

SYSTEMS VANUATU, A MODEL DISEASE SURVEILLANCE AND CONTROL SYSTEM FOR DEVELOPING COUNTRIES

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Vanuatu is a small multi-island developing nation in the tropical west Pacific. There is an expanding beef industry ; however, access to many overseas markets is closed as a result, in part, of poorly developed disease surveillance and control systems. MAF QUALITY Management (New Zealand) over 2 years from 1993 introduced a simple but comprehensive quality management system and a versatile information system. The quality management system is known as « Systems Vanuatu » ; the core is a brief but concise statement on the agreed mission, legislative basis, scope of services and organisation. Using Critical Control Point (CCP) concepts, job descriptions, work instructions and training schedules were developed. Equipment purchases and maintenance was also included. A PC based database was established. This covers basic demographic issues, disease control and disease surveillance.

INTRODUCTION

The Republic of Vanuatu (prior to independence the French/British condominium, the New Hebrides Islands) is a small multi-island nation in the tropical west Pacific. As in many developing countries, foreign exchange is limited; this has been exacerbated by low world prices for copra over the last decade. A sector which offers much promise is the beef industry; however access to many export markets is closed as a result, in part, of inadequate disease surveillance and control systems.

Over 2 years from 1993, MAF Quality Management (MQM) assisted the Vanuatu Department of Livestock with the development of an agricultural security infra-structure; this paper outlines this development.

THE PROBLEM

There is little doubt that authors of recent publications concerning the features required for 'veterinary accreditation' (e.g. Hueston W., 1993 in OIE Scientific and Technical Review, 12: 1187-1196), had in mind, large quite sophisticated veterinary services. The question is how to apply this to small countries like Vanuatu, where there are very limited resources (Vanuatu has only three veterinarians). Further, over recent years there has been a high turnover of expatriate veterinarians, with a consequence loss to the country of much valuable experience.

THE SOLUTION

MQM's response to this situation, was to design for the Department of Livestock a simple but comprehensive quality management system. Further, a versatile information system should be integrated with field operations, thus allowing for data to be accumulated. In the interests of continuity, local people should manage and operate these systems; expatriate veterinarians would 'slot into the system' providing key technical skills.

The quality management system became known as 'Systems Vanuatu'. The core is a brief but concise statement on the agreed mission, legislative basis, scope of services and organisation (including lines of responsibilities). From this job descriptions of all staff were developed. Using Critical Control Point (CCP) concepts, work instructions were designed, equipment purchases/maintenance looked after and training planned.

The information system is designed along similar lines to the New Zealand National Livestock Database. It is based on properties (farms or communities). The component modules are (1) a census of livestock, (2) a disease control system – history, testing control, reactor control, quarantine and disease status and (3) a disease surveillance database – clinical histories, diagnoses. OIE codes are used in the database to assist with international reporting requirements. The database was developed using Microsoft Access and runs on a personal computer. Using these administrative systems the following national services have been designed and implemented; (1) animal health surveillance (2) country freedom for tuberculosis and brucellosis (3) emergency response procedures, and (4) abattoir hygiene.

CONCLUSIONS

This development of the veterinary and para-veterinary infra-structure, as opposed to a one-off 'disease survey' is very successful. Quality surveillance data is being accumulated steadily. Strategic plans for tuberculosis and brucellosis testing are being formulated with confidence. Three field investigations (leptospirosis, arboviruses and salmonellosis) have also been completed.

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