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E-MACHHLI ANDROID BASED APPLICATION FOR FARMERS

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ABSTRACT

This e-Machhli App is an initiative under Pradhan Mantri Matsya Sampada Yojana (PMMSY). The app aims to serve as a comprehensive fisheries development marketplace and information portal for direct use of fishers, fish farmers as well as input suppliers. The platform will be the central digital platform for farmers managing fisheries including buying and selling of high yield seeds, feeds as well as equipment and implements and laboratory testing facilities[11]. PMMSY aims at enhancing fish production by an additional 70 lakh tons by 2024-25, increasing fisheries export earnings to Rs.1,00,000 crore by 2024-25, doubling of incomes of fishers and fish farmers, reducing post-harvest losses from 20-25% to about 10% and generation of additional 55 lakhs direct and indirect gainful employment opportunities in fisheries sector and allied activities[9]. Registration in the e-Machhli App will assist fishers, fish farmers, fish vendors and suppliers to mutually connect each other and grow their business to higher profitability, according to CSC- Department of Fisheries.

In today's scenario, at the central level there's no such existing digital platform which provides all fishers, fish farmers and input suppliers to communicate on a single platform. Hence there's a need for such system application which provides communication platform for them.

Keywords: Fish, Fishers, Fish Suppliers, Fish Vendors, Android App.

I. INTRODUCTION

In today's scenario, at the central level there's no such existing digital platform which provides all fishers, fish farmers and input suppliers to communicate on a single platform .Hence there's a need for such system application which provides communication platform for them.

The Pradhan Mantri Matsya Sampada Yojana (PMMSY) maybe a flagship scheme for focused and sustainable development of fisheries sector within the country with an estimated investment of Rs. 20,050 crores for its implementation during a period of 5 years from FY 2020-21 to FY 2024-25 in altogether States/Union Territories, as a neighborhood of Aatma Nirbhar Bharat Package. Out of this, an investment of about Rs 12,340 crores is proposed for beneficiary-oriented activities in Marine, Inland fisheries and Aquaculture and about Rs 7,710 crores investment for Fisheries Infrastructure [8].

PMMSY is supposed to affect critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of useful chain, traceability, establishing a strong fisheries management framework and fishers' welfare. While going to consolidate the achievements of Blue Revolution Scheme, PMMSY envisages many new interventions like fishing boat insurance, support for new/up-gradation of fishing vessels/boats, Bio-toilets, Aquaculture in saline/alkaline areas, Sagar Mitras, FFPOs/Cs, Nucleus Breeding Centres, Fisheries and Aquaculture start-ups, Incubators, Integrated Aqua parks, Integrated coastal fishing villages development, Aquatic Laboratories Network and Extension Services, Traceability, Certification and Accreditation, RAS, Biofloc & Cage Culture, E-Trading/Marketing, Fisheries Management Plans, etc.[12]

PMMSY scheme primarily focuses on adopting 'Cluster or Area based Approaches' and creation of Fisheries clusters through backward and forward linkages. Special focus are going to be given for employment generation activities like as seaweed and decorative fish cultivation[12]. It emphasizes on interventions for quality brood, seed and feed, special specialize in species diversification, critical infrastructure, marketing networks etc.

II. EXISTING SYSTEM

A fish market maybe a marketplace for selling fish and fish products. It is often a wholesale market between fishermen and fish merchants, or to the sale of seafood to individual consumers, or to both. Retail fish markets, a kind of wet market, often sell street food also.[1]

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Till now we don't have any of the application available in the market which trades/sells fishes online in India. Therefore, arises the need of an application which provides a platform for the users mainly fish farmers, fish vendors and input suppliers to get connected through a medium or a platform.

III. PROPOSED SYSTEM

In this application all the Fishers (Capture), Fishermen and Fish Vendors and Input Suppliers, labs across the country register themselves on a single platform. Initially developed it as a self-managed mobile app. Users can register with a valid Mobile Number and OTP and view other stakeholders in their area as per GIS coordinates. The app should progressively have additional features of information dissemination on PMMSY, Other Government programs, Weather forecast for Fishermen, Knowledge base, Extension services etc.

There may be not many Fishermen and related stakeholders may register themselves and use the App, given the requirement of smart phones with connectivity and digital literacy levels but to ensure high level of registrations of fishermen and other stakeholders and their engagement it will be necessary to involve CSC VLEs who will REGISTER them exhaustively and assist in submitting applications under various Govt. Schemes.

The App will have a component of assisted mode Registrations of Fisherman /stakeholders by CSCs. Post this, as per priorities of DOF additional services of IEC, Training, Govt. Services, PMMSY Services etc. at CSC can be considered and progressively developed, extending the engagement of the team.

IV. METHODOLOGY

Workflow of proposed system [Figure 1]

Step 1: Start

Step 2: Registration

Step 3: Login

Step 4: Validation

Step 5: Profile Creation

Step 6: Gathering Information

Step 7: Exploring functions

Step 8: Logout

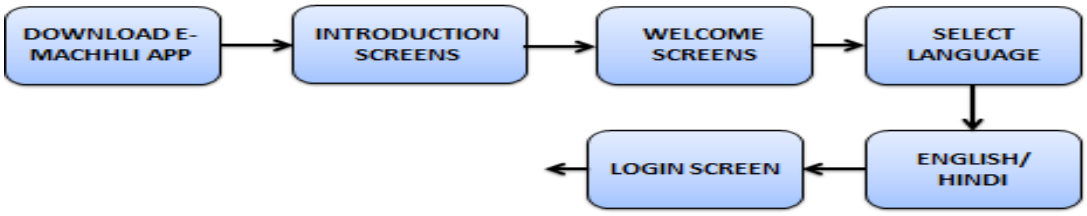

Figure 1: Architecture of system application

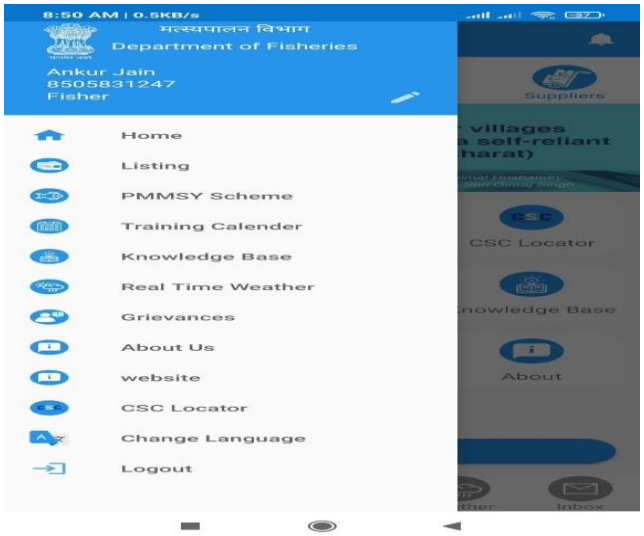

Figure 2: Welcome Screen with Side Menu[11][12]

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V. MODULES DESCRIPTION

In this android application we have mainly four modules. Description of each module is explained in detail below-

1. FISHER

This module provides the fisher details. If the fisher is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials.. The fisher can register the details with proper validation. and all the fields will be required for this registration process. The fisher can add the fishing details, which includes type or variety of fish ,water along with the exact location, and contact number. Then the fisher profile has been generated which can be updated later on as per requirements.

2. FISH FARMER

This module provides the fish farmer details. If the fisher is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials.. The farmer can register the details with proper validation. and all the fields will be required for this registration process. The farmer can add the fishing details, which includes type or variety of fish ,pond details along with the exact location, and contact number. Then the fish farmer profile has been generated which can be updated later on as per requirements. All the manipulation related to adding/deleting of fish variety can be performed easily once the profile is generated.

3. FISH VENDOR

This module provides the fish vendor details. If the vendor is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials. The vendor can register the details with proper validation. and all the fields will be required for this registration process. The vendor have to add the details, which includes type or variety of fish , shop details, contract with government along with the exact location, and contact number. Then the fish vendor profile has been generated which can be updated later on as per requirements. All the manipulation related to adding/deleting of fish variety can be performed easily once the profile is generated.

4. FISH SUPPLIER

This module provides the fish supplier details. If the supplier is new to the application means they need to register for this application first after then they can access this application easily by using their login credentials. The supplier can register the details with proper validation. and all the fields will be required for this registration process. The supplier can add all the fishing details, which includes type or variety of fishes available , pond details, contract with government along with the exact location, and contact number. Then the fish supplier profile has been generated which can be updated later on as per requirements. All the information related to stock of fishes can be generated from here. All the manipulation related to adding/deleting of fish variety can be performed easily once the profile is generated.

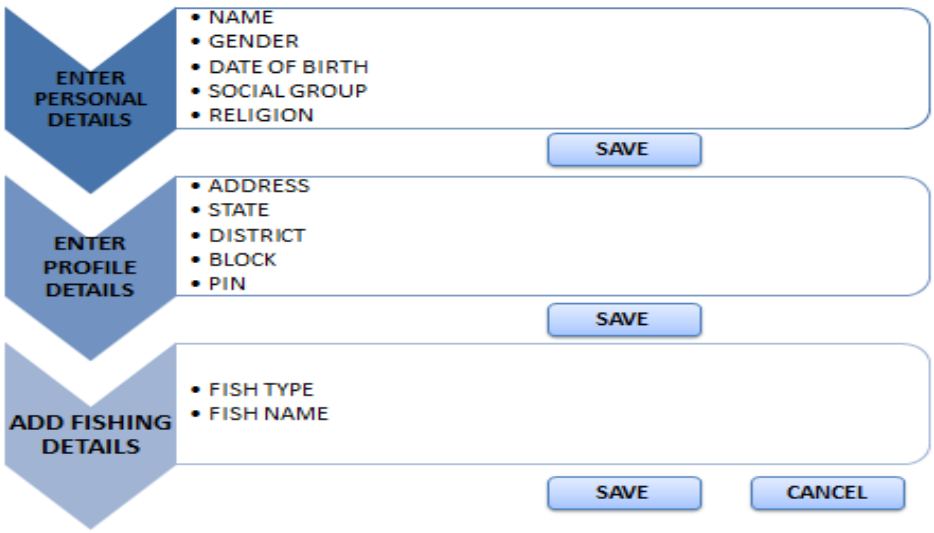

Figure 3: Profile Creation

VI. FUTURE SCOPE

Since in the updated version of this app multiple functionalities can be increased like linking with Aadhar card, various online payment gateway methods can be included, reduction in various complexities. Updation of an application should be done time to time. Website can be modified enhancing many features. Maintenance should be provided to the application and websites with increasing functionalities.

VII. CONCLUSION

E-MACHHLI is the application which is designed as an android application for every individual who is related to the department of fisheries whether its fishers, fish farmers and input suppliers to communicate on a single platform . Till now there was no such existing platform for their communication therefore arises the need of an such application.

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