Intellectual Property Rights in Agricultural Research

In this age of IT-BT, continuous innovations and securing intellectual property rights is essential. This intellectual capital is likely to play significant role in socio-economic inclusive growth of our country. There is a vital need for a very strong intellectual property right (IPR) protection regime for the development of vibrant technologies. In the recent times, transfer of IPR enabled agricultural technologies through commercial route is gaining greater importance. Inspite of existence of a policy frame work developed by the ICAr to guide the management of IP created under NARS system, there is a greater need to create awareness amongst the scientific fraternity about various tools of IP protection and its applications.

This book will provide a single platform on the topic related to IPR in agriculture. It covers the concepts and terms related to various IP tools like copyrights, trademarks, patents, trade secrets, Intellectual Property protection of microbes and transgenics, TRIPS agreement and protection of innovations in the field of biological science, Intellectual Property Protection of Innovations in Animal Biotechnology, Protection of Traditional Knowledge, Indian legislations for the protection of various types of Intellectual Properties, Drafting of IP legal agreements, Prosecution of Patent Application, Enforcement of Intellectual Property Rights, Infringement of Patents and Relief, Mechanisms of Intellectual Property Management in ICAR, etc.

This book shall serve the purpose for academia sector especially for students, teachers, and research scholars in the field of agriculture and allied sectors. This book shall be useful for high level competitive examinations conducted by ASRB, UGC, administrative and civil service examinations. The book is well referenced, making skillful use of first-person sources. The editors place on record to acknowledge the various sources of references from where this book is compiled.

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Preface_____

Farming, in the recent times, has become technology intensive and warrants intellectual property protection to safeguard indigenously developed knowledge and farmer's interest. With the advent of biotechnology and genetic engineering and multilateral agreements, a new era of intellectual property rights (IPR) has begun. The growing impact of technologies in agriculture sector has led to an increasing recognition of the potential of these IPRs as intellectual property (IP) assets. Questions on sharing the monetized benefits of technology products, the intersection areas of the use of genetic resources and associated knowledge in biotechnology based research are posing new challenges to stakeholders in the National Agricultural Research System (NARS). To realize the social and economic benefits of IP rights in agriculture sector, a comprehensive understanding of the key concepts and legal framework on the IP system in this sector is essential. This requires practical insights of how the IP system operates at the ground level, and how these rights can be used and managed effectively for societal benefit.

It is expected that the niche products from Indian agriculture would get remunerative price through IP protection and patenting. As the technological intervention progresses, the role and importance of intellectual property protection also assumes greater importance. To safeguard the interest of all stakeholders of farm sector, it is necessary to protect innovations in agriculture sector through appropriate IP instruments apart from conservation and sustainable use of native varieties, breeds and associated traditional knowledge through *sui generis* system. There are plenty of IP instruments influencing agriculture sector development, access and transfer of genetic resources and some of them are little complex to understand. Scientists and policy-makers are facing challenges in formulating and implementing IP policies influencing research and development in agriculture sector.

Editors

About the Editors

Dr Letha Devi G did her graduation in Agriculture from Kerala Agricultural University in 2001 and topped the university. She completed her Master's in Dairy Extension from National Dairy Research Institute in 2004 and topped the university with Director's Gold Medal. She completed her doctoral degree from Indian Agricultural Research Institute, New Delhi in the discipline of Agricultural Extension in the year 2007. She joined Indian Council of Agricultural Research as a scientist in 2007. She is working as a Scientist under ICAR-National Institute of Animal Nutrition and Physiology, Bangalore. She did PG Diploma in Intellectual Property Rights from IGNOU, New Delhi, in 2013. She has published a number of research papers and popular articles in various national and international journals of repute. She has published a book on livelihood security of rural women in Kerala.

Dr Mukund A Kataktalware did his graduation in Veterinary Sciences and Animal Husbandry from Veterinary College, Nagpur in 1997. He completed her Master's and Doctoral degree in Livestock Production and Management from National Dairy Research Institute in 2001 and 2004 respectively. Dr. Kataktalware joined Indian Council of Agricultural Research as a scientist in 2004 at National Research Centre on Yak, Dirang, Arunachal Pradesh, where he served for about five years. Presently, Dr. Kataktalware is working as a Senior Scientist under ICAR-National Dairy Research Institute, Southern Regional Station, Bangalore. He did his PG Diploma in Intellectual Property Rights from IGNOU, New Delhi in 2013. He has been teaching PG and Ph.D. scholars on IPR management in Agriculture. He has published a number of research papers and popular articles in various national and international journals of repute. He has published a book on Scientific Dairy Farming and successfully guided several PG students for their research work.

Dr Atul P Kolte was born on 15 March, 1974 and earned his bachelor's degree in Veterinary Science and Animal Husbandry in 1996. Later he joined Indian Veterinary Research Institute, Izatnagar for Master's degree in Animal Biotechnology. He joined Agricultural Research Service of ICAR in 2000. Presently, he is pursuing his doctoral program at Jain University, Bangalore. He has experience in handling the intellectual property and technology management services for past one decade.



Prefa	icev
1.	An Overview of Intellectual Property Rights
2.	Trademarks and their Importance with Special Reference to Dairy Industry in India
3.	Significance of Trade Secrets and Undisclosed Information as Applied to Food Industry
4	Intellectual Property Protection of Microbes and Transgenics
5.	Intellectual Property Protection of Innovations in Animal Biotechnology
6.	TRIPS Agreement and Protection of Innovations in the Field of Biological Science
7.	Protection of Traditional Knowledge within Modern IPR Era
8.	Indian Legislations for the Protection of Various Types of Intellectual Properties

Contents / vii i

9.	Drafting of IP Legal Agreements, Prosecution of Patent Application
	P K Ashwini Kumar
10	Enforcement of Intellectual Property Rights, Infringement of Patents and Relief
11,	Strategic Use of Intellectual Property Rights in Livestock Sector for Value Extraction
12.	Property Rights Era with Special Reference to
	Livestock Sector
13.	Intellectual Property and Technology Management in ICAR Scenario: Need for Intellectual Property Valuation in R&D
14.	Mechanisms of Intellectual Property Management in ICAR
	Atul P Kolte, A Dhali, Letha Devi G and N K S Gowda
15.	Organizational Designs for Enhanced Patent Productivity
	Mary Mathew and Urmi Chattopadhyay
6.	NRDC - Transforming Innovative Research into Profitable Technology

Chapter 1

An Overview of Intellectual Property Rights

Letha Devi G, Atul P Kolte, A Dhali, N K S Gowda and Mukund A Kataktalware

Intellectual Property Rights are legal rights, which result from intellectual activity in industrial, scientific, literary & artistic fields. These rights safeguard creators and other producers of intellectual goods & services by granting them certain time-limited rights to control their use. Protected IP rights like other property can be a matter of trade, which can be owned, sold or bought. These are intangible and non-exhausted consumption.

Types/Tools of IPRs

- 1. Patents
- 2. Trademarks
- 3. Copyrights and related rights
- 4. Geographical Indications
- 5. Industrial Designs
- 6. Trade Secrets
- 7. Layout Design for Integrated Circuits
- 8. Protection of New Plant Variety.

1. Patents

22A patent is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem. It provides protection for the invention to the owner of the patent. The protection is granted