Network at a glance

National Dairy Development Board

# INFORMATION NETWORK FOR ANIMAL PRODUCTIVITY & HEALTH

## (INAPH)



for later synchronisation with the central server through the GPRS network. INAPH is equipped to send messages to farmers, providing appropriate advice regarding their animals, when required. Web based reports are available to the managerial team and other decision makers for analysis.

## *Benefits*

- Unique identification of animal along with the pedigree facts, lactation yields and owner details

- Record keeping of all activities related to Breeding, Nutrition & Health

- Identification of superior bull & elite female

- Tracking disease outbreak & disease pattern for different species/breed/village/district

- Healthier/productive animals increase earning of farmers

- Assess the efficiency & effectiveness of AI services & Ration Balancing Advisory Services

- Monitor and follow up genetic improvement and Ration Balancing Programmes



NATIONAL DAIRY DEVELOPMENT BOARD

NATIONAL DAIRY PLAN
MISSION MILK
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In today's ever-changing world, the way you disseminate information assumes great significance. We must provide the right people with right information at the right time. Keeping this in view, an advanced information network has been created that can be easily accessed by all key stakeholders. This technology-driven user-friendly information network would provide reliable and timely information to enable better decision-making for improving productivity. At the heart of such a system is the unique identity assigned to each animal.

Developed and implemented by NDDB, the Information Network for Animal Productivity and Health (INAPH) would support the delivery of animal identification, breeding, nutrition, extension and health services at the doorstep of farmers. The system has multi-lingual capability and is based on best practices and Standard Operating Procedures (SOPs) recommended by domain experts.

Ear-tagging with a unique 12 digit number is mandatory for each animal registered in the network which enables tracking and monitoring of these animals. NDDB administers and centrally manages the animal identification system in the country.

## Animal Breeding

INAPH captures data related to animal registration, artificial insemination (AI), pregnancy diagnosis, calving, milk recording, milk sample collection for component analysis, typing, body measurement for growth rate monitoring and animal movement.
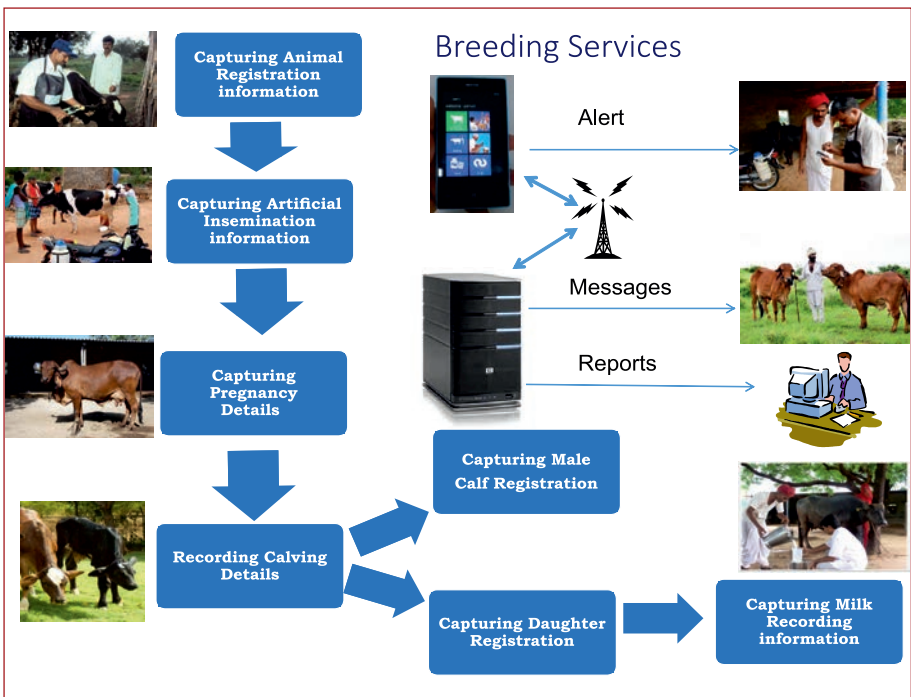


Data captured is processed for use in field activities under Progeny Testing and Pedigree Selection programmes. Operational, review and analytical reports, alerts and SMS messages are generated and forwarded to all concerned.

INAPH helps in monitoring AI delivery system to assess and improve conception rate, minimise inter-calving period. It also helps to evaluate breeding values of bulls as well as identification of elite animals.

## Animal Nutrition

INAPH supports the Ration Balancing Programme (RBP). It has a data library on chemical composition of commonly available feed resources in India and the nutrient requirements based on body weight, milk yield/milk fat, pregnancy status etc. Based on the feeding practices, prevailing nutrient status can be seen. As per the availability of feed resources and area specific mineral mixture, a least cost ration is worked out, which is then given to the milk producers in local language, in a format easy to understand.

Balanced ration advisory services through INAPH based on data of one and a half lakh cows/buffaloes resulted in increase in net daily income of milk producers between ₹ 15-35 per animal, by enhancing daily milk yield/milk fat and/or reduction in cost of feeding per litre of milk.
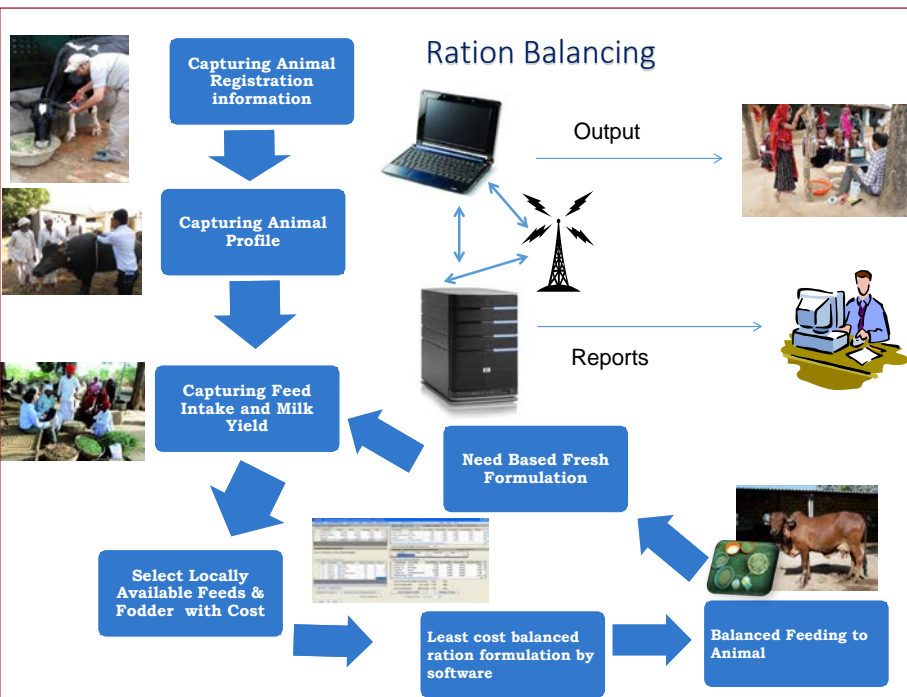


## Animal Health

The Animal Health module of INAPH is designed to capture health related data of animals such as vaccinations, de-worming, disease testing, treatment, outbreak management and fertility camps. The complete health profile of each animal is being maintained by the system, enabling better health management and treatment. Data can also be captured at the village level on most health related interventions.
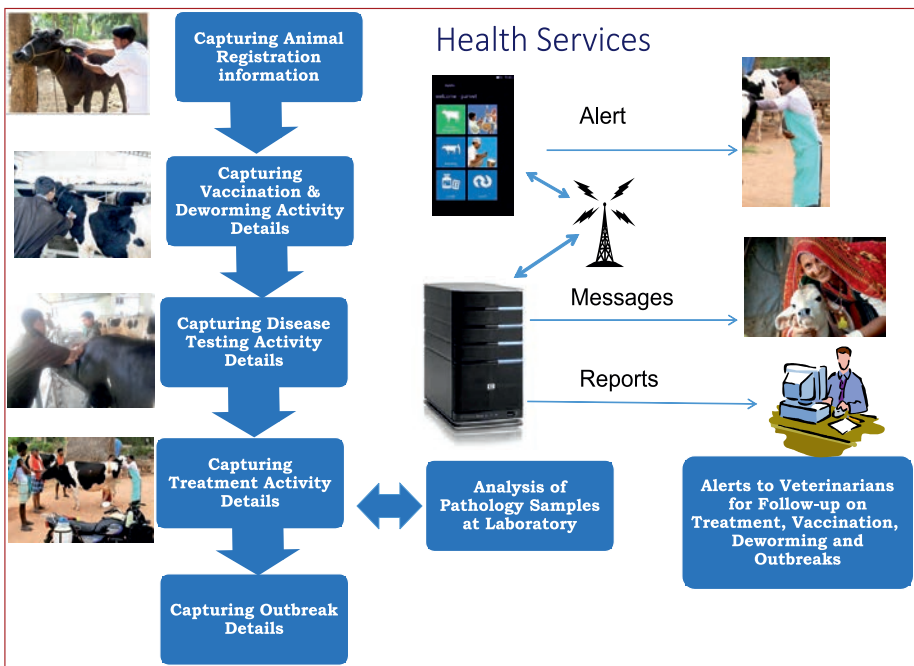


*Laboratory module:* This module provides analytical inputs in the area of milk, feed & fodder and disease diagnostic services.

INAPH is currently providing support to over 30 lakh animals belonging to around 12 lakh farmers in more than 11,000 villages spread across 14 states. The system is being used by over 6500 field users in the country.

## System Architecture & Deployment

The system is designed to meet the various information needs of farmers, field technicians, End Implementation Agencies (EIAs) such as Milk Unions/Federations, Producer Companies, analysts and policy makers. The application can be operated through computers/netbooks as well as hand-held devices (Windows phone & Android tablets) with internet connectivity. Data collected in the field is stored in the central database at NDDB, Anand. In the absence of network connection (offline mode), there is a provision for data to be captured and stored