

Text book On  
**Abattoir Practices  
& Animal Byproducts Technology**

**Jhari Sahoo | Manish Kumar Chatli**

**About the Book**

This book contains 16 chapters which include:-  
Animal Welfare Issues, Lay out and design of modern abattoir, Growth and development of meat animals, Preslaughter care, transport, judging and grading of meat animals, Scientific approach of Slaughtering and Dressing Techniques, Ante mortem and Postmortem Meat Inspection, Grading and Evaluation of Meat Animal Carcasses, Fabrication of dressed carcasses, Cleaning, Sanitation and Management of Slaughter House and Meat Plant, Hazard Analysis Critical Control Points and Abattoir Management, Quality Control, Quality Assurance and Traceability of Health Hazards in Livestock Products, National and International Standards for Abattoir Practice, Effluent Treatment Methods of Abattoir for Pollution Control, Design of effluent treatment plant for slaughter house, Abattoir byproducts technology and Wool structure, composition, characteristics and processing. This book has incorporated the Veterinary Council of India(VCI) New Syllabus 2008 Course No. LPT-312 Course Title: Abattoir practices and animal byproducts technology prescribed for B.V. Sc. & A.H. degree programme and BSMA(ICAR) syllabus courses of Abattoir and poultry plant practice, Slaughter house byproducts technology of M.V.Sc. (LPT) and the course Advances in abattoir practices and animal byproducts utilization of Ph.D. (LPT) degree. Thus can be used as a dependable primary text book for B.V. Sc. & A.H., M.V.Sc. and Ph.D. students of different veterinary colleges of the country. Besides, this book is of immense help to the teaching faculty of State Agricultural Universities(SAUs) and Veterinary Universities of the country who are engaged in teaching in the area of Livestock Products Technology/Animal Products Technology/Meat Science and Technology/Food Science and Technology.



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Dr. Jhari Sahoo has been associated with industry, teaching, research, training and quality control in the field of meat and meat products technology for about 30 years, who has been aware of their problems and needs. This book contains 16 chapters which include - Animal Welfare Issues, Lay out and design of modern abattoir, Growth and development of meat animals, Preslaughter care, transport, judging and grading of meat animals, Scientific approach of Slaughtering and Dressing Techniques, Ante mortem and Postmortem Meat Inspection, Grading and Evaluation of Meat Animal Carcasses, Fabrication of dressed carcasses, Cleaning, Sanitation and Management of Slaughter House and Meat Plant, Hazard Analysis Critical Control Points and Abattoir Management, Quality Control, Quality Assurance and Traceability of Health Hazards in Livestock Products, National and International Standards for Abattoir Practice, Effluent Treatment Methods of Abattoir for Pollution Control, Design of effluent treatment plant for slaughter house, Abattoir byproducts technology and Wool structure, composition, characteristics and processing. This book has incorporated the Veterinary Council of India(VCI) New Syllabus 2008 Course No. LPT-312 Course Title: Abattoir practices and animal byproducts technology prescribed for B.V. Sc. & A.H. degree programme and thus can be used as a dependable primary text book for B.V. Sc. & A.H. students of different veterinary colleges of the country. The authors have also taken care to suitably incorporate in this book most of the information pertaining to the BSMA(ICAR) syllabus courses of Abattoir and poultry plant practice, Slaughter house byproducts technology of M.V.Sc. (LPT) and course title Advances in abattoir practices and animal byproducts utilization of Ph.D. (LPT) degree. So this book is also useful for postgraduate students in the discipline of Livestock products technology. Besides, this book is of immense help to the teaching faculty of State Agricultural Universities(SAUs) and Veterinary Universities of the country who are engaged in teaching in the area of Livestock Products Technology/Animal Products Technology/Meat Science and Technology/ Food Science and Technology.

I am thankful to my co-author Dr. Manish Kumar Chatli for his sincere efforts and dedication in contributing, computing and editing the manuscripts of the book.  
I am dedicating this book to my darling wife Pravasini, for her constant support and encouragement.

(Dr. J. Sahoo)

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## Animal Welfare Issues in Meat Industry

The concern for animal welfare is a major consideration in meat production and is based upon the belief that animals can suffer. Animal welfare is defined as, "the avoidance of abuse and exploitation of animals by humans by maintaining appropriate standards of accommodation, feeding and general care, the prevention and treatment of disease and the assurance of freedom from harassment, and unnecessary discomfort and pain. Alternatively, welfare may be considered in terms of overall mental and physical health. Meat consumers are increasingly demanding that animals be reared, handled, transported and slaughtered using humane practices. Public pressure for increased protection and welfare of animals comes primarily from people in largely urbanized populations, is inversely related to the proportion of a population that is engaged in agriculture and is increasing in importance throughout the world. Concern about the welfare of animals is contingent on people believing that animals, if improperly cared for or mistreated, can experience pain and suffering. One way of evaluating different causes of suffering is to measure the animal's stress responses. A *stress response* is a physiological reaction in an animal to threatening or harmful situations. *Distress* is the emotional state that is created by the threatening of harmful situations. For example distress would include the fear that causes some animals to shake uncontrollably when confronted with normal sounds and situations at an auction market or abattoir. *Suffering* is less precise term. Animal suffer in many different ways, including sickness, anxiety, fear, emotional deprivation, and through cold, heat, physical discomfort, pain extreme thirst or hunger etc. In practice there are four situations where humans have some responsibility for animal sufferings and these are known as the *Four I's*. They are:

*Ignorance*- Not knowing what to do.

*Inexperience*- knowing what to do but not knowing how to do it.