FRAMEWORK FOR AN INTEGRATED MANAGEMENT SYSTEM FOR A H AND VETERINARY DEPARTMENT, GOVERNMENT OF ASSAM, INDIA.

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Glimpse of Information Technology based systems in reference to Animal Husbandry and Veterinary Sector in India

Existing system for administrative decision support:

Department of AHD, Government of Kerala :http://ahdkerala.gov.in/

- ✓ Animal Price Monitoring
- ✓ Department Farms
- ✓ Veterinary Hospitals
- ✓ Sample Survey details
- ✓ Laboratory Details
- ✓ Rearing of Calves
- ✓ Animal Health Monitoring
- ✓ Cattle Breeding
- ✓ Stock and store
- ✓ Administration

मध्यप्रदेश शासन
GOVERNMENT OF MADHYA PRADESH
पशुपालन विभाग
DEPARTMENT OF ANIMAL HUSBANDRY

पशुपालन विभाग
Department of
ANIMAL HUSBANDRY

http://mpdah.gov.in/mis/

Designed and Developed by
NIC National Informatics Center
Thiruvananthapuram
Content/Data managed by NIC Kerala

- ✓ Human Resource Management System (SFA Technologies)
- ✓ Medicine inventory system (NIC)

CATTLE INSURANCE MANAGEMENT SYSTEM (CIMS)
for Animal Husbandry Department Andhra Pradesh State
by *Excellent Insurance Broking Services Limited*

https://cattle.eibsm.com/

Initiatives that captures rural activities /infrastructure creation in A H Sector.

PlanPlus v2.0
Decentralized Planning System
Ministry of Panchayati Raj, GOI

http://www.planningonline.gov.in

MIS of State Rural Livelihood Missions
(Ex.misasrlms.in)

bhuvan

Geo tagged data of A H infrastructures created under RKVY

System meant for Herd Health productivity and Breeding program management :

Mobivet App and Herdman Data Services

INAPH app from NDDB

Initiatives for animal disease related decision support system

National Animal Disease Reporting System (NADRS), DAHD, GOI

National animal disease referral expert system (NADRES) by ICAR

GSA GEO SPATIAL ANALYTICS IIITM-K

IITM, Spatial Decision Support System for animal disease mapping, IIITM - Kerala

http://gis.iiitmk.ac.in/ahd/

Samārogyam

(A developing initiative to capture Human / animal disease incidence as reported by citizen scientist.)

Initiatives related to specific services such as Livestock marketing and online lab reports.

Online Poultry Mandi

An initiative of Department of Animal Husbandry Kashmir

http://poultrymandi.in/

PASHU BAZAR

Government of Telangana

पशुपालन, डेयरी और मत्स्यपालन विभाग
DEPARTMENT OF ANIMAL HUSBANDRY, DAIRYING & FISHERIES

epashuhaat/ईपशुहाट
Animals/Animal Genetics for Sale

सत्यमेव जयते

http://pashubazar.telangana.gov.in/

Online lab report system
of Animal Husbandry Department, J&K Government

What do we want to achieve?

- Informed stakeholders who are sharing their requirement and views on departmental activities.
- Operational efficiency (Organizational / Project) E.g. reduced processing time.
- Better project design and execution based on learning from concurrent evaluation.
- Monitoring of stakeholder investments, cluster and infrastructure growth for targeted and coordinated development initiatives.
- Monitoring of production targets at panchayat level.
- Targeted and facilitated credit availability, benefit and service delivery .

Its an integrated system as it will cover following components:

- ✓ Communication, referral tele-veterinary & Extension.
- ✓ Data Management and M&E
- ✓ Premises registration and asset Management system.
- ✓ Livestock Farming and Market Decision Support.
- ✓ Stock / Inventory management system for medicine and vaccines.

The system additionally will be integrated with select known Administrative, HRM, Financial, herd health management, animal breeding, animal disease decision support and livestock insurance management system.

- System will not cover animal disease reporting, as there is parallel ongoing initiative in India to develop comprehensive system integrating human and animal disease reporting and data analysis.

- The system will however, allow border control points to enter animal movement data and laboratories to enter data related to performance evaluation and issue online report to clients.

- The system will be integrated with national animal disease reporting system along with known private systems such as GIS based spatial analysis or mobile based system on disease reporting by citizen scientist.

It will be ensured that the proposed system will promote growth of private herd health , productivity and breeding management related service providers. The proposed MIS will have access to only certain data (e.g. *those required for regulation, general production, productivity estimation and assessment of breeding policy adherence*) to be shared by promoted private service provider as per data sharing / use agreement. Similarly, proposed MIS will also get only required data from disease management related private / public systems.

Policy and partnership imperative:

1. Setting up animal and related infrastructure identification authority with set rules for unique ID and use of data by private entities. The authority to incentivize animal and premises identification.
2. Data share and use agreement with State Level Bankers' Committee (SLBC), ASRLM, WAMUL and SIPRD
3. Data share and use agreement with GIS and Remote sensing facility.
4. System structure design, Content development and share agreement with ICAR, SAUs and other knowledge agencies.
5. Mandatory sharing of Artificial insemination and vaccination related data by private / cooperative / semi government organizations.

"Garbage in, garbage out"

Your analysis is as good as your data.

User awareness, mobile app based data entry with multiple data validation checks is must to achieve this.

Animal Identification and Premises registration both in public and private context will be the key thrust area to ensure quality data:

Premises Registration Card/

PIN :1035012

Premise Owner/ :

Contact No/ :8651280801

SMS URL

Village/ : :chetantola Block/ :Muzaffarabad

District/ :Saharanpur State/ :Uttar Pradesh

Pin Code:400 605

What will be the benefit for farmers' and other VCAs:

- Access to credible information and extension materials in local language directly delivered to their mobile phones.
- Facilitated engagement with departmental project activities, scope of sending requirement and service feedback.
- Online checking of initial livestock linked project feasibility for any specific area.
- Access to location maps of related public and private facilities.
- Scope for submission of direct application for project assistance/ farm loan with system of getting intimation on application processing status and reason of negative decisions.

What will be the benefit for the department and partner agencies?:

- ✓ Operational efficiency and insights for new project/ improvement.
- ✓ Credible real time activity, production, farm cluster and infrastructure growth data for targeted project activities.
- ✓ Access to analysis of system users opinions / feedback for innovative products / services.
- ✓ Enhanced delivery of developed content / extension messages.
- ✓ Effective use of technologies e.g. use of GIS / remote sensing data for informed decisions.
- ✓ Enhanced credit availability / disbursement due to availability of farm decision support system.

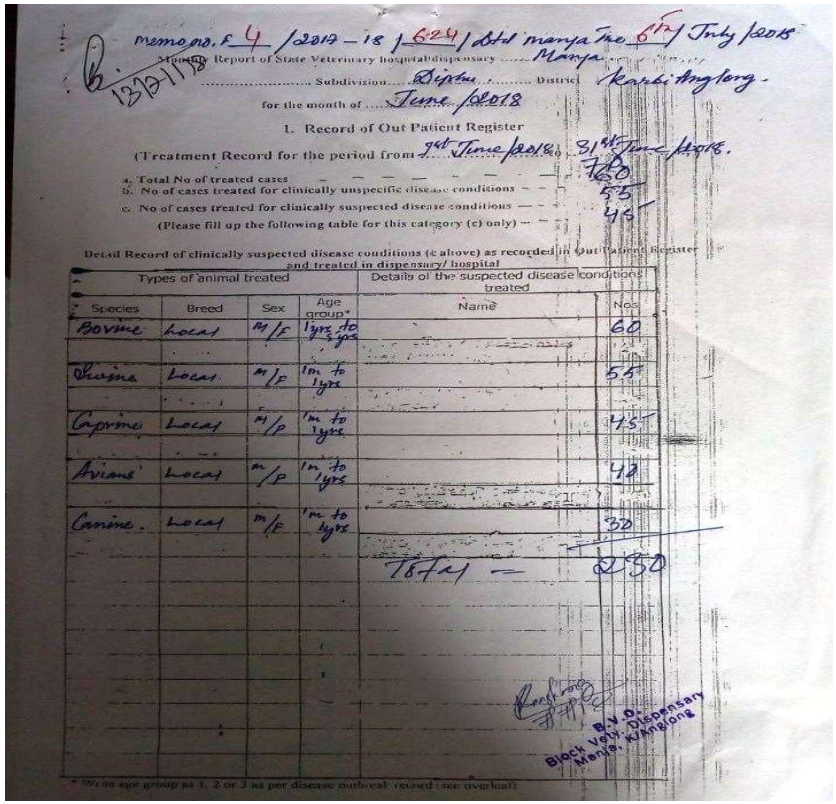
Levels of data entry:

1. Animal Level (e.g. Data to be shared by outsourced third party herd health or insurance service provider)
2. Private service provider, Farm / enterprise premise level (Data to be shared by farmers, entrepreneurs and verified by officials)
3. Government facility premise level (Data from hospitals, farms, laboratories and training facilities etc.)
4. Citizen level data e.g. Opinion / Feedback & Disease incidence data as reported by citizen scientist.
5. Project / area / Administrative level data entry e.g. Financials, HR placement, production targets, etc.

Design of various data entry format will be based on:

- Review of existing reporting system at each type of institutions e.g. farms, hospitals, laboratories etc.
- Species specific requirement. (e.g. Cattle, goat, pigs, poultry) needed to forecast production, events etc.
- Potential use of artificial intelligence in future to assess public opinion and probe health, reproduction and production problems.

Review of functional use of the collected data as of now and methods for their collection:



Memo no. F 4 /2013-18 /624/ dtd Manja the 6th July /2018

Report of State Veterinary hospital/dispensary ..... Manja

..... Subdivision ..... Diphu ..... District Karbi Anglong.

for the month of ..... June /2018

1. Record of Out Patient Register

(Treatment Record for the period from 1st June /2018 to 31st June /2018.

a. Total No of treated cases — — — — — — — 760

b. No of cases treated for clinically unspecific disease conditions — — 55

c. No of cases treated for clinically suspected disease conditions — — 45

(Please fill up the following table for this category (c) only) — —

Detail Record of clinically suspected disease conditions (c above) as recorded in Out Patient Register and treated in dispensary/ hospital

Types of animal treated				Details of the suspected disease conditions treated	
Species	Breed	Sex	Age group*	Name	Nos
Bovine	Local	M/F	1yrs to 3yrs		60
Porcine	Local	M/F	1m to 1yrs		55
Caprine	Local	M/F	1m to 1yrs		45
Avians	Local	M/F	1m to 1yrs		42
Canine	Local	M/F	1m to 1yrs		30
				Total —	230

Received

B.V.O.
Block Veterinary Dispensary
Manja, K/Anglong

* Write age group as 1, 2 or 3 as per disease outbreak record (see overleaf)

Record of foot fall in veterinary hospitals.

Ex. Should we judge the performance of a veterinary facility based on footfalls for treatment when ideal job of a veterinary hospital is to keep the assigned area free from disease?

The dashboard should permit real-time monitoring of:

- 5 identified key result areas, 39 outcome and 30 annual performance indicators (PIs) across actions suggested in departmental roadmap under 6 broad functional areas.
- Status of data sharing by registered private service providers. (e.g. Herd health & productivity data, vaccination data from identified animals etc.)
- Target (physical / financial) achievements across projects with district wise break up.
- Statistics on extension related content growth and delivery, registered individual private user activity, generated opinions etc.

The dashboard should permit real-time monitoring of:

- User activity, data entry status and achievement across PIs for each of the individual user government institutions.
- Estimated production and productivity (species wise), cluster growth and disease related event forecast.
- Status of bank loan application, cluster growth maps with parameters like average farm size, breed status etc.
- Animal movement, disease related spatial maps and event forecast.
- Status of medicine / vaccine / semen straw / LN2 use and forecast for same.
- Action status on administrative directives and status of departmental man power with spread.

The work plan (Phase: 1):

Detail review of exiting ventures and scope of partnerships / integration and value proposition thereof.

&

Analysis of existing formats and methods of data collection.

&

Review of technological options.

Output : *Final Concept Paper with approximate costing*

The work plan (Phase: 2):

Workshop for preliminary functional flow chart (Data input – processing and reporting), programing requirement, tools for back-end data storage / analysis, application development / maintenance cost etc.

Output: Draft Detailed Project Report

The work plan (Phase: 3):

System Development, Piloting, commissioning and maintenance

Output : *Functioning system*

Vet Helpline India (P) Ltd

Corporate Identification Number, GOI - U85200AS2000PTC006298

Like 2.8K

We help organizations conduct studies and implement development projects in the field of animal health care, animal welfare, livestock development, food safety and public health.

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