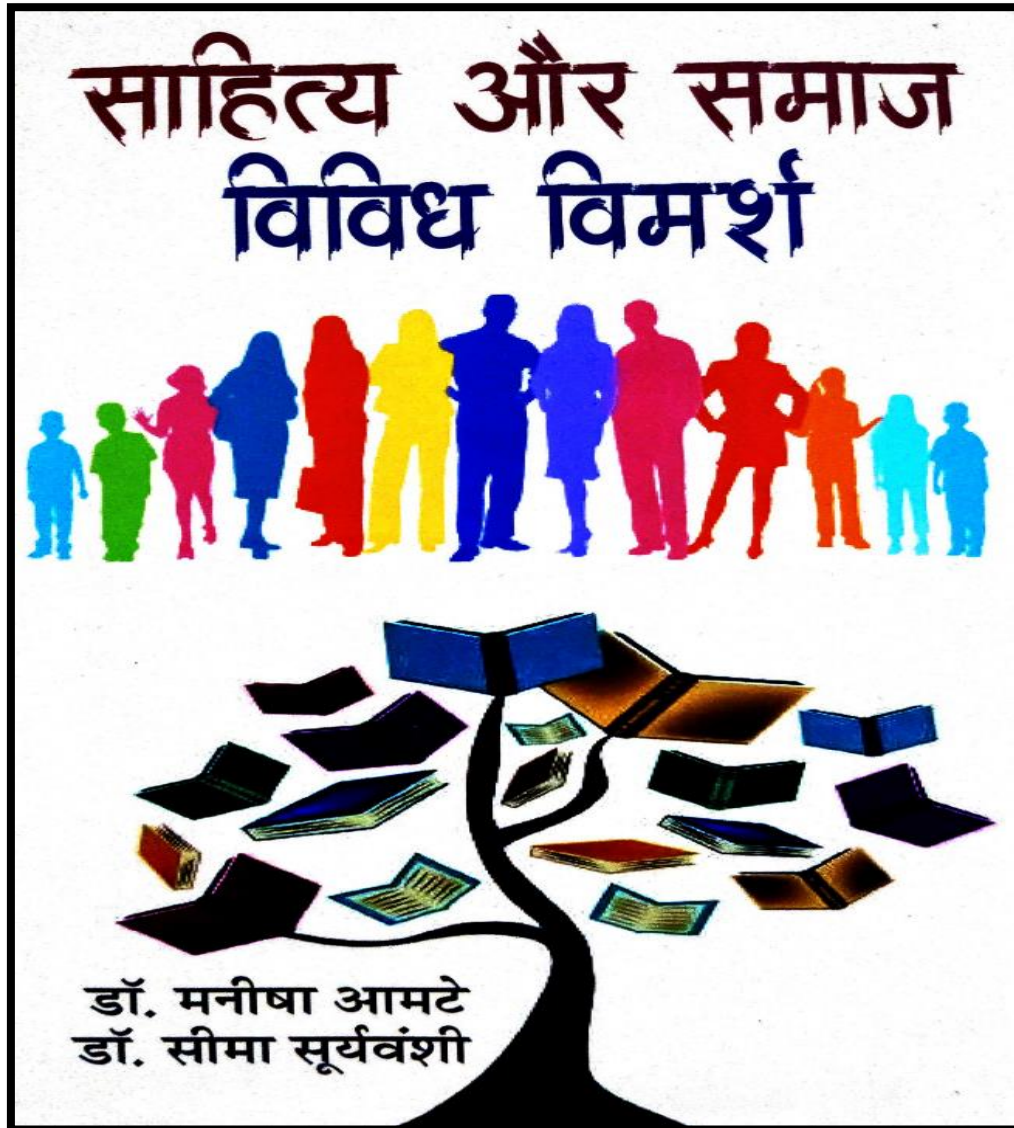
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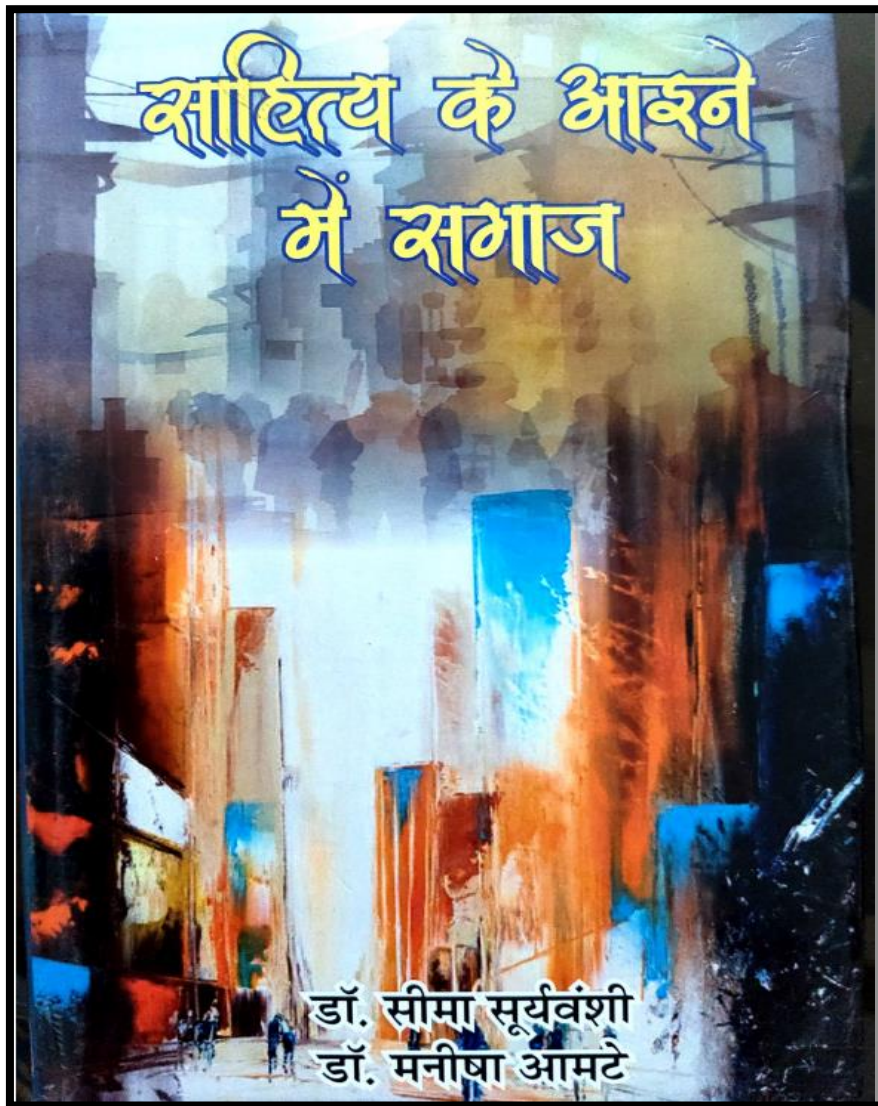


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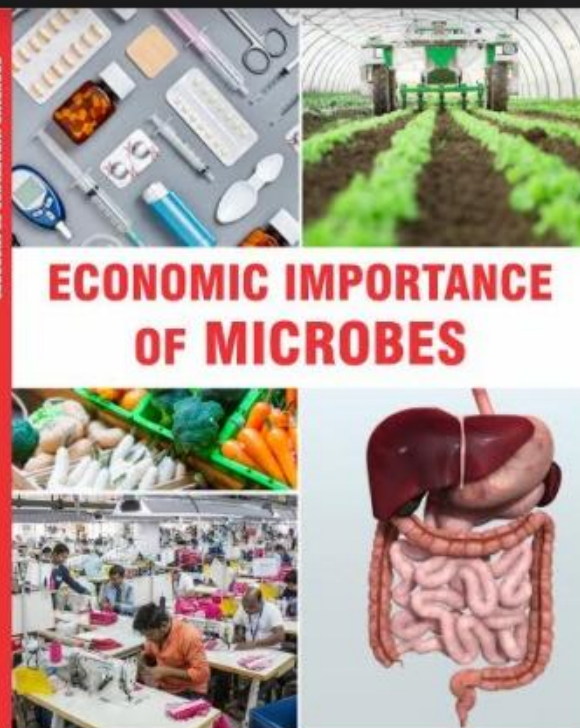
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Economic Importance of Microbes Dr. Kavita Chahal

Chapter – 18

ECONOMIC IMPORTANCE OF CYANOBACTERIA

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Abstract

Oxygenic phototrophs cyanobacteria are thought to have played a fundamental role in the change of life's evolution on the Earth through oxygenation, approximately 2.3 billion years ago. These features make cyanobacteria more important. Unique features of cyanobacteria like oxygenic photosynthesis, tolerance of extreme environment, growth on non-arable lands and generation of useful by-products and biofuels, improving soil fertility, and reducing greenhouse gas emissions have the potential to use as a bioresource for sustainable development. Cyanobacteria are widely used in different sectors like the agriculture industry, pharmaceutical industry, bioenergy industry, and cosmetic product industry. Cyanobacteria are also considered as a promising feedstock for the production of third and fourth generation bioenergy. This chapter deals with the utility of cyanobacteria in different commercial and industrial sectors to control the growing demands in various areas.

Introduction

With rapidly increasing demands in the agro-ecosystem and the environment, we need to address the issues and moving towards resolving problems. Biological resources are reliable approaches for food security for future generations and rectify environmental problems. In the last few decades, cyanobacteria have gained attention due to their potential applications in diversified fields. Cyanobacteria are used by human beings 2000 years back by the Chinese who used *Nostoc* to survive during the famine (Spolaore, Joannis-Cassan, Duran, Isambert, & bioengineering, 2006). In the last few decades, cyanobacteria are also commercially grown due to their ability to produce bioactive compounds.



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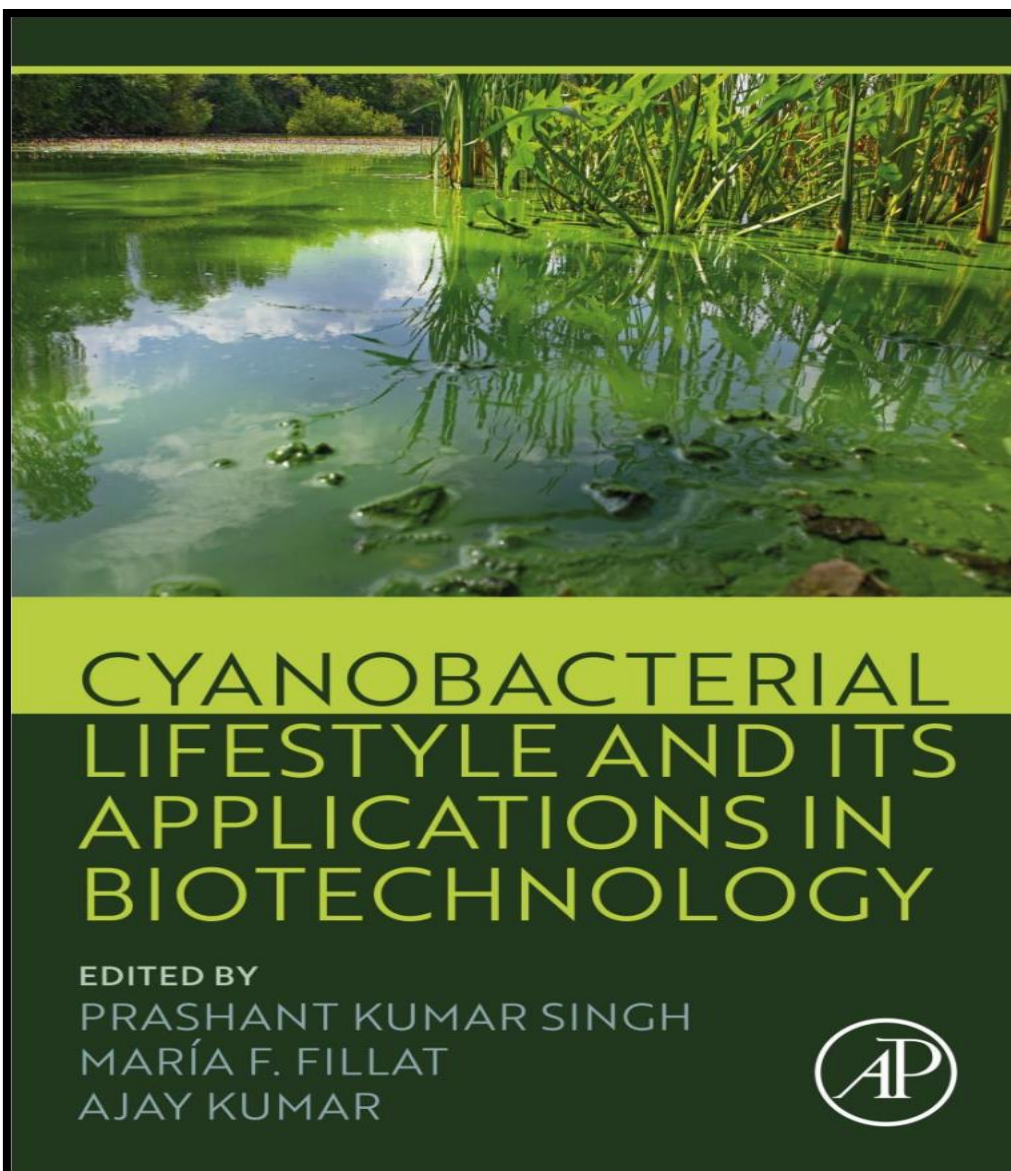


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CYANOBACTERIAL LIFESTYLE AND ITS APPLICATIONS IN BIOTECHNOLOGY

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Cyanobacterial nanoparticles: Application in agriculture and allied sectors

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2.1 Introduction

By 2050, the global population is estimated to reach nearly 9.6 billion. To meet food demand, agriculture production must increase by 70–100% (Rodrigues et al., 2017, Foley et al., 2011, Mueller et al., 2012). Agriculture is considered the backbone of developing countries, with more than 60% of the population dependent on it for their livelihood. Nanobiotechnology has the potential to revitalize and revolutionize the agriculture and food industry with novel tools for disease detection and management, plant nutrients absorption, slow-release fertilizers, and environmental protections.

2.2 Nanobiotechnology

Nanotechnology is an art and science where the matter or property of concern can be manipulated at the nano-level and can be implemented to improve life quality. Biotechnology is a technology that harnesses biological systems, living organisms, or part of it for improving the lives and health of planets. Nanobiotechnology is a dynamic and novel scientific approach blended with science, engineering, and technology at the nanoscale level.

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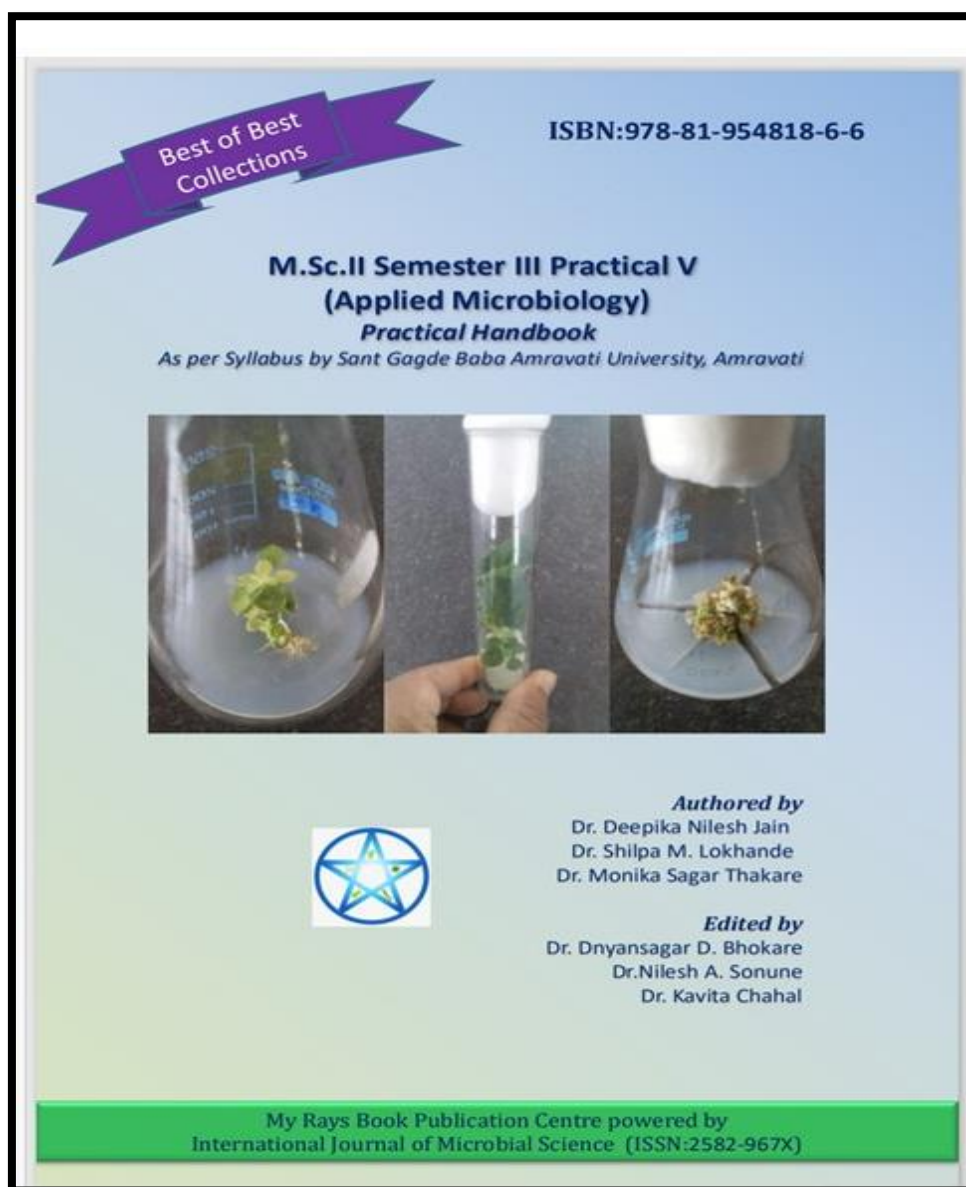


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M.Sc. II Sem-III Practical-V (Applied Microbiology)

Practical Handbook

As per syllabus of Sant Gadge Baba Amaravati, University, Amaravati

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Frontiers in Life Science

Volume II

Editor

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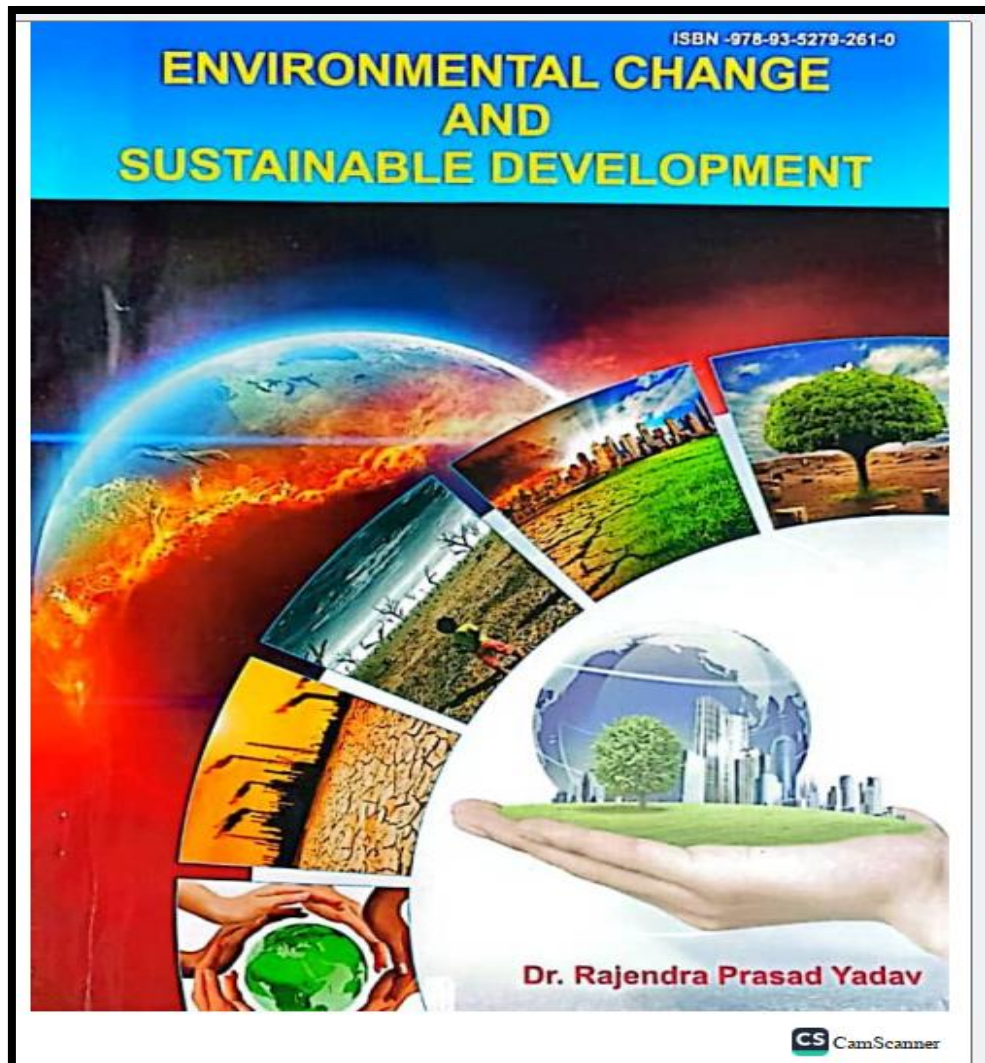


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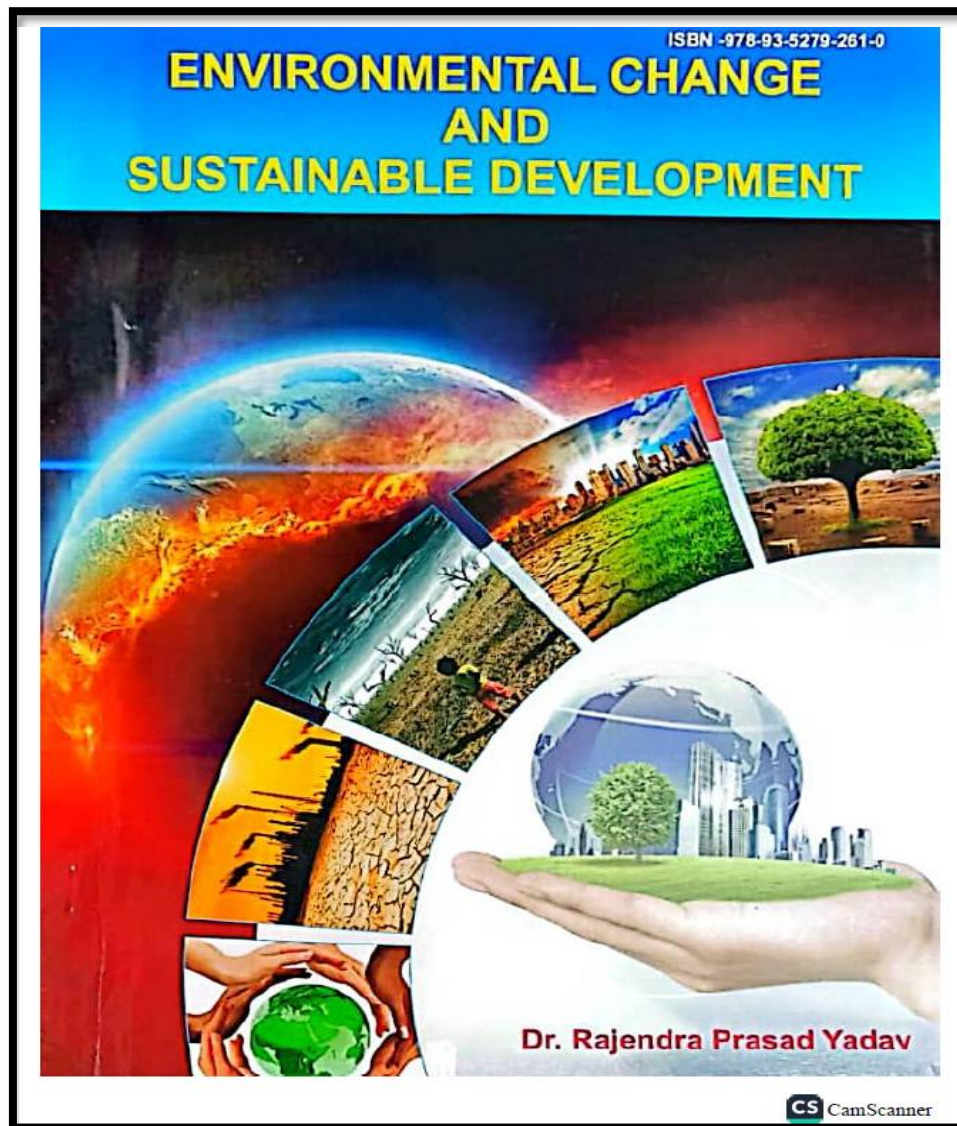


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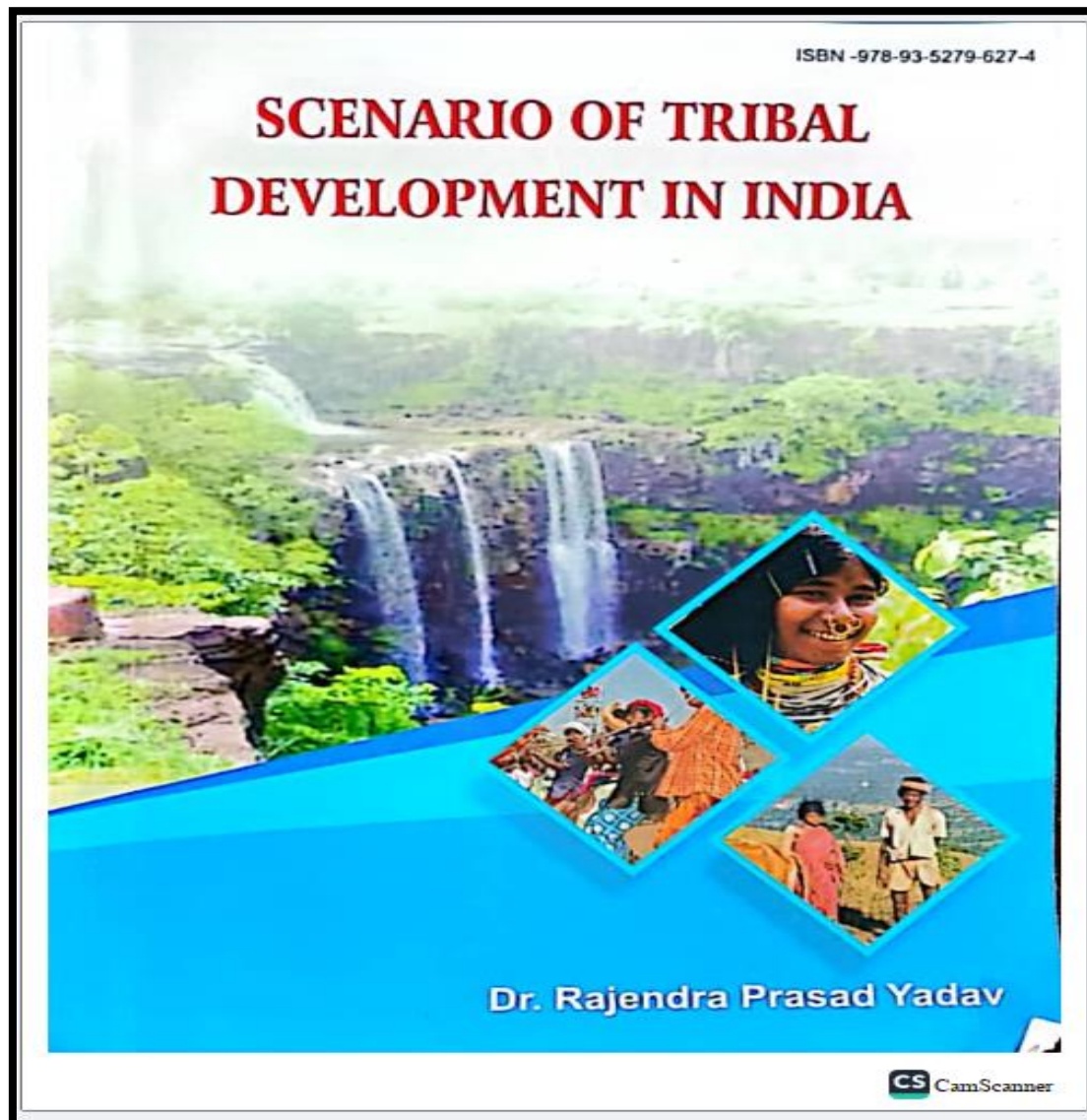


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