

ENHANCEMENT OF EXISTING ANIMAL DISEASE REPORTING NETWORK

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Animal Disease Reporting Network (ADRN) is Animal Health (AH) related information exchanging network implemented by the Department of Animal Production and Health (DAPH). Information should be pertaining to issues like deaths, abnormalities, sicknesses and loss of production. ADRN is used to identify animal diseases which affect livestock industry and disrupt regional and international trade in live animals, products and animal by-products. Failures, errors, practical difficulties and some malfunctions of current ADRN were encountered by stakeholders of livestock sector. These failures threat food security, livelihoods of farmers and prevent animal husbandry sectors from developing their economic potential.

Overall objective of this study was to study about our ADRN and such systems operated in other countries with the aim of enhancing it from existing level. Developed applications for this purpose are not freely available and developed applications are unique to the users or to the implementing country. An application was designed to fulfill demands of stakeholders. Enhancement was focused on acceleration of data flow and expansion of the network coverage with aid of computer based information dissemination. Information on events can be collected directly from field as Short Message Service (SMS) and all the messages were undergone through verification process. Important and verified messages were forwarded to Director Animal Health (DAH). Veterinary Investigating Officer (VIO) of relevant district was informed by DAH to determine the causative agent as soon as possible. All the responsible officers were informed simultaneously on outbreaks by DAH through this application. Guidance should be sent as an e-mail to all the responsible officers. SMS facility can be used by DAH or authorized officer to inform field officers of DAPH without any delay.

Materials were selected with literature survey and conducting trials. Database Management System (DBMS) was designed according to Entity Relationship Diagram (ERD). System was tested for errors by conducting trials. Errors were analyzed and data inputs were validated. Data storage was used as a source to analyse the epidemiological pattern with GIS tools to control and prevent outbreaks more efficiently and effectively. This would be a tool for epidemiological analysis, surveillance programme and a base for proposed Disease Intelligence System (DIS) in future.