

Application and demonstration of new carbohydrate agricultural formulations in the Belt and Road Countries

This project focuses on the United Nations Sustainable Development Goal 2: Zero Hunger.

The overall objective of this project is to establish a green cultivation technology system suitable for application on important crops in the Belt and Road countries, with new carbohydrate agricultural formulations as the core reagents, to ensure food security and food safety.

It will also promote the agricultural technology and cooperation in the Belt and Road countries. The lead unit of the project is Dalian Institute of Chemical Physics, Chinese Academy of Sciences, and the participating units are the Institute of Polymer Chemical Physics, Uzbekistan Academy of Sciences, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh Boduakali University of Technology and India Koneru Lakshmaiah Education Foundation.

The project will develop new carbohydrate agricultural products and focus on the large-scale application of a series of carbohydrate agricultural formulations and supporting technologies on important crops in Central and South Asia. The project will establish 5-8 sets of integrated planting systems for several important crops to achieve large-scale application in "Belt and Road" countries. In the demonstration core area, a 15-30% reduction in pesticide application and a 5-10% increase in crop yield will be achieved. Through cooperation with the industry, we will strive to complete the local application of Chinese technology and products in the above-mentioned countries. At the same time, a green agricultural cooperation network will be established,

cooperation and exchanges will be carried out, and scientific research backbones and local application technicians will be trained to enhance the sustainable development of agriculture in the above-mentioned countries. Through research cooperation and industrial promotion, we will provide effective means for the Belt and Road countries to reduce the use of chemical pesticides, improve their agricultural modernization capacity, and guarantee food security on the premise of ecological and environmental safety.