

# Textbook of Veterinary Extension Education

Based on latest regulation of Minimum Standards of  
Veterinary Education Degree Course -  
B.V.Sc. & AH by Veterinary Council of India

This is a panoramic book on Veterinary Extension Education in which theoretical aspects have been explained coherently with adequate field exposures, based on the latest regulation of Veterinary Council of India - Minimum Standards of Veterinary Education (MSVE) - Degree Course (B.V.Sc. & A.H.). This shall serve as a course book in Veterinary and Animal Husbandry Extension Education in Veterinary Universities, Colleges, Training Institution and also, a handbook for Veterinary Assistant Surgeons, Extension agents working under Agricultural and Allied departments like banks, voluntary agencies, input dealers, etc.

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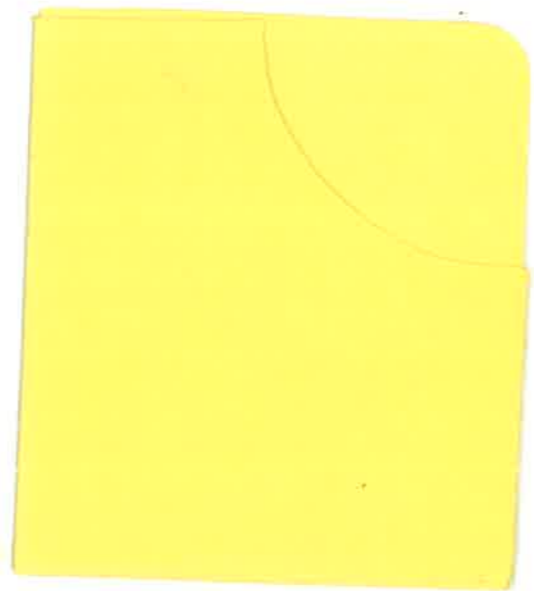


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A.K. Chaturvedani

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## Preface

This is a panoramic book on Veterinary Extension Education in which theoretical aspects have been explained coherently with adequate field exposures. This shall serve as a course book in Veterinary and Animal Husbandry Extension Education in Veterinary Universities, Colleges, Training Institution and also a handbook for Veterinary Assistant Surgeons, Extension agents working under Agricultural and Allied departments like banks, voluntary agencies, input dealers, etc.

Textbook of Veterinary Extension Education has been written to provide basic and fundamental information on Extension Education for the students of Under-graduate courses in Veterinary and Animal Sciences. The book comprises of nine units based on the latest regulation of Veterinary Council of India - Minimum Standards of Veterinary Education (MSVE) - Degree Course (B.V.Sc. & A.H.). The book comprises of different core areas like domestication, farming and its classification; concepts, principles, scope of extension education, teaching-learning process, rural development; Fundamentals of rural sociology, social control, social stratification, social institution, social change and social group; Adoption and diffusion of innovation, programme planning, cattle and buffalo improvement programmes, dairy co-operative, Transfer of technology projects of ICAR; elements and models of communication, barriers of communication, different contact methods; Basic concepts of livestock economics, theories of demand and supply, theories of cost, theories of production, classification of market, marketing functions, external trades in livestock products; Livestock entrepreneurship, Theories of entrepreneurship, entrepreneur - types, characteristics and functions, Forms of entrepreneurship, Project appraisal, Entrepreneurship development programmes, Accounting, financial, personnel and resource management; Information and Communication Technology- Strengths and limitations, Cyber extension, Computer networking; Gender issues in livestock enterprises, 20<sup>th</sup> livestock census, Sustainability, Animal welfare, ethics and rights, environmental consequences of livestock rearing.

An attempt has been made to cover all those relevant aspects, which are regularly required for graduates of veterinary and animal

sciences. The deliberate attempt was made to include the newer facts and concepts for the benefits of the readers. We acknowledge the pioneers whose work has been cited and to all those who motivated and helped to bring out this publication.

Authors

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## UNIT - 1

### Livestock Based Livelihoods and Their Evolution

#### History of domestication and their social dimension

One of the most fruitful and fascinating aspects of the evolution in human culture was the beginning of man's relationship with plants and animals in the Mesolithic period (1000 to 5000 BC) that developed into domestication in the Neolithic (Pre-historic) period. It was through this process of domestication that a population of animal and plants first became accustomed to human care and controls and then their evolutionary process was influenced by human so as to ensure secure supply of food and other valuable commodities like wool, hides, teeth, skin and silk. Other factors, such as use of animals in transportation, protection, warfare and companionship for enjoyment made the bondage more secure and strong. Thus the domestication of animals and plants proved an indication to cultivation of crops and rearing of cattle and animals.

Concurrently, with the beginning of agriculture and animal husbandry, the role of hunting and foraging began to decline because not only supplanted animal man's need for food and clothing but also became source of energy for him. The ox, horse, buffalo, camel, etc. provided not only meat and milk but also bones for making tools, skin for equipment, teeth for ornaments and hair for decoration and painting. These animals were also useful in carrying loads drawing the plough, thrashing the crops, in running the wheel and could be used as pack animal as well as for riding. This relationship between man and animals went beyond the utilization level even at the hunting stage as the men became emotionally attached with his domesticated animals.

The domestication of animals probably began about 12,000 years ago and by about 10,000 years ago all human societies had learnt to domesticate plants and animals. This development proved to