



The demand for rice, the most important crop in the country, is estimated to increase by 38% in the next 25 years. Assuming that the planting area, which often amounts to only 0.3 to 0.5 ha per farming household, remains the same, this gap will need to be filled by increasing yields. With the Indonesian population growing at a rate of 1.49% per year, efforts to raise rice production to meet the demands of about 275 million people by 2025 are necessary. Lack of access to information and technology for best farming practices, quality agro-inputs, markets and agricultural finance are all part of the challenges in developing the food crop sector.

BRIA has two components in Indonesia - agriculture and nutrition. The agriculture component promotes capacity development of stakeholders in the rice value chain and improves market linkages for rice smallholder farmers. The nutrition component enhances the nutritional status of poor population groups with oil and rice fortification.

The agriculture component aims to strengthen farmers' expertise and knowledge in best rice farming practice to increase productivity and quality in order to improve the economy, welfare and family food security. BRIA has set the following indicators:

- Participating farmers have increased profit by at least 10% from rice farming.
- Young farmers have been motivated to engage in sustainable rice cultivation with improved knowledge gained from Farmer Field School (FFS) and rice agribusiness development.
- Market linkages have been strengthened among various actors along the rice supply chain. A rice seed business has been established to meet demand for quality seed in North Sumatra.

The project has been implemented in two priority provinces of North Sumatra and East Java, covering five districts, namely Deli Serdang, Sedang Berdagai, Langkat, Simalungun and Jember.



Farmer Capacity Building

Implementing Farmer Field School (FFS) at the village level has become BRIA's core knowledge management and dissemination activity by involving both public and private agricultural extension services. FFS is an adult learning approach used to transfer technical know-how and practical skills to farmers through technical training, physical field demonstration and learning-by-doing exercises. The learning process at the FFS focuses on farmer participation in brainstorming, sharing experiences and knowledge, demo plot observation, small group discussions and presentations.

FFS is conducted from pre-cropping until the post-harvest stage. One curriculum applies to one crop cycle and consists of 11 meetings with a different topic for each meeting. FFS takes place on a demonstration plot where best rice farming practices can be observed. The demo plot serves as the learning site to contextualise lessons in the ToT (Training of Trainers) and FFS with field-based examples. This has allowed farmers to test and validate what they have learned from training in real field conditions.

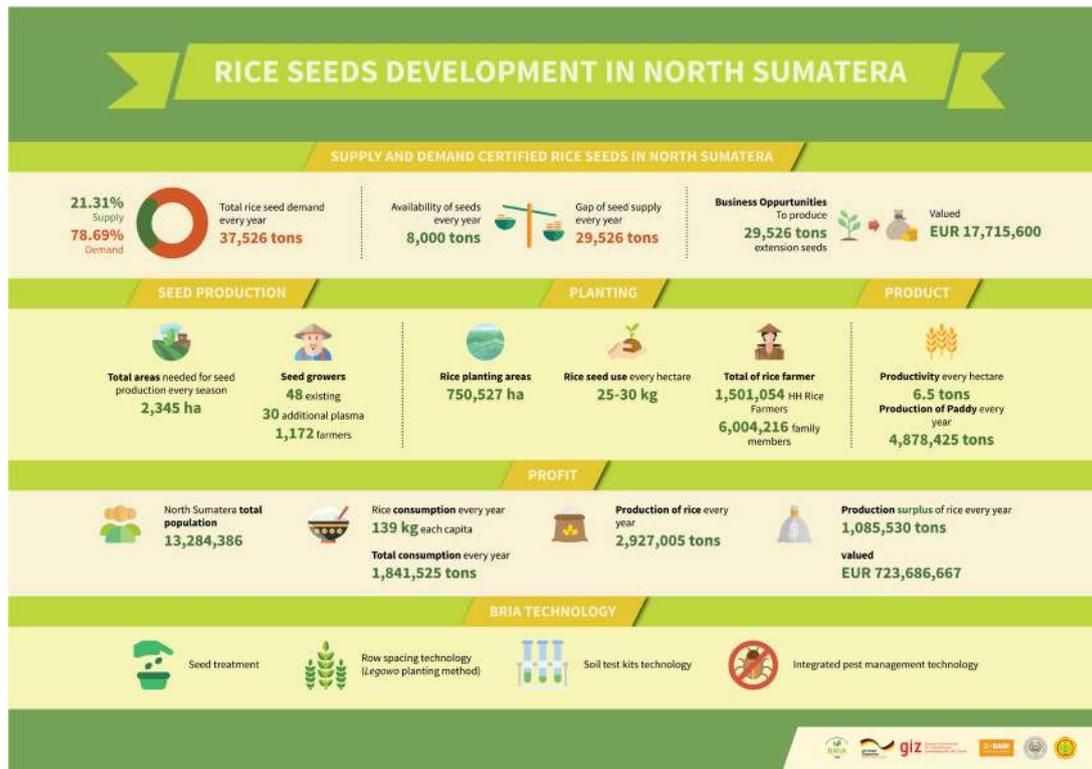
In cooperation with the Indonesian Centre for Rice Research (ICRR), university and project partners, BRIA developed modules which aim to impart knowledge about best farming practices to farmers. A comprehensive module has also been developed specifically for use as a guideline for field facilitators/extension officials during FFS meetings.

Module Contents for Field Facilitators

- **Good Agricultural Practice (GAP)** - seed technology, soil and nutrient management based on soil test kit, 'jajar legowo' planting method, Integrated Pest Management (IPM)
- **Nutrition** - definition and nutrition requirements, balanced nutrition (Family Nutrient Pyramid), nutrition sensitive agriculture
- **Farmer Group Empowerment** - functions and benefits of farmer group, group administration and action plan.
- **Android app guidelines** - operating the application for collecting farmers' data

The modules together with compiled farmer data will be handed over to the Indonesian Ministry of Agriculture.





Supporting farmers to start a seed production business in North Sumatra

Realising the great potential for seed business due to the growing demand for quality seed, BRIA selected and provided capacity building to 25 seed-grower groups in collaboration with Rice Seed Association, research institutions, as well as universities. The seed-grower groups were trained in BRIA technologies, seed production and certification. Before the planting season, seed-grower groups completing all required documents were registered by Seed Certification Agency. BRIA then continued to support seed growers with technical seed production assistance, monitoring and internal inspection. They were encouraged to apply GAP. The Seed Certification Agency conducted field audits with sample seed checked in a laboratory. After certification and seed verification, labels were issued. The support extended by BRIA also covered market and financial access. The market access included marketing and distribution, promotion, retailing, with contract farming as an option. BRIA farmers and seed growers are being linked to an agri-financial scheme (KUR), offered by financial institutions in cooperation with the Central Bank of Indonesia and BRI Commercial Bank. KUR is a low-interest loan for working capital aimed at wider credit targets such as farmers, cooperatives, and small and medium enterprises.



The market linkage initiated by BRIA of local seed growers with a state-owned seed company through contract farming resulted from a series of discussions, field visits and public events involving seed growers and the company. The value chain model promoted by the project offers better benefits for each involved actor, including seed quality and supply assurance and good prices for seed producers.

