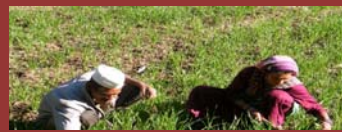
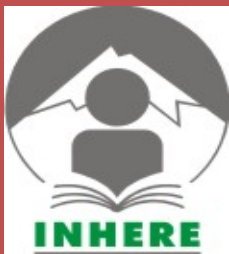


# BASELINE REPORT



2013



Local Innovation and Experimentation for  
Climate Change Adaptation Project

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## The Context

Climate change is a global concern. People across the world have started to feel the effects of global warming and climate change. The Himalayan mountain region with its fragile ecology and a population dependent on natural resources is a vulnerable category to climate change. The poor smallholder mountain farmers are struggling to adapt to the uncertain weather conditions which have upset traditional agricultural calculations. The major effect of climate change is noticed in agricultural production for food security in the Himalayas. Among them are sharp shifts in cropping seasons due to unpredictable surges of temperature, exceptionally longer and much warmer summers and occasional sharp drops in temperature with severe cold causing frequent fog, mist, frost and snows in the higher parts in the mountains. Unpredictable rainfall patterns ranging from torrential downpours to scanty and delayed rains during monsoons have become commonplace. This unpredictability is causing damage to crops and creating unrest in farming communities. The authentication of these perceptions of climate change effects on the local people requires systematic study on the subject and investigation of interventions, including local innovations, for adaptation to climate change.

This baseline study was undertaken in preparation for the implementation of a regional project called Local Innovation and Experimentation for Climate Change Adaptation (LINEX-CCA) funded by Miserere in Germany. . A group of four Non Government Organizations (NGOs), LI-BIRD, CEDAC and INHERE based in Asia (in Nepal, Cambodia and India respectively) and ETC Foundation based in the Netherlands are the main partners of this project. The project is a collaborative effort of PROLINNOVA country networks in Asia under the umbrella of the Prolinnova international network on promoting local innovation in ecologically oriented agriculture and natural resource management. Backstopping support to the project is provided by the International Support Team (IST) of PROLINNOVA.

In India, INHERE is implementing this project in 20 villages of two districts namely Chamoli and Almora in Uttarakhand State together with Prolinnova India partner organizations.

This report is based on information gathered during the baseline survey. The information was gathered with the help of the questionnaire developed during the inception meeting of project partners held during the Prolinnova partners workshop in Bamako, Mali in March 2012, and fine-tuned with inputs of the meeting of Prolinnova India Steering Committee in Masi in April 2012, subsequent meetings of project staff and INHERE personnel as well as the inputs of several Steering Committee members and well

wishers in their individual capacity. The questionnaire was administered at group level rather than at individual house hold level. Participatory Rural Appraisal (PRA) techniques were used in the survey, especially focus group discussions. Special attention has been given to the perceptions of women on climate change.

The survey carried out in the months July- September 2012 covered 20 villages of two development blocks namely block Chaukhutia of district Almora and block Gairsain of district Chamoli, Uttarakhand. The names of villages covered, development block wise is given below.

- Development block Chaukhutia, district Almora:

- Sirda
- Gajaar
- Bhaltwani walli
- Bhaltwani palli
- Brahmdevchauri
- Qairali walli
- Qairali palli
- Malsakhet
- Khatyari talli
- Khatyari malli
- Jaitha
- Kotyura
- Naugaun beria
- Golkhal
- Taragtal

- Development block Gairsain, district Chamoli:

- Maikholi
- Hargarh
- Beena
- Jogina
- Rohida

The information collected was compiled and analyzed with the help of Microsoft Excel spreadsheets. The spreadsheet formats were developed in INHERE for aggregating the data collected on specific sectors and topics. The objective of the spreadsheets was to aggregate similar information for ease of use and understanding of scenario. The spreadsheet format was tested and fine tuned internally for use. The information collected during the process of baseline survey was fed into the formats for ease of analysis and reporting. The spreadsheet formats were used for building up the baseline report.

### **Context of Project Area:**

Uttarakhand State is a part of the Western Himalayas and is mainly a mountainous and hilly State. It consists of higher, middle and lower Himalayas (or foothills) and includes a small part of the Indo-Genetic belt geographically known as Terai. Uttarakhand is predominantly an agriculture-based State with 76 % of its population dependent on agriculture as a major source of income. However, of the total land area in Uttarakhand, only 14 % is designated as agricultural land. The majority of the area is classified as forest and snow-clad peaks. Agriculture is predominantly rain fed with less than 13 % having access to irrigation. The majority of the hill farmers is marginal and own less than one acre of land. Women are the main workforce in agriculture with men engaged primarily in ploughing. Agriculture in the mountain districts is below subsistence as people get food from agriculture only for an average of five to six months in the year. But even this is a great support to these farming families.

The State is predominantly rural in character and the urban area is very small and mainly consists of district and tehsil headquarters. In Uttarakhand, the average male-female ratio is nearly balanced. Females slightly outnumber male counterparts in the mountain and hilly districts because of seasonal or temporary migration of men for employment within and outside of the State.

Mountains are considered a barometer for climate change due to their sensitivity. Therefore, changes in the process and effects of nature can be measured much earlier in mountains than in any other geographical area. As the project area is largely mountainous in character, it can help in understanding changes taking place in agriculture production due to climate change. Taking into account microclimatic conditions 20 villages were selected in from the districts of Almora and Chamoli. The INHERE project team has identified three different clusters of villages situated at different altitudes i.e. up to 750m, from 750m to 1400m and above 1400m ft. The selection of villages is based on the following considerations.

- Agriculture is the mainstay of the people
- All three types of agriculture are represented - fully irrigated, totally rain fed and a mix of rain fed and irrigated.
- Mono-culture, mixed and multiple cropping
- Cereal crop production, cereal crops including millets, mixed partly with pulses, and major crop of millets mixed with local pulses or spices.

- Cluster one is nearer to the development block office and market place, cluster two is closer to a road and has easy access to the market whereas cluster three is less accessible to a motor able road, development block and market place.

The project area comprises three clusters with villages lying in different altitudes ranging from 750m to 1850 m above sea level.

1. Taragtal cluster as a valley area ranging up to 2500 ft covering four villages and 468.92 ha. land of Kumaon division
2. Jaurasi cluster as a ridge area ranging up to 4500 ft covering eleven villages and 968.02 ha. land of Kumaon division
3. Nagchulakhhal cluster ridge area ranging up to 6000 ft covering five villages and 1187.84 ha. land of Garhwal division

### **Human resources:**

The total population of the project area in the 20 selected villages is 6291 out of which 48% are male and 52% female. The percentage population of children in the 0 to 14 and 14 to 18 year age groups is nearly 16 % for each. In the Jaurasi cluster the distribution is 44 % male and 56 % female. Those in the age groups 0 to 14 and 14 to 18 years are 24% and 28% respectively. In Taragtal cluster the population percentage is 43% male and 57% female. The percentage of children and youth belonging to the age groups 0 to 14 years and 14 to 18 years is 18 % and 28 % respectively. The population in Nagchulakhhal cluster is 53% male and 47 % female. Here it is noteworthy that women are lesser in number than men. The percentage of children in the category of 0 to 14 years of age is 10% whereas for the category 14 to 18 years of age is only 6 %.

### **Family responsibility:**

The total number of households in the project is 1165 out of which 23% of households are in Jaurasi cluster, 22% in Taragtal cluster and 55% in Nagchulakhhal cluster. Out of the total number of households, 40% are women-headed at the time of the survey. The women in these households have the main responsibility for and the lead role in the family. The data reveals the major role played by women in the hill and mountain economy. This trend of women-headed households is on the increase with more male members leaving the villages to seek livelihoods in cities within and outside of the State.



## **Basic infrastructure:**

The presence and accessibility of basic infrastructure such as markets, health facilities, education facilities, road, transport, irrigation, and cooperatives in the project villages were included in the survey.

### ***Markets:***

The nearest market center is situated at an average distance of 12 km. at Chaukhutia for Jaurasi and Taragtal clusters of villages which are located in the east and west direction of Chaukhutia market. For Nagchula village cluster, the market is at a distance of 10 km. at Mehalchauri. Mehalchauri is a comparatively smaller market than Chaukhutia but it serves all the basic domestic requirements of families. Bus services to metropolitan cities like Delhi - the capital of India, Dehradun - the capital of Uttarakhand State as well as Haldwani and Ramnagar which are the major hill entry market towns, is available from these market centers. The local transport facilities available are local buses and shared taxis.

The markets for bulk sale of agricultural produce are located at Haldwani and Ramnagar towns which are located between 120 to 160 kms away from these clusters. A direct transport facility from the villages to these towns for transport of agricultural produce is not available.

### ***Education:***

In Jaurasi cluster, six primary schools service 11 villages whilst , upper primary/middle schools are situated at Jairambakhal, Quairali and Jaurasi at an average distance of 2 Km. In Taragtal cluster, two village primary schools service 4 villages while the secondary school is situated at an average distance of 2.5 km. for both zones.

In Nagchulakhal cluster, all the six villages have one primary school each. There are two secondary schools - one at Hargarh and the other at Rohida at a distance of 0.5 km. For higher education like college graduation, students from Jaurasi and Taragtal zones come to Chaukhutia Government Degree College which is at an average distance 15 km for both zones. Similarly, for Nagchulakhal zone, the Degree College is situated at Gairsain at a distance of 20 km.

### ***Health services:***

In Taragtal zone, there is one primary health center at Naugaon but it is poorly run and maintained. The nearest health facility center for Jaurasi and Taragtal zone villages is at Chaukhutia at an average accessible distance of 15 kms. At Chaukhutia, both, a government .community health Centre as well as a

number of small private clinics are available. People from a radius of up to 25 km. come here for medical treatment. The community health centre is equipped with fourteen beds, an X-Ray machine, emergency equipment, three to four doctors, 3-4 women nurses, one auxiliary nurse and midwife (ANM), and one dispenser of medicines called compounder.

For Nagchulakhal cluster, the nearest health center is at Mehalchauri which is situated at an average distance of 10 km. from the project villages. In Mehalchauri private health services are also available. The government community health Centre is situated in Gairsain at a distance of 25 kms. At village level there is one woman accredited social health activist (ASHA) in each village. Accredited Social Health Activists (ASHAs) are community health workers instituted by the Government of India's Ministry of Health and Family Welfare (MoHFW) as part of the National Rural Health Mission (NRHM).

***Communication:***

Mobile phones as well as land line phone service is available in the area. The connectivity of internet is present though it is slow and not very reliable. In some places broadband connectivity is also available. Roads and surface transport has been described earlier. The postal service in the area is slow and inconvenient. Courier services are in operation in Chaukhutia only.

***Cooperative institutions:***

There exist only two cooperative institutions located in village Beena in Nagchulakhal zone and village Jairambakhal in Jaurasi zone. These cooperatives have been set up with the purpose of providing agricultural seeds, implements and other agricultural inputs but in reality these centers are almost defunct. The farmers now obtain these inputs from the development block center at Chaukhutia in district Almora and Gairsain in district Chamoli.

***Irrigation facilities:***

According to government records there are no irrigation facilities in the project area. The survey team however found government irrigation systems in some parts of the villages Naugaon, Taragtal and Kotyura in Taragtal zone and the villages Rohida, Beena, Jogina and Hargarh in Nagchulakhal zone. Apart from this, in some villages farmers have managed to obtain water for irrigation from nearby water sources with their own efforts through mud and stone line **guhls** or small irrigation drains constructed using their own resources.

### ***Village Institutions:***

In all the villages there are community-based groups called Mahila Mangal Dal, Nav Yuwak Mangal Dal, Self Help Groups and Van Panchayat. Self help groups work basically as thrift and credit groups generating their own funds through monthly savings by each member. After 6 months, the group provides loans to its needy members for income generating activities as well as for meeting domestic requirements. Depending on the situation and the demand for loans, these groups are also linked with banks. Apart from business activities, groups also do community welfare activities with motivation building and awareness rising on rights of women, where and how grievances can be redressed.

The Mahila **Mangal Dal** is a women's group consisting almost all the women of a given village. Mahila Mangal Dal means a group or force which works for the wellbeing of women. The head of the group is its president who is selected by all the members of the group. The main work of this group is to maintain hygiene and cleanliness in and around the village and generate awareness among villages on sustainable resource management and environment issues. Members also engage in natural resource protection, management and enhancement. Mahila Mangal Dals are more common in the Garhwal region of which district Chamoli and the project villages within it. **Nav Yuwak Mangal Dal** is a group of village youth. Nav Yuvak means Youth and Mangal Dal means a group for wellbeing. This group also has responsibility for many tasks in the village just like the Mahila Mangal Dals. Apart from this, the youth groups also try to generate sports and reading material facilities.

Not all of these bodies are currently active in the surveyed villages. And those groups which are active are at different levels, (member group, larger group, village, Federation of Groups) and to different degrees depending upon current motivation of membership, leadership, resources and felt need among the village population. On being asked whether any of them had considered, discussed or worked for adapting to the uncertain weather conditions which was affecting them, the answer across the villages was negative.

Van Panchayats or self-governed forest areas are present in all the villages though the area occupied by them and their state differs. **Van Panchayat** is the legal body of village panchayats dedicated to the maintenance and development of village forests. There are generally 5 to 9 members in such a Panchayat headed by the sarpanch. Maintenance as well as protection of the village forest is the prime responsibility of the Van Panchayat. However, Van Panchayats have little economic power. In some instances Van Panchayats and NGOs have collaborated to enhance the quality and income as well as the livelihood generating potential of the village forests.

All villages are also part of Gram Panchayats or Village Panchayats. Village Panchayats and Van Panchayats are legal bodies elected and formed under the Panchayati Raj Act and the Forest Act of the Government of India. The tenure of each such body is five years. The Gram Panchayats are responsible for development activities and maintenance of infrastructure in the village.

***Government infrastructure and NGOs:***

Different governmental organizations and NGOs are working in the districts providing a range of development and charitable services to the villagers on different platforms. The government has line departments and officers in charge of the development of agriculture, horticulture, livestock, livelihoods etc. However, their impact and reach is very minimal.

NGOs scattered in the districts provide services of social concern according to their mandates and capacity. NGOs are less in number, have limited resources, work in a limited area and mainly on short duration projects for which they mobilize funding.

An agriculture, horticulture, livestock, health and education development work is mainly being done by government departments while NGOs are making efforts to generate awareness on a variety of issues relevant and of concern to the ordinary citizen, motivation and institutional building in the villages to bring about desired change and development. Some NGOs are doing development work similar to what is being done by govt. departments but more effectively and equitably.

Although both GOs and NGOs have women and men on their staff, gender balance is lacking. Women are considerably less in numbers. (With approximately 30-35% in NGOs and 15 – 20 % in GOs)

Until now, neither the government organizations nor the NGOs have taken any steps to work with farmers and to assist them to deal with climate change and its impact on their agriculture.

## **Land classification:**

The total land area includes all the land within the boundary of a village consisting of revenue land, forest land, community land, residential land and other waste land. The land owned by an individual or a family and liable for land taxes as per government records is classified as **revenue land**. This is land on which a farmer (or farming family) carries out agriculture, builds a house on, or utilizes for his/her livelihood. The land under cultivation including both fallow and current fallow is classified as **agricultural land**.

**Van Panchayat Forest land** is forest land within the village boundary which is protected and managed by the Van Panchayat, an elected legal body. This is the area from which villagers obtain fuel wood, fodder and timber under their legal rights. **Residential land** includes houses, schools, temples, community buildings, cattle shelters etc.

The total geographical area of the 20 project villages is 2618.79 ha. Of this, revenue land is 33% (this is individually owned land), Forest Panchayat land is 42% , residential land is 1.8% and the balance 23.9% comprises of grazing land, rivulets and waste land.

The total land in Jaurasi cluster is 962.02 ha. Of this total, 32 % is revenue land, 44 % forest Panchayat land , 0.84% residential land and 22.86 % includes grazing land, waste land and rivulets.

The Taragtal cluster has a total area of 468.92 ha of which 36.04 % is revenue land, 15.96% is forest Panchayat land, 2.21% is residential land and the balance 45.78% is covered by waste, grazing and other land.

Mehalchauri cluster occupies an area of 1187.84 ha of which 31.97% is revenue land, 49.51% forest land , 2.44% residential land and 16.07% which forms grazing land, waste land, rivulets and other land.

## **Net sown area and gross cropped area:**

The net sown area is the land on which a farmer actually carries out agricultural operations, and sows seeds for crop production. In Jaurasi cluster the total net sown area is 89 % whereas in Taragtal zone and Nagchulakhal cluster this percentage is 92% and 90% respectively of the revenue land.

**Food Security:**

In the surveyed villages, agriculture alone does not provide sufficient food for the families throughout the year. Generally, their agricultural activities provide families with food for six to eight months in the year only. When families face food insecurity, the responsibility of managing food lies with both men and women in the families.. However, the more immediate pressure is on women.

Asked whether any family in the village sold/mortgaged any assets to meet their households food requirement in the previous year, the response was that no such incident had taken place in the past year or even earlier. They had coped with this situation by reducing the quantity of food intake, substituted cheaper coarse grains whatever available locally, avoided buying vegetables, used more of salt mixed with available herbs and done extra labour required for purchasing food from market.

Most respondents were of the opinion that people from marginal economic communities, those with little means of alternative livelihoods or having less family members who were earning regular incomes and with more dependents formed the majority in the rural area. However, even among them, the worst off were the socially backward groups and communities as their support base was narrower.

## PART II: AGRICULTURE

### **Agricultural pattern:**

In all three clusters of the project area, farmers grow crops in two main seasons: Rabi and Kharif. Rabi starts with the winter season from the middle of October and ends in April-May. The major crops of Rabi are wheat, barley, mustard, lentil (masoor), turmeric and colocasia. etc The Kharif season commences from mid May and ends between Sept.-Oct. Kharif is the main cropping season in the mountain economy in which many types of vegetables, cereals, millets and pulses are grown. Kharif crops are grown in the monsoon season and as mountain agriculture is mainly rain-fed, this is the season in which agricultural land is utilized to the maximum..

In between Rabi and Kharif seasons when land is left for the next cropping season, some people grow short duration crops like certain legume grasses for maintaining fertility of the soil, onion and other crops for home consumption.

In Jaurasi and Taragtal clusters, out of the total sown area 32% is covered under single cropping, 19 % under double cropping and 48 % is under multiple cropping. In Nagchulakhhal cluster, this percentage is 73%, 15% and 12% respectively.

### **Cropping system and crops sown:**

Irrigated land is mainly mono cropped with wheat in Rabi and paddy in Kharif. Some farmers also undertake double cropping on irrigated land when wheat is combined with mustard as an oilseed crop. Mustard grows faster than wheat due to the shorter maturity period and is harvested before the wheat..

In rain fed areas, farmers practice all three cropping patterns with multi-cropping being more prominent. Wheat in Rabi and paddy in Kharif is grown as single crop. The seed sowing technique used is broadcasting. In double or multi-cropping the crop combinations followed are *Mandua* or Fox millet, Barley, Sorghum, Amaranth, Soyabean, *Bhat* or Black Soyabean, *Urd* and *Kulath*. Under multiple cropping more than two of the above crops are grown. These crops come under the category of millets and pulses.

## PART III: PERCEPTIONS ON CLIMATE CHANGE

### **Perceptions on climate change:**

Out of the total 285 targeted (focus group) respondents 82% said that weather had become uncertain and unpredictable.

More than 77 % of them felt that the temperature had increased. In Taragtal cluster, more than 83 % farmers said that temperature had increased whereas the figure was 75% in Jaurasi and Nagchulakhhal zones.

With regard to the cold in the winter season, 59% people said that cold is more severe and bitter in comparison to 20 years back but that the duration of the cold season had reduced. About 64% respondents said that the duration of the winter season is shortened.

Similarly, 67% respondents were of the opinion that annual rainfall had decreased. In their opinion, the rainfall pattern has changed and become erratic and unpredictable. The occurrence of cloud bursts was considered a common occurrence now. It was a rare occurrence 15-20 years ago.

### **Perception of causes of climate change:**

#### ***Forest fires:***

The majority of those interviewed think that forest fires, which seem to be increasing each year, are a major cause for changes in the climate. At least 80% of the villagers are of this opinion.

#### ***Deforestation:***

64% of farmers think that the decrease in forest cover is a major cause of climate change. Although they say that the number of trees have increased in their area compared to several years ago, overall forest cover, diversity and density has decreased. They feel that there has been a big loss of natural forest and they have been left only with manmade mono-species forests, generally of pine trees.

#### ***Construction work:***

44% of respondents think that continuous construction work using more cement is responsible for increasing temperature. These constructions are due to growing urbanization, government and private institutions, roads, residential cemented houses etc. 38% participants said use of excessive dynamite is



also responsible for climate change but 34% did not agree with this opinion. Many had no answer as they were not clear on the subject.

Open grazing, changes in lifestyle, increase in traffic density, general industrialization and construction work were perceived to be other causes of climate change.

### **Perceived effects of climate change:**

The following are the perceptions of people on the effects of climate change as expressed in the focus group discussions:

#### ***Change in crop maturity period:***

The average crop maturity period has shortened by 10 to 12 days as compared to 15-20 years back for both cropping seasons. This has also happened with fruit crops. Fruits such as mango and banana and stone fruits such as peach, plum, pear, apricot, and nuts such as almonds and walnuts are showing early flowering and fruiting. This change has brought about deformities in shape and size of fruits and also in taste and early dropping of flowers and fruits is observed. Extreme cold in the winter with frost, especially in the valleys, has resulted in frostbite burns in many fruit plants, especially mango and banana. The mango plants which are commonly restricted to the valleys and lower altitudes are now growing in higher altitudes as well. Some fruits trees growing at lower altitudes s have stopped bearing good quality fruits .This is seen in malta orange, orange, lemon and *narangi*. Mango trees which earlier did not produce fruit at higher altitudes have been seen to fruit now. Papaya is also doing better at higher altitudes now than a couple of years ago.

The changes in winter and monsoon rain patterns have also influenced the maturity and production of almost all fruit crops in the mountains.

#### ***Desertification:***

Agriculture depends on rains but rains are neither coming on time nor in sufficient quantity. This is resulting in lesser green area as farmers are giving up cultivation in fields which are far from their homes. This is now becoming a trend in hill agriculture. Regular cutting of trees by the people for their domestic needs and also by the forest department may be causing desertification although it may not yet be visible to people.

***Loss of land/crops/assets due to landslides:***

Due to sudden and abrupt rains that occur often, agricultural fields are getting washed away. considerable soil erosion is seen during the monsoons. Landslides and slips are more frequent and bigger. This is affecting crops and sometimes causing damage to houses. In 2007, torrential rains caused heavy losses of property, land, crops, life etc across the state and the entire supply line of common essential commodities got affected for at least a week. This phenomenon occurred again in 2010 and in 2012 with nearly half of the Garhwal mountain region getting affected.

***Loss of crops/livestock/other assets due to floods:***

In the recent past, cloud bursts in different areas seem to have increased in frequency. This has resulted in high flood situations for living near drainage points such as rivers and big streams due to which agricultural fields, houses, public property, roads, livestock etc. are being damaged or lost. This has become a common feature during the monsoon season now. These were rare events in the past.

***Food insecurity:***

Food insecurity for those dependent on local agriculture has increased. The local production of different crops has decreased or become uncertain in the recent past and this trend continues. The reason given by the community is unpredictability of rain, sometimes torrential and at other times scanty and localized rains..

***Scarcity of drinking water:***

The scarcity of water has tremendously increased. A majority of local water bodies have dried up in and around the project areas. This is a widespread phenomenon and has happened due to many reasons but is mainly attributed to uneven and less than average rainfall.. Other reasons given are reduction in total biomass, decrease in tree canopy, increase in frequency of cloud bursts, repeated forest fires, deforestation and sudden run-off of water on a large scale instead of percolating down to the ground. During summers the villagers, especially women, face the problem of scarcity of drinking water in the mountains. This is the period when most of the local natural drains, rivulets, naulas (spring-based drinking water sources) go dry.

***Change in the use of agricultural land:***

Although a majority of the farmers are still engaged in traditional farming, some of them are beginning to change their cropping patterns and have started growing ginger, turmeric and more short-duration vegetable crops. Along with this they are planting fruit trees in low-producing fields.

***Increasing attacks of new diseases and pests:***

In such changing climatic conditions some new disease and pest have emerged. For example yellow disease in paddy (locally called “*Kum*”) has become a common occurrence; red ant is also damaging the paddy crop. An attack of white grub has increased. The population of wasps has increased and common ants are now also causing harm.

***Soil erosion:***

The terraced and sloping fields are always susceptible to high levels of soil erosion and land slips, which have increased in the recent past.

***Decrease in productivity and production:***

The average productivity of crops has decreased, especially in rain-fed agricultural areas but the effects of unpredictable rainfall has lowered production also in irrigated land. Due to these reasons the productivity of the land has decreased, especially in rain-fed agriculture. On irrigated lands, farmers are using chemical fertilizers for maintaining a higher level of production.

## Effects of climate change noticed in socio-economic life

The effects of climate change in socio-economic life as noticed by the people are as follow:

### **Decrease in family income:**

The families dependent solely on agricultural income are seriously affected. Migration in search of employment outside has been common for the mountain economy to generate a support income, and this trend is on the increase. Many houses in nearly all villages have been abandoned as the temporary migration of earlier years has transformed into permanent migration from the village. The absence of employment and the hardships of mountain life is compelling people, especially male youth members of families, to search for jobs in big cities. This migration is also becoming permanent as girls and their families too want a groom who works in the city and is perceived to have better job or economic prospects.

### **Drop out from school:**

The school dropout rate is very low in primary and middle schools but for higher education from high school onwards, the dropout rate is higher. This is more pronounced in the case of girls in some areas where higher educational institutions are at an inconvenient distance and also because of reduced family incomes and security issues. However, all in all, education indicators are better in the State than the national average.

### **Out-migration of youth:**

High out-migration of potential youth is seen in the hills with increasing regularity. Adverse climatic conditions due to climate change is also directly responsible for the increase in out-migration. Now, with decreased and often no income from agriculture and employment insecurity in the area, young people are migrating in search of livelihood opportunities to provide for their current and future families. Nearly 52% of respondents surveyed acknowledged the above fact.

### **Households are in debt:**

About 30% respondents said that they knew of people taking loans to pay for their food and other household requirements. Loans are being taken from banks for petty-income earning activities such as

purchasing milking cows and buffaloes, running petty shops, buying chicks and goat kids for raising and selling. The general opinion was that for most, whatever new activity they tried has failed, leaving them in a vicious cycle of debt.

### **Increase in disease:**

More than 54% respondents stated that they are not in good health. This may be because of malnourishment and low intake of nutritional food which is lowering immunity. This explanation was given by a few of the educated and aware respondents). The prevailing poor health is also attributed to the increased intake of chemically grown, preserved and stored food. The changing life style ( change in food habits, use of junk food, fast food, avoiding traditional food, reduction in physical labour etc is causing bad health, say many of the respondents.

### **Dependency on government food and other social schemes:**

Dependency on the public distribution system (PDS) for subsidized food has increased in the villages. There has been an increase in the number of poor and vulnerable persons identified as having an income that is below the poverty line. This number was negligible 0 years back. But today a large network of highly subsidized food supply systems is working across the country. The availability of 25 kg rice @Rs 3/ (equivalent to 5 US cents per kg of rice ) kg and 20 kg wheat@ Rs 2/ kg) is discouraging and demoralizing for farmers engaged in agriculture.

it is proving detrimental to the agriculture sector and worsening the already poor condition of marginal and small farmers.

### **Sense of insecurity:**

64% of respondents agreed that they are insecure about future survival. They question how long government food distribution schemes will last in such a changing environment and where food will come from in the future if farmers are forced out of farming due to adverse conditions created by natural phenomena as well as policy.

## PART IV: Effect of climate change on women

When asked who were the most affected in society by climate change every one instantly said ALL without giving any thought to the question. But after some deliberation, nearly 77% of respondents said that women are the most affected as they are responsible for and in charge of all tasks at home, in the agricultural fields, for animal keeping and outside home such as purchases from market, wage labour, bank work, social responsibilities and obligations. Climate change has further increased her drudgery and affected her intake of food. But 23% of respondents were of the opinion that children and youth are also seriously affected. According to them, when parents are troubled, children and youth automatically suffer.

### **Women's problems today and 20 years ago:**

#### **Food problems:**

Woman being the main role players in mountain agriculture, faces all the problems related to agriculture production. She always takes on the extra burden of any eventuality occurring during the cropping period until the crops mature, are harvested and stored. Otherwise all her efforts come to nothing.. So she has always to be extra alert, attentive, careful and do any quantum of extra work to combat untoward situations. But in spite of this if production decreases unexpectedly there is bound to be pressure on women. This pressure further gets intensified when she also plays the role of the head of the family. Close to 49 % of women respondents say that they have more roles to play in an individual capacity in food production than 20 year ago when a joint family system was more predominant. The main challenges to food production faced are untimely and less rainfall over a longer period and damage caused by wild animals. 29 % of women felt that no extra pressure is faced by women compared to 20 years ago whilst 21% of women could not respond to the question as they felt they were not in position to answer.

#### **Health problems:**

Of the total number of women in the survey, 68 % agreed that there is an increase in health problems at present but simultaneously they also acknowledged that there is an increase in health facilities. The majority expressed the increase in workload, anxiety, tension, low food intake, change in lifestyle, chemicals found in food etc as the root causes behind the increasing ill health of the population. But 13% felt that health problems are the same as 20 years ago while 19% could not answer the question as they felt they did not know.

**Lack of proper diet:**

Traditionally women in Uttarakhand were the last to eat, after serving every family member and this was often only pot luck. Some 20% of the women feel that the situation remained the same even today where women go with little or no food many times. This is more prevalent in families which are solely dependent on agricultural income. But 60 % of the women say that the situation is quite improved now. They take a proper diet and do daily wage labour in the Mahatma Gandhi National Rural Employment Guarantee scheme MNREGS, of the government of India to ensure 100 days of employment to every rural family who needs this employment and the resultant income.

**Low quality of food:**

Generally, the common diet of the people in this area is low in calories and also in nutrients. This problem has been further aggravated because of the mono-cropping culture of modern agriculture and the food supply of the government under the PDS which is limited to wheat and rice. In former times, people used to grow multiple crops and millets in large quantities which helped to balance their diets. Furthermore, the food grown was based on natural farming methods and nobody knew of chemical fertilizers and pesticides which are now available almost everywhere. More people used to keep more cows and buffaloes than now and milk, butter oil, curd etc were a part of the main diet of all.

**More time spent in collecting water/wood/ fodder:**

In this respect, the situation is changed as a majority of the household rear less animals due to scarcity of forest grass and field fodder. Today nearly 60% of families have liquid petroleum gas (LPG) and piped water connections in their villages which have made the life of women more comfortable. However the price of gas is increasing regularly and availability of LPG in the villages is an issue.

**Disputes among family members:**

Although unfortunate, disputes among family members is on the increase in many households. It is mainly related to an increase in alcoholism among male family members, even youth, who are victims to this problem. Unavailability of livelihood sources, low returns from agriculture, inability to provide a desired good education to their children, disputes in community on distribution of irrigation water, opportunity of employment govt. run development schemes are the cause of family disputes. Government run development schemes often offer employment on family basis, to one member of family so that benefits accrue to as many families as possible. Within the extended family it becomes a matter of dispute as to who among the needy family members will get the employment and the income, In all such cases, women are the main victims directly or indirectly and they always face the heat. When the question of

whether they suffer more in family and other disputes was put directly to the women, nearly 25% said and 46 % said no!

### **Increase in stress:**

The survey also reveals that more women suffer from stress due to the above-mentioned problems.40% of the respondents accept an increase in tension within the family but 32 % do not disagree to it and 29 % did not respond to the question at all.

### **More time taken in looking after sick people:**

Of the total respondents, 25% said more time is incurred now in looking after sick people but 42% said that due to better health facilities being available the sick get better fast and therefore not much time is taken to look after them.

### **Pressure to take loans:**

Only those women who are heads of families and are responsible for looking after their families were found to be under pressure to obtain loans.. In general, men are more vulnerable to this problem. The survey reveals that only 19% respondents agreed they had pressure to take a loan and 47 % said that there is no pressure on women in regards to loan transactions.

### **Work pressure and labour reduction by machines:**

Women in mountain villages are generally over- worked and face a great deal of pressure in agriculture. This stress is further aggravated in those families where a male partner is absent. Now, climate change is adding more pressure of work on women especially in cropping operations, fodder management and fuel collection. In the ridge areas especially women do all the post harvest work in agriculture using their own labour even though machines are now available for threshing, husking, winnowing etc. These machines (even if expensive) could reduce work pressure. But only 21% of respondents supported this statement perhaps because these 21 % used machines and recognized their benefit..Due to transport problem majority of farmers are unable to use machines and are also unaware of machines which could lighten their work. 45% did not agree to this and 34 % did not give any opinion



## **PART V: Problems faced by men due to climate change**

Climate change also impacts men. The questions that were put to the women regarding impacts on their lives through climate were also posed to the men.

### **Increased pressure for meeting food requirements of the family:**

In situations when crops fail despite inputs of hard labour and extra time by the family members, then the entire responsibility of managing food for the family comes on the shoulders of male members. This causes problems for male family member in particular and for the entire family in general. More than 61% of respondents agreed to this situation whereas 15% did not agree and 24% did not express any opinion.

### **Increase in health problems:**

More than 66 % of respondents said that health problems have increased among men in comparison to 20 years ago. This is attributed to excess smoking, chewing tobacco, consuming alcohol, consuming more tea (which creates acidity and reduces hunger), increasing domestic unrest, low earnings and high expenses, unemployment etc. The common ailments from which men suffer are high blood pressure, anxiety, asthma, diabetes, heart problems etc. The availability of comparatively better health facilities today causes less morbidity in men than in the past. It is difficult to attribute their growing anxiety and health problems directly to climate change.

### **Decreased quantity of food for consumption:**

More than 65% of respondents said that presently there is no scarcity of food as it is easily available at subsidized rates. Men are given work for fourteen days a month in the lean agricultural season as an unemployment compensation under the government's rural employment guarantee flagship programme. But 18% of respondents still said that the food quantity has decreased over last some years. Rest 22% could not respond on this question.

### **Decreased quality of food for consumption:**

The majority of respondents, 63%, accepted that quality deterioration in food was taking place. This is because they now buy larger quantities of food either from the government PDS or from the open market and they have doubts on the quality. The food is neither tasty nor healthy they say. Nearly 17%

respondents thought that the quality of food is good and 20 % did not reply as they did not give an opinion.

### **More time spent in collecting water/wood/ fodder:**

Generally these responsibilities are fulfilled by women alone but in exceptional cases men also do this work. The question however is not how relevant the issue so to them. 18% of the respondents said more time is spent in managing grass, fuel wood and drinking water collection whereas 53% did not think so. They said that this task is done in lesser time nowadays. 29% did not respond with any clear opinion.

### **Increase in fights/arguments among family members:**

Alcohol consumption is a big problem in the hill areas. This often causes arguments and fights among family members. Other factors such limited income to meet growing aspirations is also responsible for family disputes. Now, the fluctuation in agricultural income is also causing family problems.

### **Increased emotional stress/anxiety:**

It appears that as a result of above problems, tension, stress and anxiety among family members are increasing. These are often affecting both partners as both have equal responsibilities to take care of the family. However it is more prominent among women as they seem more concerned. Men are sometimes equally concerned but this depends on the situation and its causes. Over 41% respondents accepted that there is an increase in tension but 33% did not agree to this, while 25% were silent during the survey.

### **More time spent on caring for the sick:**

49% of the respondents felt that due to better facilities available for health treatment the overall time spent on care giving has reduced comparing to (10-15 years back) But it does not mean that the prevalence of diseases has decreased. Many diseases which were not known earlier have become prevalent today. 17% respondents are of the opinion that time spent in caring for the sick has increased whereas 34% did not respond (were not in position to give accurate answer).

### **Pressure to take loan/debt:**

The male is responsible for maintaining the family - not only to take care of food needs but also to meet out other requirements such as education, health, agricultural inputs, social and family matters. Being financially poor, people do take loans from banks and other credit sources for meeting social obligations and sometimes for financing petty business. The pressure of paying back these loans in adverse situations

creates stress. Over 48% of respondents agreed that they often felt under pressure to mobilize loans or clear debts, whereas 25% do not agree with this and 27 % could not answer.

**Pressure to get labour and machines for work:**

In hill and mountain agriculture, most farmers fall into the category of being very small and marginal. Farmers do all the agricultural tasks themselves and do not employ labour.. They often bear the pressures of the extra burden of work themselves or barter labour for labour with neighbors. In these circumstances the question of using an additional paid workforce does not arise.

## PART VI: EFFORTS TO DEAL WITH CLIMATE CHANGE

People were asked about efforts they had made to deal with climate change induced challenges in agriculture and in their lives. The answers received have been classified below.

### **Planted different varieties of existing crops:**

Some farmers said that they have started replacing their traditional, repeatedly used and un descriptive seed by new varieties. The improved varieties adopted are:

- In paddy - Saket-1, Kashmiri, China-4, Himanchali.
- In wheat - Kalyani, VL-54, VL-426, Pant-308/2472/2438/20 and VL-85

The above seeds are used only by a limited number and better off farmers. The majority of the farmers continue using old varieties and traditional seeds.

### **Planted new crops:**

In the last couple of years, the trend of growing cash crops, vegetables and spice crops is increasing in some parts of the project area. The new crops being taken up or taken up on a larger scale are turmeric, ginger, big cardamom as spices and frenchbean, cauliflower, ladies fingers (as vegetables). The main reason to grow spices is to save crop from the menace of wild animals, especially monkeys and wild boar. Wild animals do not eat spice crops or destroy them. Spice crops also earn some cash money.

### **Made changes in cropping systems:**

Mixed cropping systems are a common practice in rain fed areas and reduce risk. Mono cropping is practiced in paddy and wheat cultivation. Fruit crops are now increasing in prevalence in place of food crops in some villages.

### **Planting of disease-resistant varieties:**

Farmers said that they did not know about disease-resistant varieties nor has anybody told them about this. But in their opinion whatever new seeds they purchased from outside sources have mostly been affected by disease.

**Planted fast maturing varieties:**

Some farmers have adopted fast maturing varieties like VL-54 in wheat.. In paddy, they are growing ‘Sathi’, a variety locally known for its early maturity. This paddy crop matures in a maximum of 60 days after transplantation.

**Changed planting time:**

Formerly, the ploughing and sowing periods were more or less fixed; now due to changes in climate, the sowing time has got disturbed and depends on the onset of first monsoon rains. Thus the sowing period has seen a shift varying between 12 to 15 days.

**Tried breeding new varieties of crops that could resist these changes:**

The traditional crops grown in the project area have a better capacity to resist adverse climatic conditions. So far no new varieties of any crop have been tried by villagers in the project areas..

**More livestock, instead of depending on crops alone:**

Crop farming is preferred over and above animal husbandry, in the hill areas. Livestock rearing was never practiced as a mainstay. Livestock rearing has been further reduced due to severe problem of fodder and some policy issues. A policy introduced and existing today does not allow cows and bullocks to be sold for sale or slaughter outside the region. This has reduced livestock population in the region as smallholder farmers find it difficult to continue to maintain cows who have outlived their economic life for the farmer.

**Planted trees:**

To encourage tree planting, both horticulture and silvi-pastoral work has been promoted by government departments as well as NGOs. A range of fruit and fodder varieties have been distributed by these agencies. Among the main fruit varieties distributed are mango, lemon, malta orange, pear, lychee for fruit cultivation and the banj (Indian oak), bhimal (*Grewia optiva*), kharik (*Celtis australis*), ritha (soapnut), utis (*Betulaceae*), sahtoot (mulberry), queral as major trees for forest promotion. However villagers have not actively sought out plants to deal with climate change.

**Found new/better ways to store/process food:**

Traditional techniques of storage in bamboo and wooden boxes plastered with a cow dung and mud mixture are less in use today. Instead aluminum/plastic containers are in use. Families are increasingly

using chemical pesticides to control pests. Some continue to use traditional methods such as different plant leaf extracts and certain herbs. They don't know techniques to process food or fruits other than making some pickles and bars or dried vegetable and pulses for use when fresh vegetables are scarce. These are traditional skills.

**Found ways to harvest more water:**

For water conservation and utilization, traditional chals, khals and earthen ponds are being replaced by cemented tanks and *earthen* guhls have been converted into cemented guhls. Most of the tanks and gools (water channel systems) are defunct either due to cracks in them or because the water source has dried up. No thought or effort has gone into actively seeking out ways to conserve water considering that water scarcity is becoming a problem and timely rains cannot be relied upon.

**More off farm work, instead of farming:**

In the project villages, women continue to engage in on farm work in spite of its low earnings. But men are traditionally more engaged in off-farm activities such as small businesses and paid employment outside the village. In lean agricultural periods, both men and women go for labour in and outside of the village under the government employment guarantee scheme.

**Undertook soil management measures:**

Soil management is very poor and no special effort has been made by villagers except field bunding (to manage rain water) which is a traditional practice in their fields. Farmers do not give much attention to preparing compost. They also do not use compost in the required quantity to ensure a healthier soil.

**Weather forecasts:**

There is no provision for any specific weather forecasting. Also the farmers are not used to it and seem not concerned about its value.

**Risk management instruments:**

No such instruments are available and used by farmers.

**Livelihood diversification:**

No special efforts have been undertaken toward livelihood diversification.

**Land use and management:**

No efforts to take up different land use and management practices are visible.

**Set up of village community action group/ organization to tackle the problems:**

There is no organization in the villages which is taking care of specific and general problems of farmers in relation to climate change.

**Documentation of change by using photos/notes/pictures/ stories:**

There is nobody who is doing this work and this is not happening.

**Set up of saving/ rotating/ emergency fund to support community members in need:**

Some initiatives have been taken in the villages by government and nongovernmental organizations to form self-help groups and to generate their own fund through monthly savings. A thrift and credit system has been established within the groups which has provision to give loans to its members to meet their emergency domestic requirement as well as to support small income earning activities. But no special provision is in place to deal with problems concerning agriculture.

## Inspiration for initiatives/adaptations to deal with change

Some people have tried to adapt themselves to changing climatic conditions through the following:

### **Remembered what my parents/grandfather did:**

Some people said they turned to how their elders coped or would have coped with such adverse situations. Over 42 % of the respondents said they would follow traditional techniques and knowledge to help in coming over the problems.( by adopting organic farming, cultivation of traditional crops and maintaining bio diversity on the farm) 27 % were in favour of adopting scientific solutions and techniques. There was no reaction from 31% as they were not clear in their minds to answer.

### **Saw it being done in a neighboring village/different part of the country:**

42 % said they had learnt from successful innovations of neighboring households and villages outside their own village and then tried these out. They achieved some success in cultivating some vegetables and spices for the market.)

### **Come up with an idea myself and tried it out:**

Only 18% of respondents said they had applied their own experience and minds to solve the problems they encountered in term of climate change.

### **Saw it being done by others in the village/community:**

41% people said they learnt more from the villages and communities they were in contact with whereas 33% were not in this opinion and 26% did not respond.

### **Read in newspapers/magazine/ poster:**

Only 9% people said they learnt from news papers and other media but most of the time what they had read and learnt was not applicable in the mountain context in which they live and farm. The rest of the respondents either did not consider media to be important source of information of relevance to them or kept silent.

### **Heard about it on radio/saw it on television:**

The response was same as above.



**Was suggested by extension/development agent:**

The role of extension or development agents was found to be negligible.

Farmers were asked whether they knew of practices which were not in use today but which could better help adapt to climate change. Many farmers responded by saying that farmers in general did not work as hard as they did 20 years ago. The quantity and quality of compost manure has been reduced by which soil fertility has become poor and production is low. Earlier farmers use to make bunds in the agriculture field to conserve water and soil but today the farmers are quite negligent in these matters. Medicinal herbs were used to protect seeds now these are replaced by chemical pesticides. Earlier farmers used to protect their agricultural fields through collective efforts but now this practice is no more in use.

The majority of the farmers said that older farmers had much more knowledge than the younger ones in coping with the adverse conditions. They knew how to make adjustment in sowing, weather prediction and biological treatment in disease and pest control. However, according to some respondents, younger farmers have better knowledge for climate change adaptation as they have more technical knowledge. But it is unfortunate that such farmers are least interested in doing agriculture and prefer petty jobs and other private work.

Communities were asked whether traditional knowledge (both crops and practices) and the ability for coping rested equally with men and women. They were asked to give reasons for their answer. The answer with which most people agreed was that earlier men and women equally used to contribute their efforts in agriculture and had equal knowledge. But unfortunately now men's participation has decreased substantially and women have almost sole responsibility for agriculture.

On being asked whether farmers had received any information about climate change happening worldwide, it was found that some men had heard or read about this from distant sources. However, no one had explicitly provided any information on climate change or the need for efforts to adapt. Women were largely ignorant. Some farmers felt that with improved systems of communication, such information should be provided to villagers and villages as this is a dire need.

When asked whether they would be willing to try out adaptations that other individual farmers had tried out and seemed useful they said they would be happy to try out and also extend the innovation to other farmers.

## BASE LINE DATA

**Table 1: General Information**

SL.No.	Region	S.N. (Gram Panchayat-GP)	Name (Gram Panchayat-GP)	S.N. (Revenue Village)	Name (Revenue Village)	Households			No. of inhabitants					Distant to closest town/center and nature of accessibility			Basic service available in the village				Cooperative shops for agro products				Irrigation	Organization in Village		
						Male headed	Female headed	Total	Men	Women	Total	Youth ( Age 14 - 18 years)	Children ( Age 0 - 14 years)	Closest town	Distance (in Km.)	Nature of accessibility (Bus/Foot/Others)	School (P/H/I)	Health (AC/PC/CHC)	Postal service	Communication	Seeds	Fertilizers	Agriculture Implements	Community service like Panchayat		Availability of Irrigation	Self Helps Groups	Farmers Interest Groups
1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
1	Jaurasi	1	Sirda	1	Sirda	18	17	35	90	101	191	70	21	Chaukhutia	7	jeep	No	No	No	Yes	No	No	No	Yes	Yes	yes	No	No
				2	Gajar	21	13	34	54	96	150	58	18	Chaukhutia	7	jeep	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
		2	Querali	3	querali walli	9	7	16	40	54	94	23	19	Chaukhutia	15	jeep	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
				4	querali palli	5	7	12	24	33	57	16	14	Chaukhutia	15	jeep	Yes	No	No	Yes	No	No	No	Yes	No	Yes	No	No
				5	Malsakhet	15	6	21	50	57	107	39	19	Chaukhutia	20	jeep	No	No	No	Yes	No	No	No	Yes	Yes	Yes	No	No
		3	Khatyari	6	Khatyari malli	31	18	49	114	144	258	57	73	Chaukhutia	18	jeep	No	No	No	Yes	No	No	No	Yes	Yes	yes	No	No
				7	Khatyari talli	28	18	46	83	108	191	52	69	Chaukhutia	18	jeep	Yes	No	Yes	Yes	No	No	No	No	Yes	Yes	yes	No
		4	Bhaltwani	8	Bhaltwani walli	7	9	16	40	54	94	25	17	Chaukhutia	12	jeep	No	No	No	Yes	No	No	No	Yes	Yes	No	No	No
				9	Bhaltwani palli	7	5	12	24	33	57	18	13	Chaukhutia	11	jeep	No	No	No	Yes	No	No	No	Yes	No	No	No	No
				10	Brahmdevchauri	5	7	12	28	32	60	12	24	Chaukhutia	18	jeep	Yes	No	No	Yes	No	No	No	Yes	No	Yes	No	No
		5	Jaintha	11	Jaintha	41	20	61	125	157	282	53	89	Chaukhutia	20	jeep	Yes	No	No	Yes	No	No	No	Yes	No	No	No	No
<b>Sub Total</b>					187	127	314	672	869	1541	423	376																
<b>%</b>					59.55	40.45	100.00	43.61	56.39	100.00	27.45	24.39974		14.6														
2	Taragtal	6	Naugaon beria	12	Naugaon beria	42	24	66	143	170	313	103	76	Chaukhutia	11	jeep	yes	yes	No	Yes	No	No	No	Yes	Yes	yes	No	No
				13	Taragtal	17	14	31	72	74	146	55	28	Chaukhutia	10	jeep	No	No	No	Yes	No	No	No	Yes	No	Yes	No	No
		7	Kotyura	14	Golkhal	10	7	17	31	39	70	21	13	Chaukhutia	12	jeep	No	No	No	Yes	No	No	No	Yes	No	Yes	No	No
				15	Kotyura	98	49	147	371	546	917	228	150	Chaukhutia	7	jeep	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	No	No
<b>Sub Total</b>					167	94	261	617	829	1446	407	267																
<b>%</b>					63.98	36.02	100.00	42.67	57.33	100.00	28.15	18.46		10														
3	Nagchulakhali	8	Hargarh	16	Hargarh	101	74	175	593	534	1127	51	87	Mahalchauri	8	jeep	Yes	No	No	Yes	No	No	No	Yes	No	yes	No	No
				17	Beena	98	77	175	481	394	875	53	95	Mahalchauri	12	jeep	Yes	No	No	Yes	yes	yes	No	Yes	No	yes	No	No
		9	Beena	18	Jogina	23	12	35	95	78	173	13	21	Mahalchauri	12	jeep	Yes	No	No	Yes	yes	yes	No	Yes	No	yes	No	No
				19	Rohida	55	63	118	279	257	536	43	79	Mahalchauri	19	Jeep	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No	No

	11	Maikholi	20	Maikholi	93	47	140	302	291	593	49	61	Mahalchauri	5	Jeep	Yes	No	No	Yes	No	No	Yes	No	Yes	No	Yes	No	No	
<b>Sub Total</b>					370	273	643	1750	1554	3304	209	343																	
<b>%</b>					57.54	42.46	100.00	52.97	47.03	100.00	6.33	10.38		11.2															
<b>Total (1+2+3)</b>					724	494	1218	3039	3252	6291	1039	986		11.9															
<b>%</b>					59.44	40.56	100.00	48.31	51.69	100.00	16.52	15.67																	

**Table 2: Land classification**

Sl.No.	Region/Village Name	Land Use and Land Cover of the Village (in ha.)								Total land under cultivation during last 3 years (in ha.)											
		Total Land*	Revenue Land (Private own land)	Land under vegetation (Grampanchayat Forest Land)	Built up Land (Area under Construction)	Total cultivable area	Net sown area	Total gross cropped area	Total irrigated area	Rabi Season				Kharif Season				Total (Rabi & Kharif)			
										Single crop	Double crop	Multiple crop	Total	Single crop	Double crop	Multiple crop	Total	Single crop	Double crop	Multiple crop	Total
1	2	3	4	5	6	7	8	9	10	11	13	14	15	16	17	18	19	20	21	22	23
<b>Region – I</b>																					
1	Sirda	67.27	20.54	45.00	0.70	20.54	15.45	31.80	6.35	4.53	3.46	7.47	15.45	5.83	2.15	7.48	15.45	10.35	5.60	14.95	30.90
2	Gajar	115.33	25.33	47.05	0.68	25.33	22.33	46.00	8.26	5.33	4.65	12.35	22.33	7.39	4.23	10.71	22.33	12.72	8.88	23.06	44.66
3	querali walli	103.22	35.54	50.08	0.32	35.54	32.57	65.80	5.63	8.86	6.36	17.36	32.57	12.47	5.36	14.74	32.57	21.33	11.72	32.09	65.14
4	querali palli	104.89	35.37	55.14	1.22	35.37	33.46	67.70	-	10.91	5.17	17.38	33.46	11.67	5.18	16.61	33.46	22.58	10.35	33.99	66.91
5	Malsakhet	63.08	22.75	30.00	0.42	22.75	20.37	41.70	8.65	6.63	3.29	10.46	20.37	5.87	4.12	10.37	20.37	12.50	7.41	20.83	40.73
6	Khatyari malli	153.16	45.59	105.00	0.98	45.59	41.32	83.90	6.78	12.60	6.35	22.36	41.32	14.10	6.15	21.07	41.32	26.70	12.50	43.44	82.64
7	Khatyari talli	66.91	37.47	20.14	0.92	37.47	34.37	70.00	6.74	8.71	7.32	18.34	34.37	10.35	7.15	16.87	34.37	19.06	14.47	35.22	68.74
8	Bhaltwani walli	17.51	7.85	5.15	0.32	7.85	7.85	16.80	3.65	2.21	1.63	4.00	7.85	3.21	1.64	2.99	7.85	5.43	3.27	6.99	15.69
9	Bhaltwani palli	68.14	18.80	30.00	0.24	18.80	16.36	34.00	-	4.46	3.15	8.75	16.36	6.34	3.15	6.87	16.36	10.80	6.30	15.62	32.71
10	Brahmdevchauri	77.43	10.95	---	0.30	10.95	8.24	17.90	3.98	2.74	1.35	4.15	8.24	3.87	1.47	2.90	8.24	6.60	2.82	7.05	16.47
11	Jaintha	125.08	45.89	40.32	2.00	45.89	40.00	80.00	-	21.00	13.00	6.00	40.00	18.50	16.50	5.00	40.00	39.50	29.50	11.00	80.00
<b>Sub Total</b>		<b>962.02</b>	<b>306.07</b>	<b>427.88</b>	<b>8.10</b>	<b>306.07</b>	<b>272.30</b>	<b>544.59</b>	<b>50.04</b>	<b>87.97</b>	<b>55.73</b>	<b>128.61</b>	<b>272.30</b>	<b>99.60</b>	<b>57.09</b>	<b>115.61</b>	<b>272.30</b>	<b>187.56</b>	<b>112.82</b>	<b>244.22</b>	<b>544.59</b>
<b>%</b>		<b>100.00</b>	<b>31.82</b>	<b>44.48</b>	<b>0.84</b>	<b>100.00</b>	<b>88.96</b>	<b>177.93</b>	<b>16.35</b>	<b>32.30</b>	<b>20.47</b>	<b>47.23</b>	<b>100.00</b>	<b>35.16</b>	<b>20.15</b>	<b>42.46</b>	<b>100.00</b>	<b>33.76</b>	<b>20.31</b>	<b>43.96</b>	<b>100.00</b>
<b>Region – II</b>																					
1	Naugaon	97.80	33.46	---	4.51	33.46	30.56	55.90	10.21	9.64	5.36	10.35	25.35	10.83	4.36	15.37	30.56	20.48	9.73	25.71	55.91
2	Taragtal	132.02	42.79	24.00	1.22	42.79	37.25	69.40	16.73	8.42	8.35	15.39	32.15	12.26	6.25	18.75	37.25	20.67	14.59	34.13	69.39
3	Kotyura	198.99	77.98	50.84	2.34	77.98	75.35	146.00	32.29	19.47	18.65	32.56	70.68	27.38	9.65	38.32	75.35	46.85	28.30	70.88	146.03
4	Golkhal	40.12	14.79	---	2.30	14.79	12.35	21.70	---	2.39	1.99	4.97	9.35	4.03	2.32	6.00	12.35	6.42	4.31	10.97	21.69
<b>Sub Total</b>		<b>468.92</b>	<b>169.02</b>	<b>74.84</b>	<b>10.37</b>	<b>169.02</b>	<b>155.50</b>	<b>293.00</b>	<b>59.22</b>	<b>39.92</b>	<b>34.34</b>	<b>63.26</b>	<b>137.52</b>	<b>54.49</b>	<b>22.58</b>	<b>78.43</b>	<b>155.50</b>	<b>94.41</b>	<b>56.93</b>	<b>141.70</b>	<b>293.02</b>
<b>%</b>		<b>100.00</b>	<b>36.04</b>	<b>15.96</b>	<b>2.21</b>	<b>100.00</b>	<b>92.00</b>	<b>173.35</b>	<b>35.04</b>	<b>29.03</b>	<b>24.97</b>	<b>46.00</b>	<b>100.00</b>	<b>35.04</b>	<b>14.52</b>	<b>50.44</b>	<b>100.00</b>	<b>32.22</b>	<b>19.43</b>	<b>48.36</b>	<b>100.00</b>
<b>Region – III</b>																					
1	Hargarh	254.79	78.22	169.58	6.99	78.22	70.87	325.65	0.12	56.27	10.37	4.24	70.87	50.37	9.35	11.16	70.87	106.63	19.71	15.39	141.73
2	Beena	247.52	87.82	153.80	6.90	87.82	80.46	21.45	5.95	61.25	15.22	4.00	80.46	60.22	6.24	14.01	80.46	121.46	21.45	18.00	160.91
3	Jogina	50.00	20.56	13.43	1.50	20.56	20.56	16.28	-	9.32	6.24	5.00	20.56	7.52	10.04	3.00	20.56	16.84	16.28	8.00	41.12

4	Rohida	422.75	133.86	225.36	8.25	133.86	112.46	34.60	6.08	81.05	19.25	12.16	112.46	83.12	15.35	13.99	112.46	164.17	34.60	26.15	224.91
5	Maikholi	212.79	59.33	25.96	5.35	59.33	52.31	7.38	4.71	40.26	4.25	7.80	52.31	42.35	3.12	6.84	52.31	82.62	7.38	14.64	104.63
<b>Sub Total</b>		<b>1187.84</b>	<b>379.80</b>	<b>588.13</b>	<b>28.97</b>	<b>379.80</b>	<b>336.65</b>	<b>405.36</b>	<b>16.86</b>	<b>248.14</b>	<b>55.33</b>	<b>33.19</b>	<b>336.65</b>	<b>243.58</b>	<b>44.09</b>	<b>48.99</b>	<b>336.65</b>	<b>491.71</b>	<b>99.41</b>	<b>82.18</b>	<b>673.31</b>
<b>%</b>		<b>100.00</b>	<b>31.97</b>	<b>49.51</b>	<b>2.44</b>	<b>100.00</b>	<b>88.64</b>	<b>106.73</b>	<b>4.44</b>	<b>73.71</b>	<b>16.43</b>	<b>9.86</b>	<b>100.00</b>	<b>72.35</b>	<b>13.10</b>	<b>14.55</b>	<b>100.00</b>	<b>73.03</b>	<b>14.76</b>	<b>12.20</b>	<b>100.00</b>
<b>Total</b>		<b>2618.79</b>	<b>854.89</b>	<b>1090.84</b>	<b>47.44</b>	<b>854.89</b>	<b>764.45</b>	<b>1242.95</b>	<b>126.12</b>	<b>376.03</b>	<b>145.40</b>	<b>225.06</b>	<b>746.47</b>	<b>397.67</b>	<b>123.76</b>	<b>243.03</b>	<b>764.45</b>	<b>773.69</b>	<b>269.16</b>	<b>468.09</b>	<b>#####</b>
<b>%</b>		<b>100.00</b>	<b>32.64</b>	<b>41.65</b>	<b>1.81</b>	<b>100.00</b>	<b>89.42</b>	<b>145.39</b>	<b>14.75</b>	<b>100.00</b>	<b>38.67</b>	<b>59.85</b>	<b>198.51</b>	<b>100.00</b>	<b>31.12</b>	<b>61.11</b>	<b>192.23</b>	<b>100.00</b>	<b>34.79</b>	<b>60.50</b>	<b>195.29</b>

**Table 3: Agriculture**

S.N.	Region / Village Name	Crop List - Cultivation			Crop list - Cultivation			Area under fruit(in ha.)	
		Single crop	Double crop	Multiple crop	Irrigated Farming	Rain-fed Farming	Dry Land Farming	Irrigated	Rain-red
<b>Region - I</b>									
1	Sirda	Wheat, Paddy, Maize, Barley, Turmeric, Potato, Pea	Paddy+Raddish, Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi, Urd+Ragi, Jhungora+Ragi, Ginger+Turmeric, Ragi+Amaranthus	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Bhatt+Gahat, Jhungora+Koni+Soyabean, Bajra+Soyabean+Ragi, Wheat+lentil+Mustard	Paddy, Wheat, Potato, Pea, Radish, lentil	Ragi, White Soyabean, Black Soyabean, Kulth, Lentil, Jhungora, Koni, Urd, Turmeric, Barley	-	6.35	9.10
2	Gajar	Wheat, Paddy, Maize, Ginger, Barley, Potato	Arhar+soyabean, Ragi+Urd, Bhatt+Gahat, Ragi+Gahat, Wheat+Mustard, Barley+Lentil, Jhungora+Koni, Amaranthus+Urd	Ragi+Koni+soyabean, Bhatt+Gahat+mass+Ragi, Ragi+Amaranthus+Rais, wheat+lentil+Mustard	Paddy, Wheat, Potato,	Ragi, White Soyabean, Black Soyabean, Kulth, Lentil, Jhungora, Koni, Urd, Turmeric, Barley	-	8.26	14.07
3	querali walli	Wheat, Paddy, Maize, Lentil	Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maiz+chilly, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Jhungora+Koni+Soyabean,	Paddy, Wheat,	Raga, Koni, Jhungora, Soyabean, Black Soyabean, Kulth, Urd	-	5.63	26.94
4	querali palli	Wheat, Paddy, Maize, chilly	Ragi+Koni, Ragi+Jwar, Ragi+soyabean, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Jhungora+Koni+Soyabean, Amaranthus+Soyabean+Koni	Paddy, Wheat,	Chilly, Ragi, Koni, Jhungora, Soyabean, Black Soyabean, Kulth, Urd, Jwar, Bajra	-	-	33.46
5	Malsakhet	Wheat, Paddy, Maize, Potato	Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Bhatt+Gahat, Jhungora+Koni+Soyabean, Bajra+Soyabean+Ragi, Wheat+lentil+Mustard	Paddy, Wheat, Potato	Ragi, Soyabean, Black Soyabean, Kulth, Lentil, Jhungora, Koni, Urd, Turmeric, Barley	-	8.65	11.72

6	Khatyari malli	Wheat, Paddy, Maize	Chiily+Radish, Ragi+Gahat, Koni+urd, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Bhatt+Gahat, Jhungora+Koni+Soyabean, Bajra+Soyabean+Ragi, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Jwar, Bajra, Koni, Jhungora,Soyabean, Black Soyabean, Kulth,Urd	-	6.78	34.54
7	Khatyari talli	Wheat, Paddy, Maize	Arhar+Gahat, Soyabean+Ragi, Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Millets+Soyabean,	Paddy, Wheat,	Ragi, Jwar, Bajra, Koni, Jhungora,Soyabean, Black Soyabean, Kulth,Urd	-	6.74	24.63
8	Bhaltwani walli	Wheat, Paddy, Maize	Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Millets+Soyabean,	Paddy, Wheat,	Ragi, Soyabean, Black Soyabean, Kulth, Lentil, Jhungora, Koni, Urd, Turmeric, Barley	-	3.65	4.20
9	Bhaltwani palli	Wheat, Paddy, Turmeric, Ginger	Koni+Ragi, Jwar+Ragi, Ragi+Urd, Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Millets+Soyabean,	Paddy, Wheat,	Turmeric, Ginger, Ragi, Bhat, Urd, Soyabean, Black Soyabean, Kulth, Lentil	-	-	16.36
10	Brahmdevchauri	Wheat, Paddy, Turmeric, Ginger, ilaichi	Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi, Jhungora+Ragi, Koni+Jhungora, Barley+lentil.	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Millets+Soyabean, Gaderi+Maize+Radish+Turmeric	Paddy, Wheat,	Turmeric, Ginger, Ragi, Bhat, Urd, Soyabean, Black Soyabean, Kulth, Lentil	-	3.98	4.20
11	Jaintha	Wheat, Paddy, Lentil, Turmeric, Ginger	Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi, Barley+lentil, Jwar+Koni	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Millets+Soyabean, Amaranthus+Koni+Jwar+Bajra+Ragi	Paddy, Wheat,	Ragi, Jwar, Bajra, Koni, Jhungora,Soyabean, Black Soyabean, Kulth,Urd	-	-	40.00
	<b>Sub Total</b>						-	50.04	219.22
<b>Region - II</b>									
1	Naugaon	Wheat, Paddy, Maize, Lentil, Turmeric, Ginger	Paddy+Radish, Jhungora+Koni, Ragi+Koni, Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Jhungora+Koni+Soyabean, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Koni, Jwar, Bajra, Soyabean, Black Soyabean, Kulth, Lentil, Urd, Turmeric, Ginger, Garlic	-	10.21	20.36



2	Taragtal	Wheat, Paddy, Maize	Urd+Ragi, soyabean+Jhungora, Maize+Turmeric, Turmeric+Ginger, Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Jhungora+Koni+Soyabean, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Koni, Jwar, Bajra, Soyabean, Black Soyabean, Kulth, Lentil, Urd, Turmeric, Ginger, Garlic	-	16.73	20.52
3	Kotyura	Wheat, Paddy, Chilly, Maize, Lentil	Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi, Ginger+Radish, Turmeric+Maize, Chilly+Maize	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Koni+Jhunagora+Soyabean, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Koni, Jwar, Bajra, Soyabean, Black Soyabean, Kulth, Lentil, Urd, Turmeric, Ginger, Garlic	-	32.29	43.06
4	Golkhal	Wheat, Paddy, Chilly, Maize, Turmeric.	Koni+Urd, Jwar+Ragi, Jhungora+Koni, Koni+Ragi, Ragi+Gahat, Wheat+Mustard, Wheat+lentil, Wheat+Gram, Maize+Raddish, Maize+Gaderi	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Jhungora+Koni+Soyabean, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Koni, Jwar, Bajra, Soyabean, Black Soyabean, Kulth, Lentil, Urd, Turmeric, Ginger, Garlic	-	---	12.35
<b>Sub Total</b>							-	<b>59.22</b>	<b>96.29</b>
<b>Region - III</b>									
1	Hargarh	Wheat, Paddy, Lentil, Turmeric, Ginger, Maize	Ragi+Jhungora, Ragi+koni, Ragi+Soyabean, Gahat+Jhungora, Maize+radish, Wheat+Mustard, Mustard+Lentil,	Ragi+Bhatt+Gahat+Urd+Amaranthus, Ragi+Bhatt+Gahat, Jhungora+Koni+Soyabean, Bajra+Soyabean+Ragi, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Jhungora, Bajra, Maize, Arhar, Koni, Rais, Soyabean, Black Soyabean, Kulth, Turmeric, Ginger, Garlic	-	0.12	70.75
2	Beena	Wheat, Paddy, Lentil, Maize, Turmeric, Ginger	Ragi+Bhatt, Ragi+Gahat, Maize+Radish, Barley+Lentil Wheat+Mustard, Mustard+Lentil, Ginger+Turmeric, Turmeric+Maize	Ragi+Jhungora+Amaranthus, Ragi+Koni+Pulses, Radish+Maize+Ginger, Arhar+ragi+Jhungora+Urd, Ragi+Koni+Arhar+soyabean	Paddy, Wheat,	Ragi, Jhungora, Bajra, Maize, Arhar, Koni, Rais, Soyabean, Black Soyabean, Kulth, Turmeric, Ginger, Garlic	-	5.95	74.51
3	Jogina	Wheat, Paddy, Lentil, Maize, Turmeric, Ginger	Ragi+Bhatt, Ragi+Gahat, Maize+Radish, Barley+Lentil Wheat+Mustard, Mustard+Lentil, Ginger+Turmeric, Turmeric+Maize	Ragi+Jhungora+Amaranthus, Ragi+Koni+Pulses, Radish+Maize+Ginger, Arhar+ragi+Jhungora+Urd, Ragi+Koni+Arhar+soyabean	Paddy, Wheat,	Ragi, Jhungora, Bajra, Maize, Arhar, Koni, Rais, Soyabean, Black Soyabean, Kulth, Turmeric, Ginger, Garlic	-	0.00	20.56
4	Rohida	Wheat, Paddy, Lentil, Potato, Pea, Turmeric, Ginger	Ragi+Gahat, Ragi+Koni, Jwar+Gahat, soyabean+Jhungora, Lentil+Barley, Wheat+Gram Wheat+Mustard, Mustard+Lentil	Ragi+Bhatt+Gahat+mass+Amaranthus, Ragi+Bhatt+Gahat, Jhungora+Koni+Soyabean, Bajra+Soyabean+Ragi, Wheat+lentil+Mustard	Paddy, Wheat,	Ragi, Jhungora, Bajra, Maize, Arhar, Koni, Rais, Soyabean, Black Soyabean, Kulth, Turmeric, Ginger, Garlic	-	6.08	106.38

5	Maikholi	Wheat, Paddy, Lentil, Potato, Pea, Turmeric, Ginger	Ragi+Gahat, Ragi+Koni, Jwar+Gahat, soyabean+Jhungora, Lentil+Barley, Wheat+Gram Wheat+Mustard, Mustard+Lentil	Ragi+Koni+Amaranthus, Ragi+Jhungora+Pulses+Jwar, Turmeric+radish+maize+Ginger	Paddy, Wheat, Pea, Potato	Ragi, Jhungora, Bajra, Maize, Arhar, Koni,Rais, Soyabean, Black Soyabean, Kulth, Turmeric, Ginger, Garlic	-	4.71	47.61
	<b>Sub Total</b>							16.86	319.81
	<b>Total</b>							126.12	635.32

**Table 4: Perceptions on climate change- Have you noticed any changes in weather from year to year in the past 20 years.**

S.N.	Region	Revenue Village	Total HH	PRA (Group)	Increased Temperature			Severe cold			Mild winter			Increased unpredictability of weather			Reduced length of winter season			Reduced length of summer season			Reduced amount of rainfall			Rains don't fall at expected time			Rains arrive later than usual			Rains arrive earlier than usual			Increased intensity of rainfall					
					Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR				
1	Jaurasi	Sirda	35	12	8	---	4	7	2	3	---	7	5	10	---	2	9	---	3	---	7	5	6	4	2	12	---	---	6	3	3	---	8	4	6	2	4			
2		Gajar	34	10	6	---	4	5	1	4	---	5	5	7	2	1	4	3	3	---	5	5	7	2	1	8	---	2	6	2	2	---	6	4	6	2	2			
3		Querali walli	16	8	8	---	---	6	---	2	---	6	2	8	---	---	7	---	1	---	6	2	7	---	1	7	---	1	6	---	2	---	6	2	6	---	2			
4		Querali palli	12	10	10	---	---	6	2	2	---	6	4	9	---	1	6	3	1	2	6	2	8	---	2	8	---	2	10	---	---	8	2	6	2	2				
5		Malsakhet	21	9	9	---	---	5	2	2	---	5	4	9	---	---	7	---	2	---	7	2	7	---	2	6	---	3	5	---	4	---	6	3	6	1	2			
6		Khatyari malli	49	13	10	---	3	9	---	4	---	9	4	8	2	3	7	2	4	---	7	6	8	2	3	11	1	1	6	3	4	---	9	4	5	3	5			
7		Khatyari talli	46	19	12	---	7	10	2	7	---	10	9	14	1	4	1	2	3	4	---	1	3	6	1	3	5	13	---	6	13	2	4	---	14	5	12	---	7	
8		Bhaltwani walli	16	5	4	---	1	3	1	2	---	3	2	5	---	---	4	---	1	---	4	1	4	---	1	5	---	---	4	---	1	---	4	1	3	---	2			
9		Bhaltwani palli	12	7	5	---	2	3	2	2	---	3	4	5	1	1	4	2	1	---	4	3	4	---	3	4	---	3	4	2	1	---	5	2	4	---	3			
10		Brahmdevchauri	12	6	5	---	1	4	---	2	---	4	2	6	---	---	5	---	1	---	4	2	4	2	---	6	---	---	4	---	2	---	3	3	5	---	1			
11		Jaintha	61	22	15	---	7	10	4	7	---	10	12	14	5	3	1	3	---	9	---	1	4	8	1	0	5	7	16	---	6	14	---	8	---	14	8	13	---	9
Sub Total			314	121	92	0	29	68	16	37	0	68	53	95	11	15	78	13	30	2	77	42	76	18	27	96	1	24	78	12	31	0	83	38	72	10	39			
%				100	76	0	24	56.2	13.2	30.6	0	56.2	43.8	78.5	9.09	12.4	64.5	10.7	24.8	1.65	63.6	34.7	62.8	14.9	22.3	79.3	0.83	19.8	64.5	9.92	25.6	0	68.6	31.4	59.5	8.26	32.2			
12	Tarajal	Naugaon beria	66	15	10	---	5	8	1	6	---	8	7	12	1	2	9	---	6	---	8	7	9	---	6	9	---	6	10	---	5	---	10	5	8	---	7			
13		Taragtal	31	10	9	---	1	5	2	3	---	5	5	9	---	1	6	---	4	---	7	3	6	---	4	7	---	3	9	---	1	---	7	3	7	2	1			
14		Golkhal	17	14	11	---	3	7	3	4	---	7	7	11	---	3	1	0	---	4	---	1	2	2	1	2	2	---	14	---	---	10	2	2	---	9	5	9	3	2
15		Kotyura	147	27	25	---	2	20	---	7	---	20	7	27	---	---	1	8	7	2	---	1	5	12	2	0	2	5	22	3	2	25	---	2	---	25	2	20	---	7
Sub Total			261	66	55	0	11	40	6	20	0	40	26	59	1	6	43	7	16	0	42	24	47	4	15	52	3	11	54	2	10	0	51	15	44	5	17			
%				100	83.3	0	16.7	60.6	9.09	30.3	0	60.6	39.4	89.4	1.52	9.09	65.2	10.6	24.2	0	63.6	36.4	71.2	6.06	22.7	78.8	4.55	16.7	81.8	3.03	15.2	0	77.3	22.7	66.7	7.58	25.8			
16	Chamolli	Hargarh	175	21	18	---	3	14	---	7	---	14	7	19	---	2	1	3	4	4	---	1	4	7	1	5	4	2	18	2	1	10	5	6	---	16	5	13	4	4

17		Beena	175	27	20	2	5	18	3	6	---	18	9	25	--	2	1	--	1	--	1	2	15	1	3	5	19	2	6	15	8	4	---	15	1	2	20	2	5
18		Jogina	35	9	5		4	3	2	4	---	3	6	6	1	2	5	1	3	1	6	2	6	1	2	5	2	2	4	3	2	---	5	4	5	1	3		
19		Rohida	118	18	15		3	10	6	2	---	10	8	15		3	1	5	3	1	4	4	1	5	1	2	10	2	6	15		3	---	10	8	14		4	
20		Maikholi	140	23	15	---	8	14	2	7	---	14	9	15	--	8	1	4	--	9	--	1	6	7	1	4	---	9	19	---	4	17	--	6	---	15	8	15	--
<b>Sub Total</b>			<b>643</b>	<b>98</b>	<b>73</b>	<b>2</b>	<b>23</b>	<b>59</b>	<b>13</b>	<b>26</b>	<b>0</b>	<b>59</b>	<b>39</b>	<b>80</b>	<b>1</b>	<b>17</b>	<b>62</b>	<b>5</b>	<b>31</b>	<b>1</b>	<b>62</b>	<b>35</b>	<b>69</b>	<b>9</b>	<b>20</b>	<b>71</b>	<b>8</b>	<b>19</b>	<b>61</b>	<b>16</b>	<b>21</b>	<b>0</b>	<b>61</b>	<b>37</b>	<b>67</b>	<b>7</b>	<b>24</b>		
<b>%</b>				<b>100</b>	<b>74.5</b>	<b>2.0</b>	<b>23.5</b>	<b>60.2</b>	<b>13.3</b>	<b>26.5</b>	<b>0.0</b>	<b>60.2</b>	<b>39.8</b>	<b>81.6</b>	<b>1.0</b>	<b>17.3</b>	<b>63.3</b>	<b>5.1</b>	<b>31.6</b>	<b>1.0</b>	<b>63.3</b>	<b>35.7</b>	<b>70.4</b>	<b>9.2</b>	<b>20.4</b>	<b>72.4</b>	<b>8.2</b>	<b>19.4</b>	<b>62.2</b>	<b>16.3</b>	<b>21.4</b>	<b>0.0</b>	<b>62.2</b>	<b>37.8</b>	<b>68.4</b>	<b>7.1</b>	<b>24.5</b>		
<b>Total</b>				<b>285</b>	<b>220</b>	<b>2</b>	<b>63</b>	<b>167</b>	<b>35</b>	<b>83</b>	<b>0</b>	<b>167</b>	<b>118</b>	<b>234</b>	<b>13</b>	<b>38</b>	<b>183</b>	<b>25</b>	<b>77</b>	<b>3</b>	<b>181</b>	<b>101</b>	<b>192</b>	<b>31</b>	<b>62</b>	<b>219</b>	<b>12</b>	<b>54</b>	<b>193</b>	<b>30</b>	<b>62</b>	<b>0</b>	<b>195</b>	<b>90</b>	<b>183</b>	<b>22</b>	<b>80</b>		
<b>% of Total PRA Members</b>				<b>100.00</b>	<b>77.19</b>	<b>0.70</b>	<b>22.11</b>	<b>58.60</b>	<b>12.28</b>	<b>29.12</b>	<b>0.00</b>	<b>58.60</b>	<b>41.40</b>	<b>82.11</b>	<b>4.56</b>	<b>13.33</b>	<b>64.21</b>	<b>8.77</b>	<b>27.02</b>	<b>1.05</b>	<b>63.51</b>	<b>35.44</b>	<b>67.37</b>	<b>10.88</b>	<b>21.75</b>	<b>76.84</b>	<b>4.21</b>	<b>18.95</b>	<b>67.72</b>	<b>10.53</b>	<b>21.75</b>	<b>0.00</b>	<b>68.42</b>	<b>31.58</b>	<b>64.21</b>	<b>7.72</b>	<b>28.07</b>		

**Table 5: Perceptions on climate change: are the reasons for the changes you have seen?**

S.N.	Region	Revenue Village	PRA (Group)	Deforestation			More construction activities			Use of explosives in construction			Regular forest fires			More open grazing			Changes in life style			More use of fossil fuel for travel / transportation			More industrial activities in the surroundings			Extension of green areas under economic activity		
				Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	
1	Jaurasi	Sirda	12	8	2	2	6	2	4	4	6	2	12	---	---	4	6	2	5	3	4	5	3	4	---	5	7	3	4	5
2		Gajar	10	8	1	1	4	2	4	3	4	3	9	---	1	4	2	4	3	3	4	4	3	3	---	7	3	4	3	3
3		Querali walli	8	6		2	4	3	1	5	1	2	6		2	4	3	1	3	4	1	4	2	2	---	3	5	2	4	2
4		Querali palli	10	6		4	3	4	3	2	6	2	8		2		7	3	3	6	4	5	2	3	---	4	6	1	3	7
5		Malsakhet	9	6	1	2	4	3	2	3	4	2	6		2	2	7		4	3	2	3	2	4	---	3	6	3	2	4
6		Khatyari malli	13	9	2	2	7	2	4	6	2	5	10	---	3	4	2	7	4	3	6	5	4	4	---	4	9	5	4	4
7		Khatyari talli	19	13	2	4	10	3	4	6	4	9	15	---	4	9	3	7	9	6	4	11	4	4	---	7	12	9	7	3
8		Bhaltwani walli	5	3	1	1	2		3	2	2	1	4		1	2	2	1	1	2	2	3	2	---	---	2	3	2	3	
9		Bhaltwani palli	7	5	1	1	4	---	3	3	2	2	7	---	---	2	1	4	3	2	2	4	1	2	---	2	5	2	2	3
10		Brahmdevchauri	6	4		2	2	3	1	1	2	3	5		1	1	4	1	3		3	2	---	4	---	2	4	2	1	3
11		Jaintha	22	15	--	7	14	---	8	14	4	4	16	---	6	6	10	6	5	13	4	10	6	6	---	8	14	9	5	7
<b>Sub Total</b>			<b>121</b>	<b>83</b>	<b>10</b>	<b>28</b>	<b>60</b>	<b>22</b>	<b>37</b>	<b>49</b>	<b>37</b>	<b>35</b>	<b>98</b>	<b>0</b>	<b>22</b>	<b>38</b>	<b>47</b>	<b>36</b>	<b>43</b>	<b>45</b>	<b>36</b>	<b>56</b>	<b>29</b>	<b>36</b>	<b>0</b>	<b>47</b>	<b>74</b>	<b>42</b>	<b>38</b>	<b>41</b>
<b>%</b>			<b>100</b>	<b>68.60</b>	<b>8.26</b>	<b>23.14</b>	<b>49.59</b>	<b>18.18</b>	<b>30.58</b>	<b>40.50</b>	<b>30.58</b>	<b>28.93</b>	<b>80.99</b>	<b>0.00</b>	<b>18.18</b>	<b>31.40</b>	<b>38.84</b>	<b>29.75</b>	<b>35.54</b>	<b>37.19</b>	<b>29.75</b>	<b>46.28</b>	<b>23.97</b>	<b>29.75</b>	<b>0.00</b>	<b>38.84</b>	<b>61.16</b>	<b>34.71</b>	<b>31.40</b>	<b>33.88</b>
12	Tara gital	Naugaon beria	15	13	--	2	8	5	4	6	5	4	13	---	2	5	7	3	5	7	3	9	---	6	---	5	10	5	4	6

13		Taragtal	10	6	2	2	3	4	3	3	4	3	8		2	3	2	5	3	6	1	4	4	2	---	6	4	3	2	5
14		Golkhal	14	9	1	4	5	6	3	5	6	3	8	2	4	3	10	1	5	4	5	5	2	7	---	5	9	---	---	14
15		Kotyura	27	18	2	7	15	10	2	10	15	2	25		2	9	9	9	12	6	9	12	6	9	---	10	17	3	18	6
<b>Sub Total</b>			<b>66</b>	<b>46</b>	<b>5</b>	<b>15</b>	<b>31</b>	<b>25</b>	<b>12</b>	<b>24</b>	<b>30</b>	<b>12</b>	<b>54</b>	<b>2</b>	<b>10</b>	<b>20</b>	<b>28</b>	<b>18</b>	<b>25</b>	<b>23</b>	<b>18</b>	<b>30</b>	<b>12</b>	<b>24</b>	<b>0</b>	<b>26</b>	<b>40</b>	<b>11</b>	<b>24</b>	<b>31</b>
<b>%</b>			<b>100</b>	<b>69.</b>	<b>7.</b>	<b>22.7</b>	<b>46.</b>	<b>37.</b>	<b>18.</b>	<b>36.</b>	<b>45.</b>	<b>18.</b>	<b>81.</b>	<b>3.0</b>	<b>15.</b>	<b>30.</b>	<b>42.</b>	<b>27.</b>	<b>37.</b>	<b>34.</b>	<b>27.</b>	<b>45.</b>	<b>18.</b>	<b>36.</b>	<b>0</b>	<b>39.</b>	<b>60.</b>	<b>16.</b>	<b>36.</b>	<b>46.</b>
			<b>697</b>	<b>6</b>	<b>6</b>	<b>27</b>	<b>97</b>	<b>9</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>8</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>4</b>	<b>97</b>
16	Chamoli	Hargarh	21	13	--	8	10	2	9	10	3	8	15	2	4	6	10	5	6	10	5	10	5	6	---	8	13	6	8	7
17		Beena	27	8	8	11	8	12	7	6	12	9	22		5	10	9	8	8	11	6	15	6	6	---	11	16	5	15	7
18		Jogina	9	5	2	2	2	4	3	1	4	4	6	1	2	3	4	2	2	3	4	4	2	3	---	4	5	2	4	3
19		Rohida	18	12	1	5	8	8	2	10	2	6	15		3	4	10	4	3	10	5	10	6	2	---	6	12	5	5	8
20		Maikholi	23	15	--	8	8	4	11	8	10	5	16	--	8	5	10	8	8	7	7	10	6	7	---	9	14	9	7	6
<b>Sub Total</b>			<b>98</b>	<b>53</b>	<b>1</b>	<b>34</b>	<b>36</b>	<b>30</b>	<b>32</b>	<b>35</b>	<b>31</b>	<b>32</b>	<b>74</b>	<b>3</b>	<b>22</b>	<b>28</b>	<b>43</b>	<b>27</b>	<b>27</b>	<b>41</b>	<b>27</b>	<b>49</b>	<b>25</b>	<b>24</b>	<b>0</b>	<b>38</b>	<b>60</b>	<b>27</b>	<b>39</b>	<b>31</b>
<b>%</b>			<b>100</b>	<b>54</b>	<b>1</b>	<b>34.</b>	<b>36</b>	<b>30</b>	<b>32</b>	<b>35</b>	<b>31</b>	<b>32</b>	<b>75</b>	<b>3.</b>	<b>22</b>	<b>28</b>	<b>43</b>	<b>27</b>	<b>27</b>	<b>41</b>	<b>27</b>	<b>49</b>	<b>25</b>	<b>24</b>	<b>0</b>	<b>38.</b>	<b>61.</b>	<b>27</b>	<b>39</b>	<b>31</b>
			<b>8</b>	<b>2</b>	<b>2</b>	<b>69</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>06</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>50</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>77</b>	<b>22</b>	<b>5</b>	<b>39</b>	<b>6</b>
<b>Total</b>			<b>285</b>	<b>18</b>	<b>2</b>	<b>77</b>	<b>12</b>	<b>77</b>	<b>81</b>	<b>10</b>	<b>98</b>	<b>79</b>	<b>22</b>	<b>5</b>	<b>54</b>	<b>86</b>	<b>11</b>	<b>81</b>	<b>95</b>	<b>10</b>	<b>13</b>	<b>5</b>	<b>66</b>	<b>84</b>	<b>0</b>	<b>11</b>	<b>17</b>	<b>80</b>	<b>10</b>	<b>10</b>
			<b>2</b>	<b>6</b>	<b>7</b>	<b>77</b>	<b>7</b>	<b>77</b>	<b>81</b>	<b>8</b>	<b>98</b>	<b>79</b>	<b>6</b>	<b>5</b>	<b>86</b>	<b>8</b>	<b>81</b>	<b>95</b>	<b>9</b>	<b>81</b>	<b>5</b>	<b>66</b>	<b>84</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>80</b>	<b>1</b>	<b>3</b>	
<b>% of Total PRA Members</b>			<b>100.00</b>	<b>63.</b>	<b>1</b>	<b>27.</b>	<b>.5</b>	<b>.0</b>	<b>.4</b>	<b>.8</b>	<b>.3</b>	<b>.7</b>	<b>.3</b>	<b>1.</b>	<b>.9</b>	<b>.1</b>	<b>.4</b>	<b>.4</b>	<b>.3</b>	<b>.2</b>	<b>.4</b>	<b>.3</b>	<b>.1</b>	<b>.4</b>	<b>0.0</b>	<b>.9</b>	<b>.0</b>	<b>.0</b>	<b>.4</b>	<b>.1</b>
			<b>86</b>	<b>2</b>	<b>02</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>9</b>	<b>9</b>	<b>2</b>	<b>0</b>	<b>75</b>	<b>5</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>4</b>

**Table 6: Perceptions on climate change:** What are the impacts of these changes and how are they visible in the environment

S.N.	Revenue Village	PRA (Group)	Loss of family income from agriculture			Children dropping out of school			Men /youth leaving the village (seasonally / permanently) to find work			More families getting into debt			More people falling ill			Increased dependence on food support programme in the area we have(MNREGS, subsidized ration Shops)			Increased sense of insecurity			Remarks
	Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	
1	Sirda	12	9	---	3	---	9	3	7	3	2	3	4	5	5	2	5	7	---	5	9	---	3	
2	Gajar	10	7	---	3	---	6	4	5	3	2	4	2	4	4	2	4	5	---	5	7	---	3	
3	Querali walli	8	5	---	3	---	7	1	4	3	1	3	3	2	5	1	2	7	---	1	5	---	3	
4	Querali palli	10	6	1	3	---	8	2	6	1	3	4	4	2	6	2	2	6	---	4	6	---	4	
5	Malsakhet	9	5	---	4	---	7	2	4	3	2	3	3	3	5	1	3	5	---	4	6	---	3	
6	Khatyari malli	13	9	---	4	---	10	3	7	2	4	2	8	3	7	3	3	8	---	5	10	---	3	
7	Khatyari talli	19	12	---	7	---	13	6	11	3	5	6	8	5	8	6	5	10	---	9	16	---	3	
8	Bhaltwani walli	5	4	---	1	---	5	---	3	---	2	2	1	2	4	---	1	4	---	1	3	---	2	
9	Bhaltwani palli	7	4	---	3	---	5	2	4	2	1	2	2	3	2	2	3	4	---	3	6	---	1	
10	Brahmdevchauri	6	3	1	2	---	4	2	2	1	3	3	1	2	4	1	1	4	---	2	4	---	2	
11	Jaintha	22	14	5	3	---	20	2	10	5	7	5	7	10	10	4	8	12	---	10	16	---	6	
<b>Total</b>		121	78	7	36	0	94	27	63	26	32	37	43	41	60	24	37	72	0	49	88	0	33	
<b>% of Total PRA Members</b>		100	64.46	5.785	29.752	0	77.686	22.31	52.066	21.49	26.446	30.579	35.537	33.88	49.587	19.83	30.579	59.504	0	40.496	72.727	0	27.273	

12	Naugaon beria	15	13	1	1	---	12	3	5	6	4	5	6	4	9	2	4	10	---	5	10	---	5
13	Taragtal	10	6	1	3		8	2	6		4	5	2	3	7	---	3	7	---	3	6		4
14	Golkhal	14	8	6	---	---	14	---	8	3	3	---	12	2	9	2	3	14	---	---	14	---	---
15	Kotyura	27	20	---	7		25	2	22	---	5	10	12	5	21	---	6	18	---	9	15	6	6
<b>Total</b>		66	47	8	11	0	59	7	41	9	16	20	32	14	46	4	16	49	0	17	45	6	15
<b>% of Total PRA Members</b>		100	71.21	12.12	16.667	0	89.3939	10.61	62.121	13.64	24.242	30.303	48.485	21.21	69.697	6.061	24.242	74.242	0	25.758	68.182	9.091	22.727
16	Hargarh	21	14	4	3	---	19	2	5	10	6	---	15	6	10	4	7	10	4	7	10	4	7
17	Beena	27	15	4	8		19	8	12	5	10	9	8	10	13	6	8	20	3	4	12	6	9
18	Jogina	9	4	2	3		6	3	3	2	4	3	4	2	4	3	2	5	2	2	3	2	4
19	Rohida	18	9	3	6		15	3	12	3	3	12	4	2	11	2	5	15	2	1	9	3	6
20	Maikholi	23	15	---	8	---	19	4	10	6	7	6	9	8	11	5	7	15	5	3	14	4	5
<b>Total</b>		98	57	13	28	0	78	20	42	26	30	30	40	28	49	20	29	65	16	17	48	19	31
<b>% of Total PRA Members</b>		100	58.16	13.27	28.571	0	79.5918	20.41	42.857	26.53	30.612	30.612	40.816	28.57	50	20.41	29.592	66.327	16.33	17.347	48.98	19.39	31.633
<b>Total</b>		285	182	28	75	0	231	54	146	61	78	87	115	83	155	48	82	186	16	83	181	25	79
<b>% of Total PRA Members</b>		100.00	63.86	9.82	26.32	0.00	81.05	18.95	51.23	21.40	27.37	30.53	40.35	29.12	54.39	16.84	28.77	65.26	5.61	29.12	63.51	8.77	27.72



**Table 7: Perceptions on climate change: What are the impacts of these changes and how are they visible in social and economic life**

S.N.	Region	Revenue Village	PRA (Group)	Change in the length of growing period (go through crops grown in the village agriculture and horticulture)			Desertification			Loss of land/crops/assets due to landslides			Loss of crops/livestock/other assets due to floods			Food insecurity			Water scarcity (esp. potable water)			Land use change			Increase in (new) pest and diseases			Soil degradation			Yield decline		
				Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y
1	Jaurasi	Sirda	12	9	2	1	9	-	3	7	1	4	6	2	4	8	2	2	8	-	4	3	7	2	9	-	3	8	-	4	4	6	2
2		Gajar	10	8	1	1	8	-	2	7	1	2	4	3	3	6	2	2	7	-	3	3	5	2	8	-	2	7	-	3	5	2	3
3		Querali walli	8	5	1	2	7	-	3	6	-	2	3	3	2	5	2	1	7	-	1	3	4	1	7	-	1	6	-	2	4	2	2
4		Querali palli	10	7	1	2	9	-	1	9	-	1	5	7	3	6	3	2	8	-	2	2	6	2	7	-	3	8	-	2	7	-	3
5		Malsakhet	9	6	1	2	7	-	2	6	-	3	4	3	2	4	2	3	-	7	2	2	5	2	6	-	3	6	-	3	4	3	2
6		Khatyari malli	13	8	2	3	10	-	3	8	2	3	7	3	3	7	4	2	9	-	4	6	4	3	10	-	3	10	-	3	8	2	3
7		Khatyari talli	19	14	2	3	15	-	4	14	3	2	6	8	5	10	5	4	13	-	6	7	8	4	15	-	4	14	-	5	13	3	3
8		Bhaltwani walli	5	3	1	1	4	-	1	3	-	2	2	2	1	2	2	1	2	1	2	1	3	1	4	-	1	2	-	3	1	2	2
9		Bhaltwani palli	7	5	1	1	5	-	2	4	-	3	2	3	2	3	2	2	5	-	2	1	4	2	5	-	2	4	-	3	2	4	1
10		Brahmdevchauri	6	4	-	2	4	-	2	4	-	2	2	2	1	2	3	1	3	1	2	2	3	1	5	-	1	4	-	2	2	3	1
11		Jaintha	22	15	-	7	18	-	4	16	2	4	7	10	5	13	6	3	22	-	-	4	15	3	18	-	4	18	-	4	22	-	-
Sub Total			121	84	12	25	96	0	27	84	9	28	48	46	31	66	33	23	84	9	28	34	64	23	94	0	27	87	0	34	72	27	22
%			100	69.	9.	20.	79.	0.	22.	69.	7.	23.	39.	38.	25.	54.	27.	19.	69.	7.	23.	28.	52.	19.	77.	0.	22.	71.	0.	28.	59.	22.	18.
				42	92	66	34	00	31	42	44	14	67	02	62	55	27	01	42	44	14	10	89	01	69	00	31	90	00	10	5	31	18
12	Taragtal	Naugaon beria	15	12	2	1	12	-	3	9	1	5	6	7	2	8	4	3	13	-	2	4	8	3	13	-	2	12	-	3	10	3	2
13		Taragtal	10	7	1	2	7	-	3	10	-	-	3	5	2	6	2	2	8	-	2	2	5	3	8	-	2	8	-	2	6	2	2

14		Golkhal	14	9	2	3	12	-	2	10	-	4	5	7	2	12	-	2	12	-	-	2	7	1	9	-	5	10	-	4	14	-	-
15		Kotyura	27	22	2	4	20	4	3	20	2	5	9	10	8	18	4	5	15	6	6	8	15	4	22	-	5	22	-	5	14	9	5
Sub Total			66	50	7	10	51	4	11	49	3	14	23	29	14	44	10	12	48	6	10	16	35	11	52	0	14	52	0	14	44	14	9
%			100	75.76	10.61	15.15	77.27	6.061	16.67	74.24	4.545	21.21	34.85	43.94	21.21	66.67	15.15	18.18	72.73	9.091	15.15	24.24	53.03	16.67	78.79	0	21.21	78.79	0	21.21	66.67	21.21	13.64
16	Chamoli	Hargarh	21	12	3	6	9	-	3	15	2	4	15	2	4	15	2	4	18	-	3	5	12	4	15	-	6	18	-	3	21	-	-
17		Beena	27	15	5	7	24	-	3	19	4	5	22	5	20	2	5	20	2	5	6	14	7	25	-	2	23	-	4	27	-	-	
18		Jogina	9	6	2	1	7	-	2	6	-	3	6	1	2	5	2	2	5	2	2	2	5	2	7	-	2	6	-	3	9	-	-
19		Rohida	18	10	3	6	13	2	3	15	1	2	15	3	10	5	3	12	3	3	4	9	5	15	-	3	13	-	5	13	6	-	
20		Maikholi	23	15	4	4	16	3	4	16	2	5	16	--	8	12	5	6	16	3	4	4	14	5	17	-	6	18	-	5	16	3	4
Sub Total			98	58	17	24	69	5	15	71	9	19	74	3	22	62	16	20	71	10	17	21	54	23	79	0	19	78	0	20	86	9	4
%			100	59.18	17.35	24.49	70.41	5.12	15.31	72.45	9.18	19.39	75.51	3.061	22.45	63.27	16.33	20.41	72.45	10.25	17.35	21.43	55.11	23.47	80.61	0	19.39	79.09	0	20.41	87.76	9.18	4.082
Total			285	192	36	59	216	9	53	204	21	61	145	78	67	172	59	55	203	25	55	71	153	57	225	0	60	217	0	68	202	50	35
% of Total PRA Members			100.00	67.37	12.3	20.70	75.79	3.16	18.60	71.88	7.37	21.40	50.88	27.3	23.71	60.50	20.7	19.3	71.88	8.77	19.3	24.9	53.6	20.0	78.9	0.00	21.5	76.4	0.00	23.6	70.88	17.54	12.28

**Table 8: Perceptions on climate change: Who would you say has been affected by the change in weather between now and 20 years ago.**

S.N.	Revenue Village	PRA (Group)	Men			Women			Children			Elderly			Entire family affected to the same degree		
	Name	No.	1			2			3			4			5		
			Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
1	Sirda	12	7	2	3	10	2	---	5	5	2	5	4	3	6	4	2
2	Gajar	10	5	3	2	6	2	2	4	4	2	4	4	2	5	3	2
3	Querali walli	8	7	---	1	7	---	1	5		3	3	3	2	6	---	2
4	Querali palli	10	8	---	2	8	---	2	6	2	2	5	3	2	10	---	---
5	Malsakhet	9	6	---	3	7	---	2	5	3	1	5	3	1	7	---	2
6	Khatyari malli	13	6	3	4	8	2	3	5	4	4	5	4	4	10	---	3
7	Khatyari talli	19	10	2	7	13	2	4	6	6	7	6	6	7	12	---	7
8	Bhaltwani walli	5	5	---	---	5	---	---	3	2	---	2	1	2	4	---	1
9	Bhaltwani palli	7	3	2	2	5	---	2	2	2	3	2	2	3	4	---	3
10	Brahmdevchauri	6	4		2	5		1	3	2	1	3	2	1	6	---	---
11	Jaintha	22	14	---	8	16	---	6	8	8	6	8	8	6	14	---	8
<b>Total</b>		121	75	12	34	90	8	23	52	38	31	48	40	33	84	7	30
% of Total PRA Members		100	61.98	9.917	28.1	74.38	6.612	19.01	42.98	31.4	25.62	39.67	33.06	27.27	69.42	5.785	24.7934
12	Naugaon beria	15	9	---	6	12	---	3	7	5	3	7	5	3	9	---	6
13	Taragtal	10	7	1	2	7	1	2	6	3	1	6	3	1	8		2
14	Golkhal	14	5	8	1	10	2	2	7	5	2	6	6	2	14	---	---
15	Kotyura	27	20	1	6	25	---	2	10	15	2	10	10	7	22	---	5

<b>Total</b>		66	41	10	15	54	3	9	30	28	8	29	24	13	53	0	13
% of Total PRA Members		100	62.12	15.15	22.73	81.82	4.545	13.64	45.45	42.42	12.12	43.94	36.36	19.7	80.3	0	19.697
16	Hargarh	21	14	4	3	16	3	2	6	10	5	9	6	6	10	5	6
17	Beena	27	14	5	8	19	5	3	5	10	12	6	13	8	18	4	5
18	Jogina	9	4	2	3	7	1	1	2	3	4	3	2	4	6	1	2
19	Rohida	18	15	2	1	16		2	10	5	3	10	5	3	15	---	3
20	Maikholi	23	12	3	8	16	---	7	7	7	9	8	8	7	15	---	8
<b>Total</b>		<b>98</b>	<b>59</b>	<b>16</b>	<b>23</b>	<b>74</b>	<b>9</b>	<b>15</b>	<b>30</b>	<b>35</b>	<b>33</b>	<b>36</b>	<b>34</b>	<b>28</b>	<b>64</b>	<b>10</b>	<b>24</b>
% of Total PRA Members		100	60.2	16.33	23.47	75.51	9.184	15.31	30.61	35.71	33.67	36.73	34.69	28.57	65.31	10.2	24.4898
<b>Total</b>		<b>285</b>	<b>175</b>	<b>38</b>	<b>72</b>	<b>218</b>	<b>20</b>	<b>47</b>	<b>112</b>	<b>101</b>	<b>72</b>	<b>113</b>	<b>98</b>	<b>74</b>	<b>201</b>	<b>17</b>	<b>67</b>
% of Total PRA Members		100	61.4	13.33	25.26	76.49	7.018	16.49	39.3	35.44	25.26	39.65	34.39	25.96	70.53	5.965	23.5088

**Table 9: Perceptions on climate change:** What problems do women face today in comparison to 20 years ago as a result of change in the weather?

S.N.	Revenue Village Name	PRA (Group) No.	Increased pressure to provide food for family			Increased health problems			Decreased quantity of food for consumption			Decreased quality of food for consumption			More time spent in collecting water/wood/fodders			Increased in fight/arguments amongst family members			Increased emotional stress/anxiety			More time spent on caring for the sick			Pressure to mobilize loans/debt			Pressure to get labour and machines for work			
			8			9			10			11			12			13			14			15			16			17			
			Y	N	NR	Y	N	NR	Y	N	N R	Y	N	NR	Y	N	N R	Y	N	N R	Y	N	N R	Y	N	N R	Y	N	N R	Y	N	N R	Y
1	Sirda	12	6	4	2	8	2	2	2	8	2	2	8	2	2	4	6	2	3	7	2	6	2	4	4	2	6	2	8	2	2	8	2
2	Gajar	10	5	2	3	7	1	2	2	6	2	6	2	2	2	6	2	2	6	2	2	5	3	3	2	5	1	5	4	1	5	4	
3	Querali walli	8	4	3	1	5	1	2		5	3	6	1	1	1	4	3	1	4	3	3	3	2	3	2	3	1	2	5	1	3	4	
4	Querali palli	10	6	2	2	9		1	2	6	2	8		2	2	6	2	5	3	2	5	2	3	2	5	3	3	5	2	2	6	2	
5	Malsakhet	9	5	1	3	8		1	1	7	1	6	2	1	2	5	2	3	4	2	3	1	5	2	4	3	2	4	3	1	3	5	
6	Khatyari malli	13	6	2	5	9	2	2	2	8	3	8	2	3	4	6	3	4	6	3	5	4	4	3	8	2	2	7	4	2	7	9	
7	Khatyari talli	19	7	6	6	12	4	3	5	11	3	11	5	3	5	8	6	5	8	6	9	6	4	5	9	5	2	8	9	2	8	9	
8	Bhaltwani walli	5	3		2	5			2	3		2	1	2	1	2	2	1	2	2	1	2	2	1	2	2	1	1	3	1	1	3	
9	Bhaltwani palli	7	4	1	2	4	1	2	2	4	1	4	2	1	2	3	2	2	3	2	2	3	2	2	2	3	1	2	4	1	2	4	
10	Brahmdevchauri	6	3	1	2	4	---	2		4	2	3	1	2	1	3	2	1	2	3	1	3	2	1	2	3	1	2	3	1	3	2	
11	Jaintha	22	9	10	3	12	5	5	5	12	5	12	5	5	5	10	7	5	10	7	10	7	5	5	7	10	2	10	10	2	10	10	
<b>Total</b>		<b>121</b>	<b>58</b>	<b>32</b>	<b>31</b>	<b>83</b>	<b>16</b>	<b>22</b>		<b>23</b>	<b>74</b>	<b>24</b>	<b>74</b>	<b>23</b>	<b>24</b>	<b>29</b>	<b>59</b>	<b>33</b>	<b>32</b>	<b>55</b>	<b>34</b>	<b>47</b>	<b>38</b>	<b>36</b>	<b>31</b>	<b>45</b>	<b>45</b>	<b>18</b>	<b>54</b>	<b>49</b>	<b>16</b>	<b>56</b>	<b>54</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>.47</b>	<b>.26</b>	<b>.25</b>	<b>.68</b>	<b>.13</b>	<b>.18</b>		<b>.19</b>	<b>.61</b>	<b>.19</b>	<b>.61</b>	<b>.19</b>	<b>.24</b>	<b>.48</b>	<b>.27</b>	<b>.26</b>	<b>.45</b>	<b>.28</b>	<b>.38</b>	<b>.31</b>	<b>.29</b>	<b>.25</b>	<b>.37</b>	<b>.37</b>	<b>.14</b>	<b>.44</b>	<b>.40</b>	<b>.13</b>	<b>.46</b>	<b>.44</b>	
12	Naugaon beria	15	5	6	4	9	2	4	2	9	4	9	2	4	4	6	5	3	5	7	7	5	3	4	5	6	2	9	4	2	9	4	
13	Taragtal	10	6	2	2	8	1	1	3	5	2	5	3	2	5	3	2	1	2	7	7	2	1	2	5	3	2	5	3	2	5	3	

14	Golkhal	14	12	---	2	11	---	3	4	9	1	10	2	2	6	5	3	6	6	2	4	5	5	5	7	2	--	12	2	5	5	4
15	Kotyura	27	15	10	2	20	2	5	2	20	5	20	2	5	8	10	9	8	10	9	12	5	10	8	12	7	5	10	12	5	10	12
<b>Total</b>		<b>66</b>	<b>38</b>	<b>18</b>	<b>10</b>	<b>48</b>	<b>5</b>	<b>13</b>	<b>11</b>	<b>43</b>	<b>12</b>	<b>44</b>	<b>9</b>	<b>13</b>	<b>23</b>	<b>24</b>	<b>19</b>	<b>18</b>	<b>23</b>	<b>25</b>	<b>30</b>	<b>17</b>	<b>19</b>	<b>19</b>	<b>29</b>	<b>18</b>	<b>9</b>	<b>36</b>	<b>21</b>	<b>14</b>	<b>29</b>	<b>23</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>.6</b>	<b>.3</b>	<b>.2</b>	<b>.7</b>	<b>.8</b>	<b>.7</b>	<b>16.7</b>	<b>.2</b>	<b>.2</b>	<b>.7</b>	<b>.6</b>	<b>.7</b>	<b>.8</b>	<b>.4</b>	<b>.8</b>	<b>.3</b>	<b>.8</b>	<b>.9</b>	<b>.5</b>	<b>.8</b>	<b>.8</b>	<b>.8</b>	<b>43.9</b>	<b>27.3</b>	<b>13.6</b>	<b>54.5</b>	<b>31.8</b>	<b>21.2</b>	<b>43.9</b>	<b>34.8</b>
16	Hargarh	21	10	5	6	10	5	6	5	10	6	10	5	6	6	10	5	6	10	5	9	6	6	3	13	5	10	5	6	10	5	6
17	Beena	27	12	7	8	18	3	6	5	16	6	16	5	6	6	12	9	5	15	7	5	12	10	6	13	8	10	12	5	12	10	5
18	Jogina	9	4	3	2	5	2	2	2	4	3	4	2	3	3	2	3	1	3	5	2	4	3	2	3	4	2	3	4	3	4	2
19	Rohida	18	8	8	2	15	1	2	5	10	3	10	5	3	4	12	2	4	12	2	10	6	3	3	10	6	2	12	4	2	12	4
20	Maikholi	23	9	10	3	15	5	3	5	15	3	15	5	3	5	10	7	4	12	7	10	7	5	8	7	7	3	13	7	3	13	7
<b>Total</b>		<b>98</b>	<b>43</b>	<b>33</b>	<b>21</b>	<b>63</b>	<b>16</b>	<b>19</b>	<b>22</b>	<b>55</b>	<b>21</b>	<b>55</b>	<b>22</b>	<b>21</b>	<b>24</b>	<b>46</b>	<b>26</b>	<b>20</b>	<b>52</b>	<b>26</b>	<b>36</b>	<b>35</b>	<b>27</b>	<b>22</b>	<b>46</b>	<b>30</b>	<b>27</b>	<b>45</b>	<b>26</b>	<b>30</b>	<b>44</b>	<b>24</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>.9</b>	<b>.7</b>	<b>.4</b>	<b>.3</b>	<b>.3</b>	<b>.4</b>	<b>22.4</b>	<b>.1</b>	<b>.4</b>	<b>.1</b>	<b>.4</b>	<b>.4</b>	<b>.5</b>	<b>.9</b>	<b>.5</b>	<b>.4</b>	<b>.1</b>	<b>.5</b>	<b>.7</b>	<b>.7</b>	<b>.6</b>	<b>.4</b>	<b>46.9</b>	<b>30.6</b>	<b>27.6</b>	<b>45.9</b>	<b>26.5</b>	<b>30.6</b>	<b>44.9</b>	<b>24.5</b>
<b>Total</b>		<b>285</b>	<b>139</b>	<b>83</b>	<b>62</b>	<b>194</b>	<b>37</b>	<b>54</b>	<b>56</b>	<b>172</b>	<b>57</b>	<b>173</b>	<b>54</b>	<b>58</b>	<b>76</b>	<b>99</b>	<b>78</b>	<b>70</b>	<b>0</b>	<b>85</b>	<b>33</b>	<b>90</b>	<b>82</b>	<b>72</b>	<b>0</b>	<b>93</b>	<b>54</b>	<b>5</b>	<b>96</b>	<b>60</b>	<b>9</b>	<b>10</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>48.77</b>	<b>29.12</b>	<b>21.75</b>	<b>68.07</b>	<b>12.98</b>	<b>18.95</b>	<b>19.65</b>	<b>60.35</b>	<b>20.00</b>	<b>60.70</b>	<b>18.95</b>	<b>20.35</b>	<b>26.67</b>	<b>45.26</b>	<b>27.37</b>	<b>24.56</b>	<b>45.61</b>	<b>29.82</b>	<b>39.65</b>	<b>31.58</b>	<b>28.77</b>	<b>25.26</b>	<b>42.11</b>	<b>32.63</b>	<b>18.95</b>	<b>47.37</b>	<b>33.68</b>	<b>21.05</b>	<b>45.26</b>	<b>35.44</b>

**Table 10: Perceptions on climate change:** What problems do men face today in comparison to 20 years ago as a result of change in the weather?

S.N.	Revenue Village Name	PRA (Group) No.	Increased pressure to provide food for family			Increased health problems			Decreased quantity of food for consumption			Decreased quality of food for consumption			More time spent in collecting water/wood/fodders			Increased in fight/arguments amongst family members			Increased emotional stress/anxiety			More time spent on caring for the sick			Pressure to mobilize loans/debt			Pressure to get labour and machines for work		
			8	9	10	11	12	13	14	15	16	17																				
			Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR			
1	Sirda	12	8	--	4	7	2	3	2	7	3	7	2	3	--	7	5	5	2	5	6	2	4	2	6	4	6	3	3	6	3	3
2	Gajar	10	7	1	2	6	2	2	2	6	2	6	2	2	1	5	4	3	2	5	5	2	3	2	5	3	4	2	4	5	2	3
3	Querali walli	8	6		2	7		1	1	6	1	8				5	3	3	2	3	4	2	2	2	5	1	5	1	2	5	1	2
4	Querali palli	10	8	1	1	7	1	2	3	5	2	5	3	2	2	5	3	3	5	2	3	4	3	1	4	5	5	3	2	7	1	2
5	Malsakhet	9	5	1	3	6	1	2	1	6	2	6	1	2	2	6	1	3	2	4	3	3	3	1	4	4	5	1	3	5	1	3
6	Khatyari malli	13	8	2	3	8	2	3	2	8	3	8	2	3	2	6	5	4	5	4	5	4	4	2	6	5	7	2	4	7	2	4
7	Khatyari talli	19	10	3	6	10	2	7	2	10	7	10	2	7	4	6	9	9	4	6	8	5	6	2	10	7	10	3	6	10	3	6
8	Bhaltwani walli	5	3	1	1	4		1	1	3	1	5	--	--	--	5	--	2	3	--	3	1	1	--	3	2	3	---	2	3	1	1
9	Bhaltwani palli	7	4	1	2	5	1	1	1	4	2	4	1	2	1	3	3	4	2	1	4	2	1	--	4	3	4	1	2	4	1	2
10	Brahmdevchauri	6	4		2	5		1	2	3	1	3	2	1	2	3	1	4	1	1	3	1	2	--	4	2	4	1	1	4	1	1
11	Jaintha	22	10	5	7	13	5	4	5	13	4	13	5	4	5	10	7	5	10	7	10	5	7	4	13	5	8	6	8	8	6	8
<b>Total</b>			<b>73</b>	<b>15</b>	<b>33</b>	<b>78</b>	<b>16</b>	<b>27</b>	<b>22</b>	<b>71</b>	<b>28</b>	<b>75</b>	<b>20</b>	<b>26</b>	<b>19</b>	<b>61</b>	<b>41</b>	<b>45</b>	<b>38</b>	<b>38</b>	<b>54</b>	<b>31</b>	<b>36</b>	<b>16</b>	<b>64</b>	<b>41</b>	<b>61</b>	<b>23</b>	<b>37</b>	<b>64</b>	<b>22</b>	<b>35</b>
<b>% of Total PRA Members</b>			<b>100</b>	<b>.3</b>	<b>.4</b>	<b>.3</b>	<b>.5</b>	<b>.2</b>	<b>.3</b>	<b>18.</b>	<b>58</b>	<b>23</b>	<b>18.</b>	<b>21</b>	<b>15</b>	<b>50</b>	<b>33</b>	<b>37</b>	<b>31.</b>	<b>31</b>	<b>44</b>	<b>25</b>	<b>29</b>	<b>13</b>	<b>52.</b>	<b>33</b>	<b>50</b>	<b>19</b>	<b>30</b>	<b>52</b>	<b>18</b>	<b>28.</b>

12	Naugaon beria	15	9	2	4	12	1	2	2	11	2	11	2	2	4	8	3	5	3	7	7	5	3	4	3	8	8	4	3	8	4	3		
13	Taragtal	10	7	1	2	7	1	2	1	7	2	8	1	1	2	7	1	5	3	2	3	3	4	2	6	2	6	2	2	6	3	1		
14	Golkhal	14	9	2	3	8	2	4	4	8	2	9	2	3	4	8	1	5	3	6	7	3	4	3	5	6	9	2	3	9	2	3		
15	Kotyura	27	20	2	5	20	2	5	2	20	5	22	3	2	4	20	3	10	13	4	10	15	2	5	15	7	18	6	3	18	6	3		
<b>Total</b>		<b>66</b>	<b>45</b>	<b>7</b>	<b>14</b>	<b>47</b>	<b>6</b>	<b>13</b>	<b>9</b>	<b>46</b>	<b>11</b>	<b>50</b>	<b>8</b>	<b>8</b>	<b>14</b>	<b>43</b>	<b>8</b>	<b>25</b>	<b>22</b>	<b>19</b>	<b>27</b>	<b>26</b>	<b>13</b>	<b>14</b>	<b>29</b>	<b>23</b>	<b>41</b>	<b>14</b>	<b>11</b>	<b>41</b>	<b>15</b>	<b>10</b>		
<b>% of Total PRA Members</b>		<b>100</b>	<b>68.2</b>	<b>10.6</b>	<b>21.2</b>	<b>71.2</b>	<b>9.09</b>	<b>19.7</b>	<b>13.6</b>	<b>69.7</b>	<b>16.7</b>	<b>75.8</b>	<b>12.1</b>	<b>12.1</b>	<b>21.2</b>	<b>65.2</b>	<b>12.1</b>	<b>37.9</b>	<b>33.3</b>	<b>28.8</b>	<b>40.9</b>	<b>39.4</b>	<b>19.7</b>	<b>21.2</b>	<b>43.9</b>	<b>34.8</b>	<b>62.1</b>	<b>21.2</b>	<b>16.7</b>	<b>62.1</b>	<b>22.7</b>	<b>15.2</b>		
16	Hargarh	21	10	4	7	9	6	6	6	9	6	9	6	6	4	10	7	4	12	5	6	10	5	5	10	6	3	12	6	3	12	6		
17	Beena	27	13	10	4	21	3	3	9	14	6	14	9	6	3	14	10	8	7	12	13	9	5	5	12	10	9	8	10	14	3	10		
18	Jogina	9	5	3	1	6	1	2	2	4	3	4	2	3	4	2	3	2	3	4	4	3	2	2	3	4	2	4	3	2	3	4		
19	Rohida	18	15		3	13	1	4	1	13	4	13	1	4	3	10	6	3	9	6	5	10	3	2	10	6	12	3	3	12	4	2		
20	Maikholi	23	13	5	5	15	3	5	3	15	5	15	3	5	4	10	9	8	7	8	9	6	8	5	11	7	10	6	7	10	6	7		
<b>Total</b>		<b>98</b>	<b>56</b>	<b>22</b>	<b>20</b>	<b>64</b>	<b>14</b>	<b>20</b>	<b>21</b>	<b>55</b>	<b>24</b>	<b>55</b>	<b>21</b>	<b>24</b>	<b>18</b>	<b>46</b>	<b>35</b>	<b>25</b>	<b>38</b>	<b>35</b>	<b>37</b>	<b>38</b>	<b>23</b>	<b>19</b>	<b>46</b>	<b>33</b>	<b>36</b>	<b>33</b>	<b>29</b>	<b>41</b>	<b>28</b>	<b>29</b>		
<b>% of Total PRA Members</b>		<b>100</b>	<b>57.1</b>	<b>22.4</b>	<b>20.4</b>	<b>65.3</b>	<b>14.3</b>	<b>20.4</b>	<b>21.4</b>	<b>56.1</b>	<b>24.5</b>	<b>56.1</b>	<b>21.4</b>	<b>24.5</b>	<b>18.4</b>	<b>46.9</b>	<b>35.7</b>	<b>25.5</b>	<b>38.8</b>	<b>35.7</b>	<b>37.8</b>	<b>23.5</b>	<b>19.4</b>	<b>46.9</b>	<b>33.7</b>	<b>36.7</b>	<b>33.7</b>	<b>29.6</b>	<b>41.8</b>	<b>28.6</b>	<b>29.6</b>			
<b>Total</b>		<b>285</b>	<b>174</b>	<b>44</b>	<b>67</b>	<b>189</b>	<b>36</b>	<b>60</b>	<b>52</b>	<b>172</b>	<b>63</b>	<b>180</b>	<b>49</b>	<b>58</b>	<b>51</b>	<b>150</b>	<b>84</b>	<b>95</b>	<b>98</b>	<b>92</b>	<b>118</b>	<b>95</b>	<b>72</b>	<b>49</b>	<b>139</b>	<b>97</b>	<b>13</b>	<b>8</b>	<b>70</b>	<b>77</b>	<b>14</b>	<b>6</b>	<b>65</b>	<b>74</b>
<b>% of Total PRA Members</b>		<b>100.00</b>	<b>61.05</b>	<b>15.44</b>	<b>23.51</b>	<b>66.32</b>	<b>12.63</b>	<b>21.05</b>	<b>18.25</b>	<b>60.35</b>	<b>22.11</b>	<b>63.16</b>	<b>17.19</b>	<b>20.35</b>	<b>17.89</b>	<b>52.63</b>	<b>29.47</b>	<b>33.33</b>	<b>34.39</b>	<b>32.28</b>	<b>41.40</b>	<b>33.33</b>	<b>25.26</b>	<b>17.19</b>	<b>48.77</b>	<b>34.04</b>	<b>48.42</b>	<b>24.56</b>	<b>27.02</b>	<b>51.23</b>	<b>22.81</b>	<b>25.96</b>		



**Table 11: Own initiatives to cope with these changes -Have you done anything to deal with these changes?**

S.N.	Revenue Village Name	PRA (Group)	Planted different varieties of existing crops			Planted new crop			Made changes in cropping systems			Planted disease resistant varieties			Planted fast maturing varieties			Changed planting location of crops			Changed planting time			Moved crops across land			Tried breeding new varieties of crops that could resist these changes			Kept more livestock instead of depending on crops			Planted trees		
			Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
1	Sirda	12	8	2	2	3	6	3	2	6	4	-	8	4	5	2	5	6	2	4	9	1	2	-	9	3	2	8	2	-	10	2	8	2	2
2	Gajar	10	6	2	2	2	6	2	2	5	3	-	7	3	3	2	5	5	2	3	7	2	1	-	7	3	2	5	3	-	7	3	6	2	2
3	Querali walli	8	5	2	1	2	5	1	3	2	3	-	6	2	3	2	3	5	2	1	6	2	2	-	6	2	3	2	3	-	5	3	5	1	2
4	Querali palli	10	5	3	2	3	5	2	2	5	3	-	7	3	3	5	2	6	2	2	7	2	1	-	8	2	3	5	2	-	7	3	6	2	2
5	Malsakhet	9	6	1	2	3	5	1	2	5	2	-	6	3	3	2	4	4	2	3	5	2	2	-	6	3	2	4	3	-	8	1	6	2	1
6	Khatyari malli	13	6	4	3	2	8	3	4	7	2	-	10	3	4	5	4	8	2	3	9	1	2	-	10	3	4	6	3	-	10	3	8	3	2
7	Khatyari talli	19	8	7	4	2	10	7	5	10	4	-	15	4	9	4	6	12	3	4	14	2	3	-	15	4	5	10	4	-	15	4	12	3	4
8	Bhaltwani walli	5	2	2	1	2	2	1	1	2	2	-	3	2	2	2	1	2	2	1	3	-	2	-	4	1	1	3	1	-	4	1	2	2	1
9	Bhaltwani palli	7	3	2	2	2	3	2	2	3	2	-	5	2	4	2	1	4	2	1	4	1	2	-	5	2	2	3	2	-	5	2	3	2	2
10	Brahmdevchauri	6	3	2	1	2	3	1	2	3	1	-	3	3	4	1	1	4	1	2	4	-	2	-	4	2	2	2	2	-	4	2	4	1	1
11	Jaintha	22	10	7	5	5	13	4	4	15	3	-	15	7	5	10	7	16	3	3	16	2	3	-	16	6	6	12	4	-	18	4	13	4	5
<b>Total</b>		121	62	34	25	28	66	27	29	63	29	0	85	36	45	37	39	72	23	27	84	15	22	0	90	31	32	60	29	0	93	28	73	24	24
<b>% of Total PRA Members</b>		100	51.24	28.09	20.66	23.14	54.55	22.31	23.97	52.07	23.97	0	70.25	29.75	37.19	30.58	32.23	59.55	19.01	22.31	69.42	12.44	18.18	0	74.38	25.62	26.45	49.59	23.97	0	76.86	23.14	60.33	19.83	19.83
12	Naugaon beria	15	7	5	3	2	11	2	4	8	3	-	12	3	5	3	7	10	2	3	11	2	2	-	11	4	3	10	2	-	12	3	9	3	3
13	Taragtal	10	4	3	3	1	7	2	3	5	2	-	7	3	5	3	2	5	2	3	7	1	2	-	7	3	4	3	3	-	7	3	6	2	2
14	Golkhal	14	4	6	4	4	8	2	2	6	2	-	10	4	5	3	6	9	3	2	9	2	3	-	11	3	2	8	4	-	11	3	9	2	3
15	Kotyura	27	20	3	4	2	20	5	10	12	5	-	22	5	10	13	4	16	4	7	20	3	4	-	22	5	8	14	5	-	22	5	18	5	4

<b>Total</b>		66	35	17	14	9	46	11	19	31	12	0	51	15	25	22	19	40	11	15	47	8	11	0	5	1	15	17	35	14	0	52	14	42	12	12
<b>% of Total PRA Members</b>		100	53.03	25.75	21.212	13.64	69.7	16.67	28.79	46.97	18.18	0	77.27	22.73	37.88	33.33	28.79	60.61	16.67	22.73	71.21	12.12	16.67	0	7.27	22.73	25.76	53.03	21.21	0	78.79	21.21	63.64	18.18	18.18	
16	Hargarh	21	10	5	6	6	9	6	4	12	5	-	16	5	4	12	5	14	4	3	16	3	2	-	1	6	5	4	14	3	-	18	3	10	6	5
17	Beena	27	13	8	6	9	14	6	6	15	6	-	22	5	8	7	12	15	5	7	20	3	4	-	2	6	5	15	7	-	23	4	16	8	5	
18	Jogina	9	3	4	2	2	4	3	2	5	2	-	5	4	2	3	4	5	2	2	5	2	2	-	6	3	2	5	2	-	6	3	4	2	3	
19	Rohida	18	13	2	3	1	13	4	7	9	2	-	13	5	3	9	6	9	5	4	10	3	5	-	1	4	4	9	5	4	-	15	3	12	3	3
20	Maikholi	23	12	5	6	3	15	5	6	15	6	-	16	7	8	7	8	13	4	6	15	4	4	-	1	8	5	5	13	5	-	18	5	14	5	4
<b>Total</b>		98	51	24	23	21	55	24	25	56	21	0	72	26	25	38	35	56	20	22	66	15	17	0	7	5	23	25	52	21	0	80	18	56	24	20
<b>% of Total PRA Members</b>		100	52.04	24.49	23.47	21.43	56.12	24.49	25.51	57.14	21.43	0	73.47	26.53	25.51	38.78	35.71	57.14	20.41	22.45	67.35	15.31	17.35	0	6.53	23.47	25.51	53.06	21.43	0	81.63	18.37	57.14	24.49	20.41	
<b>Total</b>		285	148	75	62	58	167	62	73	150	62	0	208	77	95	97	93	168	54	64	197	38	50	0	2	1	69	74	147	64	0	225	60	171	60	56
<b>% of Total PRA Members</b>		100.00	51.93	26.32	21.75	20.35	58.60	21.75	25.61	52.63	21.75	0.00	72.98	27.02	33.33	34.04	32.63	58.95	18.95	22.46	69.12	13.33	17.54	0	0.79	24.21	25.96	51.58	22.46	0	78.95	21.05	60.60	21.05	19.65	

**Table 12: Own initiatives to cope with these changes:** Have you done anything to deal with these changes?

	Revenue Village	PRA (Group)	Found new/better way to store/process food			Found ways to harvest more water			Did more off farm work, instead of farming			Undertook soil management measures			Weather forecasts			Risk Management instruments			livelihood diversification			Land use and management			Set up a village/ community action group/ organization to tackle the problems			Started to record/track the change by using photos/notes/pictures/ stories			Set up the collective marketing initiative			Set up a saving/ rotating/ emergency fund to support community members in need		
			Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR			
1	Sirda	12	7	3	2	8	2	2	8	2	2	3	6	3	-	10	2	-	10	2	10	-	2	6	3	3	-	10	2	-	8	2	-	8	2	8	-	4
2	Gajar	10	6	2	2	7	1	2	6	2	2	4	3	3	-	8	2	-	8	2	8	-	2	4	3	3	-	6	4	-	5	4	-	5	4	7	-	3
3	Querali walli	8	5	2	1	5	1	2	5	2	3	3	2	3	-	5	3	-	5	3	5	-	3	3	2	3	-	5	3	-	3	4	-	3	4	5	-	3
4	Querali palli	10	5	3	2	2	7	1	7	1	3	4	3	3	-	8	2	-	8	2	7	-	3	5	2	3	-	7	3	-	6	2	-	6	2	7	-	3
5	Malsakhet	9	5	1	3	6	2	1	5	2	2	3	4	2	-	7	2	-	7	2	7	-	2	4	2	3	-	8	2	-	3	5	-	3	5	6	-	3
6	Khatyari malli	13	6	2	5	9	2	2	9	2	2	5	4	4	-	10	3	-	10	3	9	-	4	7	4	3	-	10	3	-	7	9	-	7	9	10	-	3
7	Khatyari talli	19	8	5	6	10	6	3	12	4	3	7	8	4	-	13	6	-	13	6	13	-	6	9	6	4	-	14	5	-	8	9	-	8	9	13	-	6
8	Bhaltwani walli	5	3	1	1	3	-	2	3	1	1	1	2	2	-	3	2	-	3	2	3	-	2	2	2	1	-	4	1	-	1	3	-	1	3	3	-	2
9	Bhaltwani palli	7	3	2	2	1	3	3	4	2	1	2	3	2	-	5	2	-	5	2	4	-	3	2	3	2	-	5	2	-	2	4	-	2	4	4	-	3
10	Brahmdevchauri	6	3	1	2	3	1	2	3	2	1	2	3	1	-	4	2	-	4	2	4	-	2	2	1	3	-	4	2	-	3	2	-	3	2	3	-	3
11	Jaintha	22	10	7	5	12	5	5	15	4	3	8	10	4	-	15	7	-	15	7	15	-	7	9	6	6	-	18	4	-	10	10	-	10	10	14	-	8
<b>Total</b>		<b>121</b>	<b>61</b>	<b>29</b>	<b>31</b>	<b>66</b>	<b>30</b>	<b>25</b>	<b>77</b>	<b>24</b>	<b>23</b>	<b>42</b>	<b>48</b>	<b>31</b>	<b>0</b>	<b>88</b>	<b>33</b>	<b>0</b>	<b>88</b>	<b>33</b>	<b>85</b>	<b>0</b>	<b>36</b>	<b>53</b>	<b>34</b>	<b>34</b>	<b>0</b>	<b>91</b>	<b>31</b>	<b>0</b>	<b>56</b>	<b>54</b>	<b>0</b>	<b>56</b>	<b>54</b>	<b>80</b>	<b>0</b>	<b>41</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>50.41</b>	<b>23.97</b>	<b>25.62</b>	<b>54.55</b>	<b>24.79</b>	<b>20.66</b>	<b>63.64</b>	<b>19.83</b>	<b>19.01</b>	<b>34.71</b>	<b>39.67</b>	<b>25.62</b>	<b>0</b>	<b>72.73</b>	<b>27.27</b>	<b>0</b>	<b>72.73</b>	<b>27.27</b>	<b>70.25</b>	<b>0</b>	<b>29.75</b>	<b>43.8</b>	<b>28.1</b>	<b>28.1</b>	<b>0</b>	<b>75.21</b>	<b>25.62</b>	<b>0</b>	<b>46.28</b>	<b>44.63</b>	<b>0</b>	<b>46.28</b>	<b>44.63</b>	<b>66.12</b>	<b>0</b>	<b>33.88</b>

12	Naugaon beria	15	8	4	3	6	5	4	9	3	3	4	8	3	-	10	5	-	10	5	10	-	5	7	3	5	-	13	2	-	9	4	-	9	4	10	-	5
13	Taragtal	10	6	2	2	-	8	2	6	2	2	3	5	2	-	8	2	-	8	2	8	-	2	4	3	3	-	8	2	-	5	3	-	5	3	6	-	4
14	Golkhal	14	8	3	3	-	11	3	8	3	3	5	7	2	-	11	3	-	11	3	10	-	4	3	8	3	-	11	1	-	5	4	-	5	4	8	-	6
15	Kotyura	27	15	8	4	20	2	5	20	4	3	9	11	7	-	18	9	-	18	9	20	-	7	15	8	4	-	25	2	-	10	12	-	10	12	20	-	7
<b>Total</b>		<b>66</b>	<b>37</b>	<b>17</b>	<b>12</b>	<b>26</b>	<b>26</b>	<b>14</b>	<b>43</b>	<b>12</b>	<b>11</b>	<b>21</b>	<b>31</b>	<b>14</b>	<b>0</b>	<b>47</b>	<b>19</b>	<b>0</b>	<b>47</b>	<b>19</b>	<b>48</b>	<b>0</b>	<b>18</b>	<b>29</b>	<b>22</b>	<b>15</b>	<b>0</b>	<b>57</b>	<b>7</b>	<b>0</b>	<b>29</b>	<b>23</b>	<b>0</b>	<b>29</b>	<b>23</b>	<b>44</b>	<b>0</b>	<b>22</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>56.06</b>	<b>25.76</b>	<b>18.18</b>	<b>39.39</b>	<b>39.39</b>	<b>21.21</b>	<b>65.15</b>	<b>18.18</b>	<b>16.67</b>	<b>31.82</b>	<b>46.97</b>	<b>21.21</b>	<b>0</b>	<b>71.21</b>	<b>28.79</b>	<b>0</b>	<b>71.21</b>	<b>28.79</b>	<b>72.73</b>	<b>0</b>	<b>27.27</b>	<b>43.94</b>	<b>33.33</b>	<b>22.73</b>	<b>0</b>	<b>86.36</b>	<b>10.61</b>	<b>0</b>	<b>43.94</b>	<b>34.85</b>	<b>0</b>	<b>43.94</b>	<b>34.85</b>	<b>66.67</b>	<b>0</b>	<b>33.33</b>
16	Hargarh	21	10	5	6	6	10	5	13	4	4	6	10	5	-	16	5	-	16	5	15	-	6	3	13	5	-	17	4	-	5	6	-	5	6	13	-	7
17	Beena	27	15	6	6	8	14	5	20	4	3	8	15	4	-	18	9	-	18	9	20	-	7	6	13	8	-	24	3	-	10	5	-	10	5	20	-	7
18	Jogina	9	4	3	2	2	5	2	5	2	2	3	4	2	-	6	3	-	6	3	6	-	3	2	3	4	-	6	3	-	4	2	-	4	2	6	-	3
19	Rohida	18	9	7	2	15	1	2	12	3	3	6	9	3	-	14	4	-	14	4	13	-	6	3	10	6	-	14	4	-	12	4	-	12	4	12	-	6
20	Maikholi	23	12	7	4	6	13	4	14	4	5	4	13	6	-	15	8	-	15	8	16	-	7	8	7	7	-	17	6	-	13	7	-	13	7	15	-	8
<b>Total</b>		<b>98</b>	<b>50</b>	<b>28</b>	<b>20</b>	<b>37</b>	<b>43</b>	<b>18</b>	<b>64</b>	<b>17</b>	<b>17</b>	<b>27</b>	<b>51</b>	<b>20</b>	<b>0</b>	<b>69</b>	<b>29</b>	<b>0</b>	<b>69</b>	<b>29</b>	<b>70</b>	<b>0</b>	<b>29</b>	<b>22</b>	<b>46</b>	<b>30</b>	<b>0</b>	<b>78</b>	<b>20</b>	<b>0</b>	<b>44</b>	<b>24</b>	<b>0</b>	<b>44</b>	<b>24</b>	<b>66</b>	<b>0</b>	<b>31</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>51.02</b>	<b>28.57</b>	<b>20.41</b>	<b>37.76</b>	<b>43.88</b>	<b>18.37</b>	<b>65.31</b>	<b>17.35</b>	<b>17.35</b>	<b>27.55</b>	<b>52.04</b>	<b>20.41</b>	<b>0</b>	<b>70.41</b>	<b>29.59</b>	<b>0</b>	<b>70.41</b>	<b>29.59</b>	<b>71.43</b>	<b>0</b>	<b>29.59</b>	<b>22.45</b>	<b>46.94</b>	<b>30.61</b>	<b>0</b>	<b>79.59</b>	<b>20.41</b>	<b>0</b>	<b>44.9</b>	<b>24.49</b>	<b>0</b>	<b>44.9</b>	<b>24.49</b>	<b>67.35</b>	<b>0</b>	<b>31.63</b>
<b>Total</b>		<b>285</b>	<b>148</b>	<b>74</b>	<b>63</b>	<b>129</b>	<b>99</b>	<b>57</b>	<b>184</b>	<b>53</b>	<b>51</b>	<b>90</b>	<b>130</b>	<b>65</b>	<b>0</b>	<b>204</b>	<b>81</b>	<b>0</b>	<b>204</b>	<b>81</b>	<b>203</b>	<b>0</b>	<b>83</b>	<b>104</b>	<b>102</b>	<b>79</b>	<b>0</b>	<b>226</b>	<b>58</b>	<b>0</b>	<b>129</b>	<b>101</b>	<b>0</b>	<b>129</b>	<b>101</b>	<b>190</b>	<b>0</b>	<b>94</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>51.93</b>	<b>25.96</b>	<b>22.11</b>	<b>45.26</b>	<b>34.74</b>	<b>20.00</b>	<b>64.56</b>	<b>18.60</b>	<b>17.89</b>	<b>31.58</b>	<b>45.61</b>	<b>22.81</b>	<b>0</b>	<b>71.58</b>	<b>28.42</b>	<b>0</b>	<b>71.58</b>	<b>28.42</b>	<b>71.23</b>	<b>0.00</b>	<b>29.12</b>	<b>36.49</b>	<b>35.79</b>	<b>27.72</b>	<b>0.00</b>	<b>79.30</b>	<b>20.35</b>	<b>0.00</b>	<b>45.26</b>	<b>35.44</b>						

**Table 13: Own initiatives to cope with these changes - What made you think of making these adaptations to deal with change?**

S.N.	A	B	C			D			E			F			G			H			I		
	Revenue Village	PRA (Group)	Remembered what my parents/grandfather did			Saw it being done in a neighboring village/different part of the country			Come up with an idea myself and tried it out			Saw it being done by others in the village/community			Read out it in a newspapers/magazine/ poster			Heard about it on radio/saw it on television			Was suggested by the extension/development agent		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	
1	Sirda	12	6	3	3	5	3	4	2	6	4	4	5	3	---	6	6	2	6	4	1	3	8
2	Gajar	10	5	2	3	4	3	3	2	5	3	5	2	3	1	5	4	1	5	4	2	3	5
3	Querali walli	8	4	3	1	4	3	1	1	4	3	3	4	1	1	2	5	1	2	5	1	4	3
4	Querali palli	10	3	3	4	5	2	3	2	5	3	4	3	3		7	3	---	7	3	3	6	1
5	Malsakhet	9	3	2	4	3	2	4	1	3	5	5	3	1		5	4	---	5	4	2	3	4
6	Khatyari malli	13	7	3	3	7	3	3	2	4	7	5	4	4	2	7	4	2	7	4	2	6	4
7	Khatyari talli	19	8	5	6	8	5	6	3	7	9	9	4	6	2	9	8	3	7	9	3	7	9
8	Bhaltwani walli	5	2	2	1	2	2	1		2	3	2	2	1	---	5	---		5			3	2
9	Bhaltwani palli	7	3	2	2	3	2	2	1	3	3	4	2	1	1	3	3	1	3	3	1	3	3
10	Brahmdevchauri	6	2	1	3	3	1	2	2	1	3	3	2	1	---	4	2		4	2	1	3	2
11	Jaintha	22	9	7	6	9	7	6	5	9	8	9	8	5	5	9	8	5	9	8	5	9	8
<b>Total</b>		<b>121</b>	<b>52</b>	<b>33</b>	<b>36</b>	<b>53</b>	<b>33</b>	<b>35</b>	<b>21</b>	<b>49</b>	<b>51</b>	<b>53</b>	<b>39</b>	<b>29</b>	<b>12</b>	<b>62</b>	<b>47</b>	<b>15</b>	<b>60</b>	<b>46</b>	<b>21</b>	<b>50</b>	<b>49</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>42.98</b>	<b>27.27</b>	<b>29.75</b>	<b>43.8</b>	<b>27.27</b>	<b>28.93</b>	<b>17.36</b>	<b>40.5</b>	<b>42.15</b>	<b>43.8</b>	<b>32.23</b>	<b>23.97</b>	<b>9.917</b>	<b>51.24</b>	<b>38.84</b>	<b>12.4</b>	<b>49.59</b>	<b>38.02</b>	<b>17.36</b>	<b>41.3</b>	<b>40.5</b>

12	Naugaon beria	15	6	4	5	8	4	3	3	6	6	6	4	5	2	8	5	2	8	5	2	8	5
13	Taragtal	10	3	3	4	4	3	3	2	5	3	6	3	1	1	5	4	1	5	4	3	2	5
14	Golkhal	14	7	3	4	7	3	4	4	7	3	4	6	4	2	8	4	1	9	4	---	10	4
15	Kotyura	27	10	9	8	10	9	8	4	10	13	7	10	10	---	15	12		15	12	8	7	12
<b>Total</b>		<b>66</b>	<b>26</b>	<b>19</b>	<b>21</b>	<b>29</b>	<b>19</b>	<b>18</b>	<b>13</b>	<b>28</b>	<b>25</b>	<b>23</b>	<b>23</b>	<b>20</b>	<b>5</b>	<b>36</b>	<b>25</b>	<b>4</b>	<b>37</b>	<b>25</b>	<b>13</b>	<b>27</b>	<b>26</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>39.39</b>	<b>28.79</b>	<b>31.82</b>	<b>43.94</b>	<b>28.79</b>	<b>27.27</b>	<b>19.7</b>	<b>42.42</b>	<b>37.88</b>	<b>34.85</b>	<b>34.85</b>	<b>30.3</b>	<b>7.576</b>	<b>54.55</b>	<b>37.88</b>	<b>6.061</b>	<b>56.06</b>	<b>37.88</b>	<b>19.7</b>	<b>40.9</b>	<b>39.39</b>
16	Hargarh	21	9	4	8	10	5	6	4	10	7	10	5	6	2	13	6	2	13	6	---	13	9
17	Beena	27	10	5	12	11	6	10	5	10	12	8	13	6	2	15	10	2	15	10	3	16	8
18	Jogina	9	3	2	4	3	2	4	2	4	3	4	2	3	1	4	4	2	4	3	2	3	4
19	Rohida	18	10	7	1	12	4	2	3	7	8	8	7	3	---	10	8		10	8	7	8	3
20	Maikholi	23	11	7	5	11	7	5	4	14	5	12	5	6	4	6	13	5	8	10	5	10	8
<b>Total</b>		<b>98</b>	<b>43</b>	<b>25</b>	<b>30</b>	<b>47</b>	<b>24</b>	<b>27</b>	<b>18</b>	<b>45</b>	<b>35</b>	<b>42</b>	<b>32</b>	<b>24</b>	<b>9</b>	<b>48</b>	<b>41</b>	<b>11</b>	<b>50</b>	<b>37</b>	<b>17</b>	<b>50</b>	<b>32</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>43.88</b>	<b>25.51</b>	<b>30.61</b>	<b>47.96</b>	<b>24.49</b>	<b>27.55</b>	<b>18.37</b>	<b>45.92</b>	<b>35.71</b>	<b>42.86</b>	<b>32.65</b>	<b>24.49</b>	<b>9.184</b>	<b>48.98</b>	<b>41.84</b>	<b>11.22</b>	<b>51.02</b>	<b>37.76</b>	<b>17.35</b>	<b>51</b>	<b>32.65</b>
<b>Total</b>		<b>285</b>	<b>121</b>	<b>77</b>	<b>87</b>	<b>129</b>	<b>76</b>	<b>80</b>	<b>52</b>	<b>122</b>	<b>111</b>	<b>118</b>	<b>94</b>	<b>73</b>	<b>26</b>	<b>146</b>	<b>113</b>	<b>30</b>	<b>147</b>	<b>108</b>	<b>51</b>	<b>127</b>	<b>107</b>
<b>% of Total PRA Members</b>		<b>100.00</b>	<b>42.46</b>	<b>27.02</b>	<b>30.53</b>	<b>45.26</b>	<b>26.67</b>	<b>28.07</b>	<b>18.25</b>	<b>42.81</b>	<b>38.95</b>	<b>41.4</b>	<b>32.98</b>	<b>25.61</b>	<b>9.123</b>	<b>51.23</b>	<b>39.65</b>	<b>10.53</b>	<b>51.58</b>	<b>37.89</b>	<b>17.89</b>	<b>44.6</b>	<b>37.54</b>

**Table14: Own initiatives to cope with these changes - How did you develop these adaptive practices?**

			A			B			C*			D*			E			F		
	Revenue Village	PRA (Group)	Did myself			Did together with my wife/family			Involved my neighboring/others in the community			Collaborated with an agency			Tried at small scale			Made a number of adaptation practices before arriving at current practice		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
S.N.	Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
1	Sirda	12	5	4	3	7	2	3	3	5	4	2	6	4	7	2	3	---	---	12
2	Gajar	10	4	2	4	5	2	3	2	6	2	2	4	4	4	3	3	---	---	10
3	Querali walli	8	3	5		4	2	2	2	3	3	3	4	1	3	2	4	---	---	8
4	Querali palli	10	2	5	3	3	2	5	3	2	5	1	4	5	4	3	2	---	---	10
5	Malsakhet	9	3	4	2	4	3	2	3	4	2	2	3	4	5	1	3	---	---	9
6	Khatyari malli	13	6	4	3	6	4	3	4	5	4	4	5	4	7	2	4	---	---	13
7	Khatyari talli	19	9	4	6	9	4	6	4	10	5	5	6	8	11	4	4	---	---	19
8	Bhaltwani walli	5	2	2	1	3	1	1	2	2	1	2	1	2	2	3		---	---	5
9	Bhaltwani palli	7	4	2	1	4	2	1	2	4	1	2	1	4	4	1	2	---	---	7
10	Brahmdevchauri	6	2	3	1	3	1	2	2	1	3	1	3	2	4	2		---	---	6
11	Jaintha	22	9	8	5	10	7	5	3	11	8	4	9	9	11	7	4	---	---	22
<b>Total</b>		<b>121</b>	<b>49</b>	<b>43</b>	<b>29</b>	<b>58</b>	<b>30</b>	<b>33</b>	<b>30</b>	<b>53</b>	<b>38</b>	<b>28</b>	<b>46</b>	<b>47</b>	<b>62</b>	<b>30</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>121</b>
<b>% of Total PRA members</b>		<b>100</b>	<b>40.496</b>	<b>35.537</b>	<b>23.967</b>	<b>47.934</b>	<b>24.793</b>	<b>27.273</b>	<b>24.793</b>	<b>43.8</b>	<b>31.405</b>	<b>23.1</b>	<b>38.017</b>	<b>38.84</b>	<b>51.24</b>	<b>24.79</b>	<b>23.97</b>	<b>0</b>	<b>0</b>	<b>100</b>
12	Naugaon beria	15	5	6	4	5	6	4	3	8	4	3	5	7	9	3	3	---	---	15
13	Taragtal	10	2	5	3	5	3	2	2	6	2	1	4	5	5	2	3	---	---	10
14	Golkhal	14	4	8	2	4	8	2	3	6	5	2	8	4	8	2	4	---	---	14

15	Kotyura	27	5	20	2	10	12	5	4	18	5	3	12	12	15	5	7	---	---	27
<b>Total</b>		<b>66</b>	<b>16</b>	<b>39</b>	<b>11</b>	<b>24</b>	<b>29</b>	<b>13</b>	<b>12</b>	<b>38</b>	<b>16</b>	<b>9</b>	<b>29</b>	<b>28</b>	<b>37</b>	<b>12</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>66</b>
<b>% of Total PRA members</b>		<b>100</b>	<b>24.242</b>	<b>59.091</b>	<b>16.667</b>	<b>36.364</b>	<b>43.939</b>	<b>19.697</b>	<b>18.182</b>	<b>57.6</b>	<b>24.242</b>	<b>13.6</b>	<b>43.939</b>	<b>42.42</b>	<b>56.06</b>	<b>18.18</b>	<b>25.76</b>	<b>0</b>	<b>0</b>	<b>100</b>
16	Hargarh	21	6	9	6	9	6	5	6	10	5	2	12	7	12	4	5	---	---	21
17	Beena	27	5	10	12	5	10	12	4	9	14	3	14	10	9	5	13	---	---	27
18	Jogina	9	2	4	3	2	4	3	2	5	2	2	1	6	3	4	2	---	---	9
19	Rohida	18	4	10	4	6	9	3	4	8	6	3	6	9	5	7	6	---	---	18
20	Maikholi	23	6	10	7	6	10	7	4	13	6	1	15	7	12	5	6	---	---	23
<b>Total</b>		<b>98</b>	<b>23</b>	<b>43</b>	<b>32</b>	<b>28</b>	<b>39</b>	<b>30</b>	<b>20</b>	<b>45</b>	<b>33</b>	<b>11</b>	<b>48</b>	<b>39</b>	<b>41</b>	<b>25</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>98</b>
<b>% of Total PRA members</b>		<b>100</b>	<b>23.469</b>	<b>43.878</b>	<b>32.653</b>	<b>28.571</b>	<b>39.796</b>	<b>30.612</b>	<b>20.408</b>	<b>45.9</b>	<b>33.673</b>	<b>11.2</b>	<b>48.98</b>	<b>39.8</b>	<b>41.84</b>	<b>25.51</b>	<b>32.65</b>	<b>0</b>	<b>0</b>	<b>100</b>
<b>Total</b>		<b>285</b>	<b>88</b>	<b>125</b>	<b>72</b>	<b>110</b>	<b>98</b>	<b>76</b>	<b>62</b>	<b>136</b>	<b>87</b>	<b>48</b>	<b>123</b>	<b>114</b>	<b>140</b>	<b>67</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>285</b>
<b>% of Total PRA members</b>		<b>100.00</b>	<b>30.877</b>	<b>43.86</b>	<b>25.263</b>	<b>38.596</b>	<b>34.386</b>	<b>26.667</b>	<b>21.754</b>	<b>47.7</b>	<b>30.526</b>	<b>16.8</b>	<b>43.158</b>	<b>40</b>	<b>49.12</b>	<b>23.51</b>	<b>27.37</b>	<b>0.00</b>	<b>0.00</b>	<b>100.00</b>



**Table15: Own initiatives to cope with these changes - What difficulties did you encounter in pursuing these practices?**

1	2	3	Lack of information			Lack of seeds			Extra burden of farm work			Poor or no extension / research support			Finding markets for new crop			Lack of money			No access to bank credit			Lack of labour			Inability to obtain raw material			Being a woman			Being from the marginalized groups		
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
S.N.	Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR			
1	Sirda	12	7	3	2	7	3	2	2	7	3	7	3	2	7	3	2	7	3	2	2	7	3	2	7	3	2	7	3	2	7	3	2		
2	Gajar	10	6	2	2	6	2	2	2	6	2	6	2	2	6	2	2	6	2	2	2	6	2	2	6	2	2	6	2	2	6	2	2		
3	Querali walli	8	4	2	2	4	2	2	1	3	4	1	3	4	5	2	1	3	2	3	4	3	1	1	4	3	4	3	1	3	2	3	4	3	1
4	Querali palli	10	7	2	1	6	1	3	2	5	3	5	3	2	7	1	2	7	1	2	5	3	2	2	3	5	5	3	2	5	3	2	6	3	1
5	Malsakhet	9	5	1	3	5	1	3	2	4	3	2	4	3	4	3	2	4	3	2	5	2	2	2	5	2	4	3	2	4	3	2	5	3	1
6	Khatyari malli	13	8	2	3	8	2	3	3	8	2	8	2	3	8	2	3	8	2	3	3	8	2	8	2	3	8	2	3	8	2	3	8	2	3
7	Khatyari talli	19	9	4	6	9	4	6	4	9	6	9	4	6	9	4	6	9	4	6	4	9	6	9	4	6	9	4	6	9	4	6	9	4	6
8	Bhaltwani walli	5	3	1	1	3	1	1	1	2	2	1	2	2	4		1	4		1	3	1	1	1	3	1	2	1	2	3		2	3	1	1
9	Bhaltwani palli	7	4	2	1	4	2	1	2	3	2	4	2	1	4	2	1	4	2	1	2	1	4	4	2	1	4	2	1	4	2	1	4	2	1
10	Brahmdevchauri	6	5		1	4	1	1	1	3	2	1	3	2	3	2	1	3	2	1	3	2	1	1	2	3	3	2	1	4	1	1	3	2	1
11	Jaintha	22	12	4	6	12	4	6	4	12	6	12	4	6	12	4	6	12	4	6	6	12	4	12	4	6	12	4	6	12	4	6	12	4	6
<b>Total</b>		<b>121</b>	<b>70</b>	<b>23</b>	<b>28</b>	<b>68</b>	<b>23</b>	<b>30</b>	<b>24</b>	<b>62</b>	<b>3</b> <b>5</b>	<b>5</b> <b>6</b>	<b>32</b>	<b>33</b>	<b>69</b>	<b>25</b>	<b>2</b> <b>7</b>	<b>6</b> <b>7</b>	<b>25</b>	<b>29</b>	<b>3</b> <b>9</b>	<b>54</b>	<b>2</b> <b>8</b>	<b>4</b> <b>4</b>	<b>42</b>	<b>3</b> <b>5</b>	<b>5</b> <b>9</b>	<b>33</b>	<b>29</b>	<b>6</b> <b>5</b>	<b>26</b>	<b>3</b> <b>0</b>	<b>67</b>	<b>29</b>	<b>25</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>57.9</b>	<b>19</b>	<b>23.1</b>	<b>56.2</b>	<b>19</b>	<b>24.8</b>	<b>19.8</b>	<b>51.2</b>	<b>28.9</b>	<b>46.3</b>	<b>26.4</b>	<b>27.3</b>	<b>57</b>	<b>20.7</b>	<b>22.3</b>	<b>55.4</b>	<b>20.7</b>	<b>24</b>	<b>32.2</b>	<b>44.6</b>	<b>23.1</b>	<b>36.4</b>	<b>34.7</b>	<b>28.9</b>	<b>48.8</b>	<b>27.3</b>	<b>24</b>	<b>53.7</b>	<b>21.5</b>	<b>24.8</b>	<b>55.4</b>	<b>24</b>	<b>20.7</b>
12	Naugaon beria	15	9	3	3	9	3	3	3	9	3	9	3	3	9	3	3	9	3	3	4	5	6	9	3	3	9	3	3	9	3	3	9	3	3

13	Taragtal	10	6	2	2	7	1	2	3	5	2	5	3	2	6	3	1	6	2	2	5	3	2	2	6	2	3	2	5	5	3	2	3	5	2			
14	Golkhal	14	10	2	2	9	2	3	4	8	2	8	2	4	8	2	4	8	3	3	3	8	3	4	8	2	8	4	2	8	4	2	8	4	2			
15	Kotyura	27	19	6	2	20	3	4	10	12	5	12	10	5	18	2	7	15	2	10	15	2	10	3	15	9	9	10	8	12	11	5	11	12	5			
<b>Total</b>		<b>66</b>	<b>44</b>	<b>13</b>	<b>9</b>	<b>45</b>	<b>9</b>	<b>12</b>	<b>20</b>	<b>34</b>	<b>1</b>	<b>3</b>	<b>18</b>	<b>14</b>	<b>41</b>	<b>10</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>18</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>9</b>	<b>19</b>	<b>18</b>	<b>3</b>	<b>4</b>	<b>21</b>	<b>1</b>	<b>2</b>	<b>31</b>	<b>24</b>	<b>12</b>			
<b>% of Total PRA Members</b>		<b>100</b>	<b>66.7</b>	<b>19.7</b>	<b>13.6</b>	<b>68.2</b>	<b>13.6</b>	<b>18.2</b>	<b>30.3</b>	<b>51.5</b>	<b>18.2</b>	<b>51.5</b>	<b>27.3</b>	<b>21.2</b>	<b>62.1</b>	<b>15.2</b>	<b>22.7</b>	<b>57.6</b>	<b>15.2</b>	<b>27.3</b>	<b>40.9</b>	<b>27.3</b>	<b>31.8</b>	<b>27.3</b>	<b>48.5</b>	<b>24.2</b>	<b>43.9</b>	<b>28.8</b>	<b>27.3</b>	<b>51.5</b>	<b>31.8</b>	<b>18.2</b>	<b>47</b>	<b>36.4</b>	<b>18.2</b>			
16	Hargarh	21	13	3	5	13	3	5	5	10	6	13	3	5	13	3	5	13	3	5	5	10	6	5	10	6	5	10	6	9	6	5	9	6	5			
17	Beena	27	13	6	8	10	12	5	5	12	10	12	6	9	12	9	6	11	8	8	5	10	12	9	12	6	10	10	7	6	13	8	6	13	8			
18	Jogina	9	5	2	2	5	2	2	2	5	2	5	2	2	4	1	4	5	2	2	3	2	4	2	3	4	2	3	4	2	4	3	2	3	4			
19	Rohida	18	12	4	2	12	4	2	6	10	2	6	10	2	12	3	3	10	4	4	8	7	3	3	12	3	12	3	3	13	2	3	9	7	2			
20	Maikholi	23	13	6	4	13	6	4	4	13	6	13	6	4	13	6	4	13	6	4	6	13	4	13	6	4	13	4	6	13	4	6	10	6	7			
<b>Total</b>		<b>98</b>	<b>56</b>	<b>21</b>	<b>21</b>	<b>53</b>	<b>27</b>	<b>18</b>	<b>22</b>	<b>50</b>	<b>2</b>	<b>4</b>	<b>27</b>	<b>22</b>	<b>54</b>	<b>22</b>	<b>2</b>	<b>5</b>	<b>23</b>	<b>23</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>30</b>	<b>26</b>	<b>4</b>	<b>3</b>	<b>29</b>	<b>2</b>	<b>36</b>	<b>35</b>	<b>26</b>			
<b>% of Total PRA Members</b>		<b>100</b>	<b>57.1</b>	<b>21.4</b>	<b>21.4</b>	<b>54.1</b>	<b>27.6</b>	<b>18.4</b>	<b>22.4</b>	<b>51</b>	<b>26.5</b>	<b>50</b>	<b>27.6</b>	<b>22.4</b>	<b>55.1</b>	<b>22.4</b>	<b>22.4</b>	<b>53.1</b>	<b>23.5</b>	<b>23.5</b>	<b>27.6</b>	<b>42.9</b>	<b>29.6</b>	<b>32.7</b>	<b>43.9</b>	<b>23.5</b>	<b>98.00</b>	<b>30.6</b>	<b>26.5</b>	<b>43.9</b>	<b>29.6</b>	<b>25.5</b>	<b>36.7</b>	<b>35.7</b>	<b>26.5</b>			
<b>Total</b>		<b>285</b>	<b>170</b>	<b>57</b>	<b>58</b>	<b>166</b>	<b>59</b>	<b>60</b>	<b>66</b>	<b>146</b>	<b>73</b>	<b>13</b>	<b>77</b>	<b>69</b>	<b>164</b>	<b>57</b>	<b>64</b>	<b>15</b>	<b>58</b>	<b>70</b>	<b>93</b>	<b>114</b>	<b>78</b>	<b>94</b>	<b>117</b>	<b>74</b>	<b>13</b>	<b>0</b>	<b>82</b>	<b>73</b>	<b>14</b>	<b>2</b>	<b>76</b>	<b>67</b>	<b>13</b>	<b>4</b>	<b>88</b>	<b>63</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>59.65</b>	<b>20.00</b>	<b>20.35</b>	<b>58.25</b>	<b>20.70</b>	<b>21.05</b>	<b>23.16</b>	<b>51.23</b>	<b>25.1</b>	<b>48.7</b>	<b>27.02</b>	<b>24.21</b>	<b>57.54</b>	<b>20.00</b>	<b>22.4</b>	<b>55.9</b>	<b>20.35</b>	<b>24.56</b>	<b>32.3</b>	<b>40.00</b>	<b>32.7</b>	<b>32.8</b>	<b>41.05</b>	<b>25.6</b>	<b>45.1</b>	<b>28.77</b>	<b>25.61</b>	<b>49.2</b>	<b>26.67</b>	<b>23.1</b>	<b>47.02</b>	<b>30.88</b>	<b>22.11</b>			

**Table16: Own initiatives to cope with these changes** - Do you know any practices not in use today which can help you better adapt to climate change? If yes what are they?

S.N.	Revenue Village	PRA (Group)	Practices							
			No. of person responded	1	No. of per. responded	2	No. of per. responded	3	No. of per. responded	4
1	Sirda	12	No Response	-						
2	Gajar	10	No Response	-						
3	Qrerali walli	8	No Response	-						
4	Querali palli	10	No Response							
5	Brahmdev chauri	9	No Response							
6	Malsakhet	13	No Response							
7	Khatyari malli	19	No Response							
8	Khatyari talli	5	No Response							
9	Bhaltwani walli	7	No Response							

10	Bhaltwani palli	6	No Response						
11	Jaintha	22	No Response						
12	Naugaon	15	No Response						
13	Taragtal	10	No Response						
14	Kotyura	14	No Response						
15	Golkhal	27	No Response						
16	Hargarh	21	No Response						
17	Beena	27	No Response						
18	Jogina	9	No Response						
19	Rohida	18	No Response						
20	Maikholi	23	No Response						

**Table17: Information on linkage and access - Opinion**

S.N.	Revenue Village	PRA (Group)	Do you think that young farmers have less knowledge compared to older farmers on how to cope with climate change? Why ?			Is the traditional knowledge (both crops and practices) for coping with change equally maintained by men and women? What are the reasons for each of the answers.			Do you receive any information related to climate change? If Yes, from whom, how frequently?			Is the knowledge to cope with climate change easily accessible/ shared within the community?			As a farmers do you get any information related to best practices to cope with climate change from extension/ governmental/ agriculture research agencies?		
	Name		No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N
1	Sirda	12	8	2	2	7	3	2	2	8	2	3	6	3	-	8	4
2	Gajar	10	6	2	2	6	2	2	2	5	3	2	5	3	-	7	3
3	Querali walli	8	5	3	2	5	2	1	1	4	3	3	4	1	-	5	3
4	Querali palli	10	7	1	2	6	2	2	2	5	3	2	5	3	-	8	2
5	Malsakhet	9	6	2	1	5	2	2	1	3	5	3	4	2	-	7	2
6	Khatyari malli	13	10	2	1	7	3	3	2	4	7	3	8	2	-	10	3
7	Khatyari talli	19	12	4	3	12	5	2	2	10	7	4	11	4	-	14	5
8	Bhaltwani walli	5	3	1	1	2	2	1	1	2	2	1	3	1	-	4	1
9	Bhaltwani palli	7	3	2	2	4	2	1	1	3	3	2	3	2	-	5	2
10	Brahmdevchauri	6	3	2	1	3	1	2	2	1	3	1	3	2	-	4	2
11	Jaintha	22	12	5	5	14	4	4	3	11	8	9	8	5	-	14	8
<b>Total</b>		<b>121</b>	<b>75</b>	<b>26</b>	<b>22</b>	<b>71</b>	<b>28</b>	<b>22</b>	<b>19</b>	<b>56</b>	<b>46</b>	<b>33</b>	<b>60</b>	<b>28</b>	<b>0</b>	<b>86</b>	<b>35</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>61.9835</b>	<b>21.4876</b>	<b>18.1818</b>	<b>58.6777</b>	<b>23.1405</b>	<b>18.1818</b>	<b>15.7025</b>	<b>46.281</b>	<b>38.0165</b>	<b>27.2727</b>	<b>49.5868</b>	<b>23.1405</b>	<b>0</b>	<b>71.0744</b>	<b>28.9256</b>

12	Naugaon beria	15	9	4	2	10	3	2	2	7	6	3	10	2	-	12	3
13	Taragtal	10	6	3	1	6	2	2	2	5	3	2	6	2	-	7	3
14	Golkhal	14	8	4	2	9	3	2	1	10	3	1	8	1	-	10	4
15	Kotyura	27	12	10	5	20	5	2	2	12	13	6	15	6	-	20	7
<b>Total</b>		<b>66</b>	<b>35</b>	<b>21</b>	<b>10</b>	<b>45</b>	<b>13</b>	<b>8</b>	<b>7</b>	<b>34</b>	<b>25</b>	<b>12</b>	<b>39</b>	<b>11</b>	<b>0</b>	<b>49</b>	<b>17</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>53.0303</b>	<b>31.8182</b>	<b>15.1515</b>	<b>68.1818</b>	<b>19.697</b>	<b>12.1212</b>	<b>10.6061</b>	<b>51.5152</b>	<b>37.8788</b>	<b>18.1818</b>	<b>59.0909</b>	<b>16.6667</b>	<b>0</b>	<b>74.2424</b>	<b>25.7576</b>
16	Hargarh	21	10	7	4	10	5	6	3	11	7	4	14	3	-	15	6
17	Beena	27	15	8	4	11	6	10	3	13	11	5	16	6	-	21	6
18	Jogina	9	4	3	2	3	2	4	2	4	3	2	5	2	-	6	3
19	Rohida	18	10	6	2	12	4	2	3	7	8	3	12	3	-	14	4
20	Maikholi	23	12	8	3	11	7	5	2	16	5	4	16	3	-	17	6
<b>Total</b>		<b>98</b>	<b>51</b>	<b>32</b>	<b>15</b>	<b>47</b>	<b>24</b>	<b>27</b>	<b>13</b>	<b>51</b>	<b>34</b>	<b>18</b>	<b>63</b>	<b>17</b>	<b>0</b>	<b>73</b>	<b>25</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>52.0408</b>	<b>32.6531</b>	<b>15.3061</b>	<b>47.9592</b>	<b>24.4898</b>	<b>27.551</b>	<b>13.2653</b>	<b>52.0408</b>	<b>34.6939</b>	<b>18.3673</b>	<b>64.2857</b>	<b>17.3469</b>	<b>0</b>	<b>74.4898</b>	<b>25.5102</b>
<b>Total</b>		<b>285</b>	<b>161</b>	<b>79</b>	<b>47</b>	<b>163</b>	<b>65</b>	<b>57</b>	<b>39</b>	<b>141</b>	<b>105</b>	<b>63</b>	<b>162</b>	<b>56</b>	<b>0</b>	<b>208</b>	<b>77</b>
<b>% of Total PRA Members</b>		<b>100.00</b>	<b>56.4912</b>	<b>27.7193</b>	<b>16.4912</b>	<b>57.193</b>	<b>22.807</b>	<b>20</b>	<b>13.6842</b>	<b>49.4737</b>	<b>36.8421</b>	<b>22.1053</b>	<b>56.8421</b>	<b>19.6491</b>	<b>0</b>	<b>72.9825</b>	<b>27.0175</b>

**Table18: Local organizations and "Institutions", strength and potential? (Venn diagram; SWOT analysis)**

	A	B	C			D			E			F			G		
	Revenue Village	PRA (Group)	Are there any "organizations" within the community?			If Yes, are they work for community?			Are the peoples equally participate in them? And what do they do?			Are the roles played by men/women equally?			Have they been involved in undertaking action to deal with climate change? If yes, what are these actions?		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
S.N.	Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
1	Sirda	12	9	-	3	7	3	2	6	3	3	6	4	2	-	10	2
2	Gajar	10	8	-	2	5	2	3	7	2	2	5	3	2	-	8	2
3	Querali walli	8	6	-	2	4	2	2	5	1	2	4	2	2	-	6	2
4	Querali palli	10	8	-	2	6	2	2	5	3	2	6	2	2	-	8	2
5	Malsakhet	9	6	-	3	5	2	2	4	2	3	4	3	2	-	6	3
6	Khatyari malli	13	10	-	3	7	2	4	7	5	2	8	3	2	-	10	3
7	Khatyari talli	19	15	-	4	9	4	2	12	3	4	9	4	6	-	15	4
8	Bhaltwani walli	5	3	-	2	2	2	1	3	1	1	2	2	1	-	3	2
9	Bhaltwani palli	7	5	-	2	3	2	2	3	2	2	4	2	1	-	5	2
10	Brahmdevchauri	6	4	-	2	3	1	2	3	2	1	3	2	1	-	4	2
11	Jaintha	22	18	-	4	9	7	6	10	6	5	9	8	5	-	15	7
<b>Total</b>		<b>121</b>	<b>92</b>	<b>0</b>	<b>29</b>	<b>60</b>	<b>29</b>	<b>28</b>	<b>65</b>	<b>30</b>	<b>27</b>	<b>60</b>	<b>35</b>	<b>26</b>	<b>0</b>	<b>90</b>	<b>31</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>76.0331</b>	<b>0</b>	<b>23.9669</b>	<b>49.5868</b>	<b>23.9669</b>	<b>23.1405</b>	<b>53.719</b>	<b>24.7934</b>	<b>22.314</b>	<b>49.5868</b>	<b>28.9256</b>	<b>21.4876</b>	<b>0</b>	<b>74.3802</b>	<b>25.6198</b>
12	Naugaon beria	15	13	-	2	9	3	3	8	5	2	8	5	2	-	12	3

13	Taragtal	10	7	-	3	4	3	3	6	2	2	5	3	2	-	8	2
14	Golkhal	14	11	-	3	6	5	3	6	4	4	7	5	2	-	9	5
15	Kotyura	27	23	-	4	15	6	6	15	7	5	13	9	5	-	20	7
<b>Total</b>		<b>66</b>	<b>54</b>	<b>0</b>	<b>12</b>	<b>34</b>	<b>17</b>	<b>15</b>	<b>35</b>	<b>18</b>	<b>13</b>	<b>33</b>	<b>22</b>	<b>11</b>	<b>0</b>	<b>49</b>	<b>17</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>81.8182</b>	<b>0</b>	<b>18.1818</b>	<b>51.5152</b>	<b>25.7576</b>	<b>22.7273</b>	<b>53.0303</b>	<b>27.2727</b>	<b>19.697</b>	<b>50</b>	<b>33.3333</b>	<b>16.6667</b>	<b>0</b>	<b>74.2424</b>	<b>25.7576</b>
16	Hargarh	21	16	-	5	10	5	6	9	6	5	10	5	6	-	15	6
17	Beena	27	24	-	3	14	8	5	12	10	5	12	10	5	-	21	6
18	Jogina	9	6	-	3	4	3	2	4	2	3	4	2	3	-	6	3
19	Rohida	18	14	-	4	10	3	5	9	6	3	8	6	4	-	15	3
20	Maikholi	23	18	-	5	15	3	5	10	8	5	12	7	4	-	16	7
<b>Total</b>		<b>98</b>	<b>78</b>	<b>0</b>	<b>20</b>	<b>53</b>	<b>22</b>	<b>23</b>	<b>44</b>	<b>32</b>	<b>21</b>	<b>46</b>	<b>30</b>	<b>22</b>	<b>0</b>	<b>73</b>	<b>25</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>79.5918</b>	<b>0</b>	<b>20.4082</b>	<b>54.0816</b>	<b>22.449</b>	<b>23.4694</b>	<b>44.898</b>	<b>32.6531</b>	<b>21.4286</b>	<b>46.9388</b>	<b>30.6122</b>	<b>22.449</b>	<b>0</b>	<b>74.4898</b>	<b>25.5102</b>
<b>Total</b>		<b>285</b>	<b>224</b>	<b>0</b>	<b>61</b>	<b>147</b>	<b>68</b>	<b>66</b>	<b>144</b>	<b>80</b>	<b>61</b>	<b>139</b>	<b>87</b>	<b>59</b>	<b>0</b>	<b>212</b>	<b>73</b>
<b>% of Total PRA Members</b>		<b>100.00</b>	<b>78.5965</b>	<b>0</b>	<b>21.4035</b>	<b>51.5789</b>	<b>23.8596</b>	<b>23.1579</b>	<b>50.5263</b>	<b>28.0702</b>	<b>21.4035</b>	<b>48.7719</b>	<b>30.5263</b>	<b>20.7018</b>	<b>0</b>	<b>74.386</b>	<b>25.614</b>



**Table19: Local organizations and "Institutions", strength and potential? (Venn diagram; SWOT analysis)**

	A	B	C			D			E			F			G		
	Revenue Village	PRA (Group)	D: 2- Are there any village-based (or district-based) service providers such as government agencies, NGO active in village? If yes,			Are they work for society benefit?			Are their staff composition is equal?			What in your opinion have they contributed to the development of community?			Have any of these organization/individual been involved in finding solutions to climate-change related issues? If yes, could you name a few?		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
S.N.	Name	No.	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
1	Sirda	12	7	2	3	7	2	3	5	6	2	7	2	3	-	6	6
2	Gajar	10	5	2	3	5	2	3	4	5	1	7	2	1	-	5	4
3	Querali walli	8	5	2	1	5	2	1	3	3	2	5	2	1	-	7	5
4	Querali palli	10	6	2	2	6	2	2	4	5	1	6	2	2	-	7	3
5	Malsakhet	9	4	2	3	4	2	3	3	5	1	5	2	2	-	6	3
6	Khatyari malli	13	8	3	2	8	3	2	4	7	2	7	3	3	-	10	3
7	Khatyari talli	19	10	4	5	10	4	5	6	10	3	10	4	5	-	14	5
8	Bhaltwani walli	5	2	2	1	2	2	1	3	1	1	2	2	1	-	4	1
9	Bhaltwani palli	7	4	2	1	4	2	1	4	2	1	4	2	1	-	4	3
10	Brahmdevchauri	6	3	1	2	3	1	2	2	3	1	3	2	1	-	4	2
11	Jaintha	22	12	6	4	12	6	4	6	12	4	13	5	4	-	14	8
<b>Total</b>		121	66	28	27	66	28	27	44	59	19	69	28	24	0	81	43
<b>% of Total PRA Members</b>		100	54.55	23.14	22.31	54.55	23.14	22.31	36.36	48.76	15.70	57.02	23.14	19.83	0.00	66.94	35.54

12	Naugaon beria	15	9	4	2	9	4	2	4	8	3	8	4	3	-	10	5
13	Taragtal	10	6	2	2	6	2	2	2	5	3	6	2	2	-	6	4
14	Golkhal	14	9	2	3	9	2	3	4	7	3	8	4	2	-	10	4
15	Kotyura	27	17	4	6	17	4	6	6	14	7	16	6	5	-	15	12
<b>Total</b>		66	41	12	13	41	12	13	16	34	16	38	16	12	0	41	25
<b>% of Total PRA Members</b>		100	62.12	18.18	19.70	62.12	18.18	19.70	24.24	51.52	24.24	57.58	24.24	18.18	0.00	62.12	60.98
16	Hargarh	21	12	5	4	12	5	4	4	10	7	13	5	3	-	15	6
17	Beena	27	15	7	5	15	7	5	8	12	7	18	5	4	-	17	10
18	Jogina	9	6	2	1	6	2	1	2	4	3	4	3	2	-	5	4
19	Rohida	18	12	3	3	12	3	3	5	9	5	9	6	3	-	12	6
20	Maikholi	23	14	4	5	14	4	5	8	10	5	15	7	5	-	15	8
<b>Total</b>		98	59	21	18	59	21	18	27	45	27	59	26	17	0	64	34
<b>% of Total PRA Members</b>		100	60.20	21.43	18.37	60.20	21.43	18.37	27.55	45.92	27.55	60.20	26.53	17.35	0.00	65.31	57.63
<b>Total</b>		<b>285</b>	<b>166</b>	<b>61</b>	<b>58</b>	<b>166</b>	<b>61</b>	<b>58</b>	<b>87</b>	<b>138</b>	<b>62</b>	<b>166</b>	<b>70</b>	<b>53</b>	<b>0</b>	<b>186</b>	<b>102</b>
<b>% of Total PRA Members</b>		<b>100.00</b>	<b>58.25</b>	<b>21.40</b>	<b>20.35</b>	<b>58.25</b>	<b>21.40</b>	<b>20.35</b>	<b>30.53</b>	<b>48.42</b>	<b>21.75</b>	<b>58.25</b>	<b>24.56</b>	<b>18.60</b>	<b>0.00</b>	<b>65.26</b>	<b>35.79</b>

**Table20: Food Security (Possible PRA time-line)**

A S.N.	B Revenue Village	C PRA (Group)	D		E If no, number of days it is difficult to get all meals in the year?	F				G									
			E: 1- Do all the household members in the village get all meals each day all through the year?			E: 2- For how many months is your own food production sufficient for your family?				E: 3- How do you manage to meet your food need during deficit months?									
			Y	N		1-3 Month	1-6 Month	1-9 Month	1-12 Month	Buying food		Borrowing grains		Labouring in MNREGP		Food aid		Leaving village during food deficit periods	
										Y	N	Y	N	Y	N	Y	N	Y	N
1	Sirda	12	---	12	150	---	---	√	---	12		10	2	8	4	---	12	---	12
2	Gajar	10	---	10	160	---	---	√	---	10		6	4	4	6	---	10	---	10
3	Querali walli	8	---	8	180	---	√	---	---	8	---	2	6	5	3	---	8	---	8
4	Querali palli	10	---	10	240	---	---	√	---	10	---	3	7	7	3	---	10	---	10
5	Malsakhet	9	---	9	250	---	---	√	---	9	---	5	4	6	3	---	9	---	9
6	Khatyari malli	13	---	13	180	---	√	---	---	13	---	8	5	5	8	---	13	---	13
7	Khatyari talli	19	---	19	200	---	√	---	---	19	---	12	7	10	9	---	19	---	19
8	Bhaltwani walli	5	---	5	270	√	---	---	---	5	---	1	4	4	1	---	5	---	5
9	Bhaltwani palli	7	---	7	270	√	---	---	---	7	---	4	3	4	3	---	7	---	7
10	Brahmdevchauri	6	---	6	240	√	---	---	---	6	---	2	4	3	3	---	6	---	6
11	Jaintha	22	---	22	250	√	---	---	---	22	---	12	10	13	9	---	22	---	22
	<b>Total</b>	<b>121</b>		<b>121</b>	<b>2390</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>121</b>	<b>0</b>	<b>65</b>	<b>56</b>	<b>69</b>	<b>52</b>	<b>0</b>	<b>121</b>	<b>0</b>	<b>121</b>
	<b>%</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>1975.206612</b>					<b>100</b>	<b>0</b>	<b>53.72</b>	<b>46.28</b>	<b>57.02</b>	<b>42.98</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>
12	Naugaon beria	15	---	15	180	---	√	---	---	15	---	9	6	9	6	---	15	---	15
13	Taragtal	10	---	10	270	√	---	---	---	10	---	3	7	7	3	---	10	---	10
14	Golkhal	14	---	14	270	√	---	---	---	14	---	10	4	8	6	---	14	---	14
15	Kotyura	27	---	27	270	√	---	---	---	27	---	7	20	20	7	---	27	---	27
	<b>Total</b>	<b>66</b>		<b>66</b>	<b>990</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>29</b>	<b>37</b>	<b>44</b>	<b>22</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>66</b>
	<b>% of Total PRA Members</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>1500</b>					<b>100</b>	<b>0</b>	<b>43.94</b>	<b>56.06</b>	<b>66.67</b>	<b>33.33</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>
16	Hargarh	21	---	21	300	√	---	---	---	21	---	6	15	15	6	---	21	---	21

17	Beena	27	---	27	250	√	---	---	---	27	---	15	12	12	15	---	27	---	27
18	Jogina	9	---	9	280	√	---	---	---	9	---	5	4	3	6	---	9	---	9
19	Rohida	18	---	18	180		√	---	---	18	---	4	14	14	4	---	18	---	18
20	Maikholi	23	---	23	190	√	---	---	---	23	---	10	13	13	10	---	23	---	23
<b>Total</b>		<b>98</b>		<b>98</b>	<b>1200</b>					<b>98</b>	<b>0</b>	<b>40</b>	<b>58</b>	<b>57</b>	<b>41</b>	<b>0</b>	<b>98</b>	<b>0</b>	<b>98</b>
<b>% of Total PRA Members</b>		<b>100</b>	<b>0</b>	<b>100</b>	<b>1224.489796</b>					<b>100</b>	<b>0</b>	<b>40.82</b>	<b>59.18</b>	<b>58.16</b>	<b>41.84</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>
<b>Total</b>		<b>285</b>	<b>0</b>	<b>285</b>	<b>4580</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>134</b>	<b>151</b>	<b>170</b>	<b>115</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>285</b>
<b>% of Total PRA Members</b>		<b>100.00</b>	<b>0.00</b>	<b>100.0</b>	<b>1607.02</b>					<b>100.00</b>	<b>0.00</b>	<b>47.02</b>	<b>52.98</b>	<b>59.65</b>	<b>40.35</b>	<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>

**Table 21: Food Security (Possible PRA time-line)**

A	B	C	D						E		F						
S.N.	Revenue Village	PRA (Group)	E: 4- Who in the family foregoes meals when there are food deficits?						E: 5- Has any family in the village sold/mortgaged any assets to meet the food requirement of the households in the last year?		E: 6- Which grouping in the community is most affected by food deficits?						
			Men (adult)	Women (adult)	Boy children	Girl children	Men (elderly)	Women (elderly)	No. of family	If yes, provide general detail.	Adult men	Adult women	Boys	Girls	Elderly men	Elderly women	Marginalized people (specify)
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Sirda	12	12	---	---	---	---	---	No	No	12	---	---	---	---	---	---
2	Gajar	10	10	---	---	---	---	---	No	No	10	---	---	---	---	---	---
3	Querali walli	8	8	---	---	---	---	---	No	No	8	---	---	---	---	---	---
4	Querali palli	10	10	---	---	---	---	---	No	No	10	---	---	---	---	---	---
5	Malsakhet	9	9	---	---	---	---	---	No	No	9	---	---	---	---	---	---
6	Khatyari malli	13	13	---	---	---	---	---	No	No	13	---	---	---	---	---	---
7	Khatyari talli	19	19	---	---	---	---	---	No	No	19	---	---	---	---	---	---
8	Bhaltwani walli	5	5	---	---	---	---	---	No	No	5	---	---	---	---	---	---
9	Bhaltwani palli	7	7	---	---	---	---	---	No	No	7	---	---	---	---	---	---
10	Brahmdevchauri	6	6	---	---	---	---	---	No	No	6	---	---	---	---	---	---
11	Jaintha	22	22	---	---	---	---	---	No	No	22	---	---	---	---	---	---
<b>Total</b>			121	121	0	0	0	0	0	0	121	0	0	0	0	0	0
<b>% of Total PRA Members</b>			100	100	0	0	0	0			100	0	0	0	0	0	0
12	Naugaon beria	15	15	---	---	---	---	---	No	No	15	---	---	---	---	---	---
13	Taragtal	10	10	---	---	---	---	---	No	No	10	---	---	---	---	---	---

14	Golkhal	14	14	---	---	---	---	---	No	No	14	---	---	---	---	---	---
15	Kotyura	27	27	---	---	---	---	---	No	No	27	---	---	---	---	---	---
<b>Total</b>		66	66	0	0	0	0	0	0	0	66	0	0	0	0	0	0
<b>% of Total PRA Members</b>		100	66	0	0	0	0	0			100	0	0	0	0	0	0
16	Hargarh	21	21	---	---	---	---	---	No	No	21	---	---	---	---	---	---
17	Beena	27	27	---	---	---	---	---	No	No	27	---	---	---	---	---	---
18	Jogina	9	9	---	---	---	---	---	No	No	9	---	---	---	---	---	---
19	Rohida	18	18	---	---	---	---	---	No	No	18	---	---	---	---	---	---
20	Maikholi	23	23	---	---	---	---	---	No	No	23	---	---	---	---	---	---
<b>Total</b>		98	98	0	0	0	0	0	0	0	98	0	0	0	0	0	0
<b>% of Total PRA Members</b>		100	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
<b>Total</b>		285	285	0	0	0	0	0	0	0	285	0	0	0	0	0	0
<b>% of Total PRA Members</b>		100	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0

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