

## **THE NATIONAL CAMPAIGN TO COMBAT HIDDEN HUNGER THROUGH BROWN RICE\*<sup>1</sup>**

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### Abstract

The aim of the paper is to explain the national campaign of promoting the revival of brown rice. The campaign is anchored on nutritional value of brown rice and the business opportunities it has for entrepreneurs. The rationale of the campaign is the fact that low-income pinoy whose food intake principally comes from rice will suffer in the long run from hidden hunger or deficiency in micronutrients like minerals, vitamins, fat and fiber. Polished rice which is the product eaten by most pinoy remove nutrients in the process during milling.

Without the active participation of millers, traders, and retailers, brown rice will not reach the consumers. It is not only patriotic for them to supply brown rice to our consumers; it is also good for their pockets.

Contrary to beliefs of many, brown rice is not a variety nor a method of cultivating rice. It is basically a post-harvest (milling) technology.

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\*click here to go back to the [ARF-Philippines \(Programs and Activities\)](#)

## Introduction

After the remarkable progress in rice production the next frontier of rice R&D appears to be grain quality. This includes rice rich in essential vitamins and minerals such as beta-carotene (pro-vitamin A), iron and zinc. There are attempts at so-called bio-fortification or biological supplementation, which is to nutritionally load the rice we eat with selected micronutrients through biological mechanism like unconventional breeding technique. In the Philippines there is a law on iron fortification or the iron enriched rice. After realizing that nutrients are removed during milling, we bring the nutrients back in through mechanical fortification. There is another approach, which will not require biological enhancement or mechanical nutrients supplementation. This is the nutrient retention approach or preventing the removal of essential nutrients. Brown rice, our subject today is an example of this approach.

## Hidden Hunger

In his latest book, "Rice Chemistry and Quality", Dr. Bienvenido O. Juliano reported that rice eaters in the Far East are known to be deficient in iron, vitamin A, riboflavin, calcium, energy and protein. Dr. Emil Q. Javier, high official of CGIAR and former UP president, writing for "Rice Today", an IRRI quarterly, reported the percent micronutrients removed by polishing rice:

Protein-	15%
Fat-	85%
Calcium	90%
Phosphorous	75%
Thiamine	80%
Riboflavin	70%

## Niacin 68%

The lack of essential vitamins and minerals in the diet and the adverse consequences of such on human health is what hidden hunger is. When blindness among children is manifested; when symptoms of nutritional anemia shows; when weight of children is retarded and when children appear to be less playful and mobile because of the overall weakness- hidden hunger has already struck.

The most hard hit by hidden hunger are about 25 million of our kababayans whose income are below the poverty line. These class of consumers spend their income mostly on rice and could hardly afford meat, fish, milk, fruits and vegetables to meet the vital micronutrient requirements of their body. The bulk of the diet of these people is mostly rice that provides 60-70% of their energy intake.

Unfortunately those subsisting on polished or white rice are deprived of essential nutrients because the rice bran that contains them is removed during polishing in the milling process.

### Brown Rice is Superior to polished Rice

For a couple of years now, the Asia Rice Foundation in collaboration with other agencies particularly NNC, NCP, PhilRice, FNRI, UPLB, NFA etc, has been promoting and championing the revival of brown rice. The campaign has been anchored on a tripod of reasons: nutritional value, enhancement of supply and economy.

We learn from nutritionist and medical clinicians that brown rice has high dietary fiber (a gentle laxative, prevents gastro-intestinal diseases and good for diabetes sufferers); rich in B vitamins and minerals (prevents beri-beri); and high in fat (energy source). Also it has been reported that brown rice contains high phytic acid (anti-oxidant, anti-cancer); it decreases serum cholesterol (prevents cardio-vascular

diseases); and it is considered a low glycemic index food (low starch, high complex carbohydrates which decreases risk to type 2 diabetes).

The enhancement of rice supply is another advantage of brown rice relative to polished or white rice. Post harvest researchers say that the milling recovery in brown rice is 10% higher than polished rice. Taken on a national scale this percentage increase in milling recovery is a substantial boost to food supply. For those of you who are in the rice business, 10% more output is a big increase in itself.

There is the other benefit of brown rice – economics. The fuel savings in milling is 50-60% because the polishing and whitening steps are eliminated. It follows that the milling time is also shortened; labor is less; and the cost of equipment (if the mill is dedicated to brown rice) is much lower because the miller doesn't have to install polishers and whiteners.

The enhancement in output volume and the economy in milling constitute the business opportunity in brown rice. At the moment the price of brown rice per kilo in supermarkets is P7-10 higher than polished rice. In some stores it could be more. The market for brown rice right now is a niche market - the nutrition conscious and the middle to high-income groups.

Supply will be driven up when demand increases due to increased public awareness and person-to-person influences. On the other hand, consumers need to see the brown rice in their favorite retail stores, to change their buying pattern. Eventually the supply-demand equilibrium will shift driving the price down and make it more affordable to all consumers.

“Contra” Factors

In the recent symposium organized by NFA, UPLB, IRRI, and ARF for millers, traders, retailers and researchers on the business opportunities in brown rice, certain objections or obstacles to brown rice were identified:

- More expensive compared to white rice
- Not readily or conveniently available
- Shorter shelf life (gets rancid if stored beyond 4-6 weeks) because of high fats in the bran
- Coarse texture
- "Dirty" look
- Susceptible to storage weevil
- Longer cooking time

What do we do to overcome these negative factors? This is the reason why a national promotion, advocacy and mobilization campaign is much needed. It is a real uphill challenge to change people's diet and food preference specially the young generations.

#### The National Promotional, Advocacy and Social Mobilization Campaign

Our goal in this national brown rice campaign is to make brown rice a part of the daily diet of all Filipinos-children, youth and adults, rich and poor, in order to avail of its nutritional richness.

#### Market segmentation strategy

As a matter of strategy the present target market are the nutritionally conscious and those who can afford the higher cost. These are the opinion leaders in our society. In time, the rest of the population will follow the pace setters, the opinion leaders. In advertising a common guiding principle is –"mass follows class". If the "trickle down" process in economic development doesn't work, somehow its parallel- "mass follows

class" works in social behavior pattern such as in fashion, communication (yes! That now ubiquitous cell phone), snack food, language, etc.

### Integrated campaign approach: diamond strategy

To battle the age-old habit and change routine-diet, will require an interplay of forces. This is like mounting a strategic military war against a formidable enemy where in the ground force, air force, the navy, and the intelligence are coordinated as a coherent system to annihilate the enemy.

We call our campaign conceptual framework- a "diamond strategy". The points in the diamond are: the product, the demand, the supply, and the social marketing activities. Interventions are needed in all these elements. Most importantly, they have to be coordinated.

A good product is always a strong asset in any marketing campaign. It generates the selling proposition. To lie about the virtue or merit of the product is a kiss of death in any marketing campaign. That is why, the research community like PhilRice, IRRI, and the academe should be relentlessly trouble shooting the problems associated with brown rice. Well-researched product will bring confidence to the other elements - consumer, supplier and social marketer.

The demand element defines the success of marketing. As they say- "the proof of the pudding is in the eating". No matter how good the product is if the consumers don't notice it, don't know and remember it, doesn't believe in it or doesn't have credibility in it, there is no sale. This campaign will employ market or audience research to try to identify, know and understand the intended audience. We will try to understand how decisions are made in the family on food preference and the food availability on the dining table. We will investigate the resistance families have on brown rice so that we know how to design the messages. We want to know how

something like this product is diffused around in the community. We also want to know the media usage of the market segment we are targeting.

The supply element in the brown rice campaign are the millers, traders and the retailers. The first-time consumers particularly, will not go to the trouble of hopping from one riceretail store to another just to look for the product. Only the fanatic believer will do such a thing. The product has to be available, accessible and packed conveniently. Most important is the affordability of the product, especially if we are aiming for the low-income segment of the population. Without the participation of the businessmen and entrepreneurs, no marketing campaign will succeed.

There is a demand-supply dilemma or stalemate in brown rice business. The entrepreneurs will only invest in the business if there is good indication that there is an effective demand. Otherwise they'll lose their shirt. On the other hand, the consumers will purchase only those products that are available and affordable in the locality. How do we break this impasse? Since no one will subsidize in a sustained way either the consumer or the supplier, we appeal to the entrepreneurs to take some risk, which is what entrepreneurs really do any way, and enter the business. They can do it in a measured and gradual way. The national campaign will go all out and aggressively to create demand through public awareness, advocacy and social mobilization activities.

The social marketing element of the campaign will attempt to bring the consumers, suppliers and the product together through promotional, advocacy, social mobilization and networking activities.

The promotional activities use communication media to diffuse the campaign message to a variety of target audiences: the consumers, the suppliers, opinion leaders in the community and society, and intermediaries such as extension workers, teachers, civic organizations, social workers, medical practitioners, etc.

Advocacy activities are personalized communication designed to persuade the powerful and influential role players in society to endorse and reinforce the message and champion the product. These include leaders in national and local governments and non-government organizations, religious, professional organizations, educational institutions, and business. These role players open doors, facilitate and enable processes, provide key resources and move people to action.

Social mobilizations are appeal communication in order to form alliances with individuals and organizations who have resources needed in the campaign. The national campaign cannot move and go very far just with good intention of few concerned mission-driven and passionate individuals. A lot of financial resources are needed for the campaign: for print and campaign materials (brochures, posters, streamers children's book's, bookmarkers, gift items, souvenirs, etc), broadcast (radio, TV), newspapers and other print media, identifying icons. (Mascot, slogan, jingle) and website. To generate and create effective social capital in terms of goodwill, commitment, advocacy and support, a systematic networking among role players and institutions in the community and society is needed.

### The organization and management system

A multi-level national organization and management system is proposed to coordinate and energize the campaign at the national, regional and provincial level. To be coordinated are the trainings and consultations for different players in the campaign designing, printing, producing and distributing campaign materials; campaign for funding and financial management; media work and researches.

### Tipping Point

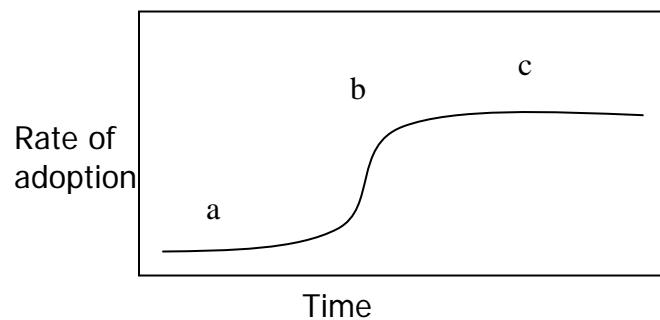
Kurt Lewin, foremost social psychologist, once formulated a theory of social movement. It is called the force field theory. He says that every time a new idea is



introduced in society, two counter veiling forces come to play: the force that favors the change and the force that opposes the innovation. For a while these two forces are engaged in a dynamic running debate wherein no clear winner emerges. In time, depending on the mass and intensity of any of the 2 forces, one of the two will overcome or overpower the other.

Following the force field framework came the diffusionist, and adoptonists headed by an agricultural sociologist, Dr. Everette M. Rogers. According to Rogers, an innovation introduced in a social system follows a pattern wherein initially the adoption is slow and implemented by what is known as early adaptors (line a). When the information and extension campaign is pursued extensively and intensely, the adoption process in the social system picks up until a peak is reached (b). Then a point of diminishing return is reached wherein adoption, while it is still going on, its growth declines compared to the previous rates of growth (c). When graphed the c line is seen as plateauing. The whole pattern is known as the adoption "S" curve in (figure below)

Fig. 1 the adoption "S" curve



Recently a journalist cum sociologist dubbing as marketing scholar, Malcolm Gladwell, wrote a book explicating what he calls the "tipping point". This notion combines the force field theory and the adoptionist view of how innovations spread in a social system.

The tipping point in a campaign is that stage when a breaking point is reached after a slow and gradual start. There are developments in the market place that trigger the breaking point: contribution of champions and communication agents in diffusing

the idea or product; the selling proposition or messages that sticks among adopters; generation of "gaya-gaya" phenomenon or band wagon effect; and availability of the product in the locality through dealers.

Just like a mapping operation in any military war, our campaign will spread from module to module or place to place: "to parochial" unit communities like subdivisions, neighborhoods, campuses; "municipal" in collaboration with local officials; "institutional" under the leadership of management and employee groups; and "national" campaign using mass media (print and broadcast) and multi level interagency coordination committees to spread the messages around.

In our brown rice campaign, your helping hand, donation of certain resources, advocacy by persuading opinion leaders in our society and championing the aim of the campaign, all these will increase the weight of the pro forces to tip the balance in favor of the adoption of the product.

Someone has written that as soon as you introduce a new idea you become a minority of one. We hope that this is not going to happen in the brown rice campaign.