TEXTBOOK ON

COMMERCIAL POULTRY PRODUCTION and HATCHERY MANAGEMENT

The textbook on Commercial Poultry Production and Hatchery Management has been brought out by ICAR, keeping in mind the importance of poultry industry in the current agricultural scenario. It is a major industry in livestock sector offering promising employment opportunities throughout India for veterinary and animal science graduates.

The book has been designed and written in a lucid manner to prepare an exhaustive information source for undergraduate students with special reference to Indian farming and business conditions. The book consists of 16 chapters on different aspects of the poultry production. Each chapter has practice exercise at the end for better understanding of concepts. We hope that this book will be able to serve its purpose.



Directorate of Knowledge Management in Agriculture Indian Council of Agricultural Research Krishi Anusendhan Bhavan-I, Pusa, New Delhi 110 012



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COMMERCIAL POULTRY
PRODUCTION and
HATCHERY MANAGEMENT

Dr M. Murugan



Indian Council of Agricultural Research New Delhi

Textbook on Commercial Poultry Production and Hatchery Management

COLLEGE OF AVIAN SCIENCES & MANAGEMENT KVASU CAMPUS, THIRUVAZHAMKUNNU

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Preface

Success of Indian poultry industry is one of the classical winner stories of agriculture and allied sectors of India. Commercial Indian poultry industry mainly revolves around the production of chicken eggs and meat. The average annual growth of Indian poultry industry is around 6-8%. This industry structure is characterized by mass production rather than production by masses.

Commercial chicken egg and meat production systems require substantial capital investment, scientific planning, rearing and marketing to be economically effective and efficient. It also provides huge employment and income generating opportunities for poultry entrepreneurs and farming aspirants directly or indirectly. Moreover, this is the major industry in livestock sector offering promising employment opportunities throughout India for veterinary and animal science graduates.

In this background, I strongly feel, a veterinary and animal science student should have a sound and thorough understanding about the commercial poultry production systems. I am confident that, knowledge on commercial poultry production will enhance the competence and employability potential of the new veterinary and animal science technocrats in industry. The purpose of this textbook is to prepare an information source for undergraduate students of veterinary and animal science and poultry science on commercial poultry production with special reference to Indian farming and business climatic conditions.

In this book, the subject matter has been arranged in a sequential manner for easy understanding of concepts and its method of application through activities at the end of each chapter. I strongly encourage the student-readers to practice the exercises for better understanding and to gain confidence in their execution. I have taken sincere efforts to avoid technical mistakes in bringing about the content; however, if it is there, it is solely unintentional. Finally, I express my loveable thanks to my wife Abbi and my daughters Muthamil and Manicka for their encouragement to write this book successfully.

Dr M. Murugan

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Annexure

929 square centimetres

 πr^2 square

Metric equivalents 1 metre 100 cm 1 metre 3.28 ft 1 feet 12 inches 1 inch 2.54 centimetres Area One hectare 2.47 acres One acre 4046 square metres One square metre 10.76 square feet One square feet 144 square inches

Weight

One square feet

Area of circle

One kilogram 2.20 pounds
One pound 0.45 kilograms
One tonne 1,000 kilograms

Temperature

Centigrade to Fahrenheit $^{\circ}$ C × 1.8 + 32 Fahrenheit to Centigrade $^{\circ}$ C × 1.8 + 32

Concentration

One mg per kg
One ppm
One microgram per gram
One ppm
One microgram per kg
One ppb

Volume

One cubic foot 28 litres (approx)
One cubic metre 1,000 litres

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