

# TEXTBOOK of **POULTRY** SCIENCE



Dr. P.V. Sreenivasaiah M.V.Sc., Ph.D., FNAVS is working as Professor and Head, Department of Livestock Production Management, Rajiv Gandhi Institute of Veterinary Education and Research, Pondicherry. He has been one of the earlier workers on basic Physiology and Management of Japanese quails when the species was introduced to our country during 1974. He established a Japanese quail breeding unit and was associated in the development of "Giriraja" while working in the All India Coordinated Research Project on Poultry for meat at UAS, Bangalore. He is involved in the field of Poultry Science for the past 37 years. His books include a) Scientific Poultry Production (2 Editions, 1987 and 1998) b) Scientific Poultry Production- a unique Encyclopedia (2006), c) Veterinary Biostatistics (2007) d) Small-scale Broiler Production (2008) and e) Small-scale Layer Production (2008). He has also published 50 research papers, 15 popular articles and a farmer's bulletin.

Veterinary Council of India (VCI) which regulates UG Education has mandated two courses on Poultry Production and Management with an option to include one more during the II B.V.Sc & A.H. Course. Students and teachers depend on many publications, Indian and Foreign, during the course of study / teaching. Therefore, a book with contents conforming to the VCI Syllabus has been long awaited.

This publication has been prepared keeping the VCI Syllabus as the framework. The Chapters included are Classification of Poultry, Male reproductive system, Structure and formation of eggs, Out-door and Confinement rearing systems, Integrated farming, Confinement and Environment-controlled housing, Equipment, Qualitative and Economic traits, Incubation and hatching, Brooding, Growing, Laying and Breeder management, Ethology and welfare, Feeds and feeding, Diseases and their control, Sanitation and disinfection and Economics and Marketing. A separate chapter on species other domestic Carinates and Ratites is also include as well as a separate "VCI 2008 Syllabus" to help locate the desired information are provided.

It is hoped that this publication will be received well by all the UG students of Veterinary colleges as well as the teachers offering the courses on Poultry production. The book also serves as a basic book for those in PG studies and research on various aspects of Poultry Science.



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As Per VCI Syllabus 2008

P.V. Sreenivasaiah





# TEXTBOOK OF POULTRY SCIENCE

(VCI, 2008 Syllabus included)

**P.V. SREENIVASAI AH**

M.V.Sc., Ph.D

*Professor and Head*

Department of Livestock Production Management  
Rajiv Gandhi Institute of Veterinary Education and Research,  
Puducherry.

## ABOUT THE AUTHOR



**Dr. P.V. Sreenivasaiah**, born 28<sup>th</sup> Feb, 1955, currently working as Professor and Head, Department of Livestock Production Management, Rajiv Gandhi Institute of Veterinary Education and Research, Pondicherry, graduated from Veterinary College, UAS, Bangalore, during 1975. He obtained his Master's (at IVRI, during 1977) and Ph.D (From APAU, Hyderabad during 1985) with I Rank in both with ICAR fellowships specializing in Poultry Science.

Dr. P.V. Sreenivasaiah has been one of the earlier workers on basic Physiology and Management of Japanese quails when the species was introduced to our country during 1974. He established a Japanese quail breeding unit and was associated in the development of "Giriraja" while working in the All India Coordinated Research Project on Poultry for meat at UAS, Bangalore. Establishment of Department of Poultry Science at Veterinary College, Bidar (Karnataka) and Department of Avian Production and Management at his current work-place are also notable contributions of the author. He is involved in the field of Poultry Science for the past 37 years contributing about 50 research papers in various accredited journals.

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## CHAPTER 1

# Indian Poultry Industry

Indian Poultry Industry has recorded a total transformation over the past six decades. Bulk of Poultry population before 1960 was "Desi" or "Indigenous" type. However, Commercialization of Poultry production paved way for exotic birds; they were accepted by the Poultry farmers and hence, their numbers rapidly increased.

But, such growth in Poultry industry is not uniform throughout the country.

**Table 1.1.** Poultry development in different States

Region	Slow growth	Rapid growth
	States	States
Eastern	Assam and North-East States	West Bengal
Western	Goa	Gujarat and Maharashtra
Southern	Kerala	Andhra Pradesh, Tamil Nadu and Karnataka
Northern	Himachal Pradesh and Uttar Pradesh	Haryana and Punjab
Central	Madhya Pradesh and	Rajasthan

*Adapted from: Bharadwaj and Kumar, 2005*

However, the overall growth rate of Poultry industry over the past 6 decades is shown below: