



## Caprovi - Desktop / laptop application

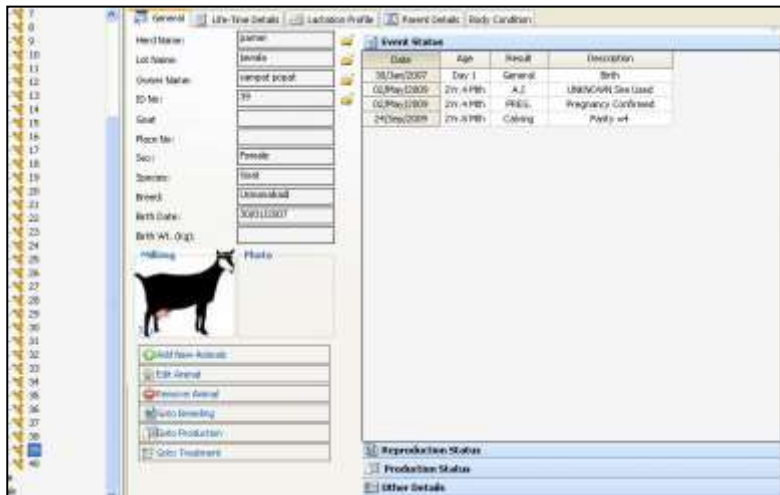
### PROGRAMMING DETAILS

VB.NET / cell phone application Android  
SQL SERVER  
CRYSTAL REPORT  
SMS PUSH AND PULL INTERFACE  
QR-CODE EAR TAG QUERY STRING INTERFACE  
DATA EXPORT AND IMPORT – EXCEL

### REGULATORY COMPLIANCE:

DEVELOPED AS PER THE GUIDELINES OF INTERNATIONAL COMMITTEE ON ANIMAL RECORDS ADOPTED BY THE NATIONAL DAIRY DEVELOPMENT BOARD

The application is to be installed on web-server primarily and from there it can be



downloaded on the desktop / laptop. There is facility of auto-data update from web-server when in internet environment. This enables offline use of the system. Multiple copies will be supplied for installing on user desktops / PCs

### Target Users:

Veterinarians  
Senior Managers  
Insurance officials  
Bank / accounts officials  
Other stakeholders

**Technical Details:** The application is 'Enterprise Solution' for large scale milk processors providing services to the farmers' dairy animals.

### **Complete Solution to Sheep / Goat Flock Management:**

- The program enables maintaining of lifetime animals' records
  - The records of sheep and goat are maintained in the same database, but the data analysis and report generation can be under taken separately.
  - The data analysis capability for different breeds of sheep and goat
  - The program can be custom designed for different breeds by defining parameters
  - The data can be analyzed as fertility and production indices
  - Generates daily action lists for smooth farm / service management
- 
- The software is window-based and provides the computing and analysis and networking strength of VB.Net and SQL-Server (Oracle) as database.
  - It is icon / menu driven hence even a moderately literate farmer can operate the software without any difficulty.
  - The records of all categories of animals, such as, kids, lambs, breeding rams and ewes and breeding does and bucks, parent stock lot, marketable lot, etc. can be maintained.
  - The records of culled, sold or died animals maintained in archive files that can be retrieved easily to analyze the data

### **What Data can be maintained?**

Following categories of data can be maintained:

- All estrus and services / AI events with details such as natural service / group semen insemination / skip / sire details the AI technician details.
- Details of treatment given at the time of AI
- Based on heat synchronization protocols, the program predicts estrus due
- The results of the pregnancy tests / abortion, etc.
- Drying off, udder examination report and treatment records at the time of drying-off
- Kidding /lambing details and relevant details.
- Milk / wool yield records with composition reports
- All sickness events and treatment records
- Feeding details in respect of each animal / group of animals / FCR
- Animal movement records, sold, culled, died, etc.
- Medicine, semen straw, feed and fodder inventory

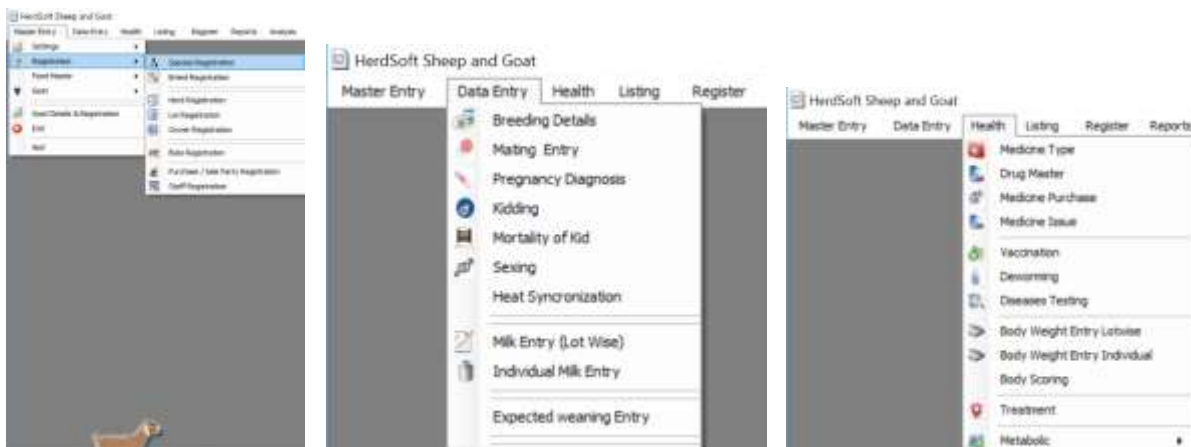
The program can be custom-designed: The program has been provided with facility of fixing the economic and management default values so that the program can installed as per the need of

the dairy set up. Thus, the program has flexibility of deployment in diverse dairy management set up.

The animals can be registered after creating herds and lots. This makes the animal data access easy and the animals can also be maintained in groups of interest. The 'Master Parameter' menu provides creation of master entries which can be accessed each time an animal is registered. The animal, parent, other details, such as, previous and current parity breeding, production and health records can be entered without any hassle. The missing parity or lactation data does not hamper analysis of the data.

**Admin Software:** Using the Admin panel assigning functions like the authorized staff, extent of access to data,

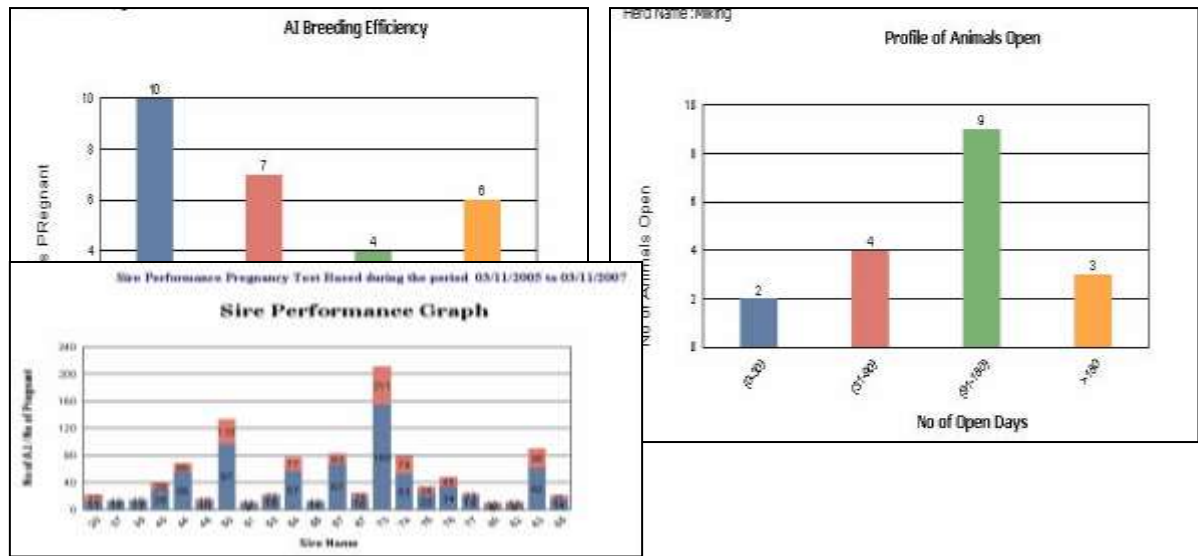
**The software can be custom modified to suit client requirements:** The software can be custom designed for use in the farm. The Farm manager can define the breeding, production, health targets and action parameters suitable and applicable to the farm.



**Multi-parameter reports:** Using a single format multiparameter reports can be generated with facility of access to individual animal abstract file.

The screenshot shows a software window with a 'Properties' dialog box on the left and a table of animal records on the right. The 'Properties' dialog includes fields for Animal No. (SW08GU0025), Herd Name (Dunda), Last Name (Goat-Adult-Female), Owner Name (Dunda Uttarakhand), Animal Name, Place No., Sex (Female), Species (Goat), Breed (Barban), Birth Date (03/04/2015 12:17:54), and Birth Wt. (kg). It also has radio buttons for 'Reject', 'Sale', 'Select for progeny testing', and 'None', along with an 'Update' button. The table on the right lists animals with columns for Farmer Name, Farmer Code, SAP Code, Mobile No, Route Name, HMB Name, HMB Code, Breeding Status, and Species. The table contains 16 rows of data, all for 'Dunda Uttarak...' with various codes and 'Goat' species.

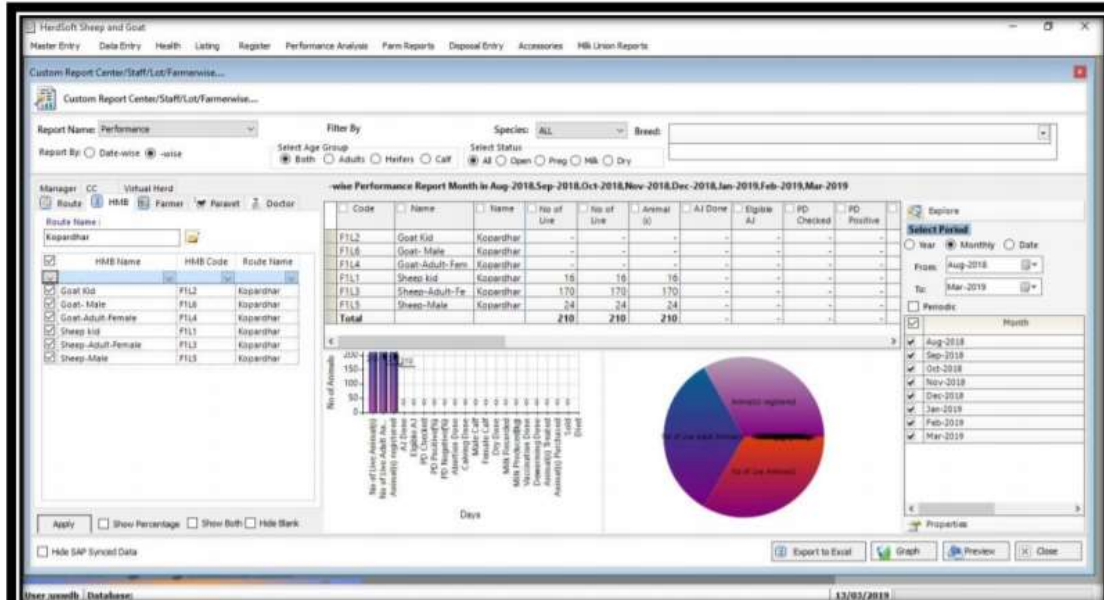
**Breeding Details:**



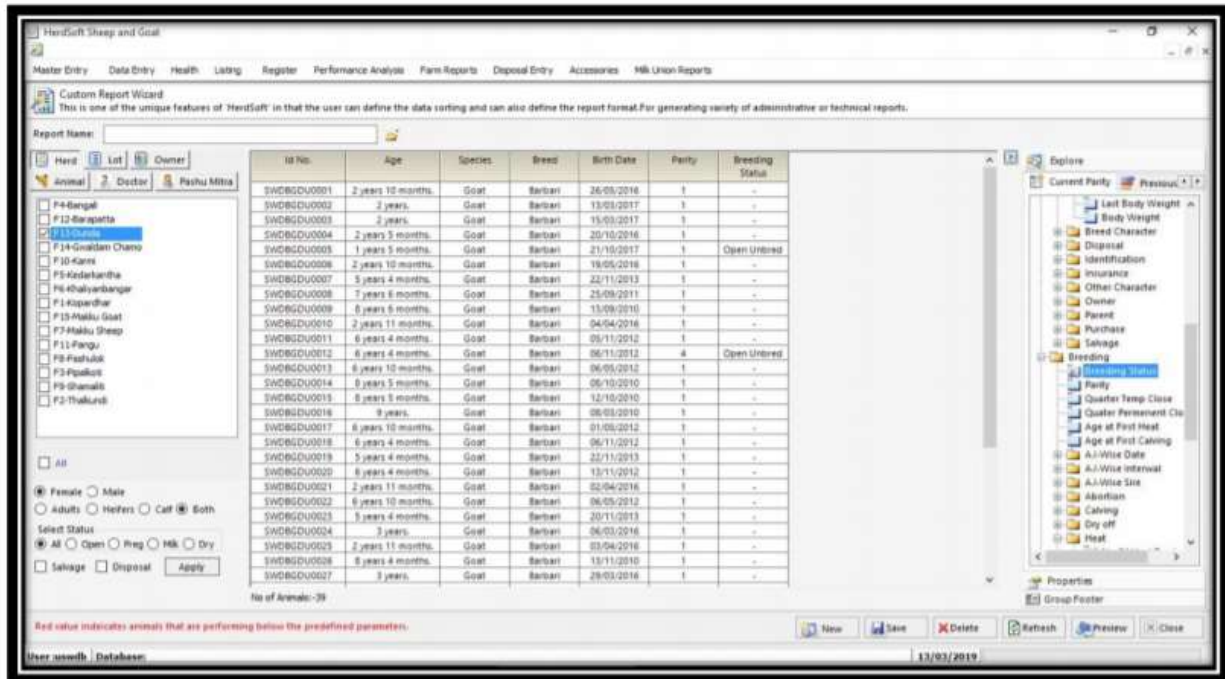
Thus, the Farm Manager can analyze fertility data and take decision on use of different bulls in the farm.

**Centre wise reports:** This report is useful for multi0centre organizations who can generate comparative performance reports.

Center-wise Performance reports:

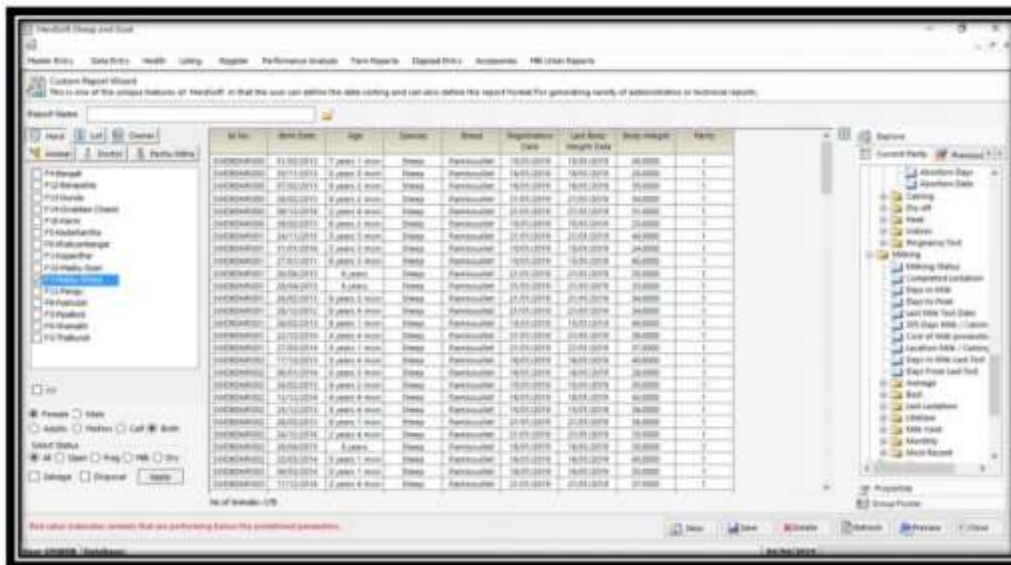


## Goat Custom Reports:



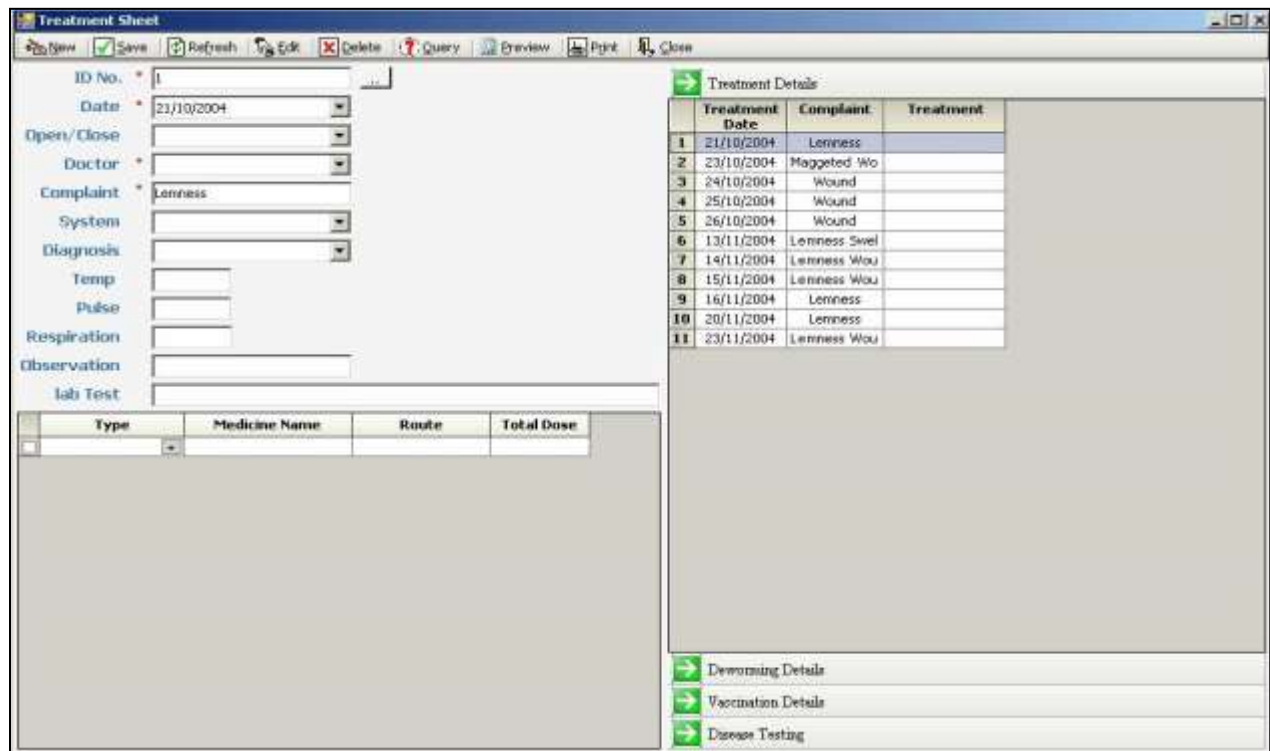
**Custom-Designed Report:** provides facility for custom-designing of reports. From amongst more than 180 parameters the veterinarian or manager can select any number of parameters and generate report of his choice. There is also facility to sort data for various parameters. The unique feature of 'Caprovi' is facility of sorting of animals' performance based on its outcome such as economic efficiency. This enables the manager take decisions based on economic performance of the animal. This also allows selection of animals for breeding purposes.

## Sheep Body-Weight Custom Reports:



The multivariate body weight custom report helps the user to understand weight gain association with different variables.

**Sick Animal Case papers and treatment records:** ‘Caprovi’ maintains lifetime records of all the treatment carried out in individual animal. The database for different symptoms, systems, and the diseases are in-built so the user has to just select from the combo box. The program also indicates the dose rates for different drugs and the milk withdrawal alarm is also given. The old



treatment records can be retrieved with a click. This also enables calculation of true disease rates in the farm. When antibiotics are used, the software also warns the farmers about the residues within the withdrawal period. Many software currently available do not have this facility.

**Flock performance indices:** The ultimate objective of the animal data management is to analyze the data to calculate production, breeding and herd indices to indicate how the herd is performing. Caprovi permits calculation of production and reproduction-based herd indices (as mean  $\pm$  Standard deviation) for each lot or flock. This is the unique feature of this software. Flock indices, such as, average FCR, Average weight gain, average milk yield per lactation day, Number of kids per year, etc., can be calculated.

**Service Dashboard:** The dashboard is meant for users who have multi-location farms and the Manager is interested in seeing the management and service actions being taken in real time. This feature will be especially good for UK Livestock Development Board as the Managerial staff



will be able to monitor the farm management services of all the farms as well as farmers who will be registered with them.

The screenshot shows a web browser window with the URL `182.73.72.14/Herdmaster/dashboard/index.asp`. Below the browser window, there is a section titled "User-wise login log Details" with a note: "The user log contains events logged by user. For example, a user logged in time and out time and from which device logged into application. To view log for particular user click on user display on grid. Note: green means user is online yellow logged out." Below this, there are filters for "User: ALL" and "Date Type: ALL", and a summary "Total Animals Registered: 81596" and "Animals Registered Today: 45".

No.	User	Log In Time	Log Out Time	No.	User	Type	Records	No.	User	Type	Sending Date	Sending Time	Data Sent	Log In Device
1	A.Hangam	2/21/2017 10:21:52 AM		1	Anilapatti	A.I	3	1	Poojaripatti	Calving	30-02-2017	12:42	830051137963 Calving Entered	Hoblie
2	Anilapatti	12/14/2016 2:28:39 PM		2	Anilapatti	Calving	3	2	Poojaripatti	Registration	30-02-2017	12:42	830051137963 Registered	Hoblie
3	Abinaya	8/29/2016 11:09:25 AM	8/29/2016 11:12:18 AM	3	Anilapatti	Registration	10	3	Marandahalli	Registration	30-02-2017	12:41	830051185877 Registered	Hoblie
4	Adary	11/12/2016 12:07:43 PM		4	Anilapatti	Dry	1	4	Marandahalli	Calving	30-02-2017	12:41	830051185877 Calving Entered	Hoblie
5	Ajaykumar	2/22/2017 10:42:56 AM		5	Anilapatti	RD	2	5	Radhapuram	Registration	30-02-2017	12:41	830052730325 Registered	Hoblie
6	Alampoonchi	2/21/2017 10:00:41 AM		6	Alampoonchi	A.I	1	6	Radhapuram	RD	30-02-2017	12:41	830052730325 RD Checked	Hoblie
7	Alampoonchi	9/12/2016 8:40:39 PM		7	Alampoonchi	A.I	1	7	Radhapuram	A.I	30-02-2017	12:41	830052730325 A.I Entered	Hoblie
8	Alampoonchi	2/20/2017 6:48:59 PM	2/20/2017 6:49:37 PM	8	Alampoonchi	Registration	2	8	Radhapuram	Dry	30-02-2017	12:41	830052730325 Dry off	Hoblie
9	Alan	2/4/2017 1:13:00 PM	2/4/2017 1:28:34 PM	9	Alampoonchi	Registration	2	9	Poojaripatti	Calving	30-02-2017	12:40	830051137963 Calving Entered	Hoblie
10	Ammapattai	1/9/2017 6:16:01 PM	1/9/2017 6:16:23 PM	10	Alampoonchi	Registration	1							
11	Anandala	1/12/2017 3:13:39 PM	1/12/2017 3:26:03 PM											
12	Anandhaveli	2/20/2017 2:34:00 PM												
13	Anandhaveli	2/13/2017 5:19:28 PM	2/13/2017 5:22:48 PM											
14	Ananthan	2/22/2017 11:05:15 AM												
15	Anbarasan	12/10/2016 11:37:01 AM	12/10/2016 11:44:51 AM	11	Alampoonchi	A.I	2							

The dashboard will be suitably modified to suit requirements

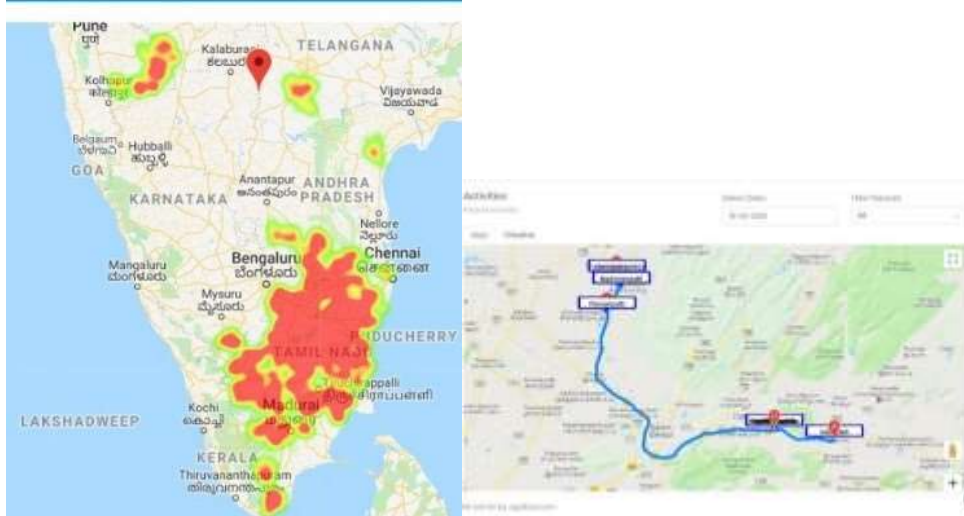
**Digitized Veterinary Services with online Deductions:** In case the farmers are to be charged for

The screenshot shows a dashboard titled "Center-wise performance for the date: 08-12-17". It features a table with columns for "Center Name", "Vaccination", "Tagging", "AI Done", "AI Cost", "RD Checked", "RD Cost", "RD", "RD Cost", "HS & BG", "HS & BG Cost", "Treatments", "Treatments Cost", and "Total Cost(Rs)". The table lists various centers and their performance metrics. Below the table, there is a bar chart showing the distribution of services across different centers.

inputs and services there is a module for online and in real time deductions and credit on the account of the service provider.

**Online monitoring of Feed / Medicine / Vaccine / Flock Inventory:**

The browser dashboard enables online monitoring of not only services but also the inventory of inputs to the farmers from the company. In case our RFID high frequency tags are used, even gate management for sheep/ goat inventory can also be provided.



Geo-maps and tracking of services: Using the google services, various maps can be generated, such as, distribution of sheep and goat, different breeds, ready-to-market goat / sheep (based on weight), vaccination / unvaccinated, treated, disease prevalence, etc.

For further details please contact [drasamad11@gmail.com](mailto:drasamad11@gmail.com); [vetware2018@gmail.com](mailto:vetware2018@gmail.com) Cell-91-9969371999

\*\*\*\*\*