Team 16

NGO Information Management System 1.0

Android Application Installation Guide & User Manual

Overview:

The user guide is for reference to the coordinator, in case he forgets or faces any problem in the way to proceed to the application

Intended Audience:

- NGO (Client)
- NGO Coordinators
- Business associates/ Investors
- This document is intended for the client to understand the system working, for the Android application. It is for the coordinators who survey the remote villages of Gujarat, to understand the flow of the application transferring data to the server at NGO main station.

Revision History:

Version	**Primary Author(s)**	**Reviewed By**	**Date Completed**
1.0	Megha	Palashi, Aakash	10th April 2012

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1. General Information:

The following is the user guide for coordinators working with the NGO – VSSM, to carry out the data collection using an Android application, rather than the pen-paper reports. The guide gives you all the required information to operate the application and also points of contact in case of difficulty.

1.1 System Overview:

We have developed a web based information management system that takes care of the basic needs of cataloguing the work, evaluating the NGO and its employee(and community) volunteer's performance and aid in creating social maps of the population and the area in which the volunteer is working. This IMS is specifically being designed for an NGO that works for the identity crisis of the Notified and De-notified Tribes of India. They have several projects like low level education of the tribes, acquiring domestic land, voting rights, health of the settlements, acquisition of several national identification cards, projects to enhance tribal art, etc. The IMS assists the organization to keep a permanent and a well managed record of their data which is right of being taken down on paper, it will also be equipped with several relevant statistical analysis capabilities. The IMS is going to consist of 2 parts (both software and hardware wise):

1. Client application – Android Application (which will be with the coordinators) for easy data collection and updating.

2. Server application- Database + CMS (at main centre of the NGO) for database management and analysis of the collected data.

1.2 Authorized Use Permission:

The certificate in the beginning of the manual authorizes the coordinators of VSSM to use the Android application as their data collection methodology. It has all the features necessary to collect the data taken earlier on pen-paper and its analysis is done by the main NGO centre with the help of IMS.

1.3 Points of Contact:

The following people need to be contacted for any difficulty in using the application in general even after training:

- NGO VSSM

In case there is any problem with the application like bugs, errors or system crashes you may contact: sen16@googlegroups.com

1.4 Organization of the Guide:

The user guide starts with the system summary, explaining what it that this application does is.

- It then describes the flow of the application in form of diagram, giving a clear idea of the steps one after the other.
- Then we move to the section 3.0 “Getting Started” which explains every field and button in a precise manner, so that you understand where to click and what to fill in each field while collecting data.
- We end the user guide with general functionalities of the system and how to transfer the collected information to the main NGO centre.

2. System Summary:

The system is basically an Android OS (OS is actually Linux) based application to convert the pen-paper work of data collection about various tribal de-notified families in remote villages and transfer of the information lately to the NGO centre. It helps to fasten the process, keeping the complexity of the overall system low and making it efficient. The NGO coordinators are the user of the application and need to have an Android tab/mobile device, with Internet connectivity for the same. Even if the connectivity is not available on the spot, it should be available in such a time that the data storage as part of the application doesn’t make it too heavy, hence simply it should be available in around 4 hours if coordinators are collecting data constantly during the time.

2.1 Data Flow & Installation:

All activity diagrams are shown along with the page view as the application proceeds, for your ease of use.

Installing the application on Android Tab:

- Connect the USB of tab to desktop/laptop having the .apk file of the android application
- Go to action bar (top above) of the android tab and slide it.
- You will see an option USB Connected. Click on Connect.
- Copy the .apk file
- Go to my computers, where you will see the android tab connected just like a pen drive to the computer.
- Paste the .apk file there.
- Disconnect the USB from android tab.
- Go to Home of android tab (square box on left of the main screen)
- Find the application “APK Installer”. Click on it.
- Find the project NIMS and click on Install.
- It will take some time (not more than a minute) and install.
- Once installed it shows, Installed and starts the application.

- Next time when you want to use the application, don't install again. Just go to Home and search for the application called "NIMS".

2.2 User Access Levels:

The coordinators are allowed to login to the application with a valid username and password, provided by the NGO. Without the same, no data entry can be made. All the forms in the application can be filled only with this access and submitted to NGO server on click of: "Update" or else stored locally on phone by clicking on respective page "Submit" buttons. There is also an option to edit data if the entry made is wrong, but only with a valid login.

2.3 Contingencies:

There is a problem if network connectivity breaks down while transfer of data is happening across mobile phone and server. For such cases, you should contact the development team to fix the problem, as it is not currently handled. Please try to "Update" the data to server only when there is good internet connectivity.

Result: In such case there are chances of data loss from the phone, without reaching the server.

Measure: Try to update data only when there is full network connectivity / Contact on emergency numbers provided.

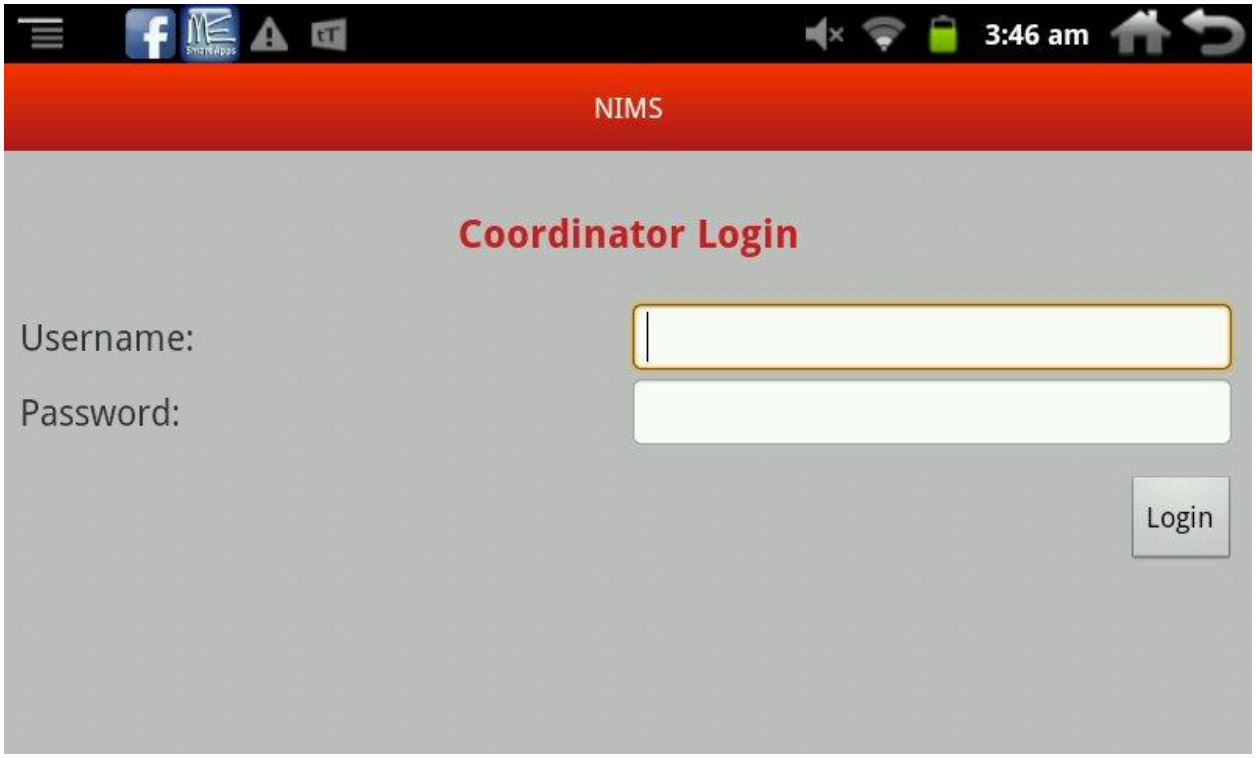
3. Getting Started:

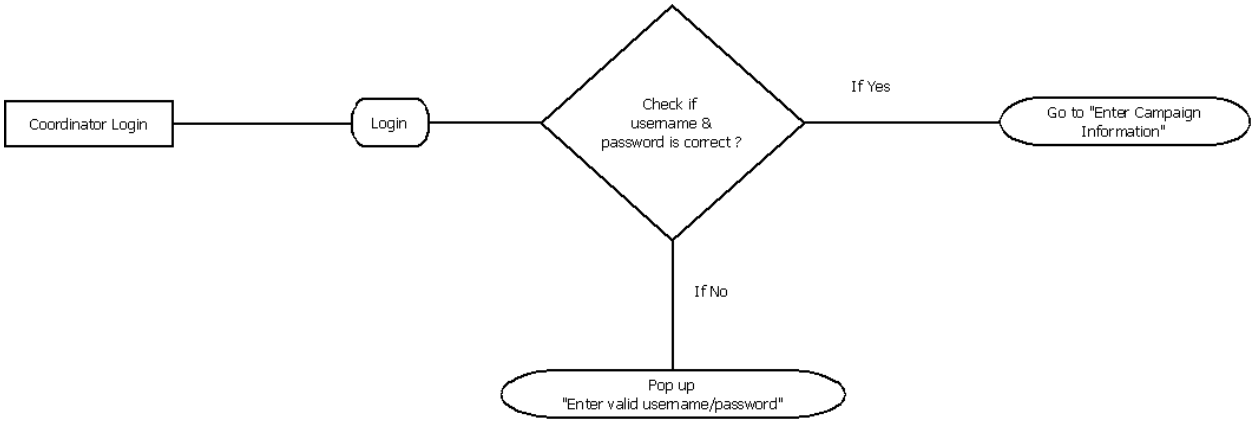
There are various steps to work on the application, called NIMS for data collection by coordinators, which we will see in the steps as we go down. The data flow is depicted in section 2.1 and there is a detailed description of each view down.

3.1 Login –

The first screen, after you click on NIMS application button is login page. The coordinators will be assigned a username and password from the NGO head, which will also be stored in the android phone for authentication.

You need to login with the correct username and password to access the data collection features of the app. If you login incorrectly, a prompt will say "Enter valid username/password" and you need to login again.

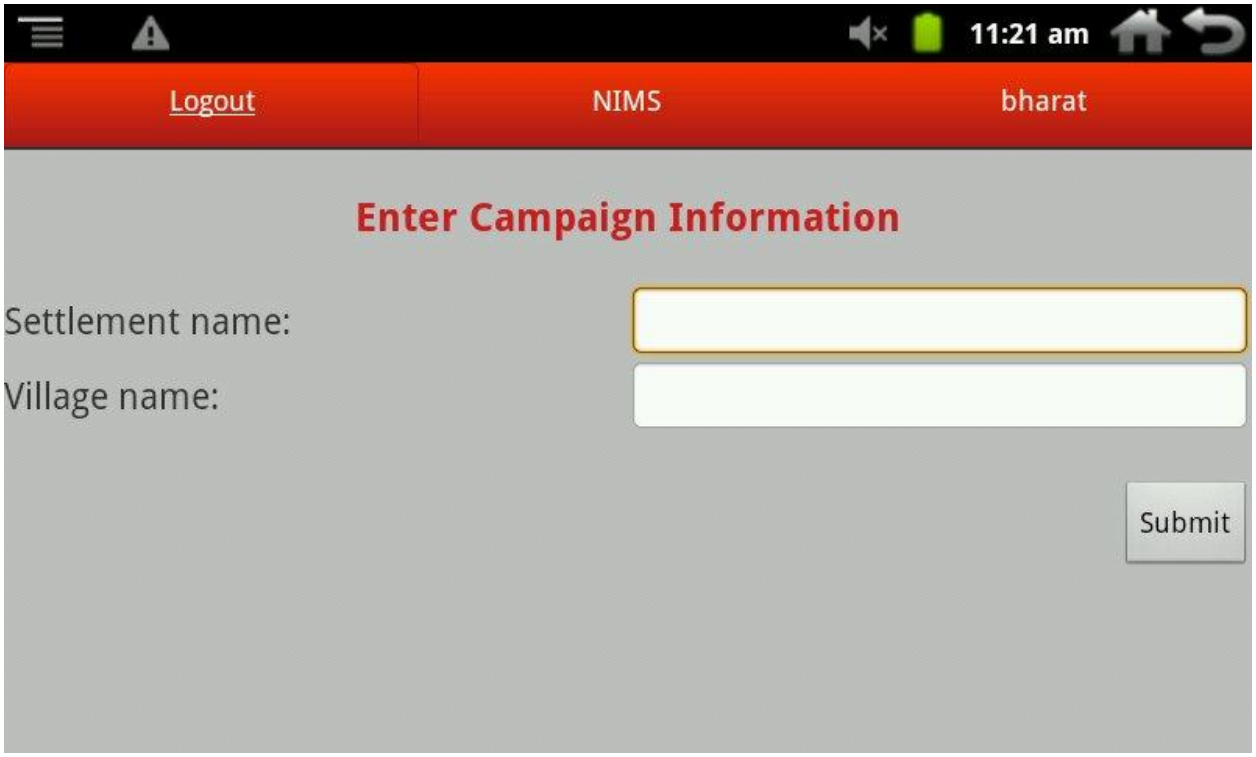


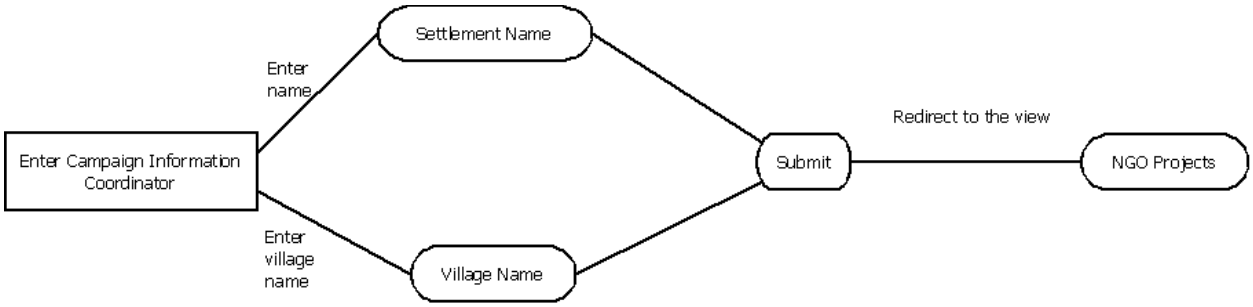


3.2 Village Entry –

Once you click on the login, with the correct username and password, we get the second screen.

It asks for the particular “settlement name” and “village name”, and based on the same shows the district information automatically. You need to click submit to proceed with data entry of that village.





3.3 Options Page –

Once village is submitted, the coordinator gets 3 options to choose: - Family Info, Social Map and Item Distribution. These options are for coordinator to choose what data entry he/she wishes to do.

Family Info

Click on **"**Family Info**"** for data entry/updating related to families, new members or any type of governmental cards (voter ID, Ration card).

Social Map

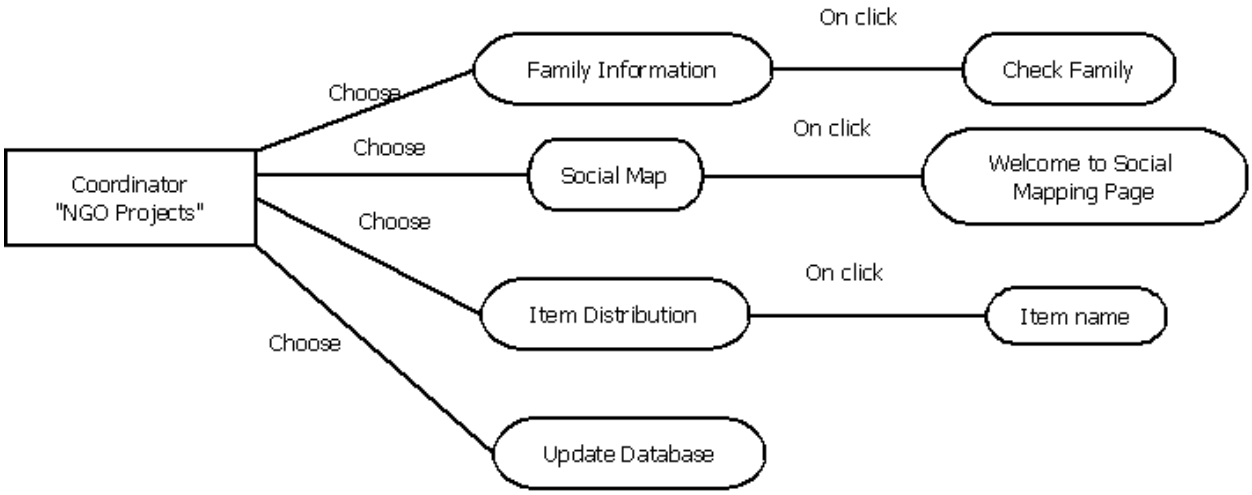
Click on **"**Social Map**"** to record about a new place in village like hospital, school, etc with the GPS tagging automatically done.

Item Distribution

Click on **"**Item Distribution**"** to feed information about any kind of items like clothes, blankets, food, etc been distributed in villages on a day.

Update Database

Click on **"**Update Database**"** to transfer all data from android phone/tab to NGO server.



Check Family -

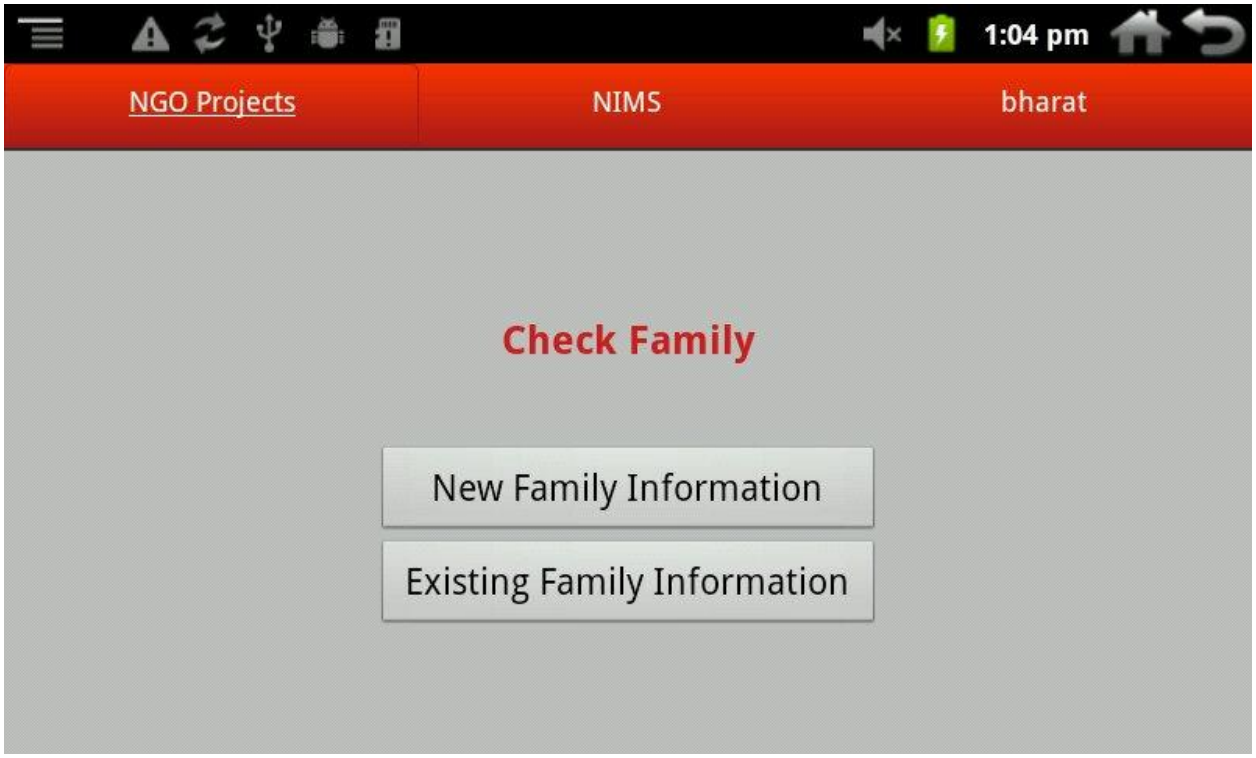
After clicking on “family info” button, the coordinator will get 2 options: - “New Family Info” and “Existing Family Info”.

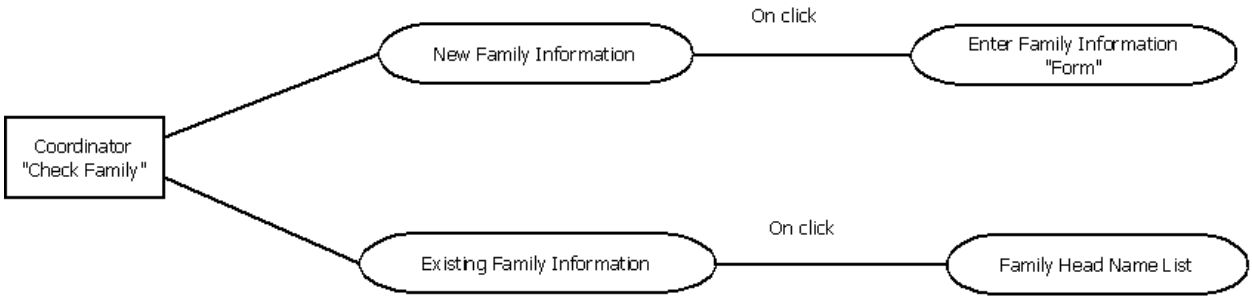
New Family Information

Click on **“**New Family Information**”** to do data entry of a new found family in the village.

Existing Family Information

Click on **“**Existing Family Information” if you want to see the details of a family. You need to click on this button also if you want to update any information related to the existing family. E.g.: ration card status update, adding a new member.

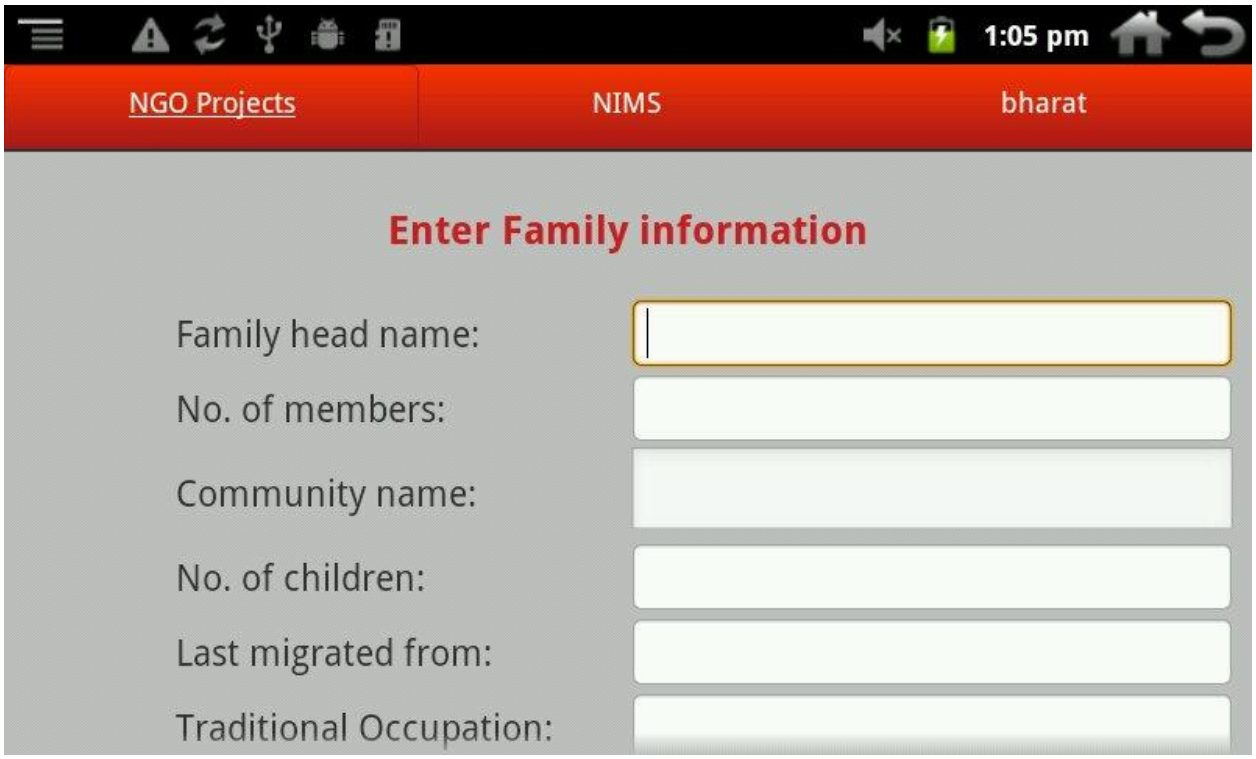




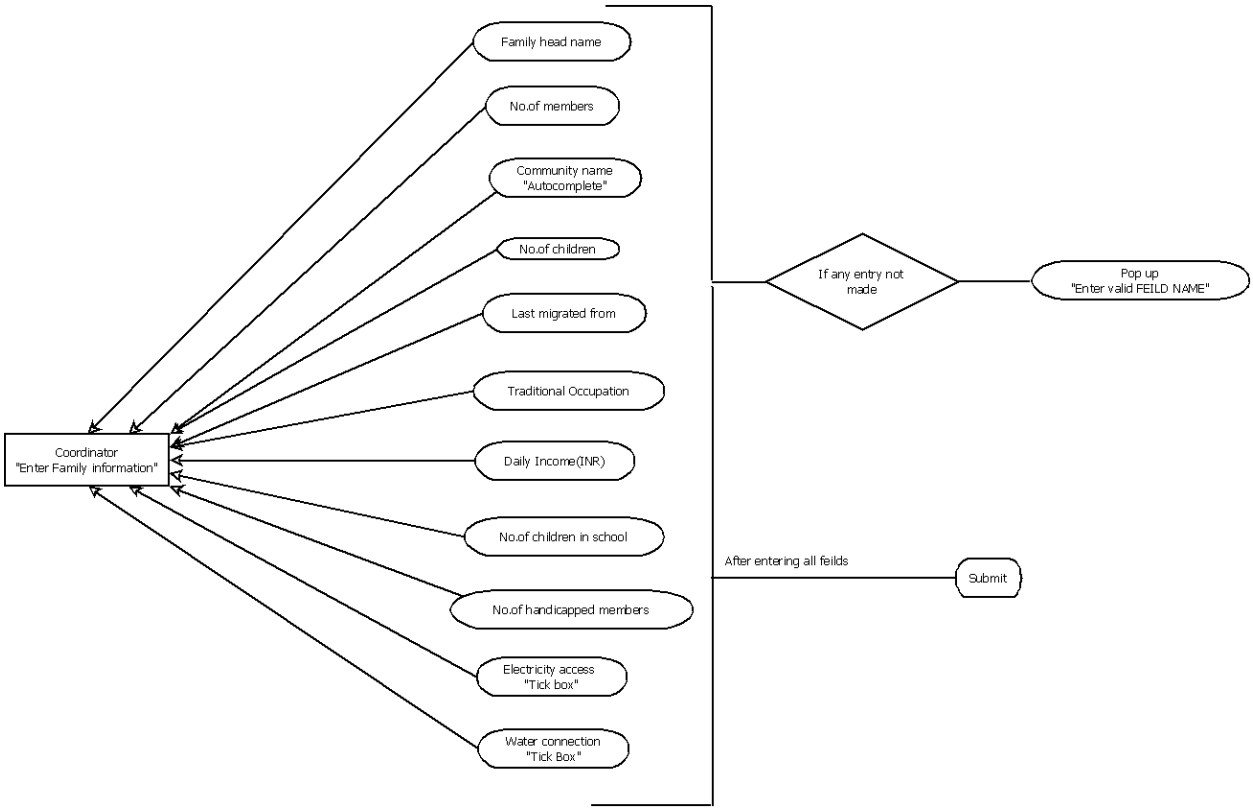
New Family Information-

As the coordinator clicks on this button, it gets a form (as the one they filled earlier for families on paper) with the fields as shown in the picture:

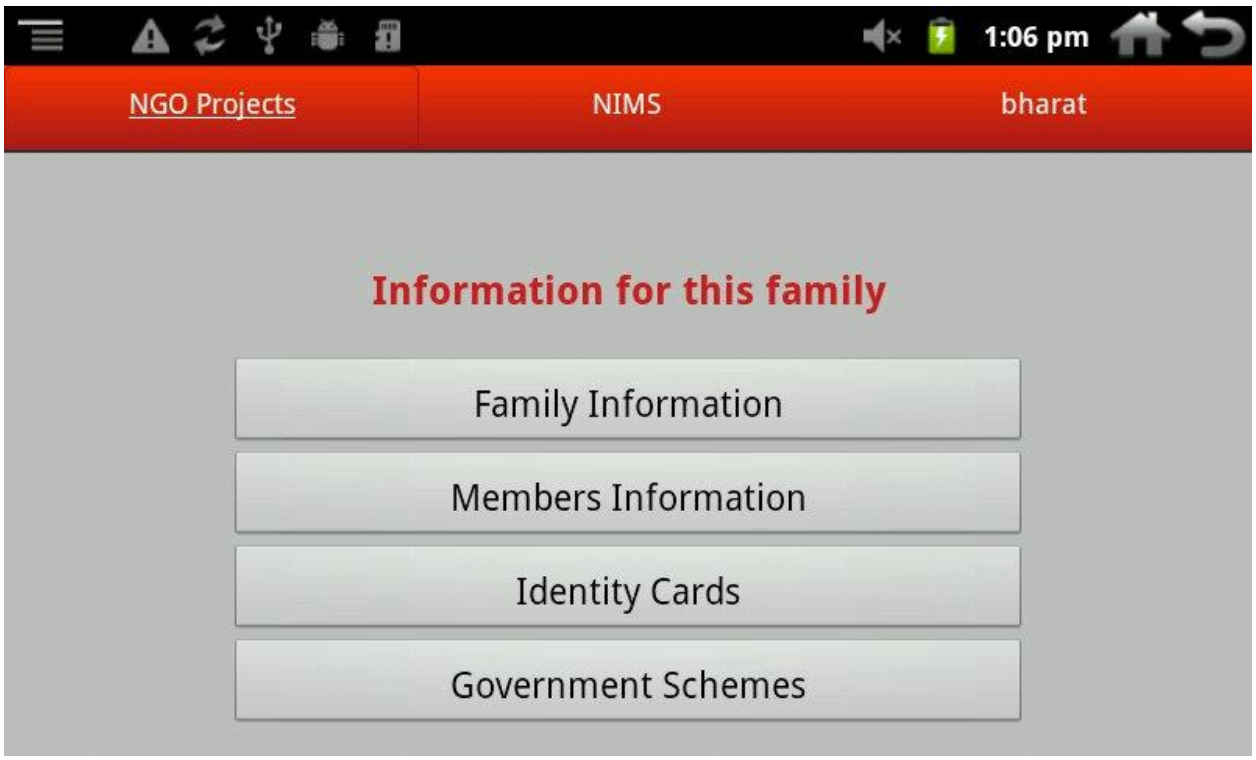
There is validation for strings and numbers the fields, i.e.: If you try to enter a character in the number of people in the family, it will show an error message; hence you need to correct such human errors and click on “Submit”.



And there are more fields as well, as shown in activity diagram below.

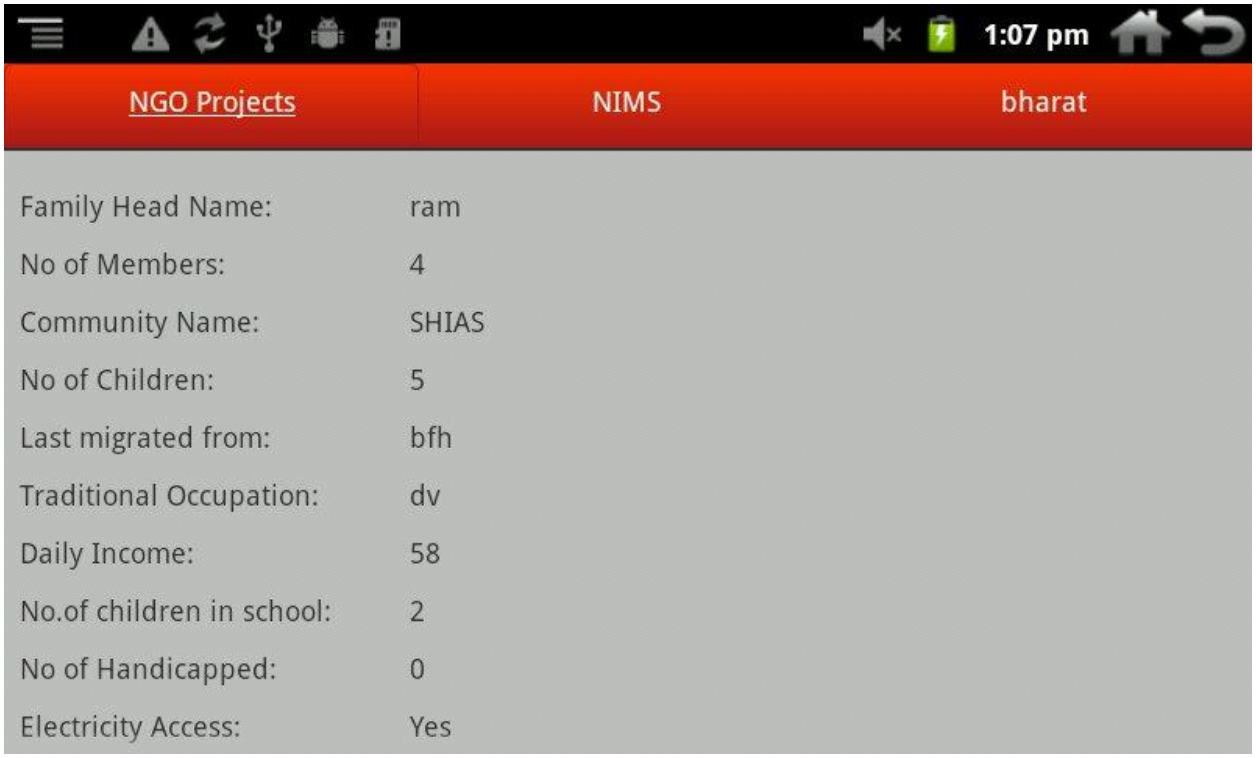


Once submitted there are 4 options:



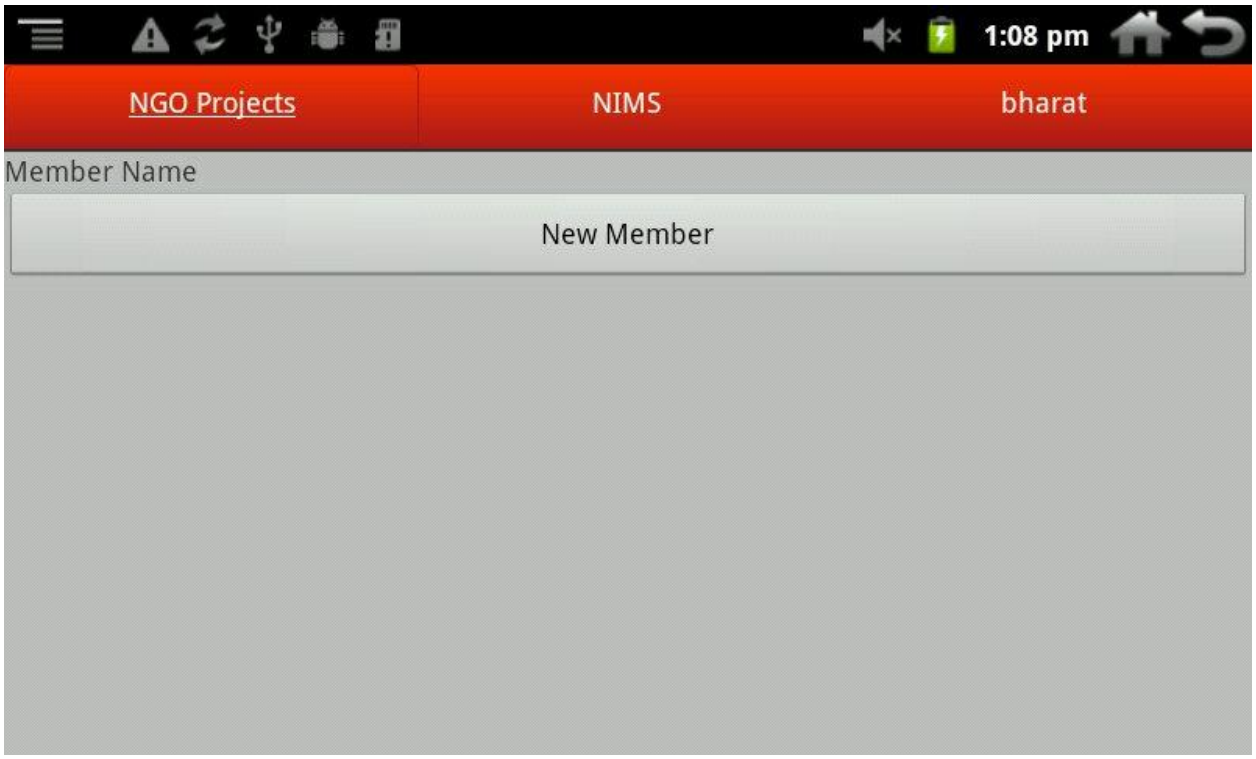
Family Info –

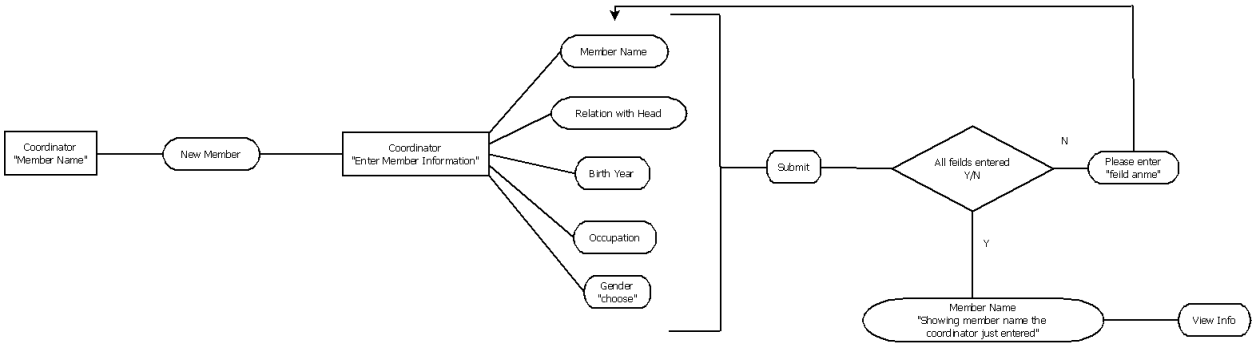
Click on “Family Info” button to look at the current entered families’ information. To see families surveyed earlier you have to choose “Existing Family Info” button Here you will see the same information you entered in the previous form.



Member Info –

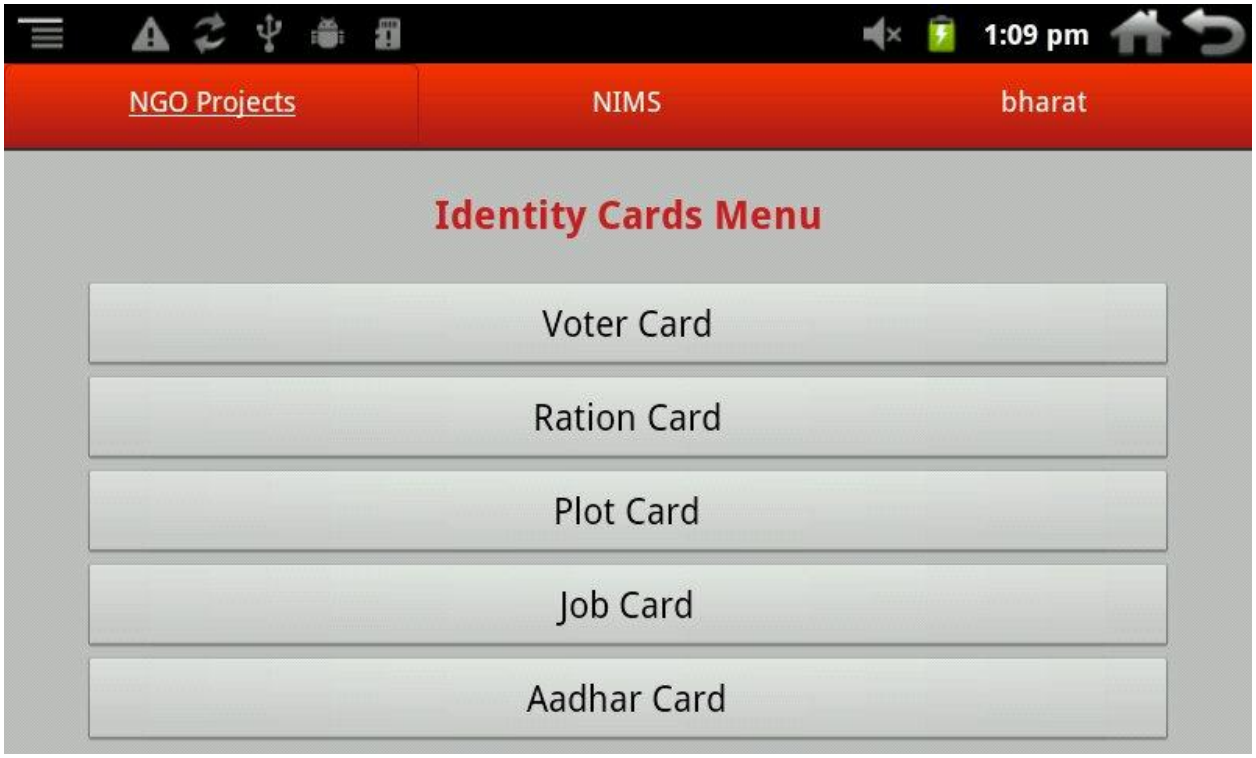
Click on this button to enter details of family members. Fill in the fields as shown and click “Submit”.

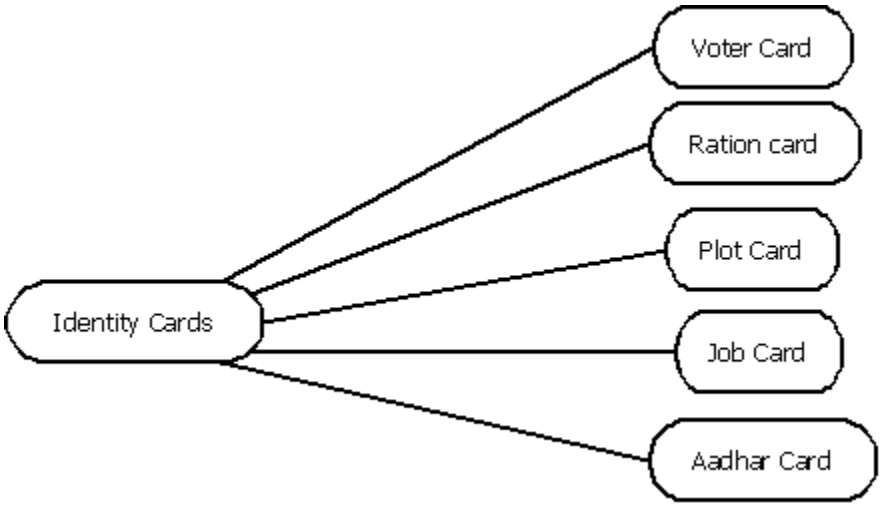




Identity Cards –

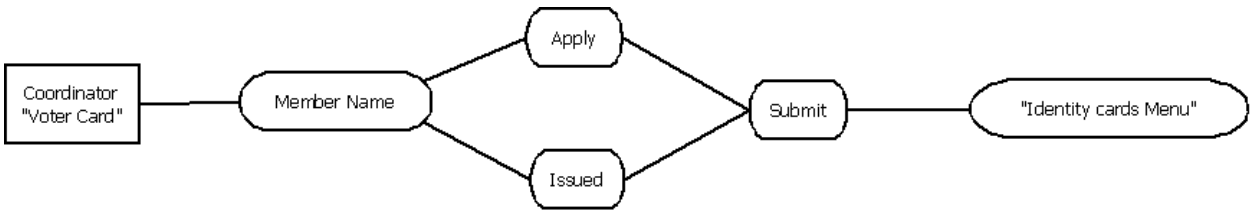
Click on this to see the various available options for cards (both individual and family wise). As you click on this button you get option of 5 types of card:





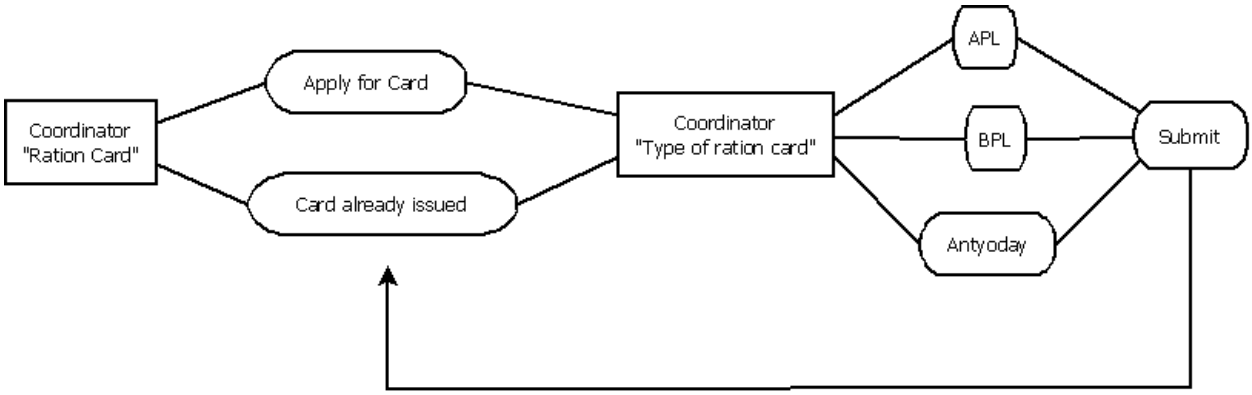
Voter Card –

It has 2 options: - apply & issued. Click on the suitable radio button to register it for the member of the family.



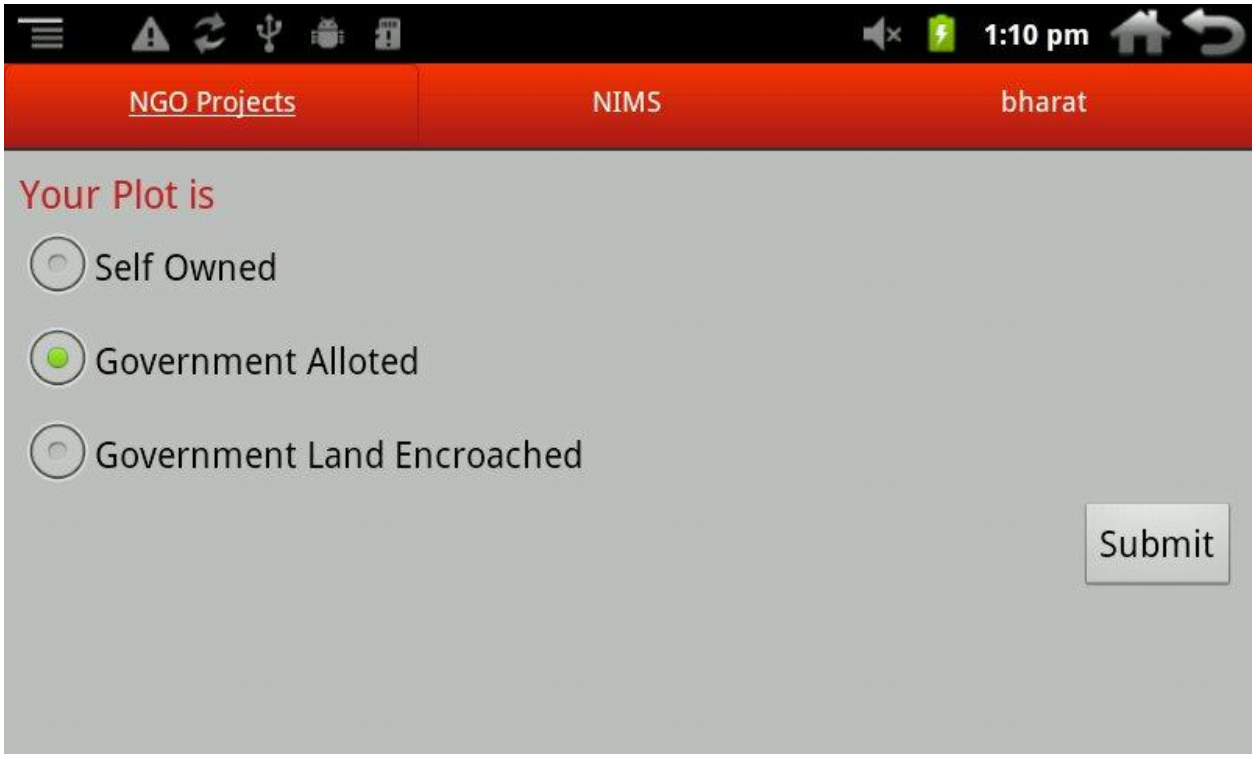
Ration Card –

It has 2 options:- apply for card & card already issued. Click on the suitable radio button to register it for that family.

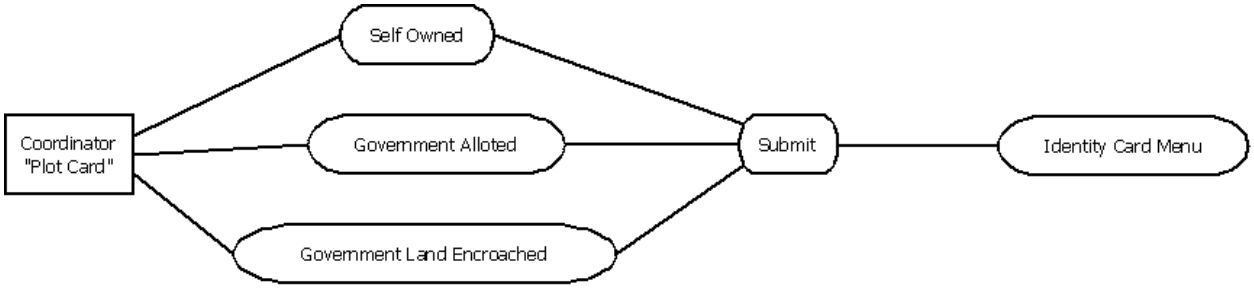


Plot Card –

It has 3 options:-self owned, government allocated & government encroached land. Click on the suitable radio button to register it for that family.

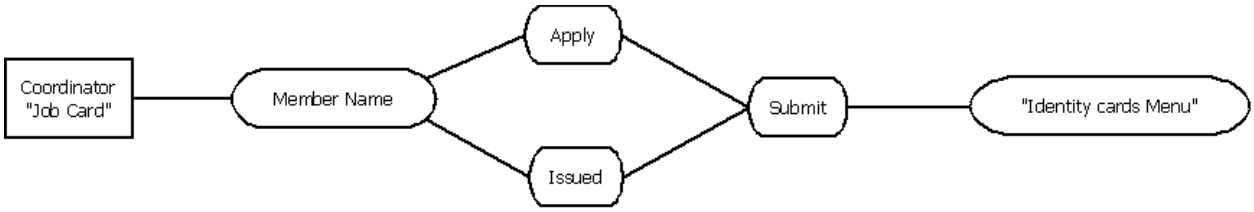


Note: All cards have similar view, with options as written hence, not repeated in all card categories.



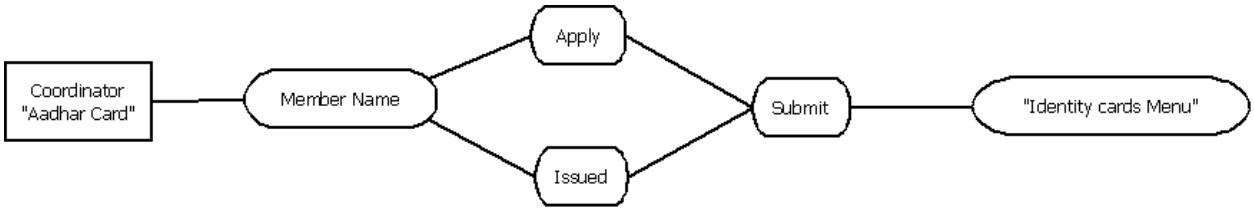
Job Card-

It has 2 options: - apply & issued. Click on the suitable radio button to register it for that member of the family.



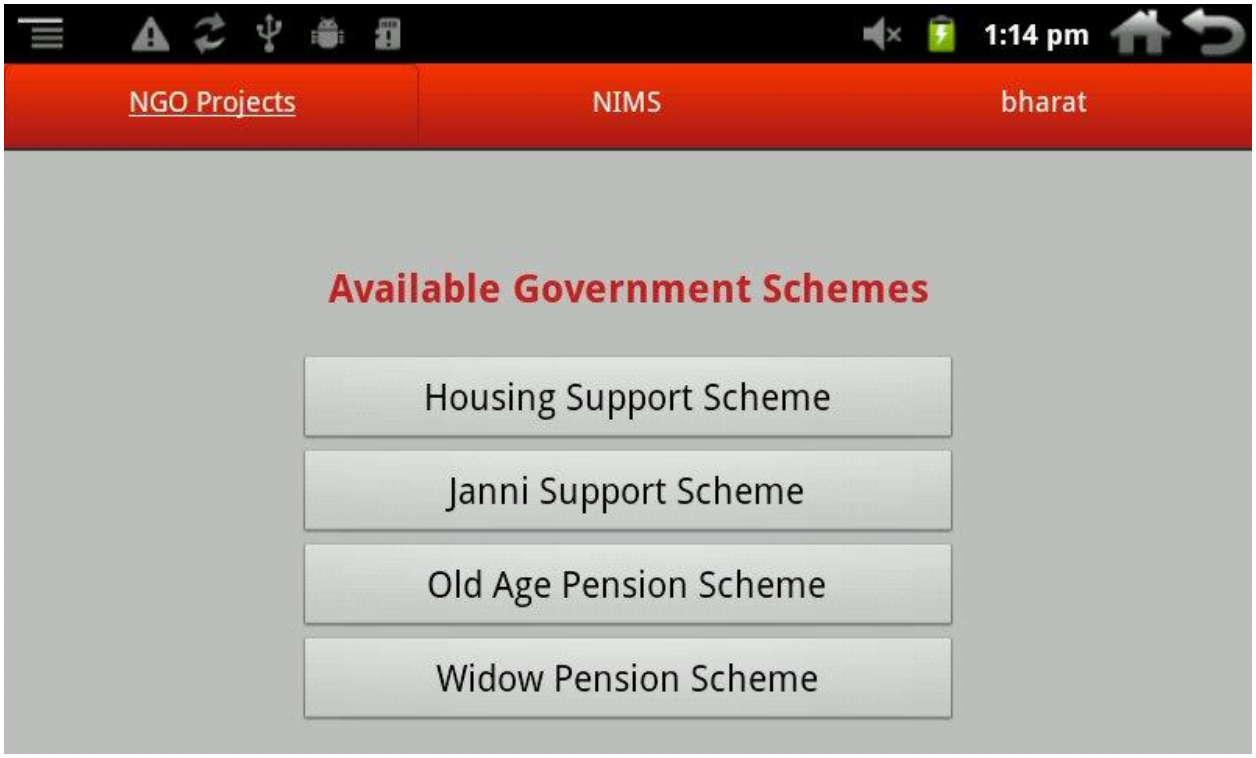
Aadhar card –

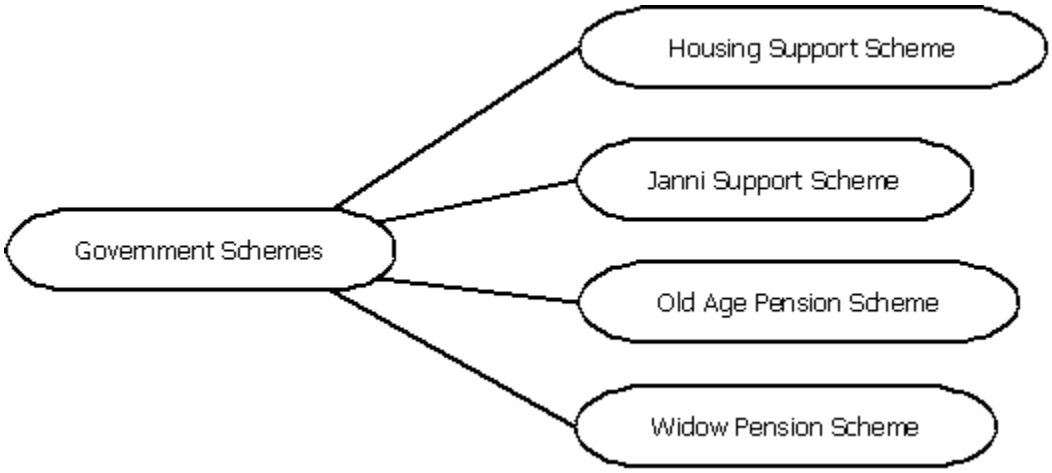
It has 2 options: - apply & issued. Click on the suitable radio button to register it for that family.



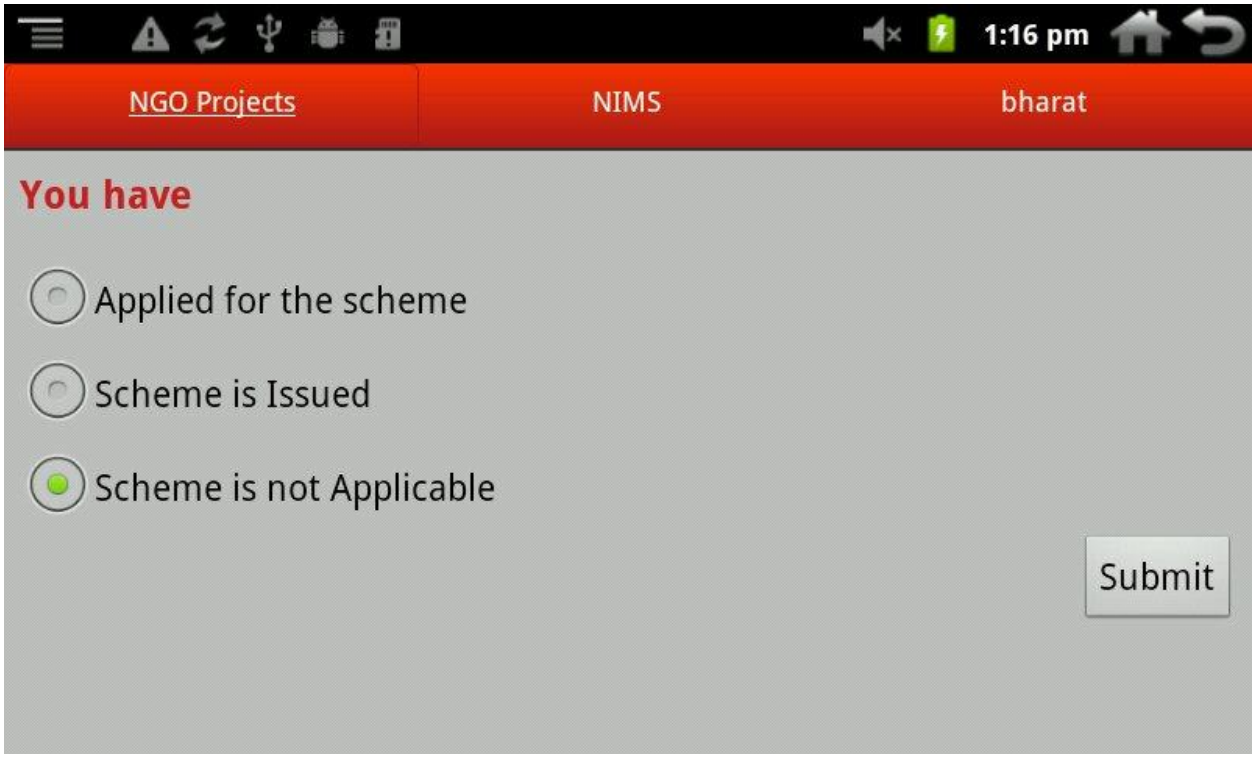
Government Schemes **–**

This button is to enter information about various government schemes available to tribal people. To do entry about the same, click on this and you will get 4 schemes which are:

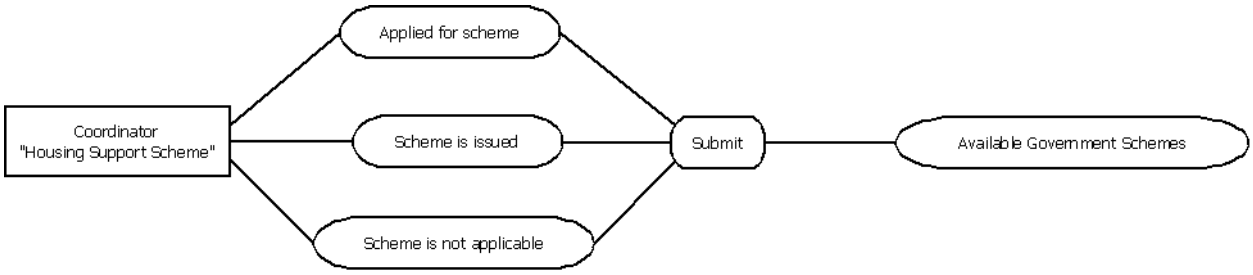

1:14 pm
NGO Projects
NIMS
bharat
Available Government Schemes
Housing Support Scheme
Janni Support Scheme
Old Age Pension Scheme
Widow Pension Scheme


Government Schemes
Housing Support Scheme
Janni Support Scheme
Old Age Pension Scheme
Widow Pension Scheme

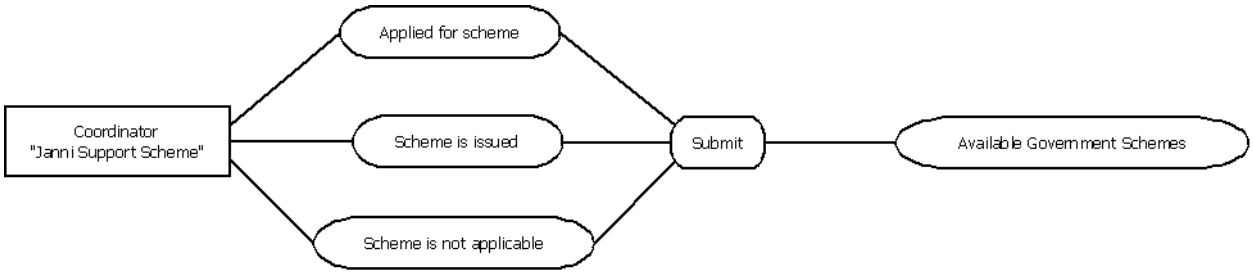
Housing Support Scheme –



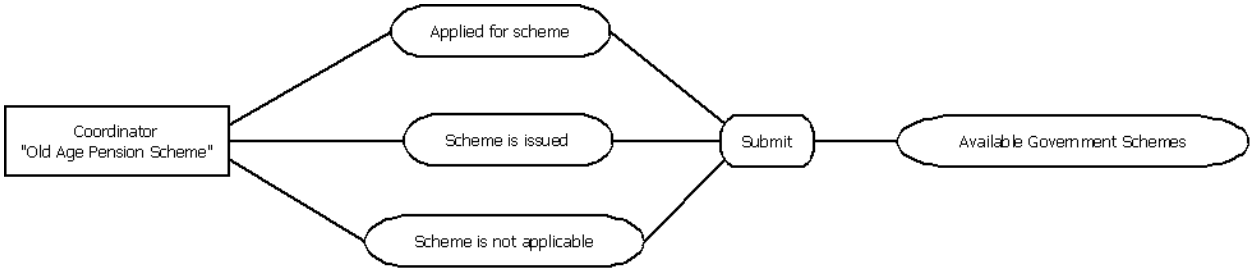
Note: All schemes have the same view and options hence not repeated for all.



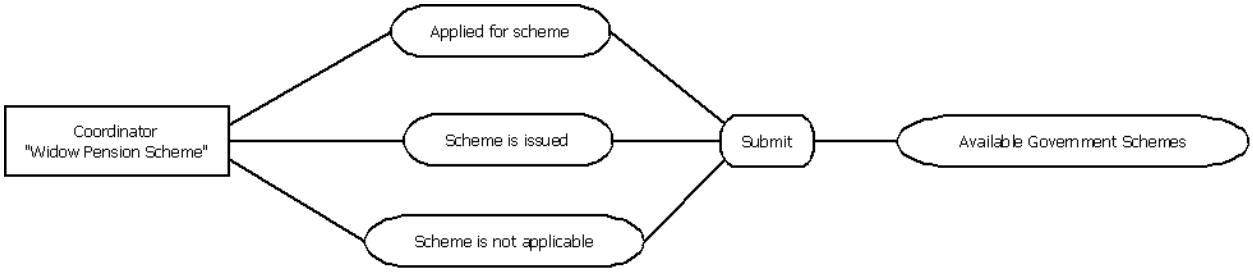
Janni Support Scheme –



Old Age Pension Scheme **–**



Widow Pension Scheme **–**

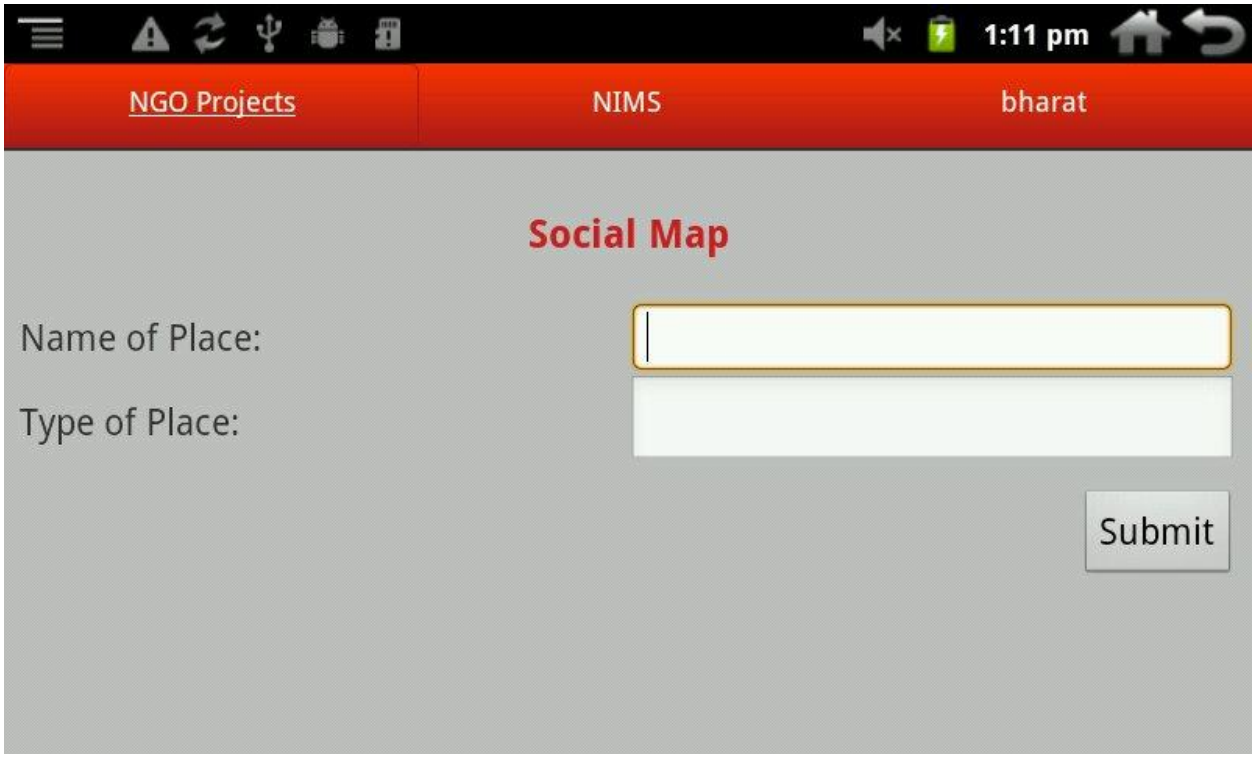


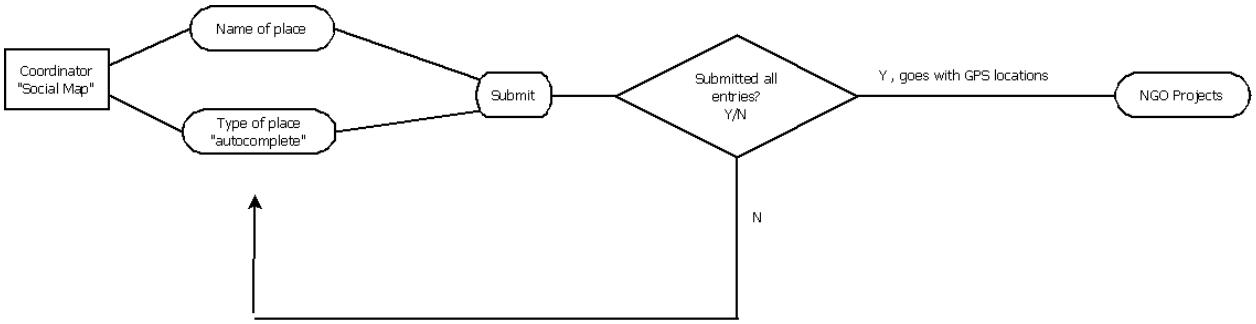
Social Map –

You need to click on this button to enter about a new place in the village/settlement, like school, hospital, chemist shop, barber shop, etc.

This information is transferred to the server once you click the submit button along with the GPS coordinates. You need to make entry about the following fields as shown in the picture.

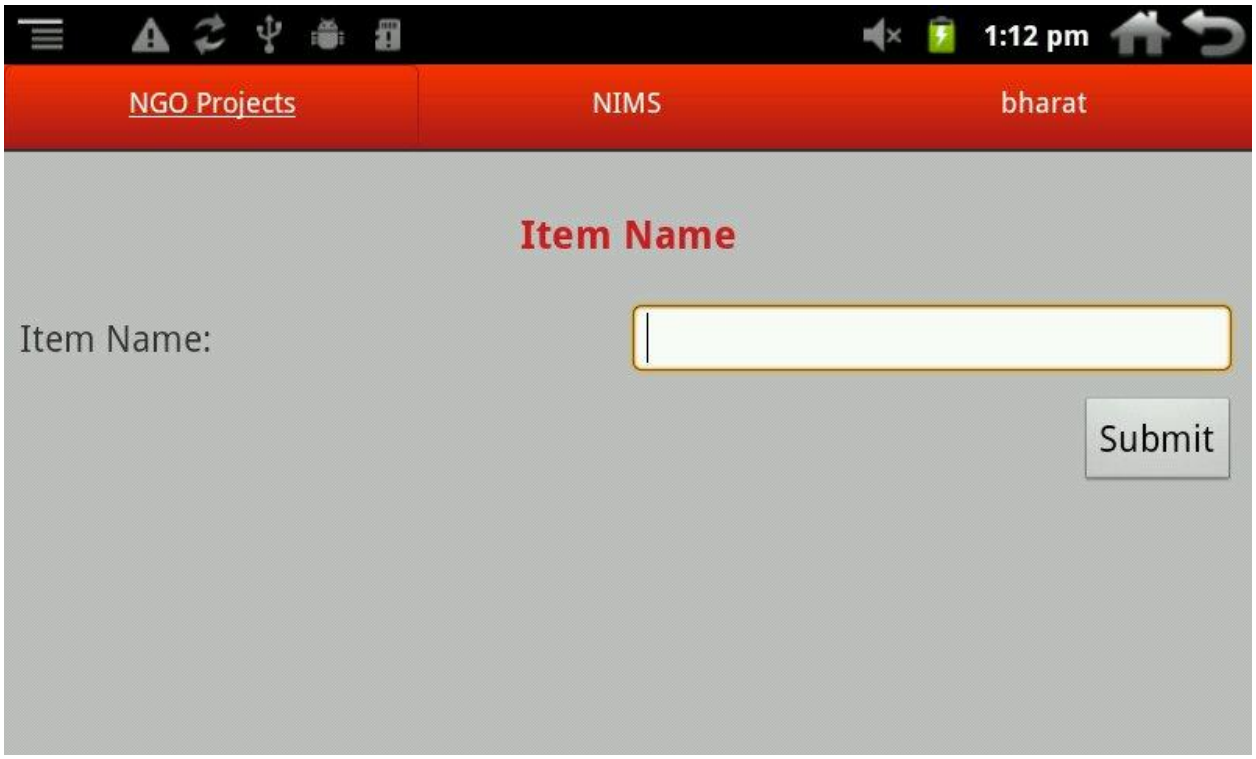
The type of place has an auto complete feature, to help the coordinator know what exactly to fill for new places.

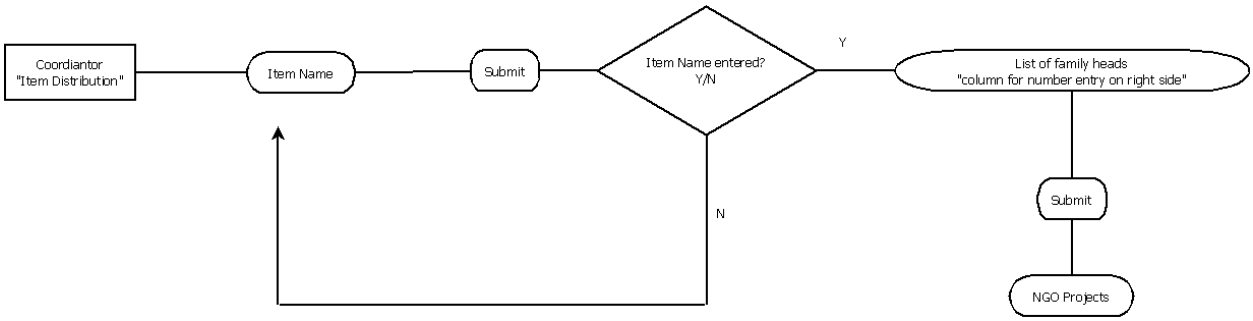

1:11 pm
NGO Projects
NIMS
bharat
Social Map
Name of Place:
Type of Place:
Submit


Coordinator "Social Map"
Name of place
Type of place "autocomplete"
Submit
Submitted all entries? Y/N
Y , goes with GPS locations
NGO Projects
N

Item Distribution –

You need to click on this button to tell an item distributed in a settlement and to which family, in what quantity.





Update Database –

You need to click on this when there is Internet connectivity to transfer the data collected to NGO main server. This also clears the data from android phone/tab keeping the application light and fetching the data again from server when you want to see families that are already present or want to edit them.

4. General Functionalities:

To go back – Click on the back button of android phone on top right corner.

To submit information – Click on Submit button, below every data entry.

To transfer information to the server – Click on update information button.

To logout from the application – Click on logout button on the campaign information page or on NGO projects page.

5. Reporting:

All the data transfer is done on click of “Update” button, to the server on the main NGO site, whenever there is GPRS connectivity. Also the information is deleted from the SQLite database in Android phone, once the data transfer occurs, to keep the application light. When you want to get information about families/members that you have already surveyed, the list of families for the particular settlement and village comes from the server again.