

SUCCESS STORY
On
Popularization of Onion var. Arka Kalyan in Bishnupur District, Manipur

Background :

Onion is one of the important spice crops in Bishnupur as well as in Manipur. Most of the farmers in Bishnupur district grow onion on a very limited scale. However, onion is an essential commodity for the people of Manipur, and almost every household uses onion daily, except for vegetarians. The onions available in Manipur are mostly imported from other states. One of the main reasons for the lack of large-scale onion cultivation is the shortage of irrigation facilities during the Rabi season. Farmers in Bishnupur district face the same issue. Due to frequent highway blockades in Manipur, Dr. P. Bijaya Devi, Subject Matter Specialist (Horticulture) at Krishi Vigyan Kendra, Bishnupur district, has advised farmers to grow onion commercially on a larger scale.

To address this, varietal performance trials of onion varieties Arka Kalyan, Arka Bheem, and a check variety were conducted during the Rabi seasons of 2014–15, 2015–16, and 2016–17 in farmers' fields. The yield performance and economic impact of the assessed technologies were found to be higher than the local farmer's practice (Onion ON-12). Based on the successful results of these trials, a Front Line Demonstration on the popularization of the onion variety Arka Kalyan was undertaken during the Rabi season of 2024.

Intervention process :

In order to popularize the cultivation of the onion variety Arka Kalyan, seeds (5 kg) were provided by ICAR-IIHR NEH Components, Bengaluru. A total of ten farmers were selected for the demonstration, each receiving 500 g of seeds. The demonstration was conducted in the villages of Utlou, Heinoubok, Khoijuman, Thinungei, and Kumbi. The technology and technical guidance were provided by Dr. P. Bijaya Devi, Subject Matter Specialist (Horticulture), Krishi Vigyan Kendra, Bishnupur district, Manipur.

Intervention Technology :

Seed rate :10 kg/ha,

Spacing : 15 cm X 10 cm,

FYM: 5 tonnes/ha,

NPK : 120: 40: 60 kg/ha

The onion seeds were sown during November–December 2024 **by** raising nursery beds. Transplanting was carried out in January 2025 after thorough ploughing of the land. Farm Yard Manure (FYM) was applied, and the onion seedlings were transplanted on raised beds of 1.5 meters width and convenient length, maintaining a 45 cm gap between each bed. Before transplanting, one-third of the nitrogen (N), along with the full dose of phosphorus (P) and potassium (K), was applied as a basal dose. Immediate watering was done after transplanting. Each farmer cultivated the crop on an area of 1,250 square meters. The second one-third dose of nitrogen was applied 55 days after transplanting, and the remaining one-third was applied 75 days after transplanting. Irrigation was provided regularly, as onion is a shallow-rooted crop requiring frequent and light irrigation, especially during the bulb development stage. After this stage, irrigation was stopped to prevent bulb rot and to ensure better storage quality. Harvesting was completed in the month of April 2025.

Impact of Horizontal spread:

The demonstration conducted under NEH component was appreciated by neighbouring farmers and were interested to follow the similar technical intervention in their fields. Thus, Onion variety Arka Kalyan had covered an area of 1 ha under the program NEH Component of the year 2024-25.

Result :

Performance of Onion var.Arka Kalyan

Name of the variety	Average yield (q/ha)	Cost of cultivation(Rs)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C
Onion var. Arka Kalyan	267.15	1,30,000	6,67,875	5,37,875	5:1
Onion(ON- 12)	221.30	1,40,000	5,53,250	4,13,250	3.9:1

Based on the yield performance and economic impact of the onion variety Arka Kalyan, farmers are now convinced to cultivate Arka Kalyan on a larger scale. This shift is expected to significantly improve their economic condition and contribute to the overall welfare of the farming community.



Photo 1 :Seed distribution .programme and distribution of onion var. Arka Kalyan seeds at training hall, Bishnupur, Manipur.



Photo 2 : Fields of onion var. Arka Kalyan at different locations.



Photo 3 : Bulb formation stage and uprooting of onion var. Arka Kalyan bulbs.



Photo 4 : Harvesting of onion var. Arka Kalyan and farmers' field day programme on Popularization of scientific cultivation of onion var. Arka Kalyan at Toubul village, Bishnupur district, Manipur.



Photo 5 : Harvested onion var. Arka Kalyan bulbs.



Photo 6 : Onion var. Arka Kalyan bulbs showcased as improved technology during Vikshit Krishi Sankalp Abhiyan (VKSA), 29th May to 12th June 2025 in Bishnupur district, Manipur.