

I-Khet Dashboard

Design and Developed by

Punjab Remote Sensing Centre

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PRSC Portal: <https://prsc.gov.in/>

I-Khet Dashboard: <https://ikhet.punjab.gov.in/>

Abstract:

Design and Development of a WebGIS based dynamic Dashboard to act as a common platform for the representation of detailed spatial and non-spatial information pertaining to Machineries and its utilization at various geographical levels for Mobile and Web Portal users of Punjab State. Development of the system includes creation of centralised database for Mobile Application and WebGIS based Dashboard, role based login for information visualization and statistics of machines from various owners and machine types.

The objective of the dashboard is to develop a platform consists of spatial and non-spatial information regarding the farming machineries and its utilization at various geographical levels for the entire Punjab state.

It contains six modules namely- Service Providers (CHC Cooperatives), Block Nodal Officer, District Nodal Officer, State Nodal Officer and End Users (Farmers).

The data is centralized for mobile application and I-Khet Machine Dashboard and the visual or statistical information shown to various users is entirely depends upon the roles based login.

The purpose of the dashboard is providing the interactive interface to the users and decision makers for the booking and monitoring of the farm machineries over the Punjab state.

Introduction:

Businesses actually adopted the term “dashboard” from automobiles. In many ways, it is used the same. There are hundreds of moving parts in your developmental activities that impact the governance and citizens in overall performance of strategic planning and management. A dashboard summarizes these events or the facilities with easy-to-understand, real-time data visuals. For machines and its utilization dashboard can immediately show how farm machineries are utilized for agricultural practices.

The ideal functions of a dashboard is to provide real-time results by aggregating and extracting value from all the which has been managed in centralised database in case of I-Khet Machineries’, It simplifies the data into more manageable chunks of visual information that allows users to see the status of farm machineries’ utilization and, decision makers can take a necessary actions for the improvement. Benefits of dashboards include making informed decisions that dramatically impact the governance – which in turn affects the bottom line.

Operational Dashboards – Operational dashboard metrics updating in real-time showing data related to daily operations. The main purpose of an operational dashboard is to provide a comprehensive snapshot of performance, which means that a large amount of detail without using too many drilldowns has been incorporated in the system.

Objective:

- ❖ The main idea of the dashboard is to develop a platform consists of spatial and non-spatial information regarding the farming machineries and its utilization at various geographical levels for the entire Punjab state.
- ❖ It contains six modules namely- Service Providers (CHC/CS/ Individual Farmers), Block Nodal Officer, District Nodal Officer, State Nodal Officer and End Users (Farmers).
- ❖ The data is centralized for mobile application and Web-GIS based Dashboard and the visual or statistical information shown to various users is entirely depends upon the roles they have assigned.

Menu Items:

Sr. No	Menu	Sub Menu / Description
1.	Home	This redirects to the Home page of Dashboard
2.	About Machines	Contains the basic information about farm machines like Mulcher, Happy Seeder, Bailer etc.
3.	About Dashboard	Document contains the basic information and architecture of the dashboard
4.	Register	This section is developed to provide the registration facility to the users in I-khet machine application.
5.	Sign In	Provides the sign in facility to enter inside the system to book the farm machineries.
6.	Feedback	This is feedback section for users.
7.	Download	All the tools and related document can be downloaded from this section

Conceptual Block Diagram of I-Khet Dashboard:

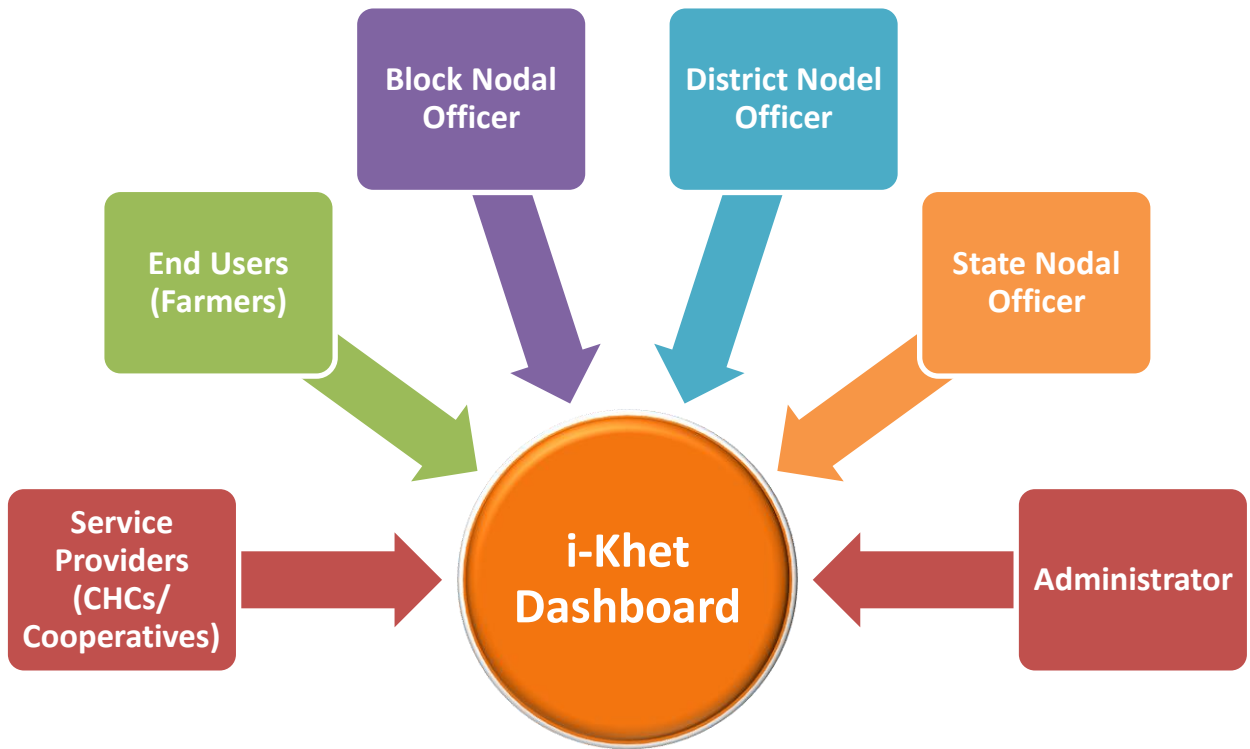
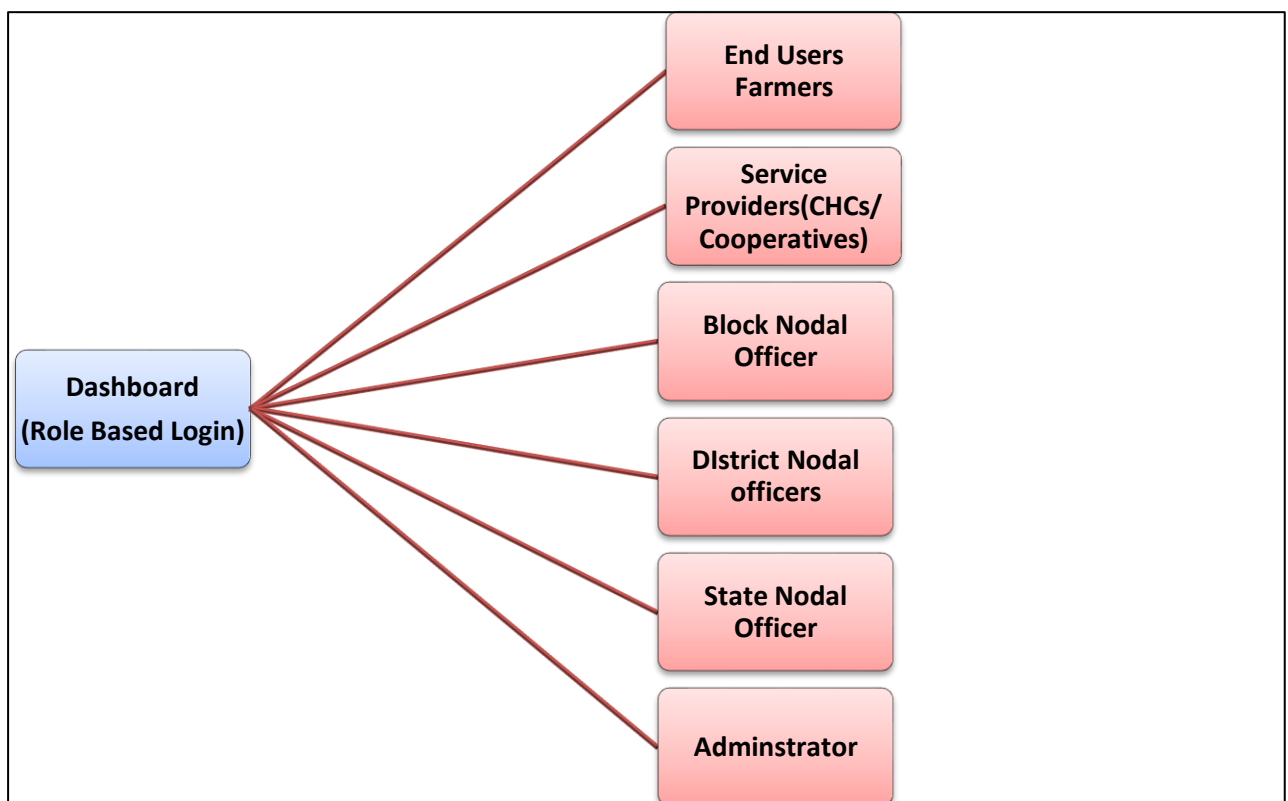


Figure: Conceptual Block Diagram

Architecture of Dashboard

Architecture of the system depicts the complete system development of dashboard for various levels. RDBMS system is designed to normalize entire dataset for smooth functioning and procedural module generation. GIS and Web servers will serve maps and MIS dataset to the client. Role based login will be provided to end users i.e. Farmers, Service Providers, Block Nodal Officers, District Nodal officers, State Nodal Officers and administrator. Administrator can monitor and analyse at each level of events and respective action using the dashboard.

Components / Modules in Dashboard Data Flow chart:



I-Khet Dashboard

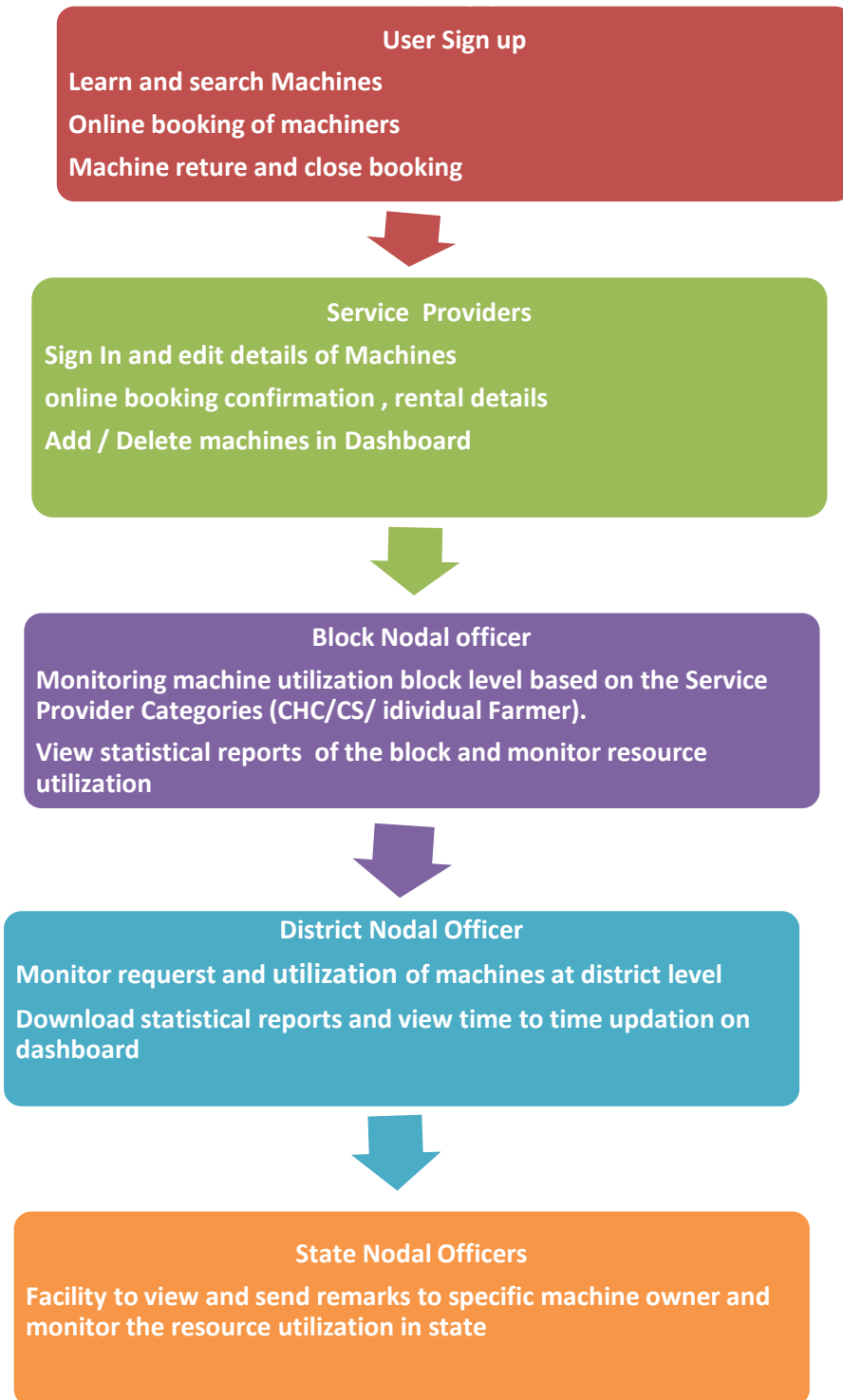
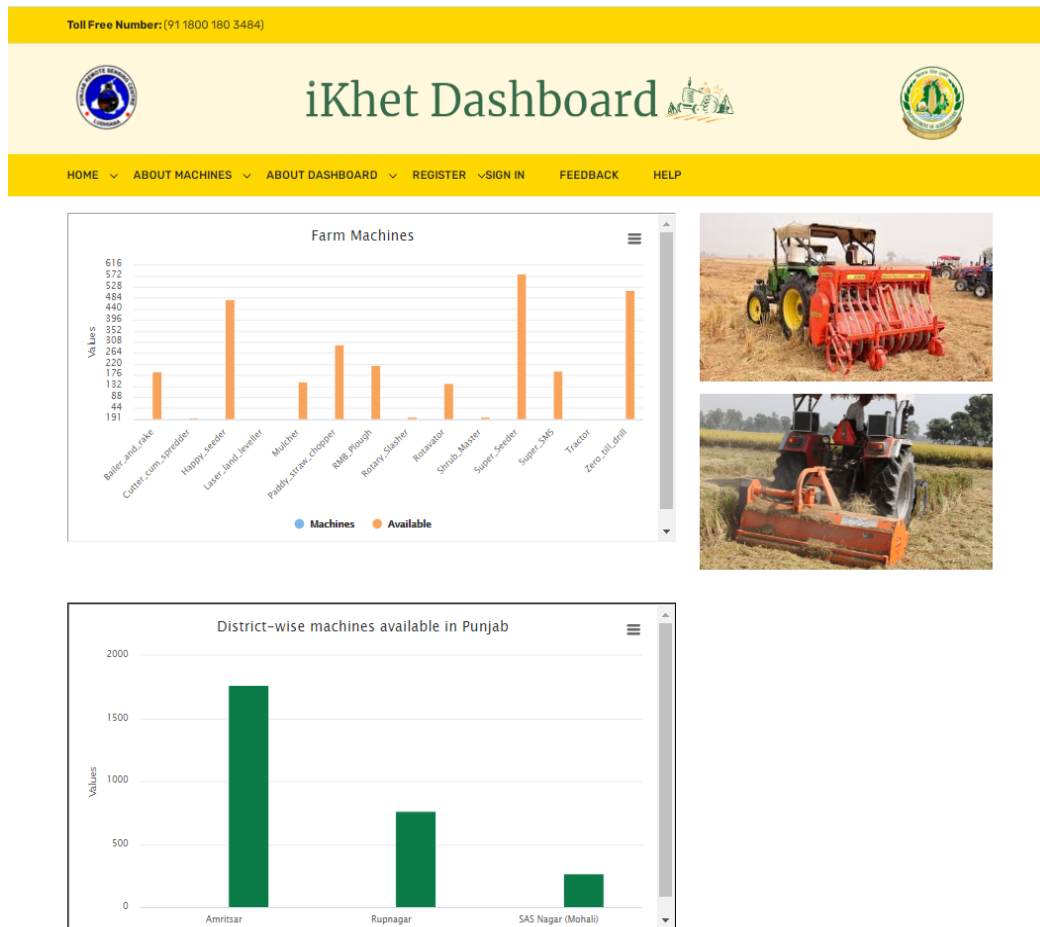


Figure: Dashboard Utilization

I-Khet Dashboard

Visual Glimpse of I-Khet Dashboard



Contact Information

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