WATER BUFFALO

Improved utilisation through new technologies

Edited by
D.H.A.Subasinghe
N.U. Horadagoda
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NSF
Sri Lanka

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Cover Illustrations:

Top	Nili Ravi buffalo cow
Middle	Production of urea–molasses –mineral (UMM) bricks at the Giradurukotte Mahaweli Livestock Farm
Bottom	Model unit for intensive buffalo farming at Niraviya Mahaweli livestock Farm

PREFACE

Although the buffalo has for generations been recognised as an important domesticated animal within the rural economy in Sri Lanka, very little scientific research had been directed towards the improvement of the productivity of this animal. In 1980, a National Workshop was held with the sponsorship of the Swedish Agency for Research Cooperation with Developing Countries (SAREC) to review the scientific information available up to that time. The workshop identified several areas of research which led SAREC to fund nearly two decades of research and development by local scientist. The information generated through research and surveys on the local buffalo during the first phase of the research programme was published in 1989 (The Sri Lanka Water Buffalo; Science Education Series No. 31) The findings of the second phase which focussed on the search for and possible solutions to constraints which prevented the efficient utilisation of the buffalo are presented in this publication. It also includes the information relating to the development of appropriate management procedures through a farming system research approach. This book is targeted for the general readership as well as for teachers, high school students, farm managers and extension workers.

One of the serious drawbacks to the development efforts of the past was the dearth of information and appropriate technologies related to buffalo development. In recognition of these deficiencies, SAREC funded the on-going third phase (The Buffalo Information Dissemination Programme) with the specific objective of disseminating the information acquired through years of research to popularise buffalo farming. Several activities such as training workshops for farmers, extension workers and field officers have been conducted to disseminate information on the applicability and effectiveness of new technologies in buffalo farming. Among the activities undertaken during this phase were the establishment of the Buffalo Information Centre, the publication of farmer leaflets, a text-book on buffalo production, a handbook for extension personnel and a compendium of research information. This publication constitutes a further attempt to provide readers with information to popularise buffalo farming and stimulate better utilisation of the animal.

The book contains 11 chapters. The first two chapters provides a historical background of the buffalo within the rural setting and an analysis of buffalo farming systems in Sri Lanka. The three subsequent chapters discuss the utilisation of the buffalo as a source of draught power, meat and milk together with comments on the potentials and constraints. Chapter 6 deals with reproductive physiology and strategies for improved reproductive efficiency while chapters 7 and 8 focus on feed utilisation and feeding systems to optimise production and income generation. Chapters 9 and 10 provides a brief description of the common diseases in the buffalo and methods for prevention of such infections. Chapter 11 gives a resume of the new technologies for improving the utilisation of the buffalo as a multipurpose animal within intensive production systems and also the experiences gained during the dissemination and transfer of these new technologies.

A list of references for further reading is provided at the end of the book for the interested reader. All the listed references can be accessed at the Buffalo Information Centre located in the library of the Department of Animal Production Health, Peradeniya.

Dr. H. Abeygunawardena
Faculty of Veterinary Medicine and Animal Science
University of Peradeniya
Peradeniya

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