

Information Network for Animal Productivity and Health

INAPH



National Dairy Development Board, Anand.

Country Scenario

- More than 79 million AI done in the country
 - In how many animals is unknown
- More than 1.2 lakh AI centres in the country
 - Details of which are not available in any database
- Country needs Animal Nutrition support services at village/farmer level
- Preventive and Curative animal health detailed database is necessary
- Data of testing lab needs to be captured and consolidated systematically
- Common platform to capture and analyse the data is required

Key Objectives

1. Establish an IT infrastructure for Service Providers involved in Productivity Enhancement & Health services.

2. Develop a Field Force Automation system for implementation of field based programs.

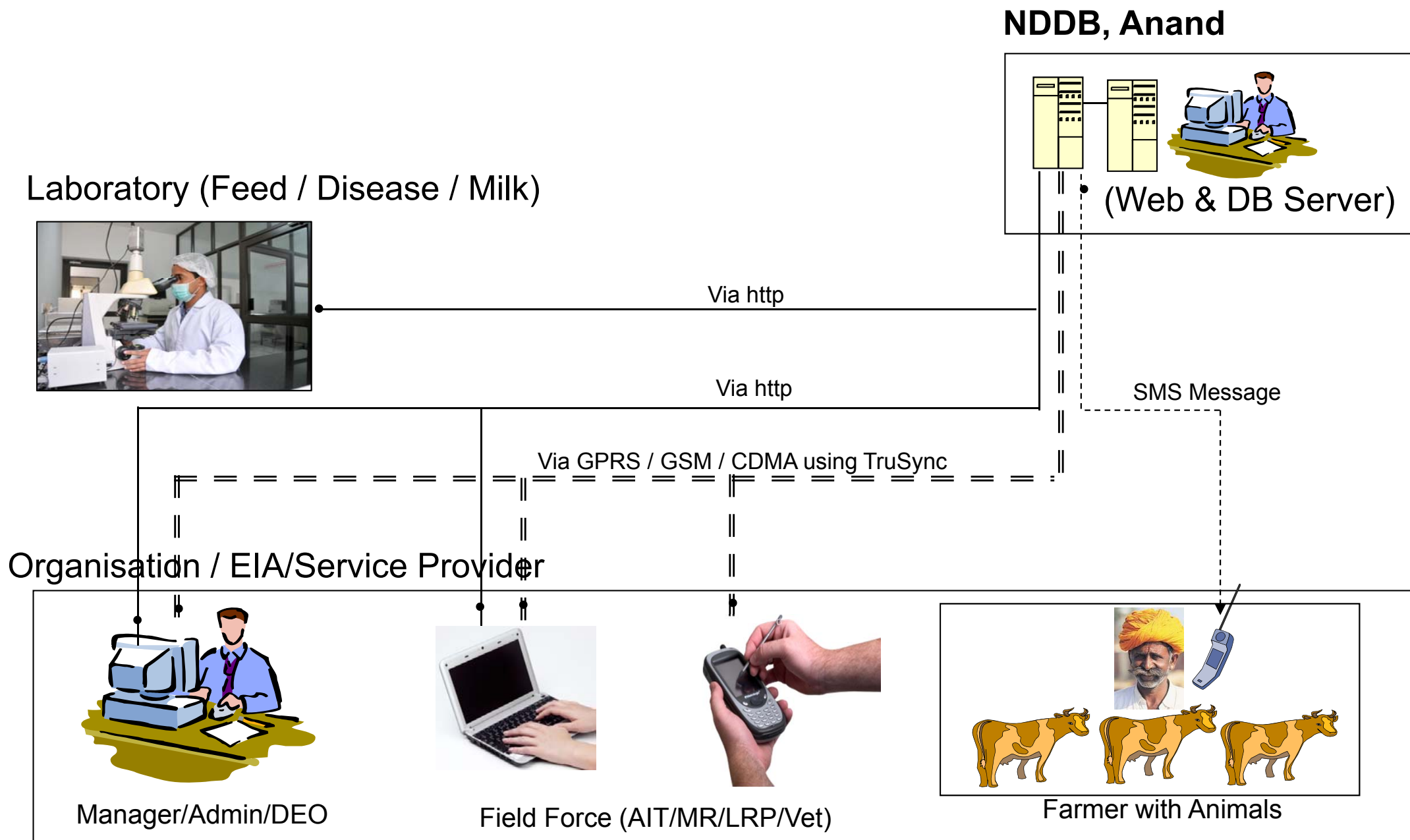
3. Provide a tool for field force to monitor & control day to day activities efficiently in the field.

4. Enable a System for managers to analyse past and plan for future.

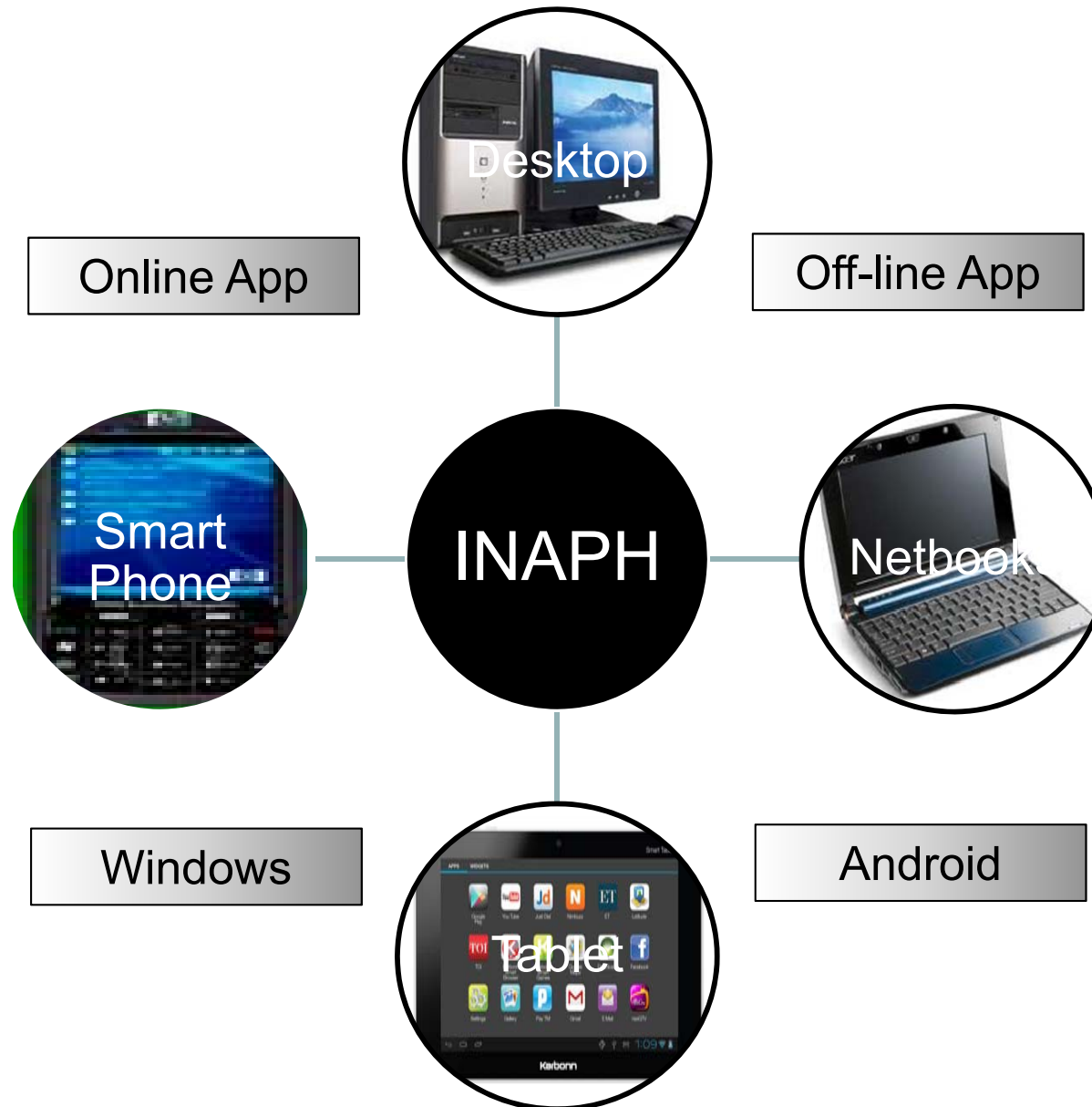
5. Enforce Standard operating procedures (SOPs) of the domain.

6. Build a rich database for policy makers, scientists and analysts.

Deployment View



INAPH Application Platforms & Versions



INAPH Logical View

Identification & Registration

- Registration
- Movement (Sale, Cull, Death)
- Re-Registration
- Eartag Change

AI Delivery

- Artificial Insemination
- Pregnancy Diagnosis
- Calving

Progeny Testing

- Milk Recording
- Typing
- Growth Moniting
- Milk Component Analysis
- Elite Animal Decl
- Parentage Confirmation.
- Breeding Value Estimation

Nutrition

- Ration Balancing (LP Model)
- Herd Ration Balancing (LP Model)
- Feed & Fodder Sample Analysis
- Pashu Poshan

Health

- Vaccination
- De-worming
- Treatment
- Disease Testing
- Outbreak
- First Aid

Lab Analysis & Examination

- Milk Component Analysis.
- Pathology sample Analysis.
- Feed & Fodder sample Analysis.

Stock Management

- Item Allocation
- Item Sale

SMS Service

- **Push**
 - Animal/ Owner
 - Field Force
 - General
- **Pull**
 - Animal/ Owner

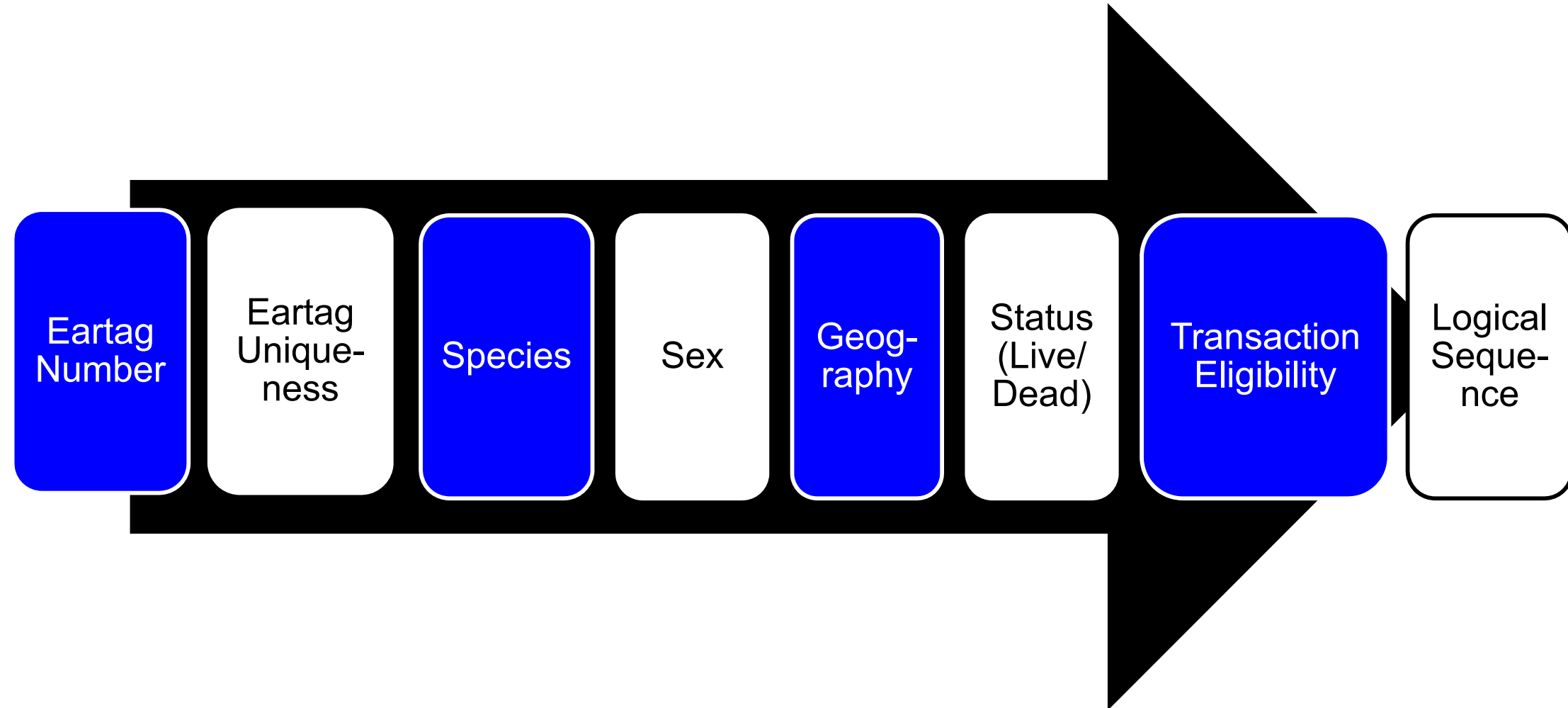
Framework Components

Synchronisation Middleware

SMS Engine

Date Access Components

Activity Recording & Validation Process



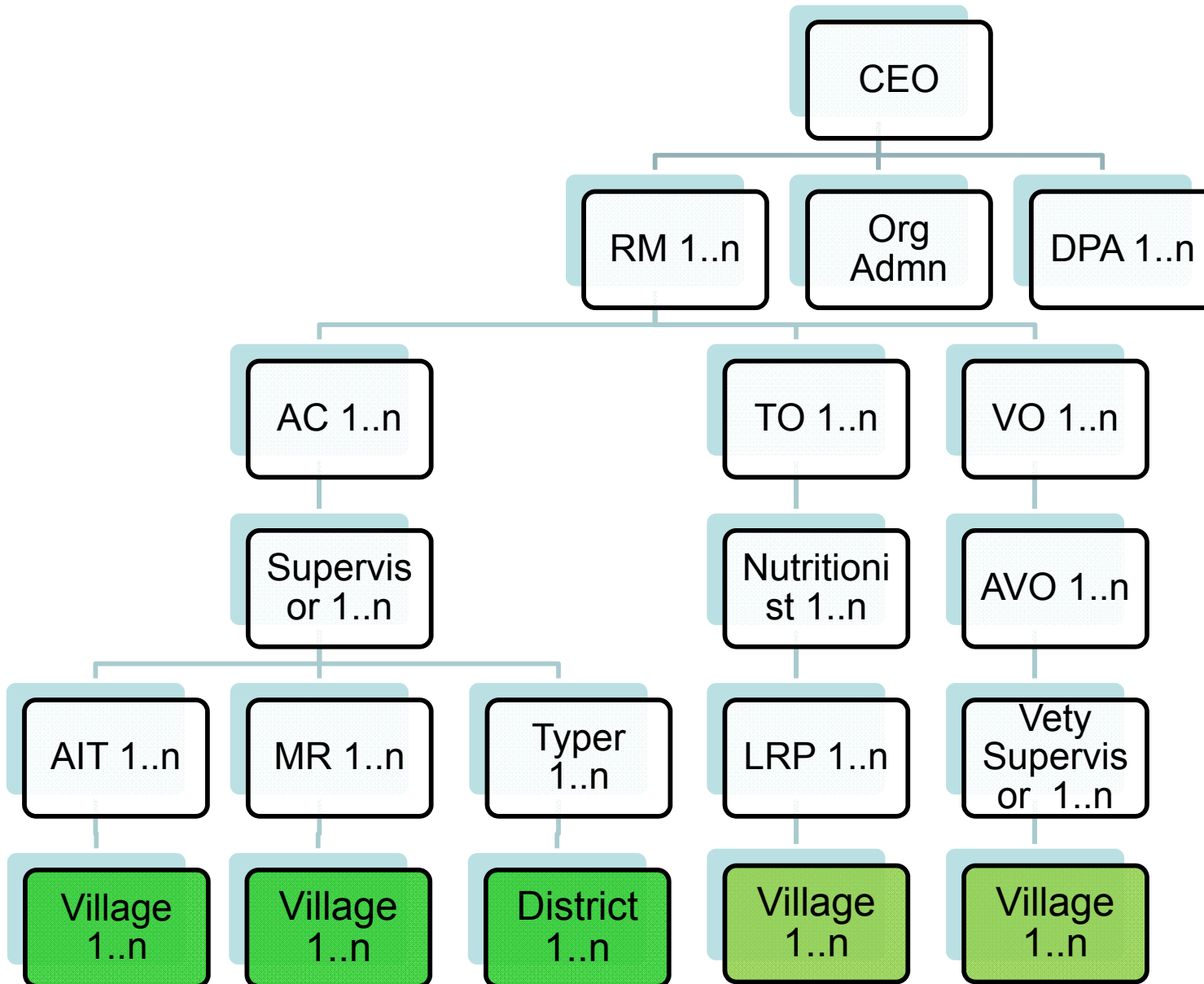
Location/Geography Hierarchy



As per GOI, 2011 census.

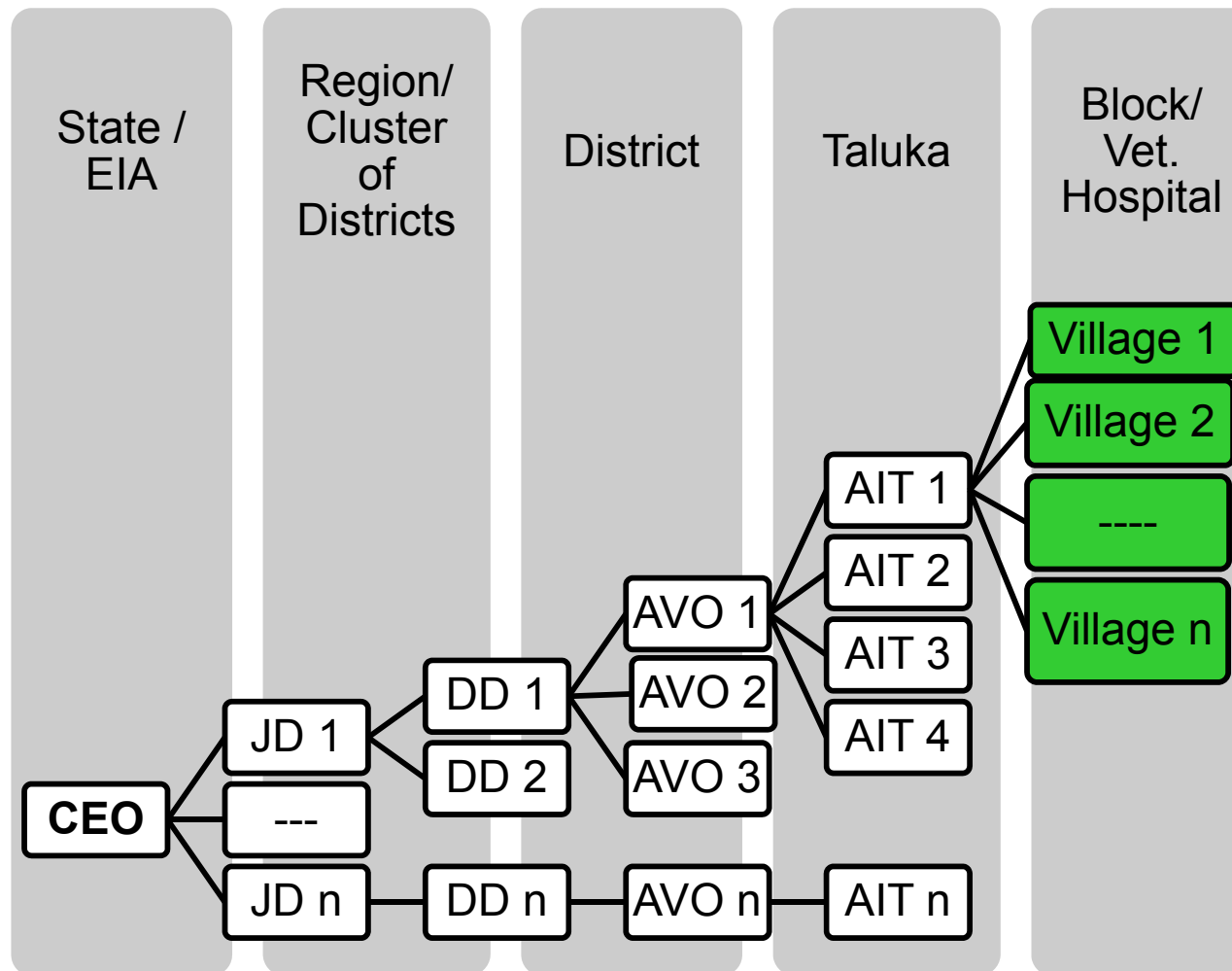
State	35
District	648
Taluka	6,072
Rev Village	6,12,426
Hamlet	1,693,646

Organization Hierarchy, Roles, Reporting and Area of operation



Role	Name/Description
CEO	Chief Exec Officer
OrgAdmn	Orgn Administrator
DPA	Data Processing Asst
RM	Regional Manager
AC	Area Coordinator
Supervisor	Supervisor
AIT	AI Technician
MR	Milk Recorder
Typer	Typer
TO	Technical Officer
Nutritionist	Nutritionist
LRP	Livestock Res.Person
VO	Vetrinary Officer
AVO	Asst. Vety. Officer
Vety Supervisor	Vetrinary Supervisor

Proposed Field Force Hierarchy



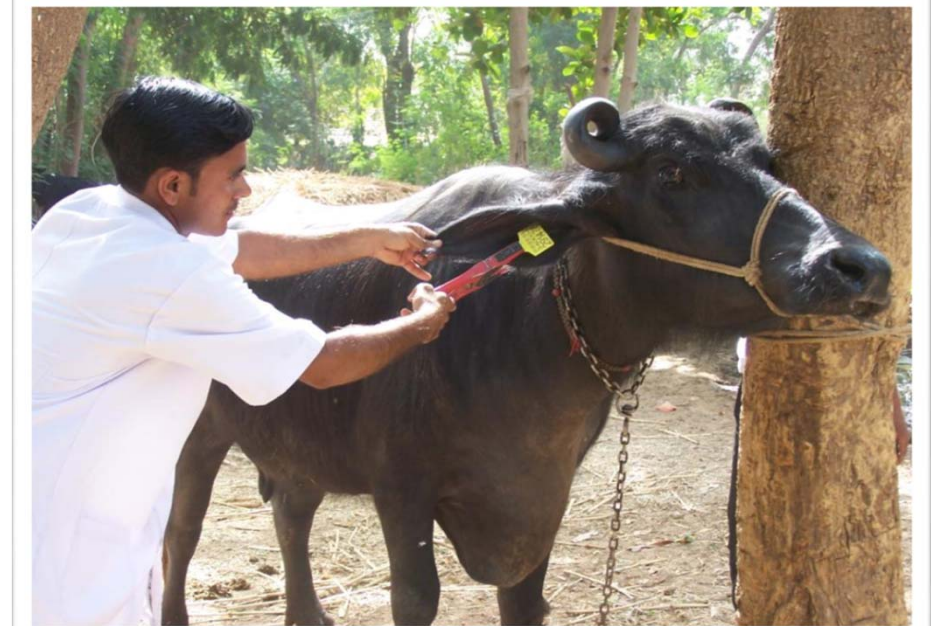
Unique Animal Identification System

Animals are identified by 12 digit unique Ear tag numbers (as specified by ICAR/ CODEX).

First 11 digits of Ear tag number are running serial numbers. 12th digit is check digit (Parity bit)

Pre-requisite / mandatory requirement for use of INAPH Application.

NDDB is centrally managing uniqueness of Animal Identification system across country.





राष्ट्रीय
डेरी
विकास
बोर्ड



राष्ट्रीय डेरी योजना
मिशन
मिल्क
अमली क्रांति

NDDB के नये ऐप 'पशु पोषण'
से घर बैठे मुफ्त में अपने पशु
को दिये जाने वाले आहार को
संतुलित करें



संतुलित आहार के फायदे

- ज्यादा दूध
- प्रजनन क्षमता में सुधार
- पशु स्वास्थ्य में सुधार
- चारे की कीमत में कमी
- फ़ैट और SNF में बढ़ोत्तरी



कम दाम में ज्यादा मुनाफा पाएं
पशु को संतुलित आहार खिलाएं

वेबसाइट — www.inaph.nddb.coop/

आज ही डाउनलोड करें



इस ऐप को इस्तेमाल करने के लिए आपके पशु का टैग होना आवश्यक है



SMS Alert Service

Daily SMS Service to Monitoring Officers and Co-ordinators of different EIA and concerned NDDDB staff regarding INAPH data

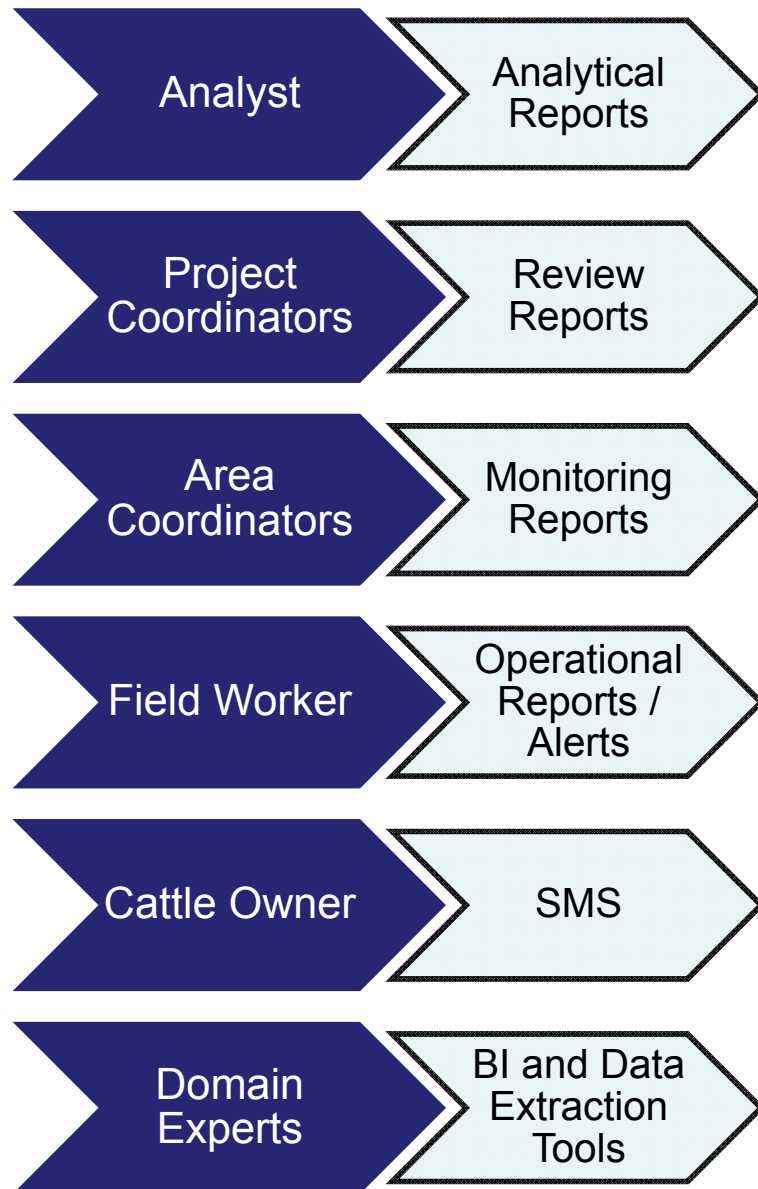
- SMS of different daily statistics like Animals Registered, Framers Registered, transaction summary, users involved and villages covered etc.
- Monitoring officers and Coordinators of many EIAs are covered till date.
- More EIAs will be covered

Pull SMS Service

A Service to avail information by sending SMS to 9601336677

Purpose	SMS	Response
Get Owner Information	NDDB OWN < Animal Tag ID > e.g. NDDB OWN 340012773718	Return Owner Details of an animal like Owner Name, Village, Tehsil, District, State and Cell No.
Get Animal details	NDDB AR < Animal Tag ID > e.g. NDDB AR 340012773718	Return Animal Tag ID, Registration Date, Registration User Id, Breed, Species, Milking Status, Pregnancy Status and Age.
Check Inbreeding for given animal	NDDB INBR < Animal Tag ID > e.g. NDDB INBR 340012773718	Return Animal Tag ID, Sire ID, Full Sibling, Sire's Sire ID and Dam's Sire ID
Get Artificial Insemination details	NDDB AI < Animal Tag ID > e.g. NDDB AI 340012773718	Return Animal Tag ID, Artificial Insemination details like Bull ID, Last AI Date, AI Dose Type and number of AI dose, Pregnancy Diagnosis details like Last PD Date and Pregnancy Status.
Get Calving details	NDDB Calv < Animal Tag ID > e.g. NDDB Calv 340012773718	Return Animal Tag ID, Last Calving Date, Calving Type, Calf Tag Id and details of an AI along with lactation number.
Get Milk Recording details	NDDB MR < Animal Tag ID > e.g. NDDB MR 340012773718	Return Animal Tag ID, Milk Recording Number, Last Milk Recording Date, Milk Yield and Lactation number.
Get RBP details	NDDB RBP < Animal Tag ID > e.g. NDDB RBP 340012773718	Return Animal Tag Id, Last Ration Balancing Date and balanced Feed Details.

Reporting



- Role and Hierarchy based Reporting covering one or more Functional Area.
- Provides Decision Supports as well as Operational Support based on the requirements .
- Provide Alerts to take action in Real Time.
- Web based Reporting on Common INAPH Portal at <http://inaph.nddb.coop>

Tools & Technologies

Architecture

- Client - Server

Server

- MS SQL Server 2012 (Enterprise Edition)

Desktop/ Netbook Clients

- Windows based application developed using .NET framework.

Tablet Clients

- Android (4.1 Jelly beans) application.
- Windows based application.

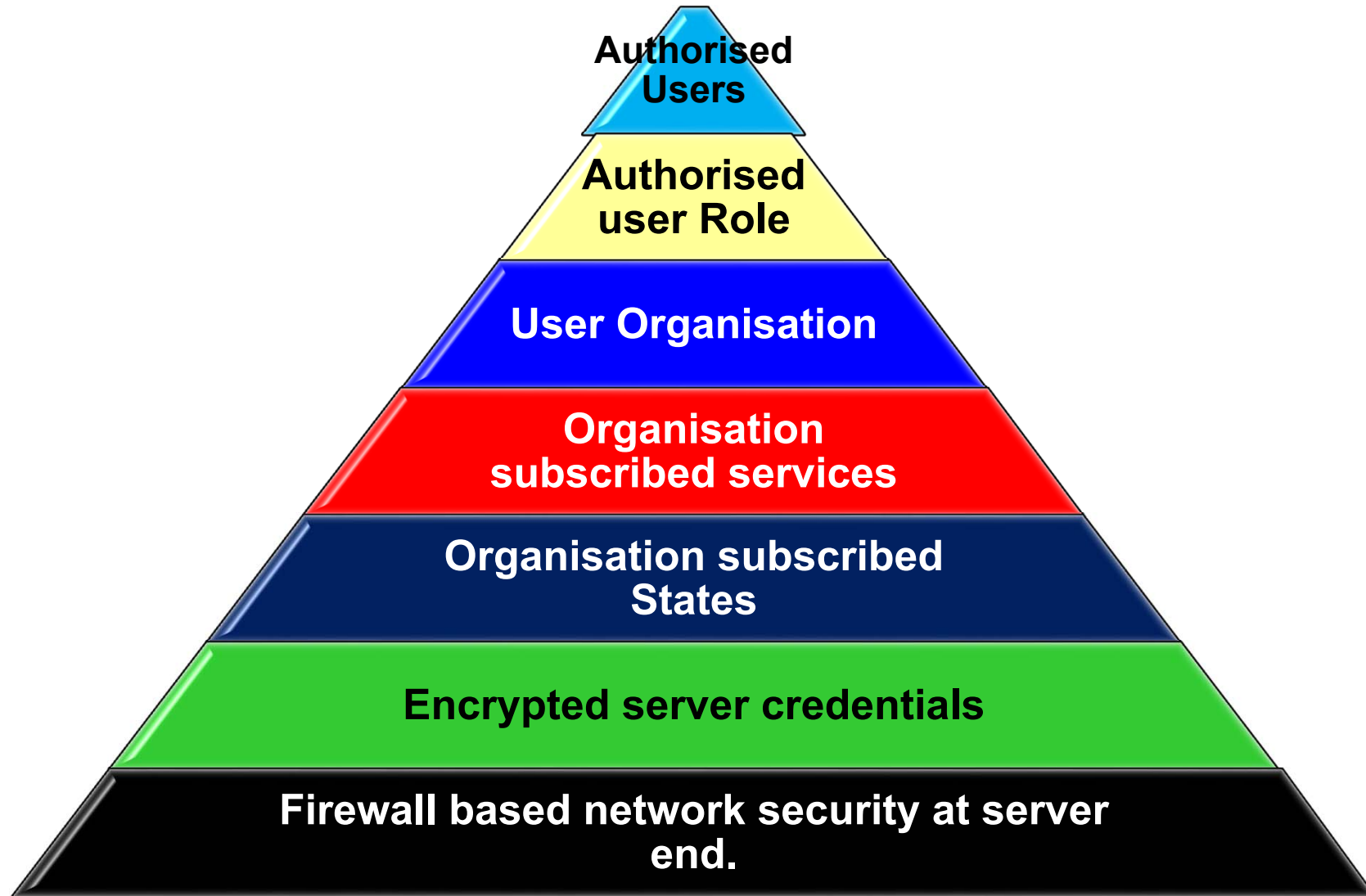
Handheld (Windows Smart Phones) Clients

- Windows Mobile based application developed using .NET framework.
- SQL CE database, available with windows mobile devices.
- Proprietary Mobile Synchronization Solution.

Web-based thin client

- Browser (Internet Explorer) based application.

INAPH Database Security



Network at a glance

NDDB

- Administration
- Analytical reports
- BV Estimation
- SMS Delivery

XYZ Organisation/EIA



CEO

AI Delivery

Progeny Testing

Nutrition

Veterinary

Laboratories



Regional Manager



District Coordinator



Regional Manager



Regional Manager



Milk Component Testing Lab



Nutrition Lab.



Disease Diag. Lab.



Area Officers



Supervisors



Tech. Officer



Area Officer



AI Technicians



Milk Recorders



Resource Persons



Veterinarians

1. Data entry
2. Data validation
3. Updation
4. Local output
5. Synchronization

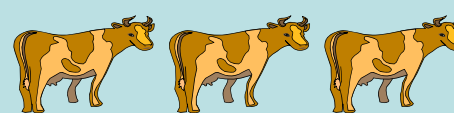
- Registration
- AI
- PD
- Calving
- Other Services

- Yield measurement
- Sample Collection
- Typing
- Growth Monitoring

- RB Individual Animal
- RB Group of Animals
- Feed & Fodder sample collection

- Treatment
- Diagnosis
- Testing
- Outbreak
- Other services

Mobile



Farmer with animals in a village

Central server

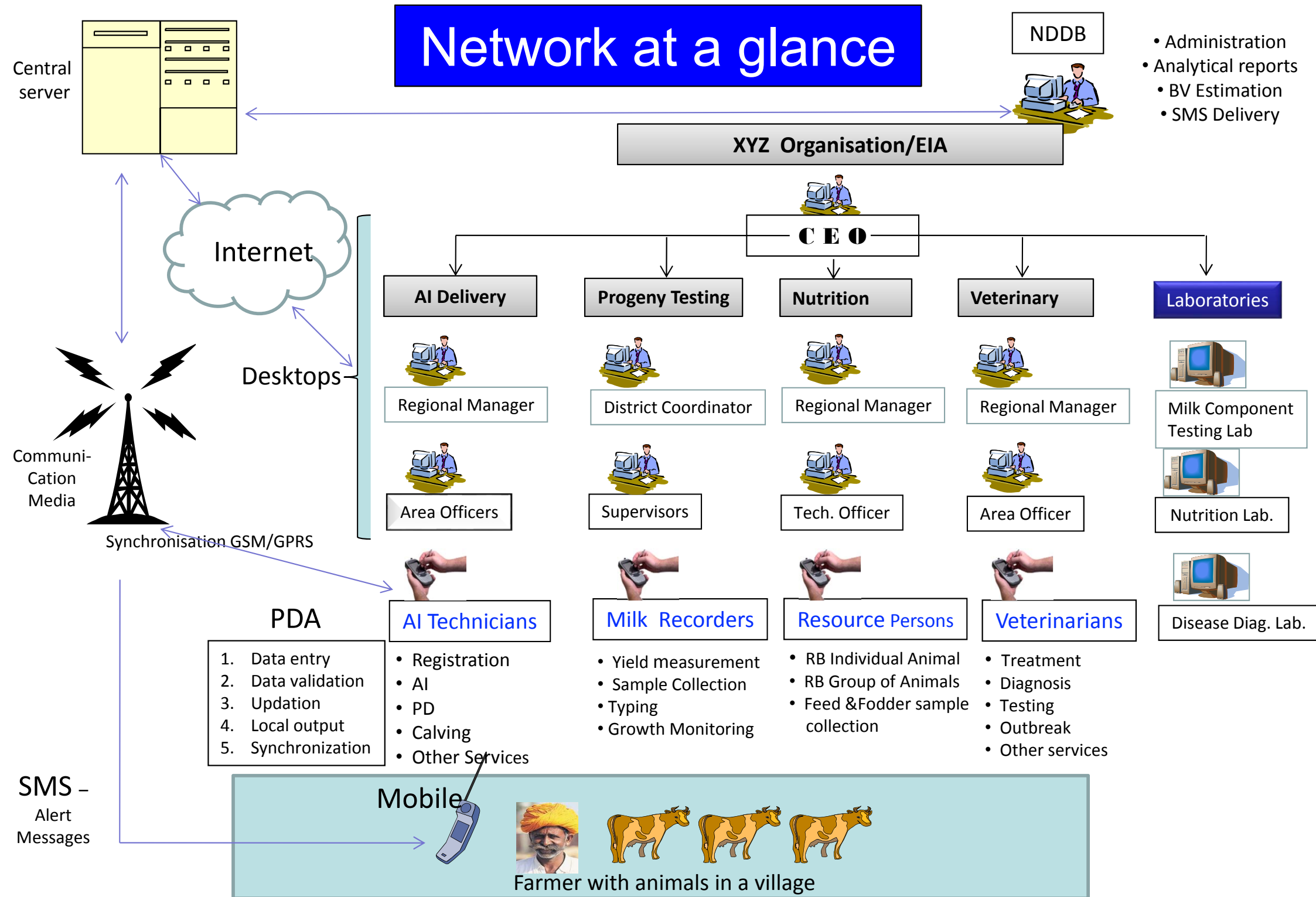
Internet

Desktops

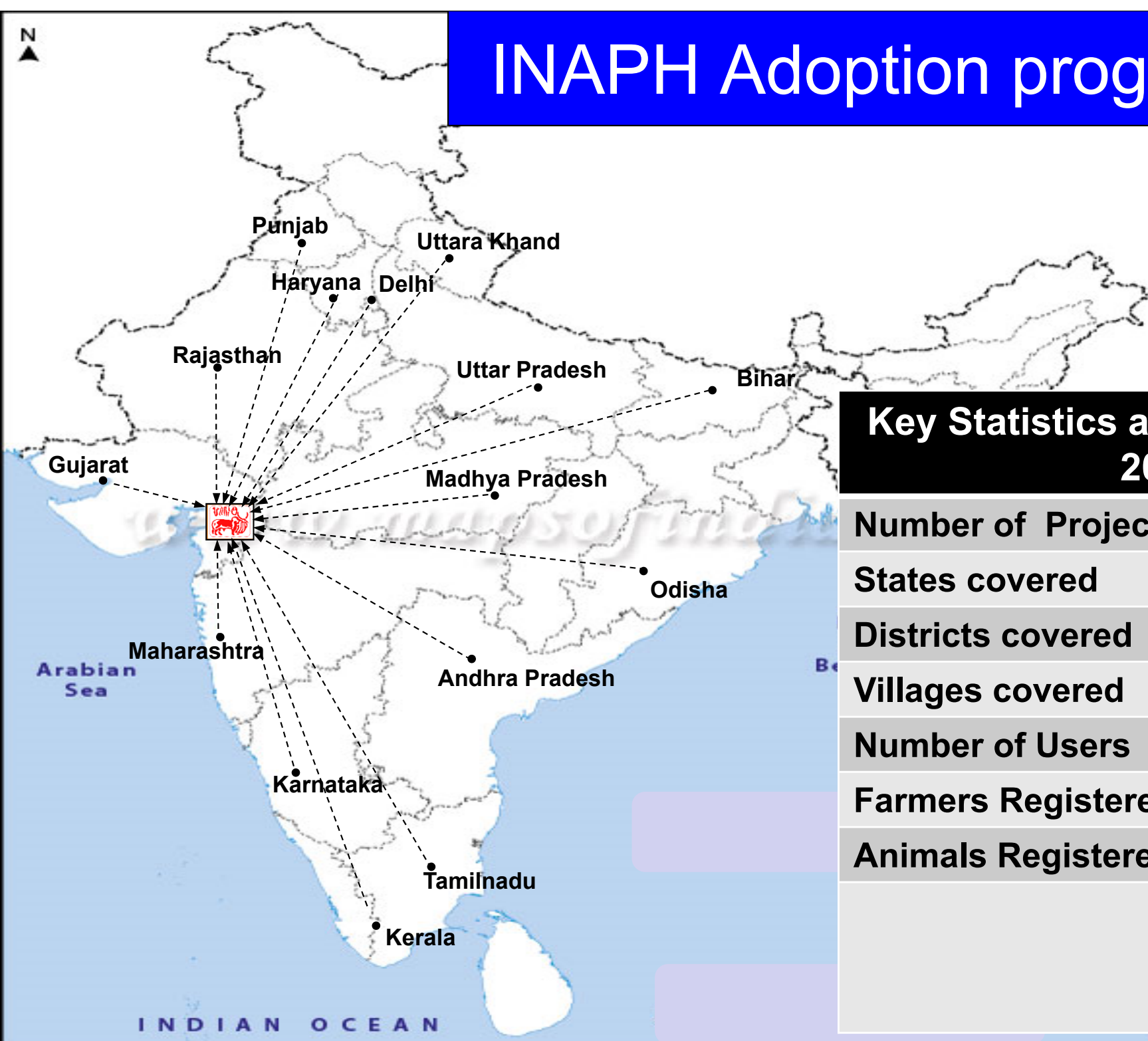
PDA

Synchronisation GSM/GPRS

SMS –
Alert
Messages



INAPH Adoption progress so far



Key Statistics as on 9th February 2018

Number of Projects	235
States covered	22
Districts covered	383
Villages covered	87,921
Number of Users	83,386
Farmers Registered	61,84,015
Animals Registered	1,01,66,768

INAPH in Kerala

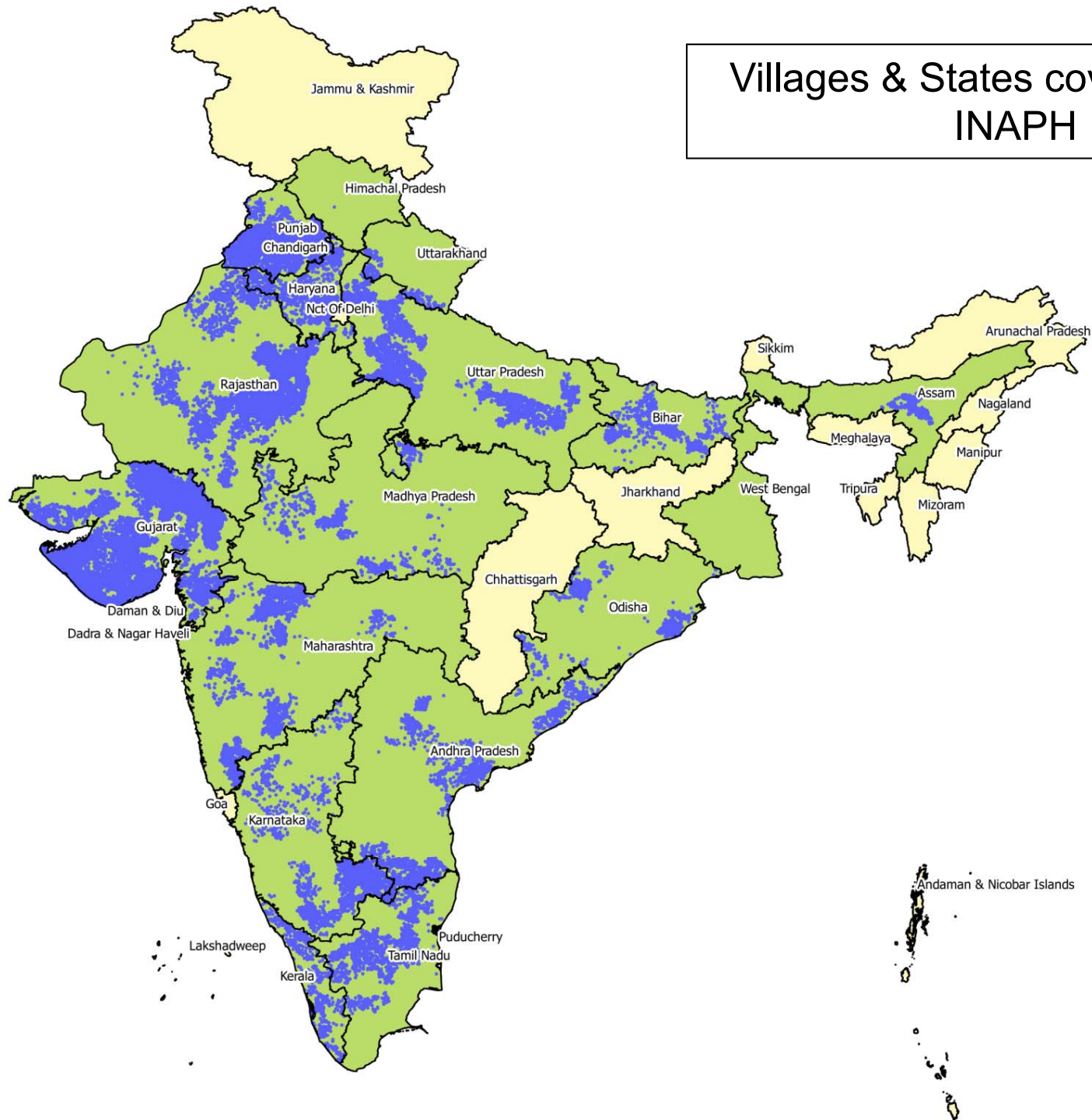
As on 9th February 2018 In the state of Kerala:

- Bovines registered – 50,679
- AI done – 93,951
- PD – 39,800
- Calving – 17,150

Dist of Kozhikode:

- KLDB has registered 18178 bovines
- AH Dept has registered 3821 bovines
- Total bovines registered is 21999. This amounts to registration of around 50% of the available breedable bovines in Kozhikode district

Villages & States covered under INAPH



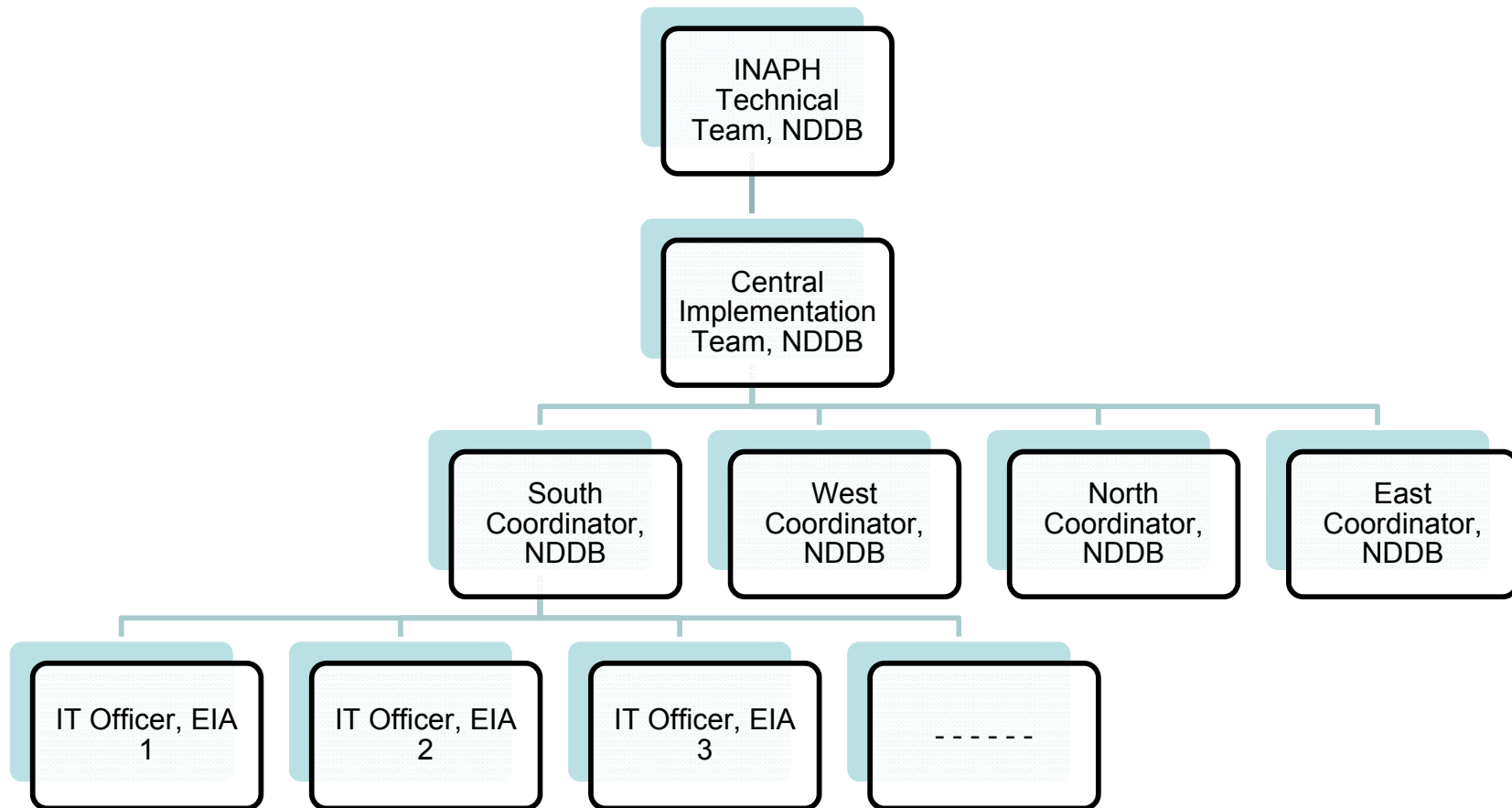
NDDB Support

1. Delivery of INAPH Application.

2. Capacity Building (Training of Trainers)

3. INAPH Specific Technical Support.

Implementation Support

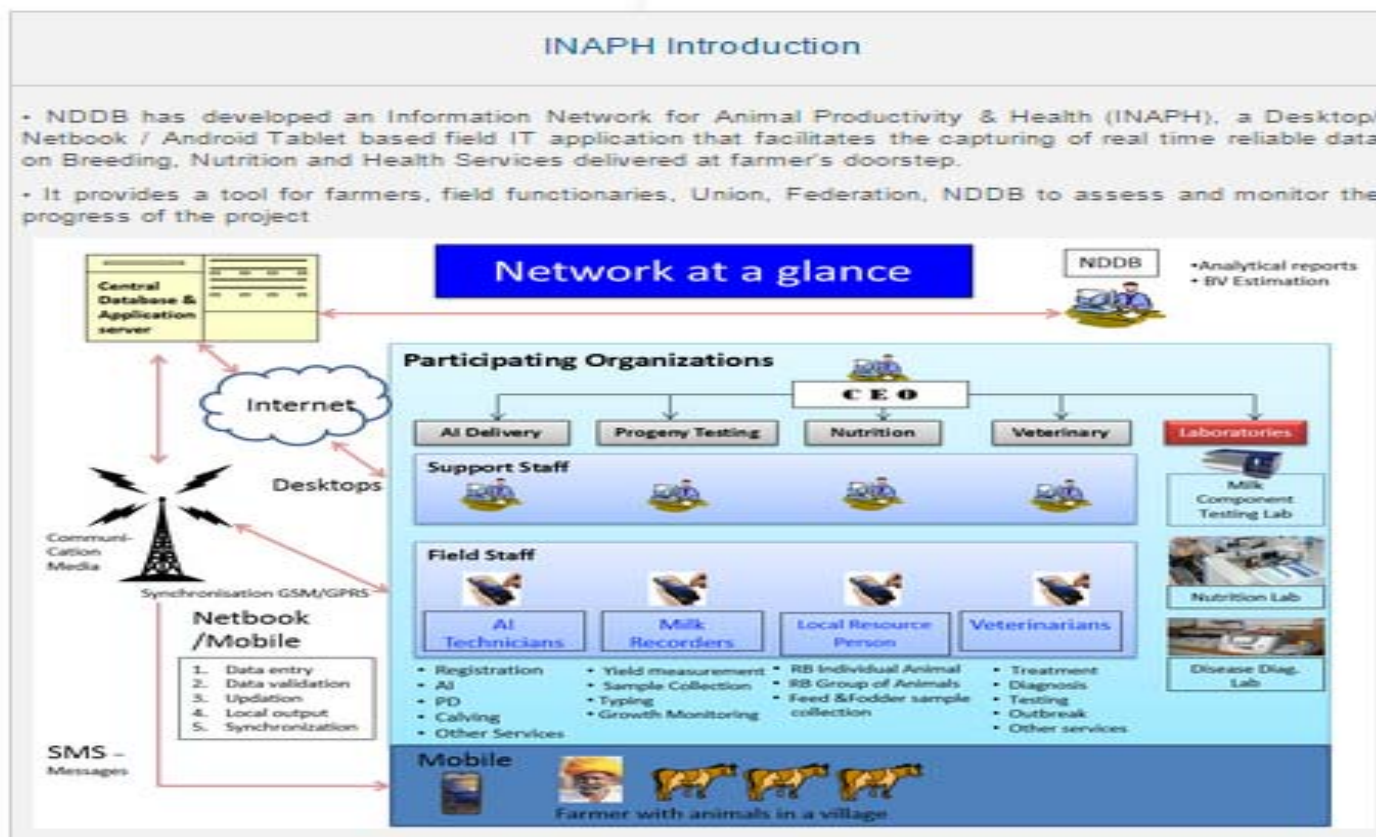


INAPH Portal/Help Desk

<http://inaph.nddb.coop/>

INAPH Portal

Enhanced INAPH Portal (<http://inaph.nddb.coop/>), a single window interface to access all INAPH components with extended interface for farmers.



Click Here To download Pashu Poshan android App.

For ear Tagging please contact nearest Veterinary centre or [LRP](#)

Login

User Name: *

Password: *

Login

[Create New Account](#)

[Verify Mobile Number](#)

[Forgot Password](#)

INAPH Status

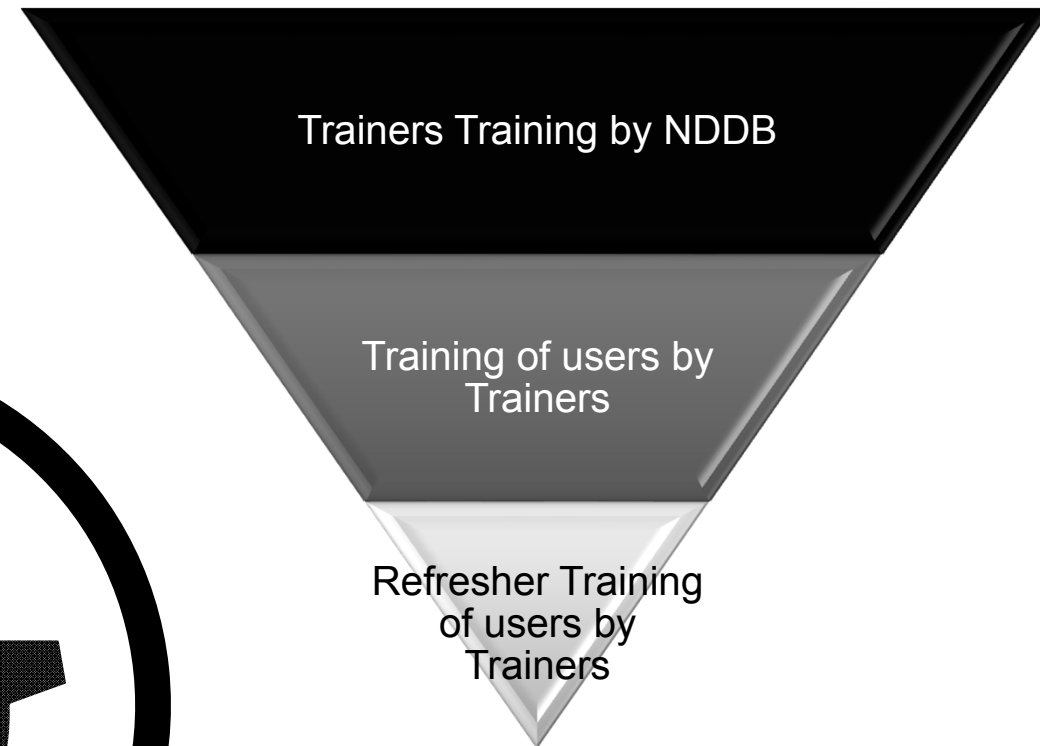
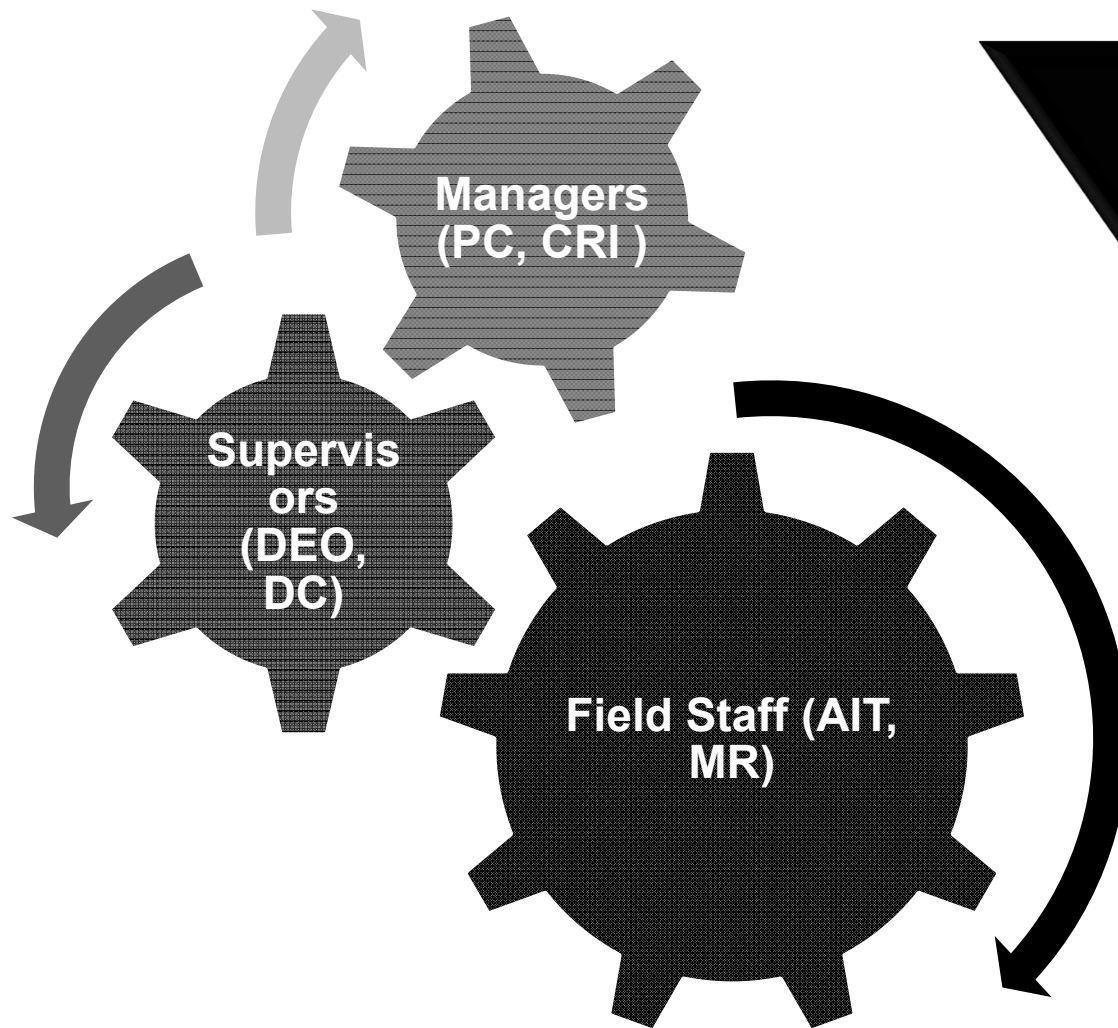
Ration Balancing:16898

Active AIT:743

Active MR:24

Active LRP:2410

Capacity Building



Thank You