

## **Enhancing agricultural productivity, one farm at a time!**

Agriculture continues to be the mainstay of a large population in India. The UN Sustainable Development Goals emphasize the importance of agriculture and the need to support farmers worldwide; increase investments in research, technology and market infrastructure; and extend agriculture knowledge sharing. But, are these unrealistic ideals? Not really, because empowered farmers can change the face of agriculture. Agricultural projects by S M Sehgal Foundation in partnership with corporate donors are effectively helping farming communities across the states of Haryana, Rajasthan, and Bihar.

### **Farm mechanization bring results**

Bhairo Prasad, a farmer from Mathia block in Pakridayal, Bihar, holds a new record for using a zero tillage machine for paddy sowing. Zero tillage technology or “no-till farming” is a method of growing crops year to year without disturbing the soil through tillage. Bhairo acquired this machine as part of an agricultural implementation project, *Samagra Krishi*, funded by Bayer CropScience in twenty-five villages in East Champaran, Bihar.



Bhairo’s success called for a celebration. In Mathia, Brij Pathak from Sehgal Foundation and Dr. Prabhat Kumar and Rajesh Kumar from CIMMYT joined the celebration and helped to share Bhairo’s success with his fellow farmers. According to Dr. Prabhat Kumar, directly seeded rice can save Rs 6,000 per acre for the farmer, give better yields, and maintain the soil quality.

Directly seeded rice intervention has also been done by farmers in Pakridayal’s Ramvan, Devi Rai Tola, and Ajgari. The farmers have been excited to see the results using this technique.

### **Soil testing enables farmers to make informed decisions**

A soil testing survey done in nineteen villages in Pusa, Jitvaarpur, and Kalyanpur blocks in Samastipur, Bihar, by Sehgal Foundation under its partnership project *Kaushal Krishak* with support from PI Foundation has revealed that potassium is present in higher quantities in those areas. Farmers are relieved that they no longer need to add potassium in their fields while sowing wheat. And the zero tillage technology introduced to farmers has enabled them to have better wheat cultivation and increased production.

CIMMYT scientists collaborating in this initiative advised farmers on using appropriate seed varieties for the early wheat sowing period (Nov 1–15), the on-time sowing period (Nov 15–30), and the late sowing period (Dec 1–15). Enthused with the zero tillage technology, the District Agriculture Department has maintained an ambitious target of wheat sowing across 60,000 hectares in drought-stricken areas of the district.

### **A brighter future for farmers**

According to District Agriculture Officer, Mr. Chandrashekhar Singh, the target has been communicated to all block agriculture officers, and the department is confident that, with zero tillage technology and information on soil quality, farmers will be able to reduce their input costs and bring home a better yield. Mr. Arvind Rana, Sehgal Foundation's program leader for Agriculture, reports that partnerships with the community, experts, and funders have been successful in promoting the much-needed agricultural interventions in the area.