

Base Line Survey of Farmers In Siddharthnagar District

By





A Chinese monk wrote “When Gautam Budhha visited Kapilvastu for the first time after attaining enlightenment; he gifted Kala Namak to the local people as “Prasad”. He asked them to sow it in marshy land, it is due to this reason this rice is also called as “Buddha’s Gift”. This rice was also found in the kitchen store of a house in UP in one of the excavation.



Survey in Village-Teknar-Babun Tiwari



Focused Group Discussion in Village-Ramwapur Nankar



Focused Group Discussion in Pakdi Village

Siddharthnagar is one of the **75 districts** of Uttar Pradesh state in Northern India. Naugarh The district is known for the ruins of the Shakya Janapada, at Piprahwa which is 22 km away from the district headquarters Naugarh. The district was named after **Prince Siddhartha**, the pre-enlightenment name of Buddha, as he spent his early years (till the age of 29 years) in Kapilavastu, parts of which included territory in this district. The district borders Nepal's district Kapilvastu on the north and Rupandehi on the northeast. Otherwise it is surrounded by other districts of Uttar Pradesh: Maharajganj on the east, Basti and Sant Kabir Nagar on the south, and Balrampur on the west. Siddharthnagar's area is 2,895 km square.

Niti Aayog has identified 117 districts of India as aspirational districts. These districts were identified on six indicators i.e. Health and Nutrition, Education, Agriculture and water resources, financial inclusion, skill development and basic infrastructure. Siddharthnagar is one of eight aspirational district of Uttar Pradesh. The most of population is dependent on agriculture The most of land are fertile, main crop rice, wheat, mustard & potato , Kalanamak variety of rice very popular . Most of the farmers (80 %) come under small and marginal category whose income is not sufficient to meet put the daily expenditure of their family. Low Seed Replacement Ratio (SRR) and less adoption of certified seed, poor soil health, facility and unbalanced use of fertilizers, inadequate credit flow, land degradation and depleting water resources, slow pace of mechanization are the major cause behind yield gap in most of the crops. The District agriculture depends with rain water and weather; most of season gets good weather & rain water. In Context of vulnerability of agriculture to climate change,Siddharthnagar is ranked 26th most vulnerable district out of 161 district studied in indo gangetic plain. Its vulnerability increases due to its low human development index, irrigated area & fertilizer consumption.(Source: Vulnerability of agriculture to Climate Change : District Level Assessment in indo gangetic plain by IARI in 2013).

1.2 Focus of the baseline:

The baseline study primarily focuses on status of famers doing paddy in 17 villages of district Siddharthnagar. It also focuses on socio economic status of selected farmers as well as volume of Kala Namak , market access and perception towards proposed Farmer Producer Company .

1.3 Methodology of Study :

1.3.1 The determination of the overall sample size for the Baseline study is governed by several considerations, including key indicators, the availability of resources, and logistical considerations. This study is seen as providing data for a baseline that can be compared at mid point and end of the project in terms of improved practices of paddy agriculture, increment in agriculture income and market access. The Baseline Study aimed to cover 100 households in Siddharthnagar district.

[Note: A sample of size 80 gives estimates with 95% of confidence and 5% of margin of error in estimating proportions for a population size from 5000 and above.]

In each village one village profile was compiled and in each cluster, in the biggest village in terms of population, one FGD was conducted to get an overall village overview.

S.No	Name of the village	Name of the Block	HH Interview	FGD
1	Niyaw	Shohratgarh	8	1
2	Ramwapur	Shohratgarh	9	1
3	Teknaar	Shohratgarh	5	1
4	Baghwa	Shohratgarh	7	1
5	Bhadaav	Shohratgarh	5	1
6	Karma	Shohratgarh	6	1
7	Pakadi	Shohratgarh	5	1
8	Khargwar	Shohratgarh	4	1
9	Parigawa	Shohratgarh	4	1

10	Chodar	Shohratgarh	5	1
11	Palta Devi	Shohratgarh	6	1
12	Mudila Khurd	Shohratgarh	5	1
Total			100	12

In the baseline study two tools were used to collect information:

- Household Tool
- Focus Group Discussion

1.3. Training :

In the baseline study two tools were used to collect information:

- Household Tool
- Focus Group Discussion

Training for data collection was carried out at SES Office in month of February 2020. The training agenda and plan were prepared keeping in mind the information needed by the data collection team in order to gather relevant and robust data for successful completion of the study. Interactive sessions used for the training helped participants to learn two tools thoroughly and they also participated enthusiastically in mock sessions. After each session/ tool, feedback was given to the participants and also clarifications were made if any doubts arise in between the session.

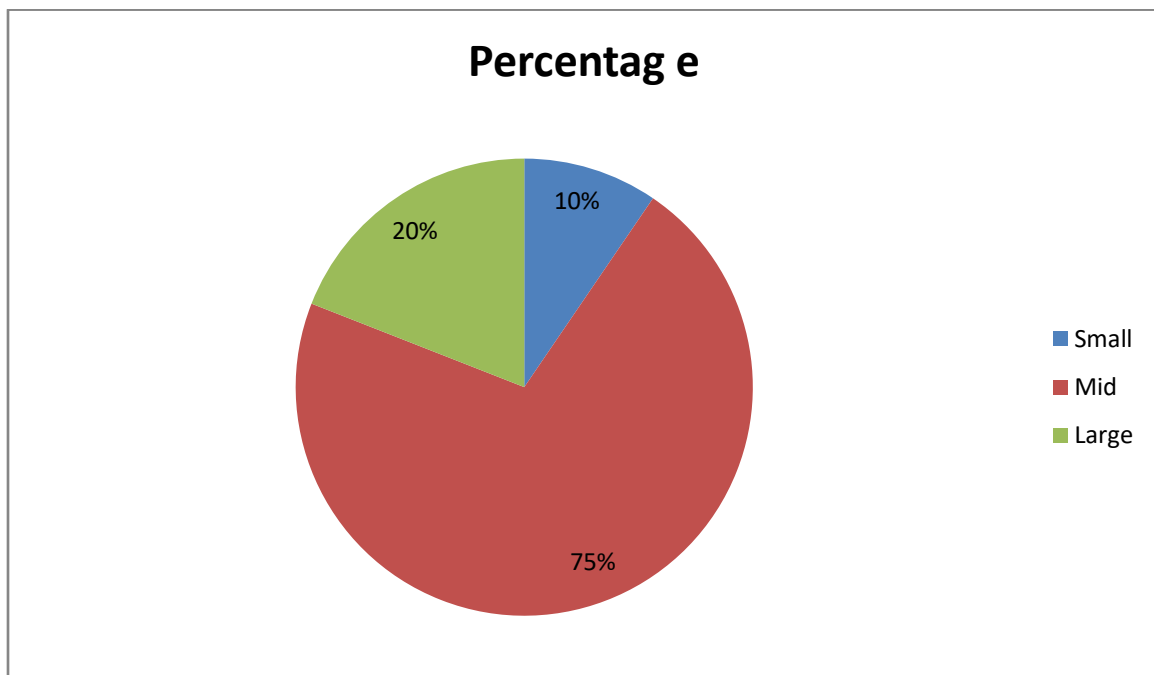
1.3.4 Field Work and Data Collection

The entire field work was completed in around one month. The surveyors were involved in filling up of household survey and conducting Focus Group Discussion. SIF Team members has monitored and supervised data collection.

Scrutiny at village level was done by the data collection team under the guidance of team. Computerised checks were used to clean and validate the data, which was then analysed for table generation. The chapterization and tabulation plan was shared for writing this report.

2.1 Demographic Profile:

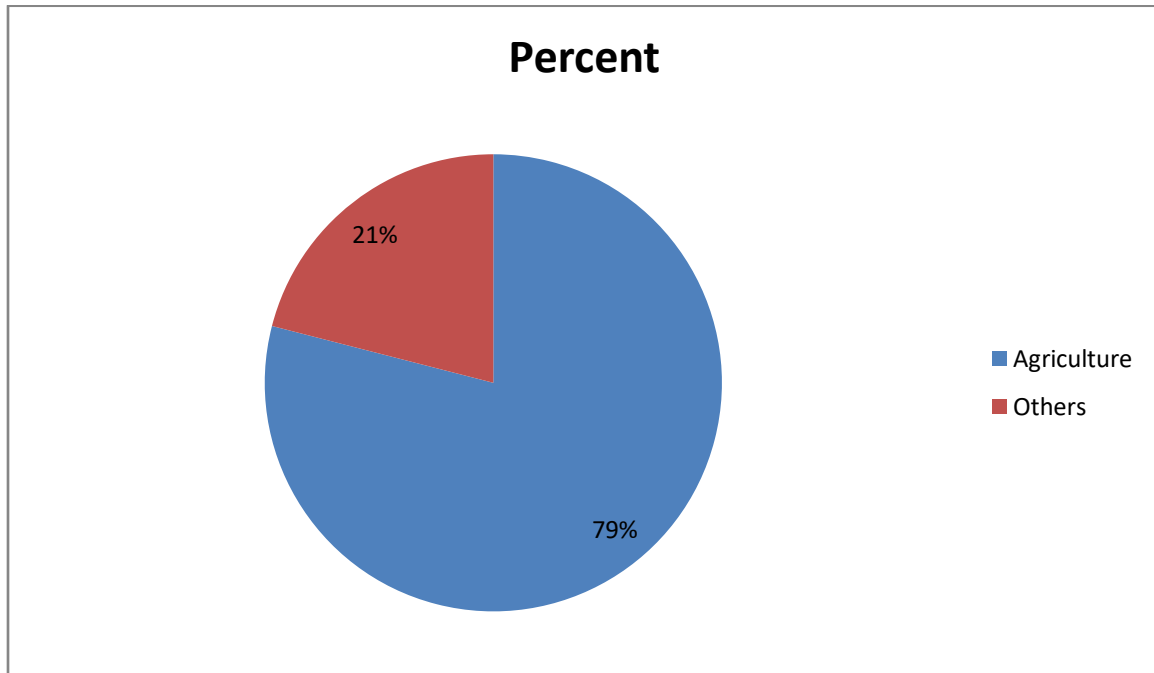
The total number of households in all the villages combined was noted to be 2480. In terms of demographic Profile, with respect to various castes residing in the 12 villages include Scheduled caste nearly 17 percent of the households. The general category contributed about 12 percent of the households residing in the sampled villages. Nearly 71 percent of the households belonged to other backward castes.



For the purpose of this study, size would mean the total number of households found in the village, for the sake of this analysis, a village is considered as small if it has less than 100 households, a medium village would have households' b/w 101-300 and a large village would mean any village having more than 300 households.

2.2 Primary Occupation

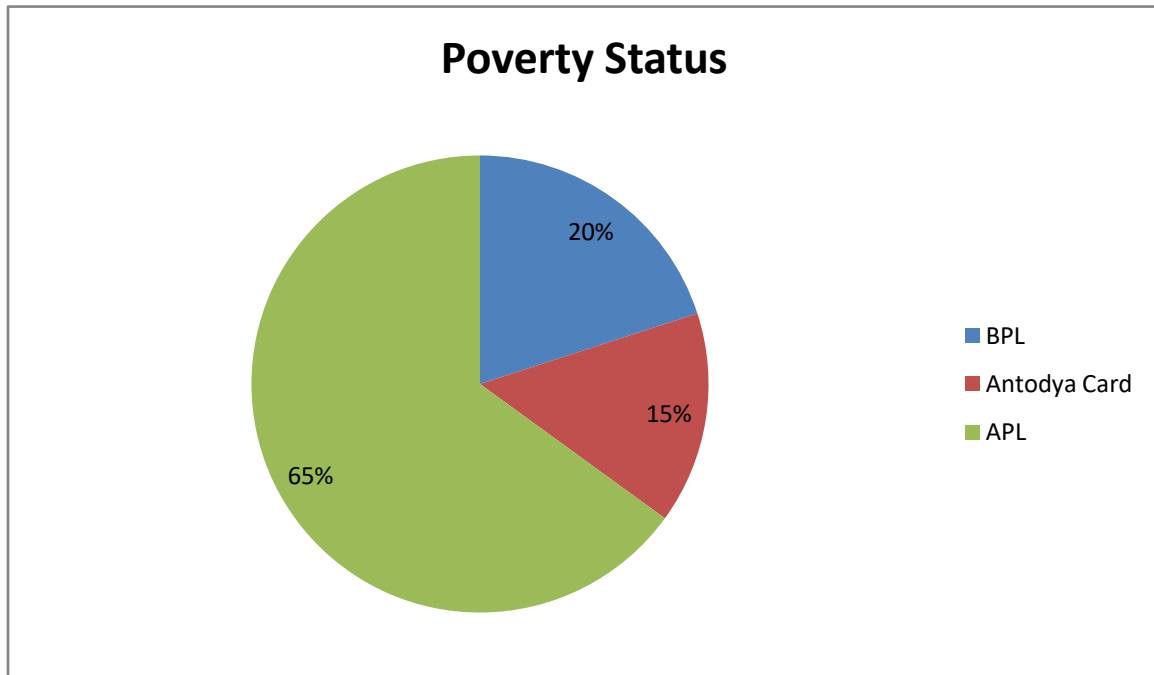
The study indicated that maximum proportion of the households was primarily involved in agriculture and contributed to about 79 percent of the total households. About 21 percent of the households across all the 12 villages were reported to be working on other's field.



2.3 Poverty Status

With respect to the Poverty Status of the households covered across the 12 villages, it was noted that nearly 20 Percent were Below Poverty Line cardholder and about 65 population belonged to the category of Above Poverty Line. Amongst the rest, about 15 percent

reported to belong to the category of Antyodaya card holders.



2.4 Basic Infrastructure

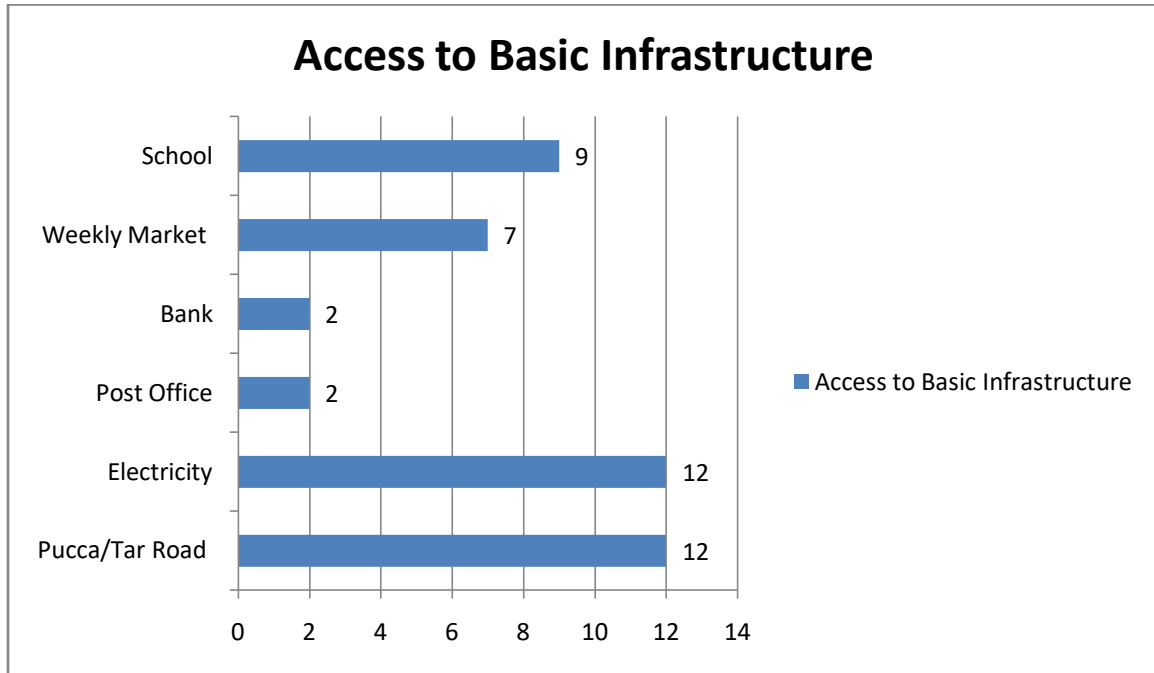
The basic infrastructure was studied with respect to the villages and it was noted that all the villages were electrified. In terms of Educational Infrastructure Primary Schools were reported to be present in 70 percent of the villages. With respect to Drinking Water Sources, hand Pump was the pre-dominant source present in nearly 70 percent of the villages

These basic infrastructure facilities can be further divided into two sub-facilities namely:

1. Basic Infrastructure facilities i.e. Road to the village, electricity connection to the village, presence of a post office in the village etc.
2. Health facilities i.e. presence of a sub-centre and a veterinary centre in the village, is there a doctor/ Rural medical practitioner in the village.

2.4.1 Basic Infrastructure facilities

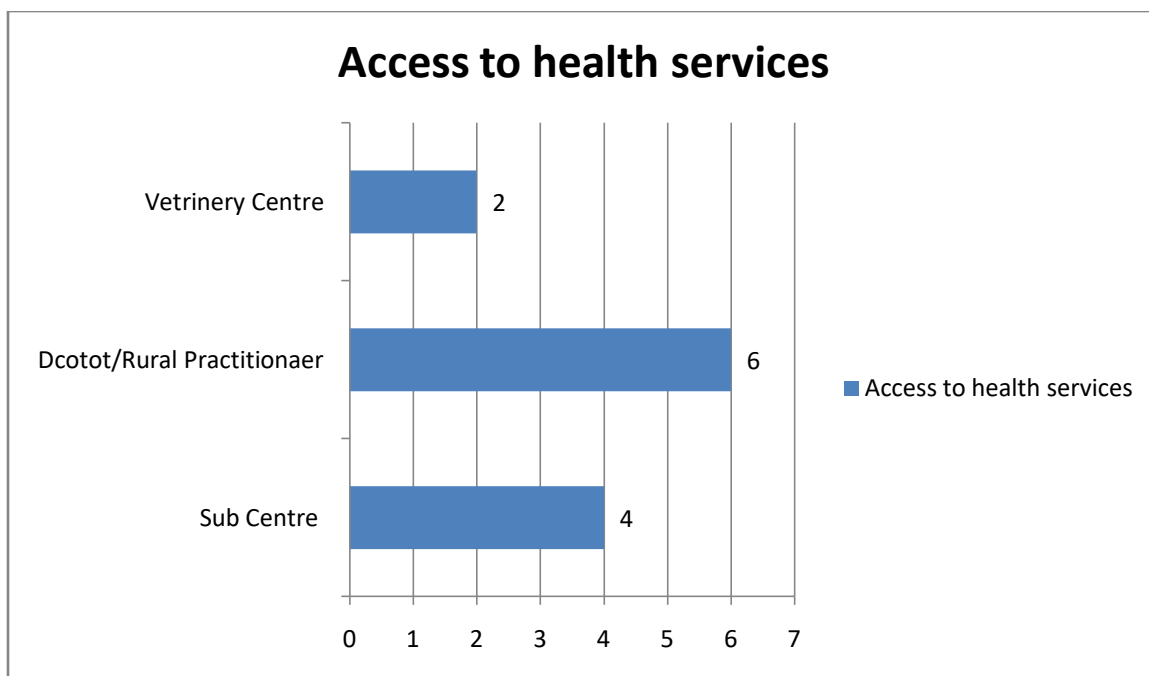
On further analyzing the data, it can be clearly seen that village Mudila Khurd in district Siddharthnagar has access to 5 of the below given basic infrastructural facilities. Details are given in below chart:



2.4.3 Health facilities

Yet another standard for measuring basic infrastructure would be access to institutions and individuals that provide health facilities like sub-centre and doctors etc. Figure below shows

:



2.5 Irrigation Facilities With reference to irrigation facilities, it was noted that out of total cultivable land, maximum area was under irrigation.

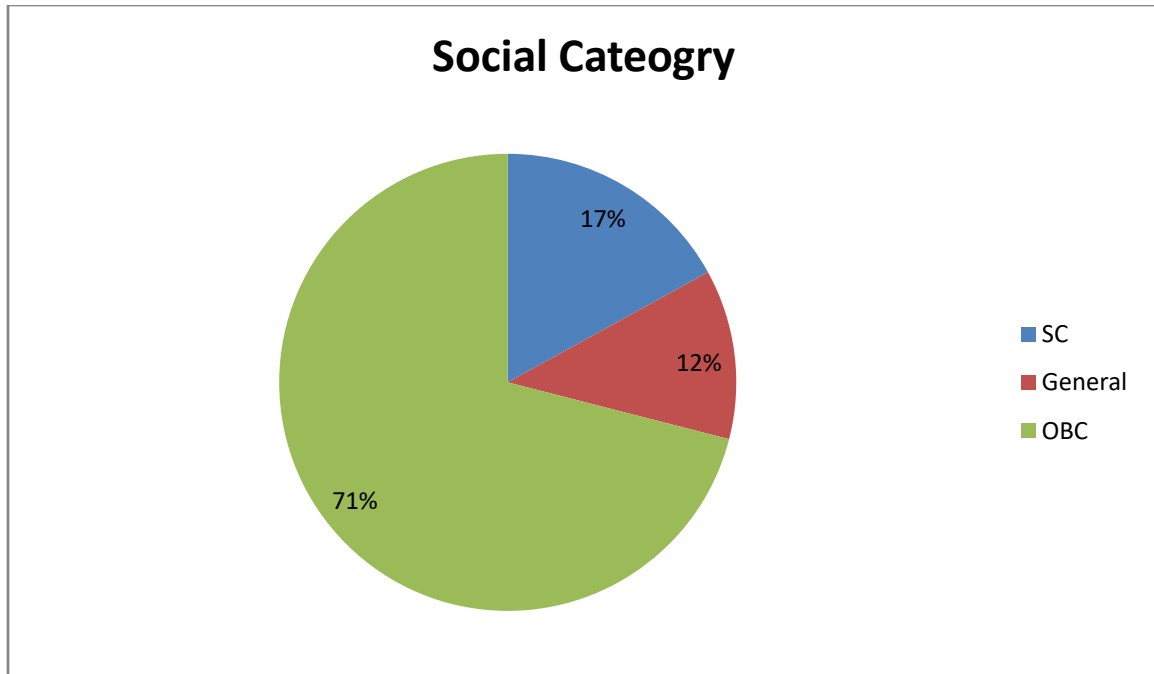
S.No	Name of the village	Name of the Block	Total Agriculture Land (Acre)	% Irrigated	% Unirrigated
1	Niyaw	Shohratgarh	40	39.28 %	61.72 %
2	Ramwapur	Shohratgarh	37	54.1 %	46.9 %
3	Teknaar	Shohratgarh	26	52.8 %	47.2 %
4	Baghwa	Shohratgarh	32	46.4 %	53.6 %
5	Bhadaav	Shohratgarh	22	37.14 %	62.86 %

6	Karma	Shohratgarh	28	56.22 %	43.78 %
7	Pakadi	Shohratgarh	40	42.85 %	57.15 %
8	Khargwar	Shohratgarh	32	32.1 %	68.9 %
9	Parigawa	Shohratgarh	37	32.7 %	67.3 %
10	Chodar	Shohratgarh	31	41.8 %	58.2 %
11	Palta Devi	Shohratgarh	36	47.7 %	52.3 %
12	Mudila Khurd	Shohratgarh	42	58.6 %	41.4 %
Total					

3. Chapter: Household Profile

This section portrays complete information about the profile of the households surveyed, i.e. different social category, poverty status, type of houses that they reside in, availability of drinking water and toilet facilities. In addition to this, the chapter highlights on the educational profile and activity profile of household members with special focus on women work participation. Here, it must be noted that analysis is done on the basis of the data that was captured through household tool.

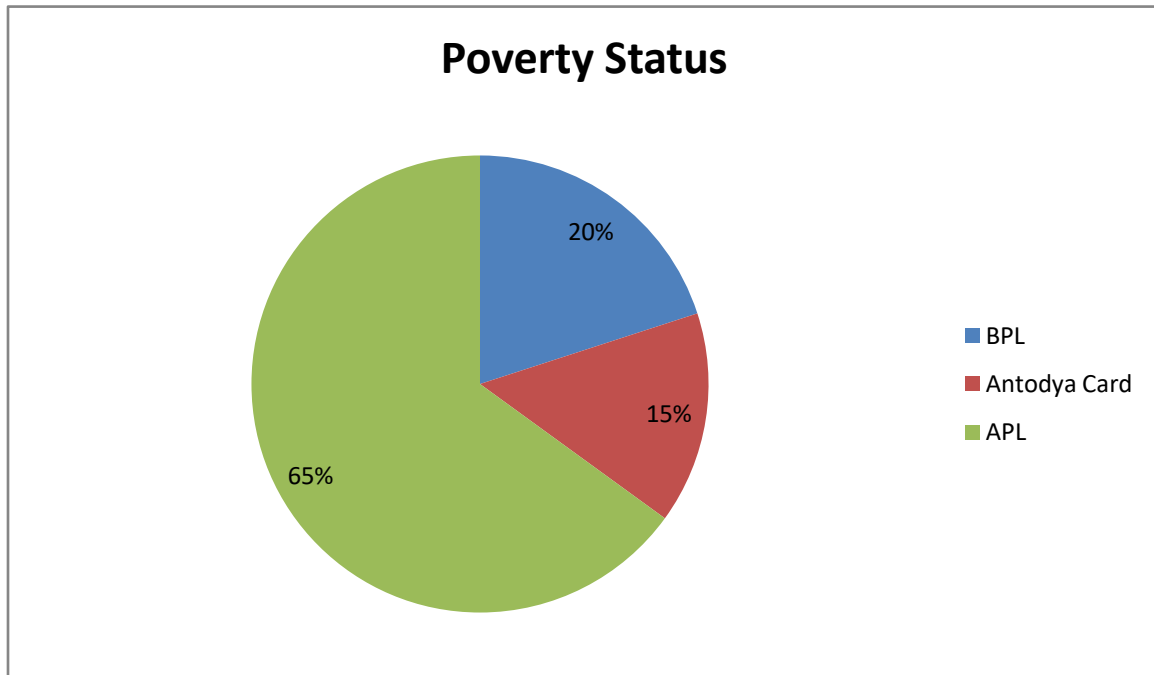
The total number of households in all the villages combined was noted to be 2480. In terms of demographic Profile, with respect to various castes residing in the 12 villages include Scheduled caste nearly 17 percent of the households. The general category contributed about 12 percent of the households residing in the sampled villages. Nearly 71 percent of the households belonged to other backward castes.



3.1.2 Poverty Status: In terms of the poverty status of the households surveyed, it is given below:

With respect to the Poverty Status of the households covered across the 12 villages, it was noted that nearly 20 Percent were Below Poverty Line cardholder and about 65 population belonged to the category of Above Poverty Line. Amongst the rest, about 15 percent

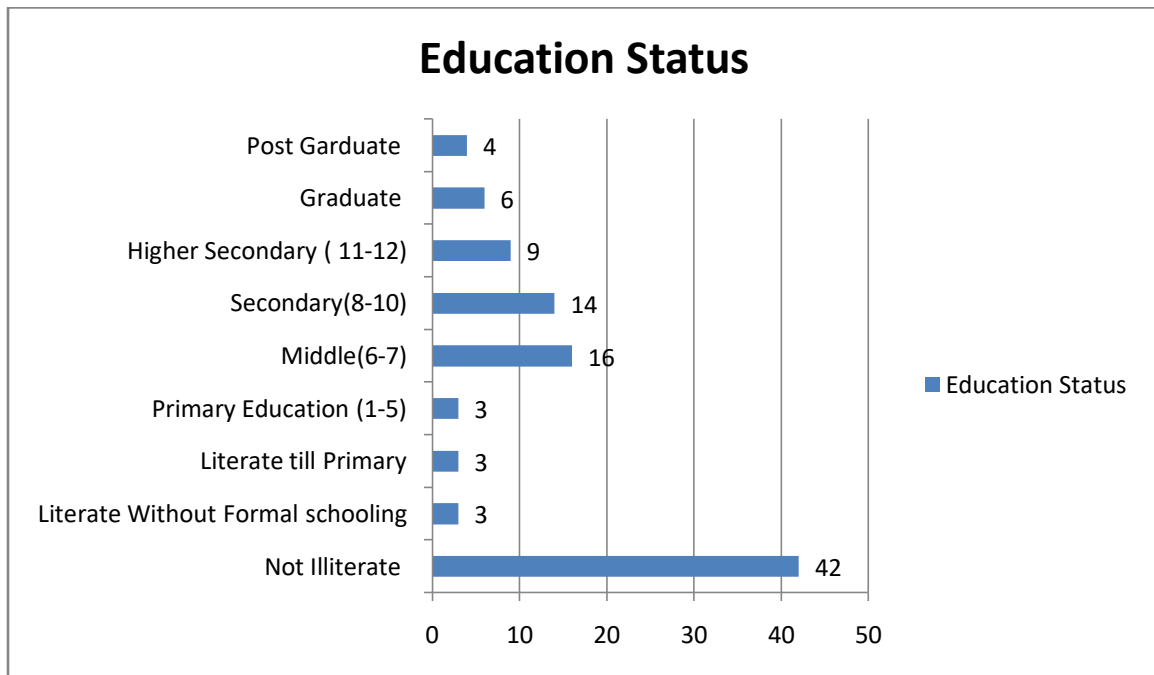
reported to belong to the category of Antyodaya card holders.



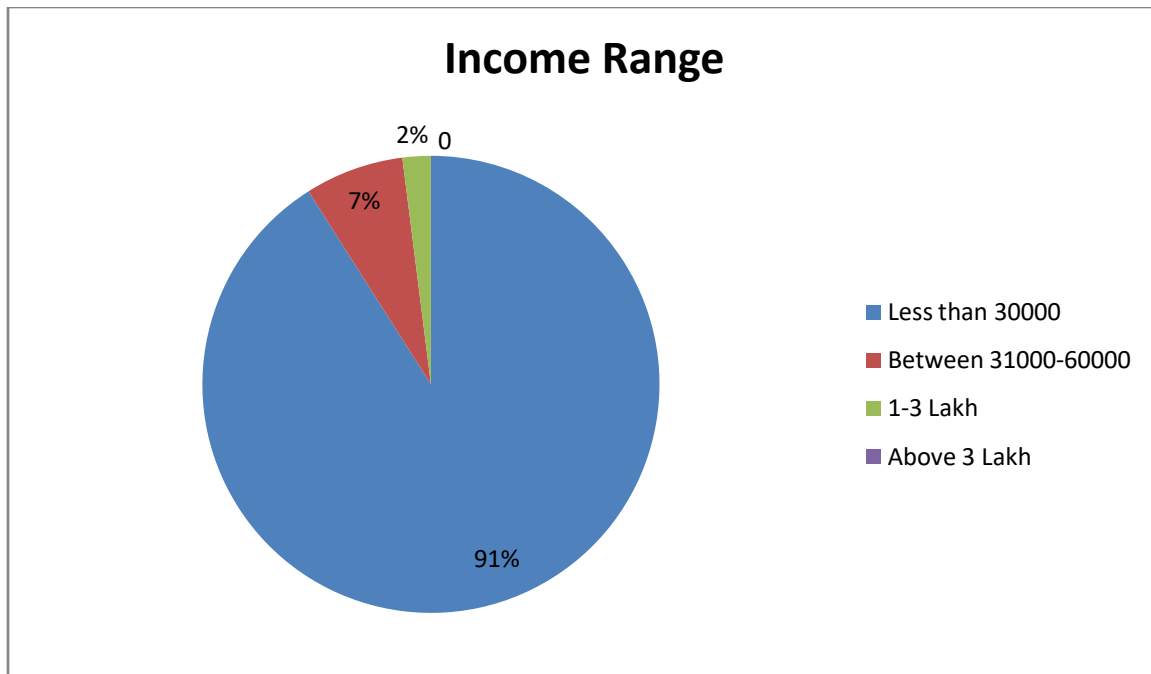
3.1.3 House Type, Drinking Water and Toilet: In order to understand the profile of Respondents covered in the study, certain other factors such as type of house that they reside in, availability of drinking water and sanitation facilities were also studied. It was reported that amongst the 100 households surveyed, about 68 % percent resided in Kachha houses, 18 percent reported to reside in Semi-Pucca houses and 14 percent reported that their house was of the Pucca category. Thus, it can be concluded that Kachha type of house is predominant in the area and this data seems to be consistent in relation to the predominance of BPL population in the study area. In terms of availability of toilet facilities, it was noted that despite the numerous sanitation programmes prevalent in the state, only about 28 percent of the 100 respondents reported to possess a toilet and the rest did not. The sources of drinking water available to the respondents was also studied and it was noted that hand pump at home was the predominant source amongst the 100 households surveyed, as nearly 81 percent reported that it was their main source of drinking water supply. 16 percent respondents reported that public hand pump was also used as a source of water supply. Amongst the other sources of water supply used were, pipeline into the house, , stream/river, protected dug well, unprotected dug well and lake/pond.

3.1.4 Education Profile:

Here, as shown in below given figures, it was noted that nearly one fourth of the household members under the category of 6 years and above (about 24 percent), 42 % are illiterate.



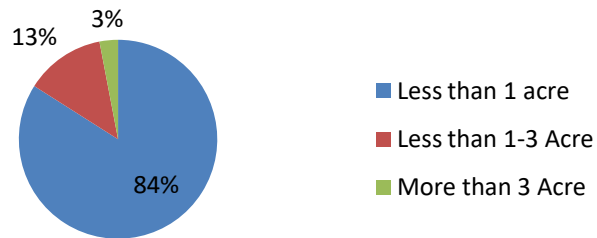
3.1.5 Income : The income distribution of surveyed people is given as below:



4. Agriculture Practices

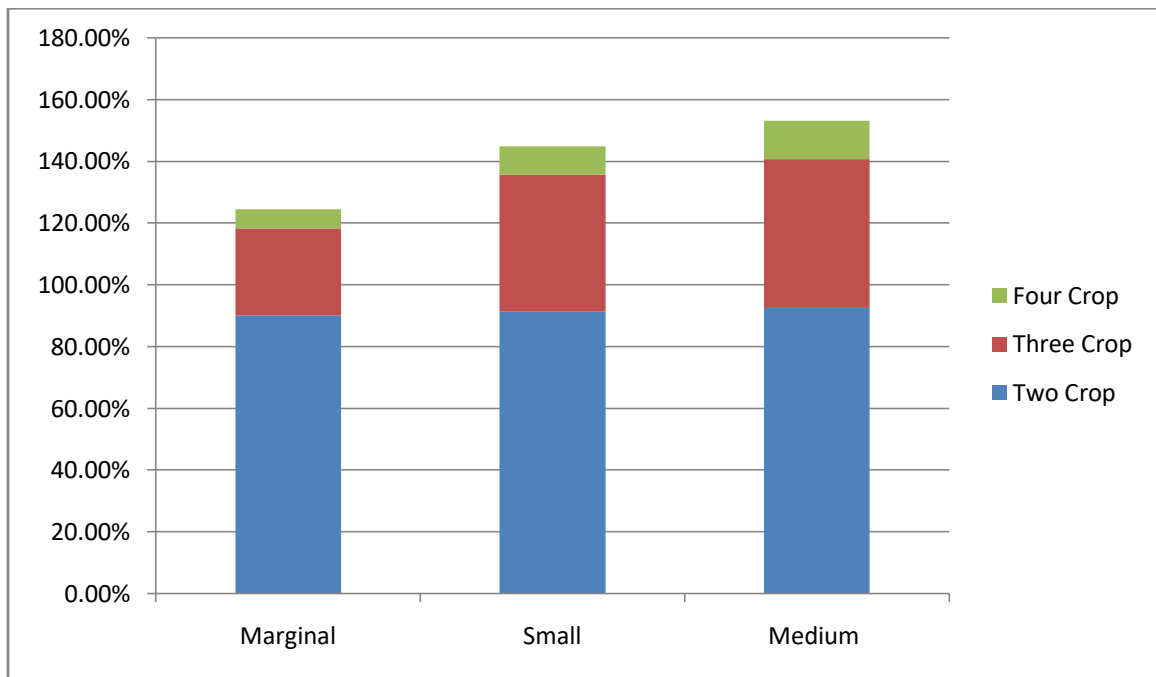
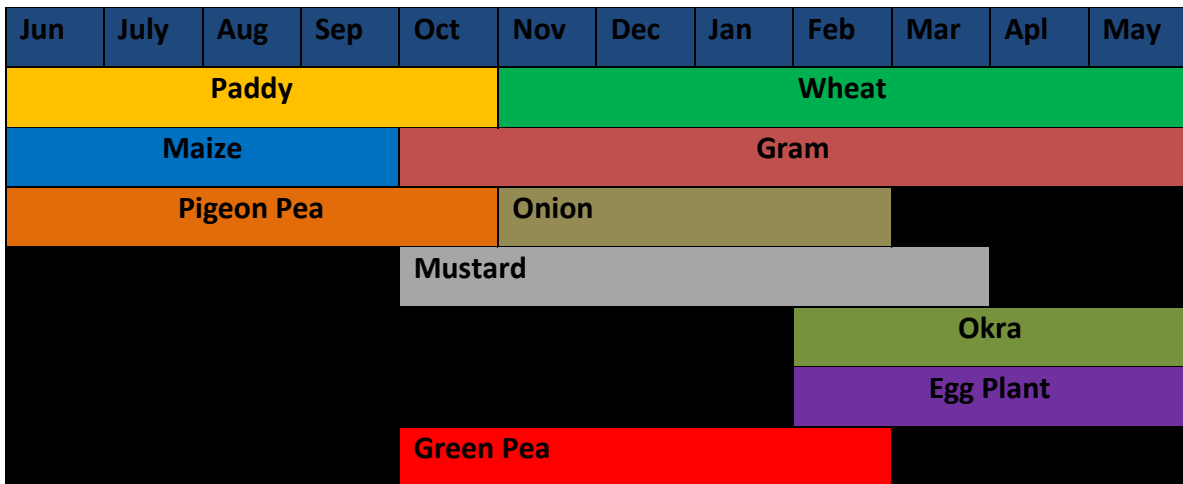
4.1 Landholding: In order to understand the agricultural practices it is important to know the land size of the respondents. As the chart shows, more than 84 percent of the farmers belonged to the marginal category and owned less than 1 acre of land. Nearly 13 percent farmers belonged to the category of small farmers with a land holding between one to two acres. About 3 percent respondents belonged to the category of medium farmers with a land holding more than 3 Acre.

Cultivable Landholding of Farmers



4.2 Main Crop:

An attempt was made to understand the main crops that are cultivated in the area. Main Crops Cultivated in the Area), it was not surprising to note that the main crops included Paddy and Wheat, which form the staple diet of the people in Uttar Pradesh . Nearly 90 percent respondents reported that the main crop that they cultivated is paddy and about 81 percent respondents reported that the main crop cultivated by them is wheat. Amongst other crops cultivated were, Tomato, Onions, mustard, Arhar, Moong, Turmeric, Banana, , Potato, Garlic, Cabbage, cauliflower, Cucumber, Ginger, Brinjal, Pigeon Pea, Gram, Okra and Raddish. An important point to note here is that a single household may grow more than one crop. Given below are the list of major crops grown by the households in the the survey, arranged according to seasons.



From above chart, it can be established that almost all the farmers grow at least 2 crops in their own field, which is to be expected.

4.3 Seed Selection:

With respect to seed selection, it was noted from household interviews that hybrid varieties of seeds were popular amongst the farmers, whereas high yield varieties were widely used for Paddy, Wheat and Potato. Quite a few farmers also used traditional seeds for the production of paddy.

Seed Type	Kala Namak Paddy	Wheat	Mustard
Hybrid	60.2%	42.2 %	53.6 %
High Yield	19.7 %	47.7 %	40.2 %
Traditional	20.1 %	11.1 %	16.2%

4.4 Harvest :

An attempt was made to understand the machinery that is used by the respondents to harvest their yield, which would in turn help to comprehend the penetration of technology with respect to agriculture amongst the sample covered. Using Sickle for harvesting was found to be the pre-dominant tool used as reported by about 84 percent of the respondents..Participants in the Focus Group Discussions also mentioned that harvesting was done manually across all crop categories in all villages studied.

4.5 Threshing

In the Focus Group Discussions it emerged that threshing is done manually with the help of available livestock. Only a handful of respondents used equipments like thresher only for the crop of Paddy.

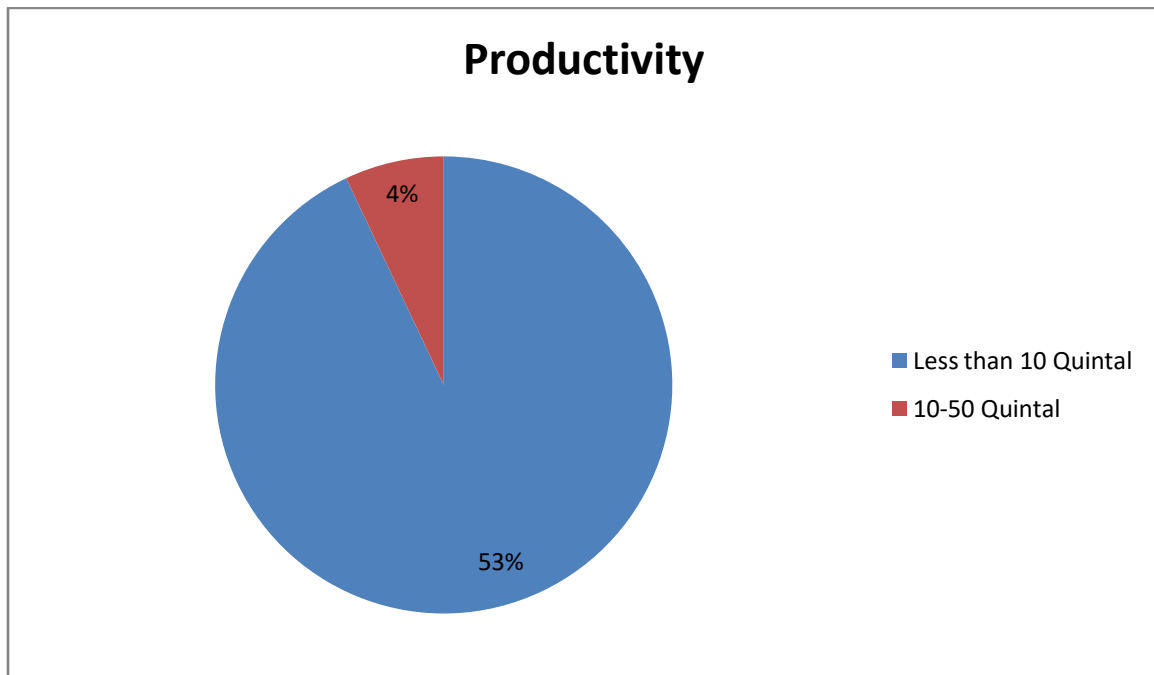
4.6 Storage

Storage also contributes as an essential component of agriculture as it is one element which if executed properly may fix a good price for the yield. The respondents were asked about whether they stored the crop that they produced or directly transported it after the harvest. It was noted that 74 percent respondents reported that they stored the crops due

to family issues. 12 percent also reported that they believed in storing and wanted to sell their produce only at the time of need and 6 percent respondents wanted to store for the purpose of better prices).8 percent respondents sold it at a purchasing site near the village or Local Haats as the place for selling.

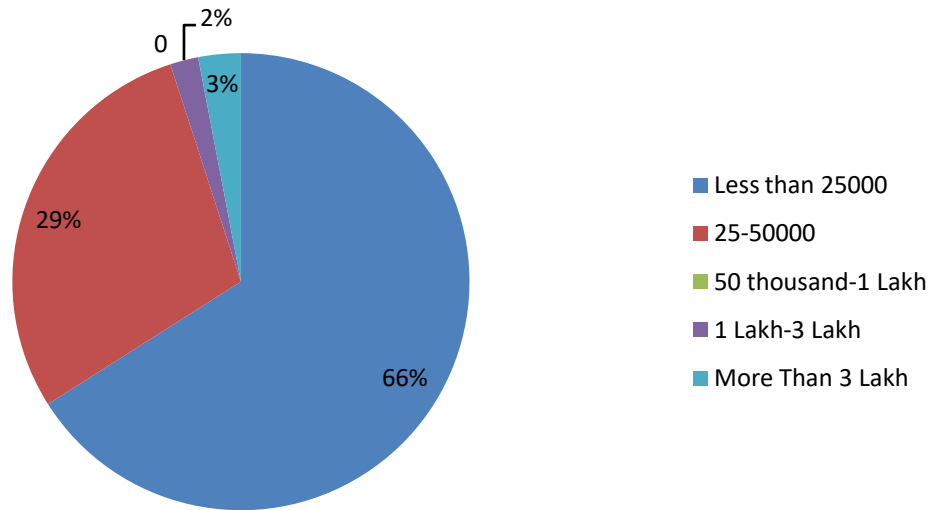
5. Kala Namak Paddy :

5.1 Productivity: For farmers growing Kala Namak in land more than a Acre have 2-3 Quintal productivity per acre in comparison to other farmers having bigger land size, this can point to the fact that a)the amount of fertilizers or manure used for enhancing production by these farmers is less or is not used evenly across the entire cultivated area



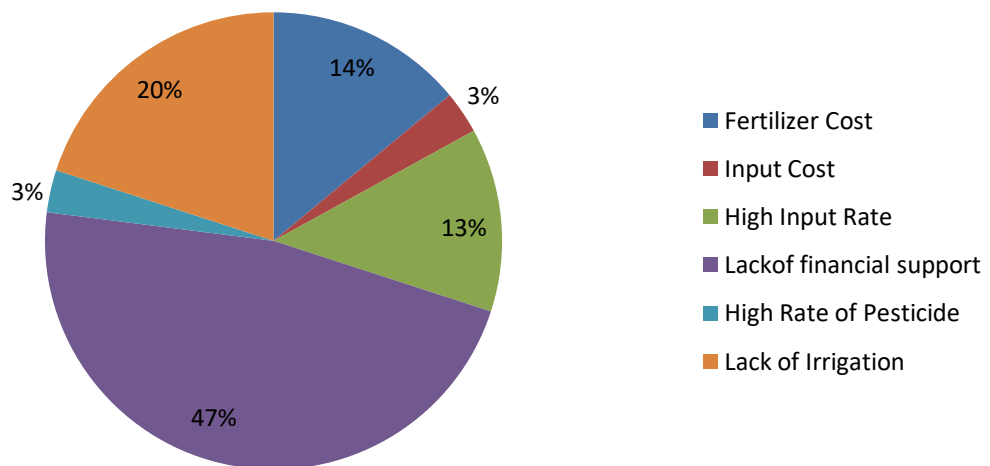
5.2 Income: The income from Kala Namak Paddy Rice is distributed as follows:

Profit From Kala Namak

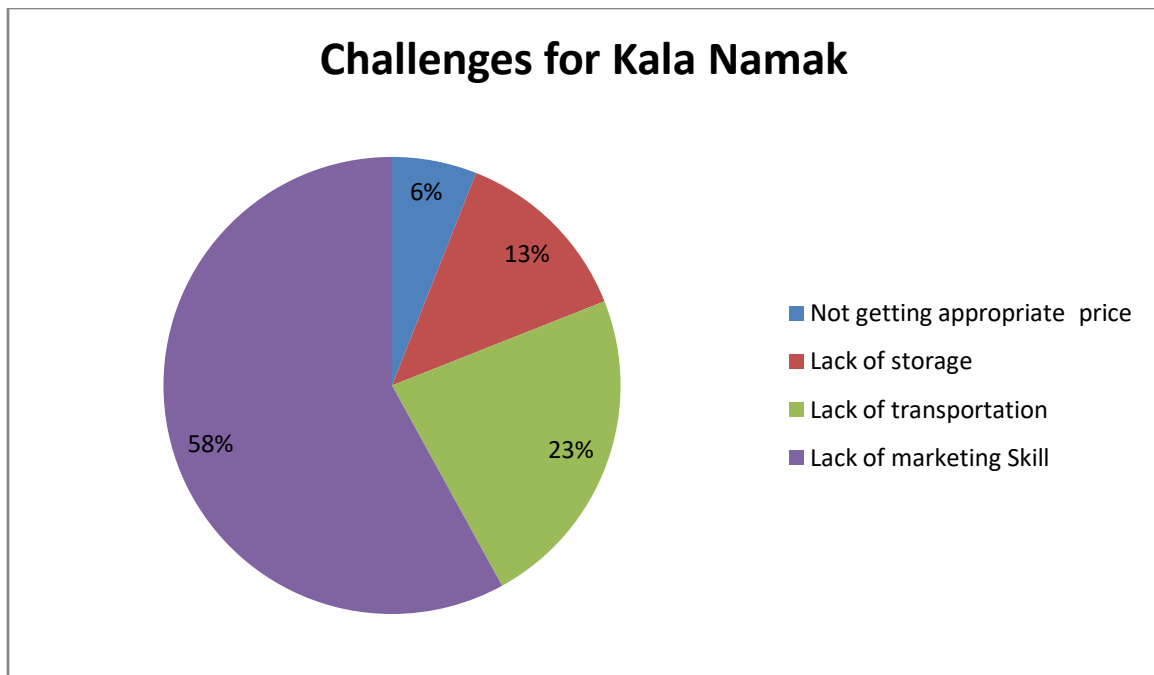


5.3 Challenges in Kala Namak Cultivation: Over the years, Kala Namak has lost its charms among buyers. The reasons are given in survey as follows:

Reasons

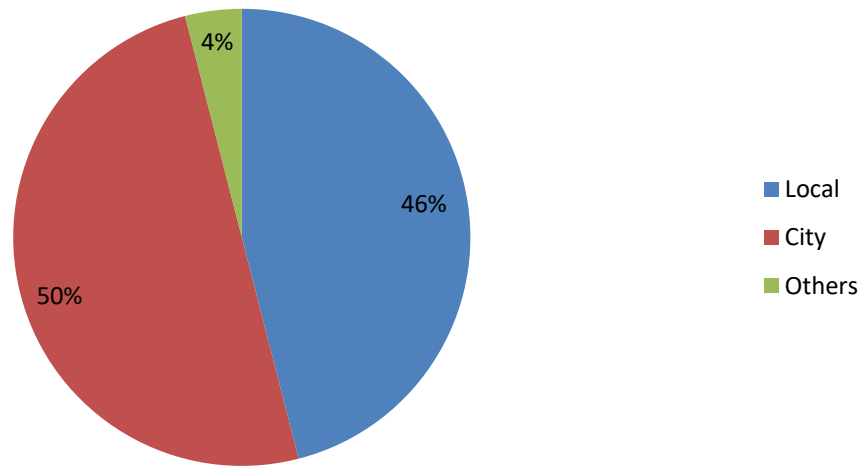


5.4 Challenge in Marketing: In traditional manner, farmer's main occupation was to grow crop. But due to globalization, everything has been changed. Marketing has become an important tool to promote or sell product. Small and marginal farmers have been lagged behind in this. S/He has two options: Either grow crop and fulfill daily needs of family with whatever rate he sells his/her agri produce or do marketing. Obviously, s/he doesn't not have required skill and ultimately s/he sells his product at lower rate.



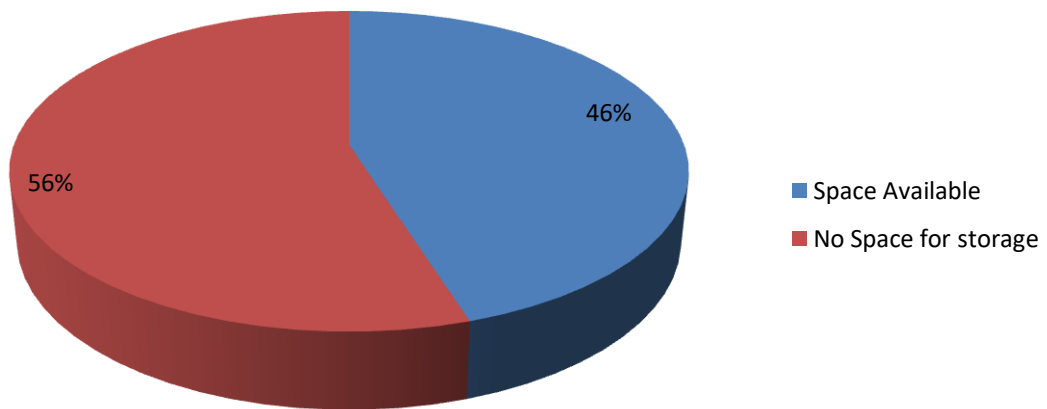
5.5 Farmer sells Kala Namak at different places. The market is varies from neighbourhood district, cities or other places, the sale is given in following pie chart:

Sales Location Wise

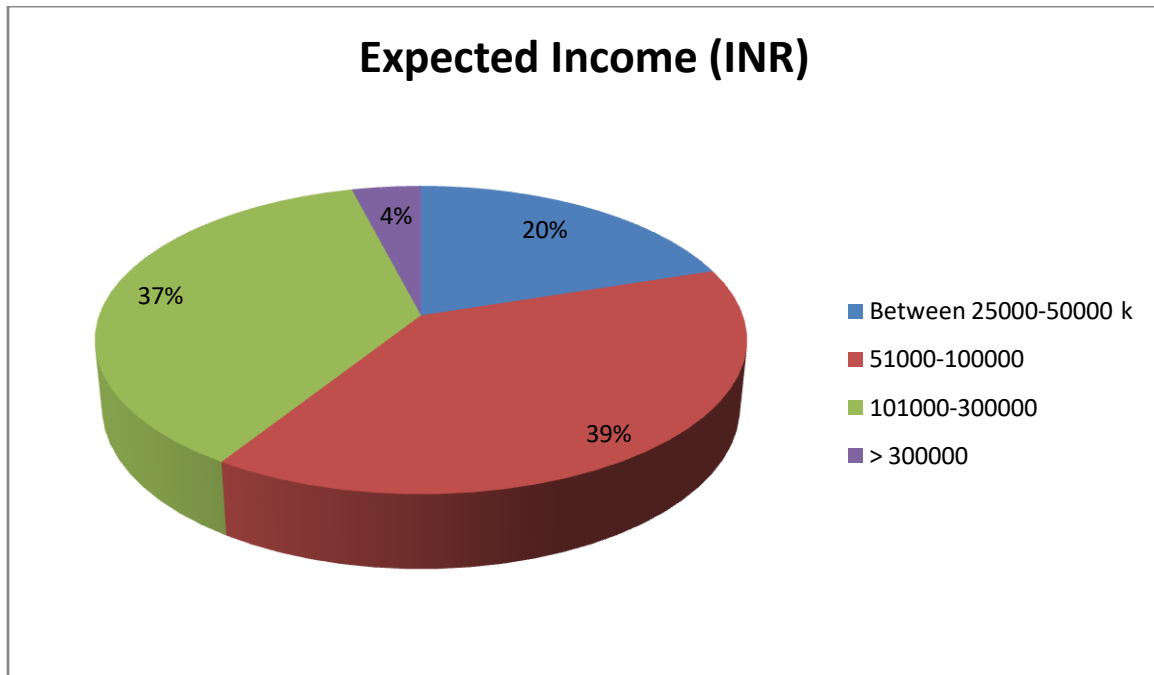


5.6 There is storage of storage for Kala Namak. Most of times, Farmers store in their home. It has its own challenges

Storage Space



5.7 Every farmer has different expectation after association with Farmer producer company. Their expected income is given in below chart:



Volume of Kala Namak:

As per report of PRDF that the production of Kala Namak Rice fell from 50,000 hectares to 2,000 hectares of land. After all the efforts by local and state government the production in 2018 went up to 35,000 hectares. The production of these lands shall be 25935 Tonne. If farmer keep forty percent for self, relatives and other social consumption. The market size of Kala Namak estimated to be more than Rs. 132 Crore. The estimated average production of Kala Namak in selected 12 villages shall be 30 Quintal per village .Thus total production shall be around 360 Quintal in all villages. 40% of Kala Namak shall be self used by farmers, Thus for market available farmers shall be 216 Quintal in one season.

Annexure- Sample of Questionnaire

The screenshot shows a survey editor interface for a questionnaire titled "SIF_SES_Survey". The interface includes a menu bar (File, Edit, View, Help) and a user status indicator (Signed in as sandeep.ses. Sign out.). The main area displays a list of survey questions, each with a data name and a required status. The questions are:

- लाभार्थी का नाम (un_beneficiary) - required
- आप की उम्र (un_age) - required
- गांव का नाम (un_village) - required (highlighted in orange)
- ब्लाक का नाम (un_block) - required
- जिला (united_district) - required

The "Properties" panel on the right shows the configuration for the selected question, "गांव का नाम":

- Data Name: un_village
- Label: गांव का नाम
- Hint: (empty)
- Default Value: (empty)
- Read Only:
- Required:
- Required Text: (empty)
- Length Minimum: (empty)

The "Information" section indicates that this field collects textual information.

The screenshot shows a survey editor interface for a questionnaire titled "SIF_SES_Survey". The interface includes a menu bar (File, Edit, View, Help) and a user status indicator (Signed in as sandeep.ses. Sign out.). The main area displays a list of survey questions, each with a data name and a required status. The questions are:

- आप को कालानमक धान की मार्केटिंग करने में क्या मुख्य समस्याएँ आती है ? (un_mktg) - required
- काला नमक मार्केटिंग आप के लिए कहा करना आसान होगा ?? (un_local) - required
- क्या आप किसान उत्पादक कम्पनी के बारे में जानते है ?? (un_fpo) - required
- क्या आप किसान उत्पादक कम्पनी से जुड़ना चाहते है ? (un_asso) - required

The "Properties" panel on the right shows the configuration for the selected question, "क्या आप किसान उत्पादक कम्पनी से जुड़ना चाहते है ?":

- Data Name: un_village
- Label: गांव का नाम
- Hint: (empty)
- Default Value: (empty)
- Read Only:
- Required:
- Required Text: (empty)
- Length Minimum: (empty)

The "Information" section indicates that this field collects textual information.

Figure 3: Screenshot of Survey Questions

End Of Document