Climate-Friendly Rice Production

Rice production produces high amounts of greenhouse gases. The goal of this my-M-climate protection project is to make rice production within Migros’ own supply chain more climate friendly. The climate-smart rice production method uses less water and releases less methane gas, which is harmful to the environment. The increased yields will make farmers more resilient.

Rice is a staple food for over three billion people and is responsible for producing 11 percent of global methane emissions and using 40 percent of the world’s irrigation water. For just one kilogram of rice, 2,000 litres of water are used. As a result of climate change, the Food and Agriculture Organisation of the United Nations (FAO) predicts a 15 percent decline in harvests by 2050 and is therefore promoting Climate-Smart Agriculture (CSA).

With the help of money from the my-M-climate fund, Migros would like to contribute to a switch from the CO₂- and water-intensive traditional method of rice production system to a more climate-friendly process – the so-called System of Rice Intensification (SRI). This method is based on alternate wetting and drying of the soil, which reduces the amount of methane escaping into the atmosphere.

Since 2010, Migros has been carrying out organic farming projects in India and Thailand. With this project, we are now working towards a more climate-friendly alternative to the traditional method of rice production. This will reduce not only CO₂ emissions, but also water consumption and pesticide use.

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Project type:
Land Use and Forestry

Project location:
Chachangsa, Thailand

Project status:
Planning

Annual CO₂ reduction:
80,000 (total over 10 years)

Situation without project
Higher methane emissions and higher water consumption

Contribution to the SDGs

Project standard
Gold Standard®
VER

Partner
MIGROS

The plan is to convert 1,000 ha of traditional cropland to the more climate-friendly SRI method. Over 1,000 farming families will be trained in this new
production method. Demonstration fields will be used to illustrate the effectiveness and profitability of the new production method. In addition, the project will provide the participating farming families with labour-saving tools and machines that, along with the prospect of a higher operating profit, will encourage the farmers to take part.

Further advantages of the SRI method include a reduction in water consumption of up to 50 percent and a reduction in the use of seeds and fertiliser, as well as pesticides, which are expensive and harmful to the environment. This therefore protects biological diversity. As the SRI method increases net earnings in the long term, many farmers will continue the more climate friendly farming practice even after the project ends. Experience has shown that increased earnings reduce the amount of young people wishing to emigrate.