RESPONSES FROM THE COMMUNITY
“Most people in the village have stopped paddy cultivation due to untimely rain. Some farmers cultivate Hybrid rice which is costly, doesn’t even produce seeds and is not adapted to heavy rains or hailstorms. The straw of hybrid rice is hard and livestock don’t like it so you have to spend extra money for fodder.”

“Seeds of traditional varieties are not easy to get, now so we do not have any choice but to cultivate what we get from the block office or from the university.”

“The seed bank is a big relief. Today we have access to older varieties and different types of new rice varieties to choose”.

TANA RAM
Farmer Devki Devi is fond of traditional millets. When she visited the seed bank, she was very happy to see traditional varieties of “Koni” (Foxtail millet), “Cheena” (Proso millet) and “Madua” (Finger millet).

“These varieties were once common but today they are hard to find. Seeds of old varieties are difficult to get and are very costly but now we are getting them free of cost from the community seed bank.”
“Gene Campaign has taken the initiative to conserve many kinds of seeds in the seed bank which they have set up in Orakahan, in Nainital district. Thanks to the bank, traditional seeds will now be easily available to us and we will be able to cultivate varieties of our choice.

Our traditional seeds didn't require much water and could give a harvest even when the weather was not good. But we don't have hose seeds anymore. These new varieties of soybean we get from the government office do not give a good yield in our area since it is colder here. I saw the seeds of the older soybean varieties kept in Gene Campaign’s seed bank. I took some seed last year and have planted them. I will multiply the seeds for cultivating them in our farms. These seeds grow well even when it is very cold.

Every time we visit the seed bank, we feel very happy to see so many different types of our traditional seeds. Many of us have taken seeds from here to revive the crops we like. We have told other farmers about the seed bank and they too are planning to visit.”
PAWAN SINGH

“We are losing our traditional seeds day by day. Previously we used to have many varieties of millets and pulses but now we have only a few varieties left. We should cultivate new varieties but not at the cost of our traditional varieties.

Gene Campaign is an NGO working in our areas that is trying to revive our traditional seeds. At first we had doubts about the need for this, but soon we understood the initiative and started liking it.

Gene Campaign showed us why it is for us to save our traditional seeds, for example new seeds are made by scientists from our traditional seeds. If these are lost, we will lose the opportunity to develop new seeds for future needs. The advantages of traditional varieties are that not only they are better in taste but they are better adapted to tolerate droughts and floods and other weather changes.

Gene Campaign has constructed a large seed bank in our area which has many traditional varieties of rice, millets, maize, pulses and other crops from the whole of Uttarakhand.

Gene Campaign staff travel across the whole state to collect traditional varieties from farmers' fields for the seed bank. They even came to my home and took millet seeds from us. They do this collection to save our traditional seeds and we know that our traditional seeds will help us to cope with uncertain weather.

In our area, more than 200 farmers are now associated with Gene Campaign and attend different training programs organized by them. We learn a lot and meet other farmers through these programs.

We support the initiative started by Gene Campaign and we will add our efforts to revive our traditional seeds. We have understood that it is better to have many varieties rather than just a few.

We are young farmers and we want information related to making our agriculture better.

We welcome and support Gene Campaigns’ work.”
Traditional rice varieties were collected from several locations in the Kumaon, Uttarakhand. Twenty varieties cultivated under rainfed conditions from Bagheshwar, Champawat, Okhalkanda, Almora and Nainital were laid out in trials for participatory varietal selection.

Of the 20 varieties tested farmers selected six varieties as well-adapted to the current conditions. ‘Parvati’, ‘Rajmati’ and ‘Lal rajmati’ were selected as the best suited by all farmers. 90% of the farmers selected ‘Jimi’, 80% selected ‘Dad Basmati’ and 40% farmers thought ‘Babaniya’ would perform reasonably well.

The PVS program was greatly appreciated by farmers. They said they have participated in training programs offered by government agencies and NGOs but have never participated in such a useful and relevant program.

“The opportunity to see several varieties from different places in cultivation at one place and being asked to select what we like was very empowering. We got the chance to choose according to our needs. Now we want seeds of the varieties we have selected. This kind of exercise should be done regularly.”
The seed bank in Uttarakhand is located in village Simayal, Ramgarh block of Nainital district. It is a large, well equipped seed bank which will also conserve duplicate collections from the other seed banks.

The collection from 2013-14 includes:

<table>
<thead>
<tr>
<th>Crop</th>
<th>No. of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>115</td>
</tr>
<tr>
<td>Finger millets</td>
<td>39</td>
</tr>
<tr>
<td>Barnyard millet</td>
<td>11</td>
</tr>
<tr>
<td>Foxtail millet</td>
<td>3</td>
</tr>
<tr>
<td>Vegetable</td>
<td>8</td>
</tr>
<tr>
<td>Maize</td>
<td>8</td>
</tr>
<tr>
<td>Legume</td>
<td>10</td>
</tr>
<tr>
<td>Pearl millet</td>
<td>1</td>
</tr>
<tr>
<td>Barley</td>
<td>8</td>
</tr>
<tr>
<td>Wheat</td>
<td>15</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>1</td>
</tr>
<tr>
<td>Oilseed</td>
<td>7</td>
</tr>
<tr>
<td>Pulses</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>256</strong></td>
</tr>
</tbody>
</table>
Usha Devi cultivates two varieties of paddy, Rajeshwari and Dudhiya Bakol. She likes Rajeshwari because it can grow under dry conditions and Dudhiya Bakol is for use on special occasions. Dudhiya Bakol is her favourite paddy variety because of its excellent cooking quality and its cultural importance “Religious puja and festive occasions are incomplete without this rice”. Dudhiya Bakol also has medicinal properties and is used to treat diarrhea. She does not cultivate hybrid rice as it didn’t taste good and had no aroma.

Due to its high cultural and religious importance, Gene Campaign has made sure that a good amount of Dudhiya Bakol seeds are available in the community seed bank.
“Traditional rice varieties are an important part of our culture. They are used to perform rituals during religious festivals. Seeds of traditional varieties are vanishing and we are facing difficulties to continue with our cultural practices”.

“With the help of the seed bank setup in our area, we will be able to restore lost traditional varieties and prevent our cultural heritage from disappearing. Thanks to this support, we can also conserve seed for future needs”.
UTTAR PRADESH
“The Beej Mela (seed diversity fairs) that were conducted in our area, were very useful. We met farmers from other villages who were cultivating traditional varieties that were lost from our village.”

“I had been looking for Kalanamak seeds for my farm but could not find it. Then I met Rajendra who had brought Kalanamak seeds to show at the Seed Fair. I have arranged to get the seeds from him.”
SEED DIVERSITY FAIRS IN UTTAR PRADESH
HIMACHAL PRADESH
“People are moving away from farming in this village due to frequent hailstorms. Seeds of traditional varieties which were resistant to hailstorms are no longer available.”

“Most of the farmers are growing high yielding varieties in this village which they say are not really suited to the local climate”.

“Thanks to Gene Campaign’s efforts, a seed bank has been established in which traditional varieties of our area are being collected and conserved. We look forward to planting those old varieties again which can withstand hail.”
Farmer showing balls of hail which damage crops
“The university only provides seeds of high yielding varieties which are developed by scientists. These varieties are good for yield but not for health. The traditional varieties were more nutritious. Farmers can cultivate hybrid and high yielding varieties to make money but for good health we need to eat our old varieties. I have been searching for seeds of traditional varieties for many years but could not find them.”

“Now with Gene Campaigns’ initiative to collect traditional varieties in the seed bank, we will be able to get seeds of the old varieties and start cultivating them again.”
Farmer Rajendra Singh examining seeds at the Seed Diversity Fair
Proactive initiatives to collect and conserve the genetic diversity of crop plants have met with enthusiastic response from the farming communities. The support of the International Treaty on Plant Genetic Resources to raise awareness and revive interest in the importance of agrobiodiversity has been extremely valuable in rekindling old know-how to stabilize future food and nutrition. This is critical at a time when food production in the global south faces the challenges of climate turbulence.