

# Stimulating Private Sector's Engagement to Fight Dietary Deficiency

Rice fortification is a practical and cost-effective way to provide essential micronutrients within a rice-based diet. Children, in particular, need sufficient amounts of selected micronutrients to develop their full cognitive, physical and productive potential. BRIA is committed to creating a sustainable fortified rice chain in Indonesia in order to target especially those who are malnourished. The project is cooperating with public and private partners, including DSM, to fortify local rice that has a potential to fulfil dietary requirements and suits the preferences of the Indonesian market.

In line with this goal, BRIA has successfully stimulated the interest of the private sector to join the fortified rice business. A number of small and big companies have become interested in producing premix kernels and fortified rice.

Premix kernels are artificially produced rice kernels composed of a micronutrient premix and rice flour. Premix kernels are homogenously mixed with regular rice to produce fortified rice. Previously, the trial production of premix kernels for the BRIA project were produced at a small facility at Bogor Agricultural University (IPB). Now, the PT Fits Mandiri Company has invested in new and bigger facilities, in which up to 200-250 kg kernels per hour can be produced. The imported machines were placed at a new building in IPB Science Park. PT Fits Mandiri aims to become the first premix kernel producer in Indonesia and to build up a training centre for other producers who are interested in developing a premix kernel business.

The production of fortified rice for the BRIA project at IPB takes place under the supervision of Professor Slamet Budijanto, one of Indonesia's most well-known experts in food technology. Yannick Foing, DSM Regional Marketing Manager, and Judith Smith, DSM Product and Technology Development Manager, expressed their optimism that with such facilities and expertise, the desired quality of premix kernels can be produced very soon. In the future, additional equipment, such as a steamer to improve the quality of premix kernels, may complement the machinery that has already been set up.



New Facilities for Rice Fortification

While the production of premix kernels is ongoing and since private sector's interest has been growing, a regulation on fortified rice should be developed in parallel. At the moment, there is no regulation on product registration, and a clear definition of the claim of the product is still missing. Once the regulation is set and implemented, companies will be allowed to register both their premix kernels and fortified rice products. This will enable more malnourished people in Indonesia to access fortified rice in order to enrich their daily diets.

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## Sellers' Perception and Acceptance of Rice Fortification

According to a qualitative consumer-focused social market research commissioned by BRIA Indonesia, sellers are, generally, willing to purchase fortified rice as long as the price is affordable to their customers. They are also willing to raise awareness on the health benefits of fortified rice to the customers. These health benefits have also convinced them to buy the rice for their families. Some of them raised concern about the colour of fortified rice, which is not as white as regular rice. According to the food sellers, their customers prefer white rice. This characteristic is more important to them than fluffiness and tenderness, and also cleanness of the rice.

The promotion of fortified rice will emphasise health benefits that are connected to its additional micronutrient content. A sufficient intake of vitamins and minerals maintains the body's immune system and prevents physical and mental impairment of children. The fortified rice will be marketed as a clean and highly nutritious quality product, being affordable at a reasonable price. According to the survey, acceptable pricing lies between Rp7,500 (USD0.58) and Rp12,000 (USD0.92) for a kg of fortified rice.



Sample Rice Kernels Produced by Fit Mandiri Company