

The Role of the Private Sector in Rice Fortification

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Introduction

The fortification of staple foods with essential vitamins and minerals is a proven, cost-effective and sustainable intervention to prevent micronutrient malnutrition among entire populations, especially where existing food vehicles and local distribution networks are available and can be utilized. As it is the staple food for an estimated three billion people – most of whom reside in developing countries – making rice more nutritious offers a vast opportunity to improve micronutrient intakes and the health status of entire populations. However, to date rice fortification has been an underutilized public health tool, due in part to the need to ensure the slightly higher costs of rice fortification are appropriately absorbed.

Fortunately, there is broad global experience with fortification of staples such as wheat flour, maize flour, oil, and salt, and some experience in rice fortification. The knowledge gained through these is valuable for implementing and scaling up new rice fortification interventions.

The exact role and interests of the private sector in rice fortification differ based on context and the delivery model chosen. This report outlines the various private-sector actors involved in fortification, as well as the interests and role of those actors in rice fortification, and offers case studies which further illustrate what the critical role of the private sector has been in various delivery models. Together, the insights gained can help the food and nutrition community

build, improve and sustain rice fortification programs which achieve impact.

Overview of private-sector actors in fortification

Figure 1 provides a simple “fortification value chain” which outlines: **1)** food production; **2)** industrial food processing; **3)** fortification processes; **4)** quality assurance and quality control; **5)** storage and transport; and **6)** marketing and promotion. Private-sector actors playing various roles in this value chain include: the food processing/rice milling industry; equipment manufacturers; manufacturers and suppliers of vitamins and minerals/multimicronutrient premixes; private food laboratories; and retail organizations (including cooperatives, where these exist).

Addressing the interests of the private sector in fortification

Fortification programs are most successful when driven by partnerships and trust between the public- and private-sector actors as outlined above, with a final public health objective. All actors should collaborate to create an enabling environment for rice fortification, with each stakeholder contributing their individual expertise and sphere of influence. This includes an appreciation and recognition of the important social benefits as well as the economic incentives required to deliver successful and sustainable fortification programming. The public health justifications for food fortification are widely accepted by the public sector, which has a key role to create the legislation and/or standards which support appropriate regulations for rice fortification and to establish clear rules which ensure the public interest.²

Because the private sector is the one undertaking the actual fortification processes, its motivation and interests require a special focus, including the need to see profitability as markets expand, to enhance brand value through improving nutritional content, and to help ensure fortified foods develop a healthy and productive labor force in low-income communities. This ongoing motivation is critical to the success of national, re-

start there was only one fortified-kernel producer, which was located in a different state – causing pipeline difficulties and near breaks; **2)** batch blending instead of continuous blending of the fortified kernels into the rice, which is labor-intensive and prone to quality issues due to shorter mixing times, caused by capacity limitations; and **3)** success of combining the program with nutritional awareness, including rice bags with messages on the importance of good nutrition that served as a school poster and a pot to grow vegetables in for a more diverse diet.

Because of the positive outcomes, Odisha state government decided to scale up the rice fortification to other districts and introduce multimicronutrient fortification. In addition, other states started projects to implement fortified rice in Public Distribution System (PDS) and Mid-Day Meal (MDM) programs.

In October 2016, the Food Safety and Standards Authority of India (FSSAI) published for the first time rice fortification guidelines for India. Furthermore, additional fortified kernel producers came on stream during 2016 that are interested in supplying the fortified kernels for the social safety net programs, as well as in launching branded fortified rice. All very promising developments after the start of introducing fortified rice successfully in the MDM program.

sion to fortify the rice distributed through social safety net programs is often made through a policy decision by government, UN agency, nongovernmental organization (NGO), or private entity, which normally also bears the costs of fortification, with zero or limited support from donor funding. **Box 4** provides an example on fortified rice for social safety nets in India.

Conclusion

While rice fortification has been an underutilized public health tool to date, the successes outlined in this paper provide important insights into how to ensure the role and interests of the private sector are leveraged appropriately vis-à-vis various delivery models, and that costs are appropriately absorbed. Mandatory rice fortification presents the best means of reaching a high coverage of population, but requires strong public-private partnerships and sustained commitments. Voluntary and market-driven approaches have seen traction, but strong consumer demand as well as government buy-in is crucial to achieve meaningful scale. Social safety net programs are an ideal platform for key partners to collaborate to bring fortified rice to vulnerable groups, and can build sufficient institutional

demand to help ensure the financial viability of rice fortification. All three models require a firm commitment from the private sector and its engagement from start to finish of the project life cycle. Together, these insights can help the food and nutrition community build, improve and sustain rice fortification programs which achieve impact.

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