

A Child's Daily Nutrition within a Small Sachet

The Renata-BRAC partnership delivers affordable micronutrient powders across Bangladesh

INTRODUCTION

Bangladesh is effectively implementing measures to address high rates of malnutrition. An important element of this effort involves tackling micronutrient deficiencies by focusing on the 1,000 Day Window from conception to a child's second birthday, where good quality nutrition makes a lifelong impact in terms of health and development.

One example of Bangladesh's approach involves addressing anemia, caused by a deficiency of iron. The country's anemia prevalence is among the highest in the world, affecting 68% of pre-school aged children and 87% of babies under two years of age¹. A large fragment of these high levels are related to iron deficiency. A lack of iron impairs

childhood development and learning, and also places mothers' lives at risk during childbirth. However, highlighting the issue as a development priority can be challenging as the effects of micronutrient malnutrition are not necessarily visible in a child, but are important for healthy development.

GAIN is helping to address this public health emergency by supporting its partners in Bangladesh to develop, market and deliver small, but affordable, packets of micronutrient powders (MNP). These can be added to children's everyday meals a few times a week, without changing the taste of the food. A single 1 gram *Pushtikona*-branded sachet contains a child's recommended daily intake of 15 essential vitamins and minerals, and is easily mixed into

the food prepared for them. In Bengali, *Pushti* means 'nutrition' and *Kona* is 'small particle', together translating to the literal meaning 'grain of nutrition.'

Renata Ltd, a local pharmaceutical company in Bangladesh, has invested in, produces and delivers the sachets through its retail network of pharmacies and sales representatives. Early in the project, the Social Marketing Company educated families on the importance of treating childhood iron deficiency anemia with *MoniMix*, the first national brand of micronutrient powders produced by Renata. Today, BRAC – the world's largest NGO – has joined this effort and is key to the scale up and distribution of *Pushtikona*-micronutrient powders through its community health workers across rural Bangladesh. Within



two years, combined monthly sales of *MoniMix* and *Pushtikona* in this partnership grew to almost 2.4 million sachets and are predicted to reach 3 million by June 2012.

This committed public-private partnership shares a long-term goal of developing a sustainable business solution and delivering improved nutrition with impact and scale. Effective empowerment has also been a key element throughout the evolution of the project: from empowering

local organizations to deliver together as partners, to empowering community health workers to educate mothers on the importance of micronutrient powders in meals for young children starting at 6 months of age. Although *Pushtikona* sachet sales continue to steadily grow each month, there is considerable distance to go to accelerate demand growth and achieve a longer-term business solution that ensures sustained and reliable access.

EARLY DAYS

Micronutrient powders: affordably tackling micronutrient malnutrition at scale.

Retailing at 1.55 Taka (2 US cents), each 1g *Pushtikona* packet contains a child's daily intake of 15 essential vitamins and minerals at levels recommended by the World Health Organization.

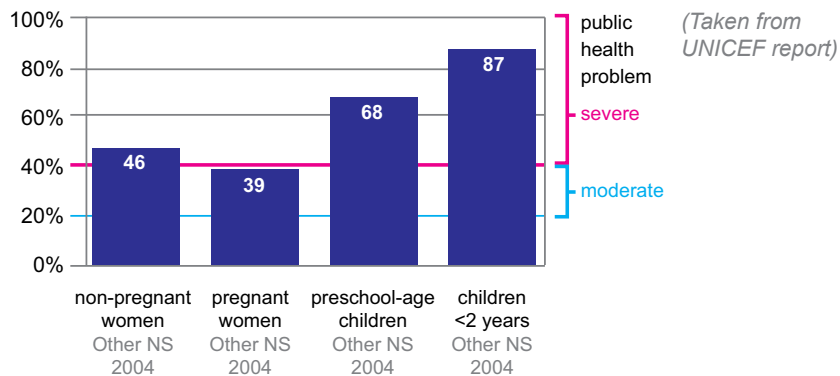
The sachets – which include iron – are added to locally prepared food to prevent iron deficiency anemia and other deficiencies in babies starting at 6 months during their most vulnerable period of growth and development. These micronutrient packets are designed to fit within the means and routines of families across Bangladesh, where 43% of its 160 million population lives on just USD 1.25 per person per day or less.

“Renata is on a mission to increase access to affordable nutritional products so children get the right start in life and are able to realize their potential,” said Kaiser Kabir, CEO of Renata Ltd, the pharmaceutical company which produces the micronutrient powders at its production facility in Bangladesh.

ABOUT ANEMIA

Iron deficiency impairs the growth and learning of children, lowers resistance to infectious diseases and reduces the physical work capacity and productivity of adults. In Bangladesh, anemia is considered a severe public health problem in children, affecting: 87% aged less than 24 months and 68% at pre-school age. For adults, anemia also results in reduced work productivity and it is estimated 7.9% of GDP is lost due to the condition.

Anemia Prevalence of anemia among selected population



However, Renata Ltd is not a typical pharmaceutical company; it is majority-owned by the Sajida Foundation, which focuses on public health and poverty alleviation, and specifically delivers effective health and nutritional products.

In 2007, Renata Ltd was already producing a powder with five micronutrients. With support from the Global Alliance for Improved Nutrition (GAIN) and USAID, the Social Marketing Company, based in Bangladesh, developed a sustainable social marketing model for the product. Branded as *MoniMix*, each sachet retailed at 2.25 Taka (3 US cents) and was produced to effectively treat iron deficiency.

Through educating health providers and performing village drama shows, *MoniMix* became a culturally accepted product in rural Bangladesh. Meanwhile, its affordable price meant 22 million sachets were sold through the partnership between 2008 and 2009.

THE MODEL

A successful start for MNPs in Bangladesh.

While the popularity and sales of *MoniMix* rapidly grew, an enhanced powder with 15 micronutrients was already in development based on applications by the international community's response to the 2004 Indian Ocean tsunami. Adapted to prevent a range of micronutrient deficiencies rather than treat iron deficiency anemia alone, this new MNP formula contained a child's recommended daily intake of essential vitamins and minerals.

Quickly accepted by the international development community, the product

opened new channels when Renata formed its partnership with BRAC, Bangladesh's largest NGO. The expertise of both organizations meant supply could increase rapidly in terms of scale, impact and delivery.

Establishing the Renata-BRAC partnership.

"This partnership between Renata-BRAC is pioneering in terms of public and private sectors working together to scale-up access to good nutrition on a sustained basis," said Dominic Schofield, Director of the Micronutrient Supplements initiative at GAIN.

ABOUT THE PARTNERS

Renata. A pharmaceutical company based in Bangladesh, it is majority owned by the Sajida Foundation and has a specific mandate to address effective health nutritional products. It developed the early *MoniMix* product with SMC and began marketing the *Pushtikona* sachets for retail through pharmacies and its network of doctors and sales representatives.

BRAC. The largest NGO in the world, BRAC is dedicated to alleviating poverty by empowering the poor to bring about change in their own lives. For *Pushtikona*, it has delivered over 20.5 million sachets to rural communities using its extensive network of 75,000 community health volunteers and effective behaviour change communication.

Social Marketing Company (SMC). Established social marketing experts in Bangladesh. GAIN, in collaboration with USAID, supported SMC to introduce *MoniMix* as a means to address childhood Iron Deficiency Anemia (IDA) in May 2008. While Renata and BRAC have since scaled-up the project, SMC continues to sell 1 million sachets through their social marketing activities with grassroots NGOs.

GAIN. An alliance driven by a world without malnutrition, GAIN supports public private partnerships to increase access to the missing nutrients in diets necessary for people, communities and economies to be stronger and healthier. For the development of *Pushtikona*, it supported the Renata-BRAC partnership with initial start-up costs and marketing activities. It continues to monitor the project.



“Here, a pharmaceutical company has invested in a product and then partnered with a well-respected NGO to scale up production and deliver impact using a market-based model”, Mr. Schofield added. “Now other NGOs and government are joining the effort to explore ways to expand distribution to the most marginalised populations.”

The partnership was formed with the mandate to improve the diets and nutritional status of 6.8 million children under the age of two through the expansion of home fortification and breastfeeding promotion. Its key objectives were: to reduce anemia by 15%; create a sustainable market mechanism; and ensure access for the poor.

While carefully maintaining consumer access, the *MoniMix* formula of five micronutrients was replaced with the new MNP of 15 essential vitamins and minerals. Branded *Pushtikona*, this was to be sold through Renata’s retail network of sales representatives and pharmacies as well as accessing BRAC’s extensive community-based network of female health workers.

Bringing together expertise and garnering the global communities support to establish a sustainable business model.

During these early days, GAIN provided technical assistance and working capital on a cost-share basis for the installation of production facilities and marketing activities. This ensured Renata could offer reasonable trade and retail prices for *Pushtikona* while BRAC could buy sachets at a competitive 1.55 Taka (USD 0.019) for community health volunteers to sell for a small profit. Furthermore, a revolving fund helped community health volunteers buy their initial stock on consignment.

In terms of marketing, both Renata and BRAC offered very different approaches towards demand creation for *Pushtikona*. While Renata had extensive experience in promotional advertising campaigns; BRAC’s expertise targeted more interpersonal and behaviour change communication in rural Bangladesh. Through the education of community health volunteers on the importance of good nutrition, they were able to pass their knowledge to mothers and to create demand for the *Pushtikona* product.

This unique partnership created an opportunity to harmonise demand creation

**MICRONUTRIENT POWDERS.
PUSHTIKONA INGREDIENTS**

Vitamin A: For eyesight and immunity

Vitamin C: For growth and bone strength

Vitamin D: Absorb calcium and bone growth

Vitamin E: Cell signalling

Vitamin B (various): For metabolism, immune system, nervous system, anemia prevention

Folic Acid: For metabolism

Iron: Anemia prevention

Zinc: To maintain a healthy immune system

Copper: Healthy tissues and red blood cells

Selenium: For immune system functioning

Iodine: For mental and physical growth

approaches. The sale of *Pushtikona* also created an opportunity to introduce a new approach to funding public health messages in support of optimal infant and young child feeding that can be sustained without government or donor funding.

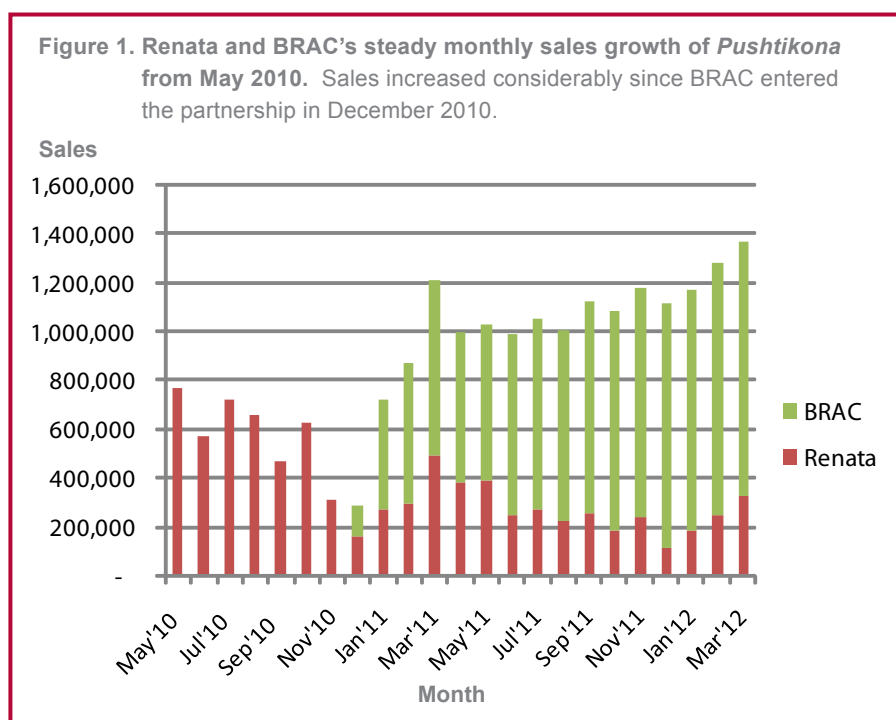


Meanwhile, the broader MNP community also provided support to the partnership. Royalty fees on the sale of Sprinkles™, upon which Pushtikona's formulation is based, are normally paid to the Toronto Hospital for Sick Children – the institution where Sprinkles™ was invented. But the hospital waived the royalties so that they could be re-invested in the production of commercials and public health communication to promote breastfeeding and optimal infant feeding practices. These messages were co-developed by Renata and BRAC, with input from the international expert community facilitated by GAIN, to ensure accuracy, buy-in and that poor households receive the information they need to use *Pushtikona* appropriately.

A multi-tiered distribution channel ensures access across all socio-economic groups.

As well as demand creation efforts, the Renata-BRAC partnership brings together two distinct distribution networks across rural and urban areas, and socio economic groups in Bangladesh.

While Renata's national network covers 90% of pharmacies and accesses physicians across Bangladesh, BRAC's



75,000 community health volunteers are located in rural villages and slums. This network, combined with the continuing efforts of the Social Marketing Company, ensures widespread access to MNPs.

Shastya Shebikas, BRAC's community health volunteers are situated in Bangladeshi villages to provide health information and sell basic health and hygiene products. Highly respected in the community, they are influential in providing evidence-based advice and fostering behaviour change.

"After receiving training on good childhood nutrition practices, I feel very confident to counsel mothers," said Komla Begam, who has been a BRAC Shashtya Shebika for 10 years. "Many families don't understand the adversities of childhood anemia and the benefits of *Pushtikona*. To make a bigger impact, we need more promotional materials to share with them and the key influencers of the community."

LESSONS LEARNED

Overcoming challenges to ensure impact at scale and create a sustainable business model.

In June 2012, estimated monthly sales of MNPs in Bangladesh will reach over 3 million sachets through retail channels with an additional 10 million sachets through institutional delivery channels annually. The project has effectively tapped into a market where an MNP product can work, particularly to serve low income households in rural communities.



One key accomplishment is the development of a 'community of practice' in Bangladesh through uniting the private sector, non-profits, donors and the government around a common agenda. Together, they use evidence-based approaches and strategies to address childhood malnutrition.

But however impressive the model and retail figures may seem, these must be strengthened further and sales increased considerably before the model can become commercially sustainable. One step in the right direction involves committing a percentage of each sachet sale into ongoing marketing efforts and expanding partnerships for distribution with government and other NGOs focused on the most marginalised communities.

To push MNP sachets further, key areas of growth have been identified:

1. **An emphasis on reducing costs.**
One area of investigation involves adapting packaging options.
2. **Expanding reach and impact.** At the moment, *Pushtikona* fails to reach the ultra-poor except in very limited ways through small scale projects. GAIN and its partners are currently working with civil society groups and the country's government to explore scaling-up a national MNP program.

3. **Strengthen the current market further** through harmonizing the product marketing strategy in-line with national public health and social marketing messages. Several landscaping studies are in progress to provide more information in this area of development.

Assessing the program and delivering evidence on public health impact.

Learning by doing is a key principle of the partnership - detailed assessments are evaluating project effectiveness and impact to identify ways to accelerate the project's deliverables at scale; both in terms of its market-based approach and public health impact.

GAIN is currently working with the International Food Policy Research Institute (IFPRI) to evaluate the market-based approach to delivering MNPs. This assessment will then be used to strategically identify the key channels to scale up the project.

Evaluating the public health impact of *Pushtikona* will also identify the product's effectiveness of tackling anemia. In January 2012, GAIN partnered with

CARE and PATH to assess in detail the potential of MNPs to correct and control anemia in infants and young children aged 6-23 months. As mothers have also noticed that their children develop a larger appetite and become more active when adding *Pushtikona* to their meals, this will also be assessed in the study.

In Bangladesh, MNPs are becoming a culturally accepted approach to tackling micronutrient malnutrition in children. This approach holds promise for efforts by the international community to scale-up nutrition in the highest burden countries such as Bangladesh, particularly as the return on investment of micronutrient interventions can range from eight to 30 times the cost. Later in 2012, a detailed case study about the Renata-BRAC *Pushtikona* model will be released by the Base of the Pyramid Innovation Centre, an institution which develops strategies for private sector-led innovations for poorer populations.

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1 WHO Global Database on Anemia.
http://who.int/vmnis/anaemia/data/database/countries/bgd_ida.pdf

2 Horton S et al. 2009. Scaling Up Nutrition: What will it Cost?

