

ABSTRACT BOOK

International Seminar
on

LIVESTOCK SERVICES FOR SMALLHOLDERS

a critical evaluation of the delivery
of animal health and production
services to the small-scale
farmer in the developing world

PROBLEM IDENTIFICATION
PLANNING and PRIORITIES
PROBLEM RESOLUTION

NOVEMBER 15-21, 1992
Yogyakarta, Indonesia



Sponsored by :

The Directorate General of Livestock Services (Indonesia)
The Canadian International Development Agency (Canada)
and The Overseas Development Administration (UK)

Organised by The Indonesia International Animal
Science Research and Development Foundation
(INIANSREDEF)

Jl Pangrango 2, PO Box 94 BOUT,
Bogor 16161A, Indonesia

Fax : 62-251-326425 Tel : 62-251-322429

LIVESTOCK DEVELOPMENT IN EAST TIMOR

Ronny Mooy
Dinas Peternakan, Dili, Indonesia

A review of the development of livestock in East Timor is presented.—This paper deals with the trends in livestock populations, meat production, egg production and also reviews the overall structure of veterinary service and laboratory support. On 17th July 1976 when East Timor became the 27th and newest province in the Republic of Indonesia, it started its economic development at a time when other provinces were half way through their second five year plan. Civil war or political upheaval in the province in the years before integration caused a dramatic fall in the livestock populations from their previous high level. Bali cattle numbered 63,000 in 1972, fell to 70,000 at the time of integration and continued to fall to 31,000 in 1980. In 1961 the population increased to 32,500 and has increased steadily to a present population of 75,000. The extent of the difficulties which must be faced when developing the livestock services are discussed.

The province remains far from developed, and the handicaps and deficiencies must be addressed for livestock to reach full potential in the province.

DEVELOPMENT OF LIVESTOCK SERVICES IN KABUPATEN WAJO, SULAWESI SELATAN PROVINCE DURING 1990-1992

Stephen Ashdown
ODA Animal Health Project, Ujung Pandang, Indonesia

The effectiveness with which District Livestock Services in Indonesia are able to serve their smallholder farmers is often reduced by such factors as 1) Poor contact with the local farming community, 2) Limited skills and field presence of livestock assistants, 3) Poor information flow from field staff to those planning the services provided, 4) Lack of ability and capacity to plan services according to local requirements.

An integrated approach is described to contact the above constraints and improve services for the smallholder livestock owners in Wajo district. This comprises 1) Development of sustainable vaccination programmes for local chicken, cattle and buffalo, 2) Systematic provision of a formal extension programme for farmers at the sub-sub district (Desa) level, 3) Implementation of regular monthly meeting for field staff. These allow staff to report on data collection the previous month, discuss its implications, share and discuss their experiences and received technical training, 4) Development of an information system which yield, accurate and useful results. This includes completion of accurate records concerning animal members and their owners and the branding of all cattle.

It is concluded that most important to these programmes is a) The close contact and participation with farmers in order to understand which services are most suitable and readily received. b) The motivation, training and support of field workers and their participation with administrative staff in order to enable effective local planning.

Future developments in the above programmes are described in the context of Government policy for providing a model for the development of services in other districts in the next 5 year development plan.

SOME FACTORS INFLUENCING VETERINARY SERVICES ON RURAL AREAS

Lukman Hakim
Veterinary Laboratory of East Java, Malang, Indonesia

Veterinarian, veterinary cost and Service management are three important factors influencing the successfully or the failure of Veterinary services on rural areas.

The veterinarian skill, good motivation to do best service at reasonable veterinary cost and practical salesmanship management on Ethics, Profession, art and science are very important thing to improve services to smallholder farmers in the village areas.

On other hand economical justification (approach) on prognosis and treatment should be cope by veterinarian who work to increase the productivity of farm animals as well as to improve farmers income.

ESTABLISHING SMALL SCALE COMMERCIAL NATIVE CHICKEN PRODUCERS IN CABANGBUNGIN, BEKASI, WEST JAVA

E. Basuno, A.P. Sinurat, H. Hamid and P. Gilchrist
Research Institute for Animal Production, Bogor, Indonesia,
Research Institute for Veterinary Sciences
Indonesia International Animal Science Research and Development, Bogor, Indonesia

Research and development activities were carried out in three villages in the Bekasi district of West Java. The objective of the activities was, firstly, to transfer technology in rearing native chickens from research institute to rural smallholders and, secondly, to motivate villagers to become semi commercial native chicken producers.

In each village, preliminary interviews were conducted with approximately 30 householders, from who 15 were selected to participate in the data activity for at least one year starting in December 1991. Each cooperator received 13 hens and 2 cockerels, with an obligation to repay chickens at the end of the project. The wide range of performance results made general conclusions difficult. Preliminary observations indicated that cooperators with sound educational background, some cash resources to spend on inputs and who are serious about daily management of the chickens were able to respond positively to all introduced techniques.

It is recommended that future trials be based on a separation of householders into groups according to their resource availability and different approaches can be applied for each category. Ways of establishing groups of chicken reares for using improved management in rural areas are discussed with an emphasis on transferring commercial ideas to potential farmers.

THE ROLE OF LABORATORY DIAGNOSIS SERVICES TO IMPROVE POULTRY PRODUCTION IN THE VILLAGE

Lukman Hakim
Veterinary Laboratory of East Java, Malang, Indonesia

Poultry diseases such as infectious disease, nutritional disturbance and the failure of extensive management are main losses due to commercial poultry farmer in villages.

A study on poultry laboratory diagnosis service were done since 1987 at Veterinary B Type Laboratory of Malang, Indonesia. From 31,707 specimens (12.0% of total specimens flow), 40.85% comes directly from smallholders and were examined serologically 68.4%, parasitology 15.9%, gross pathology and histopathology 7.5%, microbiology 4.4%, and biochemistry 3.9%.

From questionnaire survey to farmer (specimen senders), it was proved that they needs diagnosis and veterinary recommendation as soon as possible (high speed diagnosis), applicable at their own economical situation and at reasonable accuracy.

According to farmers comments that 78% of services have on time value and had have an important role to control their economical losses due to ND, CRD, Pullorum, Coccidiosis, Gumboro, Fowl Cholerae and other endogenous diseases.

OVERCOMING INFRASTRUCTURAL PROBLEMS OF DELIVERING ANIMAL HEALTH SERVICES TO SMALLHOLDERS II: VETERINARY EQUIPMENT FOR SMALL LABS

Sugiono, Satrio, Sri Soeharto, Woro, Waluyo and D. Unruh
Disease Investigation Centre, Yogyakarta, Indonesia

Many developing countries have established small labs to assist in diagnostic backup services needed by field personnel delivering animal health services to smallholder farmers. These labs are frequently limited by inadequate funding for both equipment and operations. Outside funding is often required but not available. Additionally tropical environments often add specialised requirements for labs.

An approach to overcoming these problems is to make equipment locally where appropriate. Obviously equipment such as microscopes, electronic spectrophotometers do not falls into this category. However, wish' some ingenuity numerous items can be made which serve very adequately. The Yogyakarta Disease Investigation center has developed some examples which will be illustrated iq this paper.

It is suggested that there is a need for different developing countries to exchange experience in small lab development and methods used to overcome some of the infrastructural problems.

EAST COAST FEVER CHEMOTHERAPY: FURTHER EVALUATION OF BUPARVAQUONE (BUTALEX (R) COOPERS) AS A TREATMENT FOR EAST COAST FEVER IN THE DAR ES SALAAM REGION OF TANZANIA

H.A. Mbwambo
Animal Disease Research Institute Temeke, Dar Es Salaam, Tanzania

The city of Dar es Salaam has a population of about 2.5 million people. With the increase in demand for milk and milk products, backyard farming has become an important preoccupation among Dar es Salaam region residents. Incidentally, with the introduction of valuable dairy cattle and the importation of slaughter indigenous stock, often tick-infested, from up-country, the incidence of tick-borne diseases, particularly East Coast Fever (ECF) increased considerably over the years. Subsequently, the search for a convenient and reliable treatment for ECF became desirable. Butalex, a recently developed antitheilerial drug, was first tested and reported in Tanzania in 1989, however, further treatments were desirable for more data on its efficacy.

Buparvaquone (Butalex, Coopers) was tested against cases of field infections of *Theileria parva*, over a period of 21/2 years. Treatments was given intramuscularly, 2.5mg per kg body weight. Seven cows (Low-yielding) were given single treatment, while 75 animals received two doses 48h apart. Concurrent babesiosis (3/82), anaplasmosis (5/82); and trypanosomiasis (9/82) were treated with imidocarb dipropionate and diminazene aceturate, respectively. Animals that had high schizont parasitosis or developed a cough, were given penstrept injection as supportive therapy. In addition, furosemide (Dimazon, Hoechst), a diuretic, was used in 11/82 cases.

Of the total animals treated, 78 (95%) were cured and 4 (5%) died. The animals that died were from the single-treatment-group. Of the 78 animals that were cured, 13 were milking animals. Milk production was cut completely during the first 48h of treatment and increased gradually from the 72h of treatment, until the cow recovered but did not reach the previous level of production before illness in less than 21 days.

A drop of body temperature to normal levels was noted within 72h of first treatment in the majority of cases. Deformation of *Theileria* piroplasms and schizonts was observed within 48h of treatment and by day 7 the majority of the schizonts were cleared. The disappearance of blood forms took longer, however, no difference of milk yield was noted among cows with either persistent, often deformed piroplasms or with those, whose piroplasms were cleared shortly after recovery. The response to treatment was better in herds, where tick control by use of acaricides was fair; recovery to normal production was faster unlike in herds with poor tick control.