

‘Sahabijani’

Systematic Selection of Nagali Seeds

Shivakhandi, Nashik: “Farming is like a two-wheeled chariot. One wheel is ‘pure and robust seed’, and the other is ‘proper crop management’. If either wheel comes off, the vehicle of productivity cannot move forward,” said agricultural expert Dr Satish Karande. He was speaking at a Millet Value Chain Training and Farmers’ Gathering organised for finger millet farmers on 9 April 2026 at Shivakhandi village in Peth taluka of Nashik district, under Pragati Abhiyan’s **Sahabijani** programme. More than 100 farmers from Shivakhandi and surrounding villages, along with Pragati Abhiyan trustee Milind Murugkar, participated in the gathering.



Sahabijani is a participatory study initiative focused on developing pure and robust finger millet seed. The study began with 11 farmers from five talukas—Shahapur and Mokhada in Palghar district, and Peth, Surgana and Trimbakeshwar in Nashik district. Eleven locally used finger millet varieties were collected from these farmers. Each participant cultivated all 11 varieties in experimental plots and selected the three best-performing varieties. In the following kharif season, 115 farmers joined the experiment and established plots to compare these three selected varieties with their own traditional seed. The number of participating farmers has increased to 498 in the current season.

The farmers’ gathering was planned by Programme In-charge Sangita Jadhav, Coordinator Anand Bambale, Research Assistant Kiran Ambawane and Taluka Resource Persons Shravan Nirgude, Chander Kunwar and Mohan Khadam.

Dr Karande, who is guiding the **Sahabijani** initiative, led the discussions at the gathering. The participants reflected deeply on how traditional crops can be sustained in a changing climate and how maintaining seed purity can help improve productivity.

The challenge of climate change

Explaining the changing climate, Dr Karande said, “If you look at rainfall data from the last 10 years, every year has been different. Sometimes the rains begin as early as May; sometimes they disappear around Ganesh festival. Even when the average rainfall looks adequate, it may not be useful for agriculture. Sowing gets delayed, and heavy rain can arrive at the time of harvest.”

The effects of climate change are not limited to rainfall. Crop diseases and pest attacks are also becoming more frequent. Dr Karande explained that disease develops when three factors come together—the

environment, the host (crop or living organism), and the disease-causing pathogen. Changing weather conditions can bring these three factors together more easily, leading to greater disease incidence.

He cited the example of 'Telya' disease in pomegranate. The pathogen had existed for a long time, but particular weather conditions created an environment in which the disease spread on a much larger scale, resulting in crop losses.

Changes in farming practices are also contributing to the problem. The widespread use of weedicides has destroyed grasses that once served as natural food for several pests. As their food sources disappear, pests increasingly attack crops. Understanding the science behind farming practices has therefore become essential.



The decline of finger millet seed quality

Farmers shared a common concern: "Where we once harvested 25 bags of finger millet, getting even two bags is now difficult."

Dr Karande explained that declining seed quality is one of the important reasons for falling productivity in finger millet. If even a single poor-quality earhead gets mixed with otherwise good seed, its effect multiplies over successive generations. The resulting crop becomes progressively weaker and the overall quality of the seed deteriorates.

"However much fertiliser you apply, poor-quality seed can never give good yields," he said, emphasising the need to focus on seed purification.

While several companies develop improved seed varieties for crops such as tomato, cabbage and other commercial crops, there is no comparable system for developing improved finger millet varieties. Farmers therefore need to take responsibility for improving and purifying their own seed. This is the need that *Sahabijani* seeks to address.

The 'Sahabijani' approach

The initiative has brought together 11 selected varieties collected from five talukas in Palghar and Nashik. Each variety is planted in separate rows with great care to prevent any mixing of earheads or seed. Before sowing, the seeds are treated with *Bijamrut*. Seedlings raised on nursery beds are transplanted systematically in rows. Crop management includes the use of *Jivamrut*, regular observation, timely pest and disease management, and careful crop care.

Through training, participating farmers are learning each of these practices and developing a scientific approach to crop observation. The experiment is being conducted with the rigour of an agricultural university-level trial, but the research itself is being carried out by the farmers.

Dr Karande described the process as a “sieve”: “Just as we sift grain, we need to keep selecting the good from the finger millet crop. From good, we select better; from better, the best.”

Farmers themselves have defined what they consider a ‘good’ finger millet plant: one with more tillers, larger earheads, well-filled grains and higher grain weight.

Farmers also observe other characteristics, such as which varieties mature early or late, which are more susceptible to disease and which are able to withstand it. These observations help them identify the varieties best suited to their conditions.

A variety that performs well for one farmer is also shared with other farmers for further testing. This allows its performance to be compared across different farms and conditions. The process creates a collective learning system based on sharing experience and observations. The seed purification and selection process is planned to continue for seven consecutive years, covering seven finger millet seasons.

Adapting agriculture to a changing climate

Accepting the reality of climate change and adapting farming practices accordingly is now essential. Dr Karande said, “It is no longer enough to rely only on past experience. Rainfall patterns, pest incidence and seed quality are all changing. Farmers too need to change their thinking and practices.”

The gathering ended with a shared understanding that agriculture depends on nature, but farming must also adapt to a changing nature if it is to remain viable.

After the experimental seeds are distributed, farmers will begin preparing their nurseries from Akshaya Tritiya and take the experiment forward. They committed to carefully observing each stage, maintaining records and following the prescribed practices.

The purification of finger millet seed through *Sahabijani* is therefore more than a seed improvement exercise. It is a collective effort by farmers to understand their crops, strengthen their own seed systems and find practical ways of responding to climate change.

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