



Contribute to Better Rice Production and Nutrition in South East Asia
**Better Rice Initiative Asia -
Monthly Update**

Editor's Note

Summary on BRIA Implementation



To start the New Year, the BRIA newsletter is pleased to present the main results the project has achieved so far. BRIA has a clear mission to enhance the efficiency and sustainability of the rice value chain in the four Southeast Asian countries of Indonesia, Thailand, Viet Nam and the Philippines as well as the nutrition situation. Since its full implementation in 2014, the BRIA project has now started to yield results which can be broadly summarized as follows:

Farmers reached

Training of farmers conducted by BRIA facilitators, public partners or trained lead farmers is the project's main intervention to promote sustainable practices, safe use of production inputs and higher incomes for farmers. The training modules aim to impart Good Agricultural Practice (GAP), resource management and post-harvest efficiency. Altogether, sustainable recommendations have reached 10,559 farmers.

Farmers' age and promoting young farmers

The average age of the participating farmers in the Philippines and Thailand is 55-60 with 5% below 35 years old while 18% of farmers joining the project in Indonesia and 14% in Viet Nam are lower than 35 year old. For regional food security, BRIA seeks to promote rice farming as a business to young farmers.

Increased net income for farmers

BRIA aims to raise farmers' income through achieving higher yield with quality seed; lower production costs with optimum seed rates and nutrient management based on soil testing, farm machinery as well as facilitating improved market linkages.

Implementing Sustainable Rice Platform (SRP) Standard

Farmers in two Community Rice Centres (CRC) in Thailand were trained in the SRP Standard on Sustainable Rice Cultivation and audited by a 3rd party certifying body. Rice produced per the standard was harvested. In Indonesia, 1,202 farmers in North Sumatra province were assessed against the standard. A workshop to introduce the standard was held in Viet Nam and is planned for the Philippines.

Suriyan Vichitlekarn, **BRIA Regional Director**
Kamol Taukitphaisarn, **BRIA Communication**



Indonesia

Better Rice Initiative in Indonesia



BRIA seeks to enhance the capacity of farmers in the districts of Langkat, Sedang Berdagai and Deli Serdang, North Sumatra province and Jember district, East Java province in order to improve the livelihoods of participating farmers. Particularly, BRIA aims to strengthen young farmers and their knowledge of sustainable rice cultivation. BRIA also intends to improve market linkages.

Farmer Field School (FFS)

BRIA started the FFS in April 2015. So far, BRIA has trained 2,211 farmers (1,785 male and 426 female). 104 FFSs have been conducted in 104 villages in 29 sub-districts.

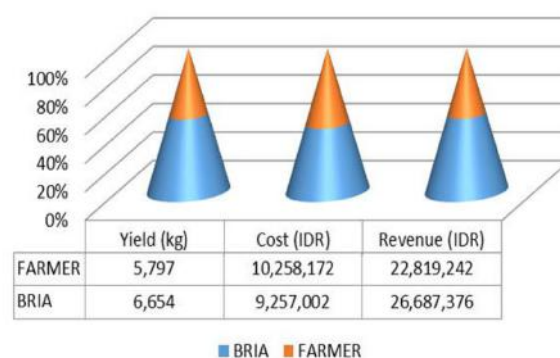
| Field School Coverage | | |
|-----------------------|--------------|------------|
| | Sub-district | Village |
| Langkat | 8 | 29 |
| Sedang Berdagai | 2 | 10 |
| Deli Serdang | 5 | 23 |
| Jember | 14 | 42 |
| Total | 29 | 104 |

BRIA promotes the following four major rice farming technologies:

- Seed Treatment Technology
- Legowo (Row Spacing) Technology
- Soil and Nutrient Management (based on Soil Test Kits)
- Integrated Pest Management (IPM)

According to a case study of 30 FFS areas in the two provinces, farmers adopting the recommended practices achieved higher yields and more profits owing to reduced inputs and higher revenue.

Results of Practices



Strengthening Young Farmers

A survey of 440 farmers undergoing the BRIA training found that most farmers are more than 51 years old with 18% below 35 years old. BRIA collaborated with Agricultural Extension Academy (STPP) Medan to conduct a study involving 500 respondents in 50 villages in Langkat, Deli Serdang and Serdang Bedagai districts to learn about the factors influencing young people's perception of and interest in rice farming. The results show that gender, marital status, expectations, socialization, land holdings and technology significantly influence the perception; and education, age and perception influence their interest. So, to raise the interest, it is important to develop interventions that facilitate access to comprehensive information about the rice sector and the opportunities it holds and to introduce rice farming technology.

Establishing Seed Growers

To meet the demand for high quality seed, in 2015, BRIA sent key farmers who had participated in the first season of the BRIA Farmer Field School for comprehensive training as seed growers at BBPadi. (Indonesian Rice Research Centre). Seven farmers from different districts in North Sumatra underwent 1-week training to become good seed growers. In March 2016, they were presented with certificates for their quality seed production and are certified to distribute seeds in their regions. With each member managing 2 ha of land, they produced around 24.2 tons of seeds ready for distribution. This amount of seeds could be used for 968 ha of paddy fields by approximately 4,000 farmers. Based on their success, most seed growers expanded their members and land size to produce seed in the second production cycle. BRIA will establish and strengthen 30 additional seed growers

with approximately 90 farmers involved by the end of 2017. Moreover, BRIA has collaborated with partners to establish the Rice Seed Information and Learning Centre in Percut Sei Tuan. This centre serves as a hub for farmers to exchange knowledge and improve best farming practices of rice, and for farmers, research institutes, universities and other rice stakeholders to obtain knowledge about the business and technical aspects of rice seeds and develop and grow networks.

Outlook 2017

- Organise Farmer Field School in the four districts, across the two provinces, to reach a total of 5,200 (\pm 1,500) farmers.
- Strengthen 30 additional seed growers through the Rice Seed Information and Learning Centre.
- Establish business models to support 'collective selling' between farmer groups and millers.
- Facilitate financial access for seed growers in collaboration with Bank of Indonesia.

Promoting sustainable production of rice and ecosystem resilience **in Thailand-PROSPECT**



Farmer Training

The training has covered 27 Community Rice Centres (CRC), facilitated by local extension officers and BRIA field staff and resource persons. Farmers learned about such topics as good rice cultivation management, soil fertility, plant nutrition management and cost reduction. A total of 471 ‘smart’ farmers were trained by the project and last year, farmer to farmer training was conducted in the Northeast from July to December. Thus far, some 3,716 farmers (50.16% female and 49.84% male) have participated in BRIA’s training activities.

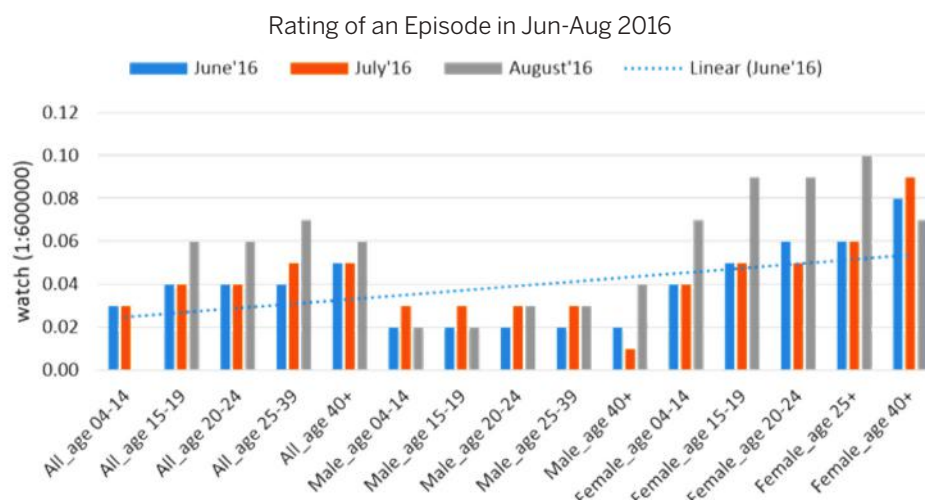
Introducing Seeding Implement

BRIA introduced a local seeding implement to Bua Ngarm CRC in Det Udom district, Ubon Ratchathani province where BRIA operates a demo plot with the CRC. The devise costing approximately THB 6,500 (USD180) is affordable to a farmer and the Rice Department (RD), BRIA’s public partner, also promotes it to Thai farmers. It reduces a seed rate from averagely 22.25 kg/rai with broadcast seeding to 5 kg/rai (6.25 rai = 1 hectare). This allows farmers to save some THB 431.25 per rai as one kilogram of seeds costs THB 25. The devise also raises productivity and makes weeding easy. The benefits led lead farmers from nearby CRCs to buy the devise. The BRIA field facilitators in Ubon Ratchathani are working on a larger model that can be connected to a tractor and collaborate with the Department of Agricultural Extension (DoAE), Provincial Farmers Council and Bayer to establish more demonstration plots to showcase the machine and recommended practices to farmers.

Media-based Awareness Raising

In 2016, the third season of the ‘Farmers Love’ series featured ‘Farmers love Seeds.’ It informed the audience of rice seed production from land preparation to harvest as well as seed management. Aired on TV Channel 5, the average numbers of viewers of the episodes in June, July, and August were 120,000, 126,000, and 150,000 respectively. BRIA estimated that 35,244 farmers watched each episode. A VDO clip contest was also held alongside to involve school students in the Central Plain in the programme. At the end, a DVD containing the 15 episodes was produced for distribution.

To assess farmers’ knowledge and attitudes toward ‘Farmers love Seeds,’ a post survey was conducted by the Faculty of Education, Kasetsart University, commissioned by BASE. 148 farmers (55.48% female, 44.52% male) were randomly selected and interviewed. The average knowledge scores of the respondents was 8.54 out of a maximum score of 10. According to their top responses, farmers learnt more about rice farming techniques to improve yields, the programme gave knowledge for improving efficiency, and farmers found the programme interesting to follow.



Promoting the SRP Standard to Farmers in the Northeast

BRIA collaborated with RD, Olam International and Bayer to introduce the SRP Standard to farmers. The following two CRCs in Ubon Ratchathani were chosen to participate in the pilot-testing of the standard:

- Bua Ngam CRC, located at 139 Moo 3, Bua Ngam sub-district, Det Udom district, with 32 farmers participating
- Klang CRC, located at 114/1 Moo 9, Klang sub-district, Det Udom district, with 45 farmers participating

The selection criteria of the farmer groups were the CRC's familiarity with BRIA training since the training modules are based on Thai GAP which covers 70% of the SRP Standard, strong group management, integrated large rice field management as promoted by the RD policy, their proximity.

BRIA in coordination with RD conducted a baseline survey in May 2016 to assess Thai farmers. 77 farmers from the two CRCs were trained in the standard by RD for two days in July and August. BRIA and the partners followed up on the adoption of the standard. An Internal Management System (IMS) and assurance system were set up. OneCert Asia, an independent certifying body, audited farmers' practices and the IMS in early November, supported by UTZ, RD, Olam.

Rice produced in accordance with the standard was harvested and sold to Ubon Thanyakij, a local mill (15 km from both CRCs) engaged by Olam. Approximately 380-400 tons of SRP rice grown on 929 rai of rice fields was produced in the 2016/2017 cropping season. Milling was closely supervised by Olam with traceability. All the milled rice was bought at the most competitive price. The results from the standard implementation were shared at the SRP 6th Annual Plenary Meeting and General Assembly held on 7-9 December 2016 in Singapore.

Outlook 2017

- Continue Farmer to Farmer (F2F) Training.
- Facilitate activities to promote the SRP Standard to CRCs in the Northeast as well as introduce the standard to 'smart' farmers.
- Expand the number of demonstration plots.
- Facilitate market linkages.

Sustainable Management of Rice production systems through introduction of improved Technologies - **SMART in Viet Nam**



BRIA aims to improve livelihood options for rice farmers in the three provinces of Dong Thap, Hau Giang and Kien Giang through an ecologically sustainable increase in rice production and an improved linkage to quality markets.

In 2016, 50 provincial staff and farmer group leaders were provided with ToT training on smart rice cultivation system (1 Must Do, 6 Reductions). 1,433 farmers have been trained by provincial staff by the Winter/Spring season 2016-2017.

The demonstration plot was established to implement the recommended techniques for participating farmers in project sites. Rice cultivation was monitored in each stage of the growth to collect such data as input cost, yield, and farming profit for end-of-season evaluation.

Differences between fields inside
and outside the models in Kien Giang province

| Comparison | 2015 Dry Season | 2016 Wet Season |
|------------------------|--------------------|--------------------|
| Yield per ha | +150 kg | +325 kg |
| Production cost per ha | -54 USD | -58 USD |
| Profit per ha | +87 USD | +155 USD |
| % gross margin | +10.8% | +18.35% |

Rice Standards for Quality Markets

Rice traders participating in BRIA PPP models are concerned about pesticides residues on rice products exported to international markets. Consequently, an international standard on maximum residue limits (MRL) of pesticides on rice is being applied in two project sites per the request of food companies (VINAFOOD II) taking part in the PPP models. Besides, a workshop was organised to introduce the SRP Standard to key Vietnamese partners at government and provincial levels to develop the rice quality control system in Viet Nam.

Results of chemical testing of two samples of jasmine white rice produced in project sites in Summer-Autumn 2016, collected by food companies at their mills

| No | Test | Allowed Level (US FDA) | Dong Thap | | Allowed Level (EU Market) | Hau Giang | |
|----|----------------|------------------------|--------------|----------|---------------------------|--------------|------|
| 01 | Hexaconazole | 0-not allowed | not detected | PASS | 0.01 ppm | 0.0080 | PASS |
| 02 | Isoprothiolane | 0-not allowed | 0.035 ppm | NOT PASS | 5 ppm | 0.0061 | PASS |
| 03 | Tebuconazole | 0-not allowed | not detected | PASS | 1 ppm | 0.0034 | PASS |
| 04 | Tricyclazole | <3.0 ppm | not detected | PASS | 1 ppm | 0.023 | PASS |
| 05 | Azoxystrobin | <5.0 ppm | not detected | PASS | <5.0 ppm | 0.0015 | PASS |
| 06 | Propiconazole | <7.0 ppm | 0.009 ppm | PASS | <0.7 ppm | 0.0069 | PASS |
| 07 | Chlorpyrifos | 0-not allowed | not detected | PASS | 0.05 ppm | not detected | PASS |

In Dong Thap, only isoprothiolane was higher than allowed while the other 6 chemicals could not be detected or was below the allowed levels. In Hau Giang, the concentrations of most of the chemicals were lower than allowed.

In 2016, a total of 1,301 tons of high quality rice was produced according to the new rice standard in each of the three provinces. The paddy rice met the requirements of international markets and was bought by the following food companies:

- Dong Thap Food Company: 331 tons of jasmine rice (PPP models at Tam Nong district, Dong Thap province)
- Song Hau Food Company: 970 tons of IR 50404 (PPP models at Chau Thanh A district, Hau Giang province)

Strengthening Public-Private Partnerships (PPP)

BRIA has established the 'Vietnamese Rice PPP Task Force' in cooperation with the Ministry of Agriculture and Rural Development (MARD). After a concept note was approved by the ministry, the PPP model was designed, developed and tested in the field. In 2015, six PPP models were established and operated whereas an additional four new PPP models were set up by the end of 2016, covering 2,085 ha of rice fields and 1,433 farmers in 10 farmer cooperatives and farmer groups.

Outlook 2017

Establish and strengthen Public-Private Partnerships (PPP).

- Enhance the capacity of farmer cooperatives in the three provinces, and design and implement pilot models aimed at strengthening the cooperatives.
- Support MARD with the Rice PPP Task Force.
- Facilitate matchmaking fairs for farmers, cooperatives and companies.

Strengthen the rice quality control system.

- Establish partnership with food certification agencies to test the pesticide residues in paddies in BRIA sites.
- Introduce the Sustainable Rice Platform Standard and its application in Vietnam.
- Assess the application of the existing rice production and quality standards and the control system.

Raise sustainable production and quality of Vietnamese rice for farmers.

- Adopt and deliver IPM training documents for technical training in BRIA sites.
- Train and monitor farmers in the field in the project sites as well as establish and evaluate demonstration plots.

Fostering Agriculture and Rice Marketing by improved Educational and Rural advisory Services - **BRIA FARMERS in the Philippines**



Training of Trainers (ToT)

BRIA conducted four batches of FARMERS School Training of Trainers in the three provinces of Southern Leyte, Iloilo and Aurora. 140 Agricultural Extension Workers (AEW) and Lead Farmer Technicians (LFT) (56% female, 44% male) were trained in rice production technology as well as such new topics as climate smart agriculture, farming as a business (FAAB) and product stewardship.

3,140 farmers (52% female, 48% male) have been trained through extension services offered by the trained AEWs and LFTs. Going forward, approximately 4,900 more farmers are targeted to be trained through different activities such as conducting the BRIA School Day at all BRIA sites (1,500), intensified field training on demo plots (1,500), and farmer training led by the supported LGUs or Local Government Units (1,900). In 2016, 57 demo plots were set up in the three provinces with more to develop to reach 150 in 2017. Each demo plot is expected to transfer BRIA rice farming technologies to 10 farmers.

| Trained AEWs/LFTs and Farmers | | | | |
|-------------------------------|-----------|-----------|--------------|--------------|
| Region | AEWs/LFTs | | Farmers | |
| | Male | Female | Male | Female |
| Region 3 | 10 | 20 | 17 | 10 |
| Region 6 | 38 | 45 | 1,326 | 1,511 |
| Region 8 | 13 | 14 | 173 | 103 |
| Total | 61 | 79 | 1,516 | 1,624 |

Two Market Linkage Models Tested

In cooperation with the Department of Agriculture (DA), its Regional Field Offices (RFOs), the Agricultural Training Institute (ATI), the Philippine Rice Research Institute (PhilRICE) along with Bayer and Yara, BRIA is implementing Component 2 on “Better Market Linkages.” This component intends to explore options for direct marketing channels for rice and enable smallholder farmers through better and more efficient organization of the production and marketing processes to realize efficiency gains. BRIA seeks to develop and test a scalable model, which is economically sustainable and creates benefits for the market actors involved (farmers, traders, millers) through supporting the establishment of more efficient market linkages, which can serve as a model for replication in other regions.

Activities related to market linkages have been implemented according to the recommendations made by the research study on “Improving Market Access for Smallholder Rice Producers in the Philippines” conducted by the Centre for Rural Development (SLE) of the Humboldt University of Berlin. Two marketing agreements facilitated by BRIA were implemented in Iloilo. One agreement was entered into by a farmers’ association (FA) with a local private trader/miller. Under the terms of the agreement, the FA sells 100 tonnes of palay (rice) at Ph0.50 per kg on top of the prevailing price (USD10 per tonne). The haul or transport cost is covered by the private trader/miller within 10 km. The other agreement involves another FA and a rice processing complex (RPC) with the sale of a total of 150 tonnes of rice.

Outlook 2017

- Train the last batch of 60 AEWs and LFTs in May 2017 with the reviewed and finalized training manual.
- Assess options for stronger collaboration with private partners.
- Disseminate knowledge products (FAAB and Adult Learning) as well as training materials to be used by national agencies (e.g., DA-Agricultural Training Institute).
- Actively participate for policy fora and dialogues (exploring possibilities with International Rice Research Institute or IRRI in the Philippines).
- Introduce the Sustainable Rice Platform Standard.
- Hand over the final knowledge portfolio to the Department of Agriculture (DA).

In Collaboration with National and Regional Agencies and



Science For A Better Life



Knowledge grows



Deutsche Bank



Published by:



BRIA Regional Secretariat Office

39/1 Soi Sukhumvit 13, Sukhumvit Road, Klongtoey Nua, Wattana, Bangkok 10110 Thailand

bria@giz.de

www.better-rice-initiative-asia.org

Responsible for the content:

Suriyan Vichitlekarn (BRIA Regional Director)

If you want to be added or removed from this mailing list, please contact:

kamol.taukitphaisarn@giz.de