

Vulnerability reduction and food security of rice farmers using rice information services and crop insurance

Rice and poverty coincide in Asia, home to over 70% of the world's poor (900 million people) and where almost 90% of the world's rice is produced and consumed. The Asian population continues to grow rapidly, meanwhile commodity prices are rising and the available arable land area is decreasing. In most of the developing world, rice availability is equated with food security and closely connected to political stability: Rice price increases have caused social unrest in several countries, most recently during the food crisis of 2008.

The objective of this project named "RIICE" (Remote sensing-based information and insurance for crops in emerging economies) is to reduce vulnerability of smallholders engaged in rice production by setting up an easy accessible rice information system ("Global Rice Information Gateway") which opens the way for involved public and private stakeholders to better manage domestic rice production and the risks it is exposed to (development of crop insurance solutions). In the long run rice yields should increase due to better access to information about the actual growth status of observed rice crops and the forecasted yields (as well as about damages and forecasted losses of rice crops), hence leading to a better land management by farmers. Additionally, crop insurance take-up by smallholders facilitates their negotiation position in applying for loans which eventually leads to increased investments in their agricultural business. To reach this, a multiphase project is proposed that is focusing on major rice growing areas in 7 Asian target countries (Bangladesh, Cambodia, India, Indonesia, the Philippines, Thailand, and Vietnam,) in the first three years (Phase 1). In the following three years (Phase 2), the activities will be up-scaled to the remaining major rice producing areas of Asia, Africa and South-America. Objectives for the first phase are:

1. Provision of reliable rice production information to the Global Rice Information Gateway in major rice growing areas.
2. Transfer of appropriate know-how and remote sensing technology to national partners.
3. Development of a model aiming at improving production forecast by combining remote sensing, in situ and climatic data.
4. Setting up sustainable crop insurance schemes by developing insurance solutions covering production shortfalls (e.g. from flood and drought) on regional level (and at a later stage on sub-regional level).
5. Provision of crop insurance solutions for at least 5 million rice growing farmers together with local public- and private stakeholders from the financial and agricultural sector.

A public-private development partnership (PPDP) is implementing the project of which Swiss Development Cooperation (SDC) is one of the partners. The partnership is furthermore composed of sarmap SA – a Swiss private enterprise – providing the necessary remote sensing technology; IRRI (International Rice Research Institute) is the public research partner providing a rice crop growth model and is working with regional partners to put the system up and running at national levels; AllianzRe Switzerland supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) develops insurance solutions based on the information provided by sarmap SA and IRRI and pass those solutions on to interested national partners as crop insurance schemes. SDC's role is to institutionally and politically support the partners by facilitating the relations to relevant ministries in targeted countries. SDC will also become active in the national coordination of RIICE activities in one or more of the targeted countries.