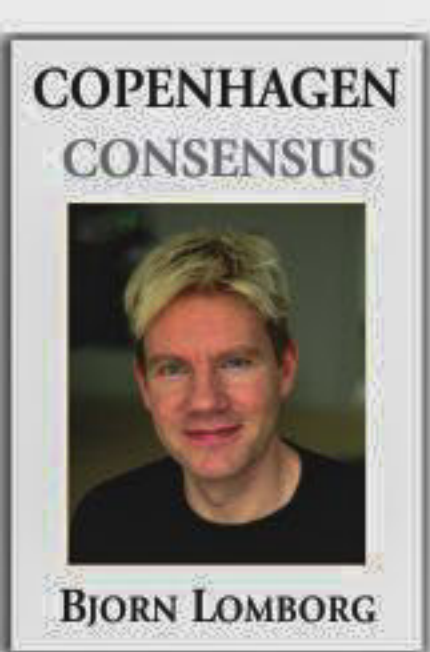


# Golden rice: The malnutrition fighting crop



**COPENHAGEN CONSENSUS**  
BJORN LOMBORG

OVER the past two decades, Bangladesh has remarkably managed to feed an increasing population better - the UN's Food and Agricultural Organization estimates that in 1993, the average Bangladeshi had access to just 2,000 calories per day, whereas today that number has increased to 2,450 calories per day. To a large extent, this success comes on the back of ever-higher rice production - rice makes up 70 percent of the average daily calorie intake. Unfortunately, rice may make an empty stomach feel full, but it lacks many vital micronutrients. The latest survey shows three-quarters of all children deficient in vitamin A. This matters because studies show that every day an estimated 88 children in the country go blind due to vitamin A deficiency. And each year, the condition is responsible for 28,000 deaths of children under age 6. Furthermore, chronic undernourishment leads to stunting, which hinders cognitive and physical development and affects about six million Bangladeshi children. One solution is to provide vitamin A in capsules, which reach about 63 percent of children. It would also be good to get more children to eat other foods rich in vitamin A, but this is a challenge of both education and income, bounded by the 70 percent of

rice intake. But what if there was a cheap and effective way to exploit that rice to get more vitamin A to everyone? New research by Uttam Deb, an economist at the International Crops Research Institute for the Semi-Arid Tropics, suggests that investment in the development and dissemination of golden rice can help Bangladesh overcome vitamin A deficiency and its related blindness and deaths. Each taka spent on golden rice could do up to 329 takas of good. Research on golden rice began in the 1990s as an effort to develop a type of rice that could counter malnutrition. The rice is fortified with beta-carotene, which is converted into vitamin A inside the body, and also gives the strain of rice its colour. Because the rice is enhanced with micronutrients, widespread adoption of it holds the potential to combat the critical vitamin A deficiency in Bangladesh, which would be incredibly valuable for the country. Not only would the beta-carotene-fortified rice combat malnutrition, golden rice also has higher crop yields than many improved varieties. So benefits from its cultivation would arise both from increased crop productivity as well as the positive health effects. Furthermore, golden rice is a Boro rice, so the geographic areas where it is most likely to succeed in the field overlap considerably with the areas where nutrition deficiencies are highest in Bangladesh. The costs to release golden rice for cultivation by 2018 include funding for research and development to



**Golden Opportunity?**

continue to adapt it to the Bangladesh environment. It would also require paying costs for crop trials, extension services, seeds, marketing, and education. In total, the costs would be more than Tk. 800 million. When it comes to benefits, golden rice is not a panacea for fighting vitamin A deficiency in Bangladesh, it should rather be seen as a complement to existing initiatives that provide nutritional supplements

to unreached people. Deb's analysis estimates that this strategy holds the potential to reduce vitamin A deficiency nationwide by roughly 3 percent, assuming that 30 percent of the population would adopt the rice as part of their regular diet. In reviewing Deb's research, Saul Morris of the Children's Investment Fund Foundation and Sue Horton of the University of Waterloo separately noted the lack of significant causal relationship between vitamin A

deficiency and the greater risk of stunting. However, Deb points out that most studies show that fighting vitamin A deficiency can have a positive, if small, impact on stunting. He concludes that the cultivation and dissemination of golden rice could decrease stunting by up to 3 percent nationwide, perhaps preventing approximately 165,000 children from becoming stunted. When added together, the value of these health benefits is more than Tk. 175 billion.

In addition, golden rice stands to increase rice yields by up to 10 percent. This estimated productivity gain should be taken as optimistic, given that scientists are also breeding other new, higher-yielding rice varieties that could benefit farmers in the absence of golden rice. But even if the average yield increases by just 5 percent when compared to the existing BRRI dhan29 rice variety, Bangladeshi farmers would still benefit by nearly Tk. 110 billion. Overall, the health and productivity benefits combined could equal up to Tk. 285 billion. Each taka spent toward adoption of golden rice in Bangladesh could do up to 329 takas in benefits. The eminent panel of local and international experts, who reviewed all Bangladesh Priorities research, concluded that Deb's analysis may be on the optimistic side. However, they also noted that most of the costs to develop golden rice have already been incurred, that the variety holds potential to improve upon the status quo, and farmers can choose to use it or not. For those reasons, they found it a worthwhile strategy that could provide net benefits regarding both farmer productivity and health measures. Is golden rice one of the smartest solutions for Bangladesh? Let us hear from you at <https://copenhagen.fbapp.io/malnutritionpriorities>. We want to continue the conversation about how to do the most good for every taka spent.

The writer is president of the Copenhagen Consensus Center, ranking the smartest solutions to the world's biggest problems by cost-benefit. He was named one of the world's 100 most influential people by *Time* magazine.

## Requiem for a friend

NEEMAN SOBHAN  
He passed away, in his sleep, I hear, leaving us, his family and friends, to awaken to his unfathomable, unacceptable absence, almost as resounding as his laughter, his jovial voice, and his life-affirming joyful presence. The rest of the media world, where my friend made his indelible mark, mourns and eulogises him as



**Syed Fahim Munaim**

Syed Fahim Munaim, CEO & Chief Executive Editor of *The Daily Star*, Press Secretary to a caretaker government and press counselor to the Bangladesh embassy in Japan, and many other avatars. For me, he was and will always remain Tipu, the slight framed, laughing, flamboyant brotherly figure I encountered at Dhaka University, both of us in the final stages of our teens, fellow students in the newly opened department of International Relations. It was the start of our journey of friendship, indeed, the journey of

our future, curiously linked, since we both left Dhaka University (in my case, within the first year) and found ourselves in the US, due to separate family circumstances, and later entered the world of journalism, both associated with *The Daily Star*, and more importantly, connected by his marriage to someone whom I consider to be like my younger sister. I joined the University of Dhaka in the early 70s and within the next year, I got married and was swept away to the shores of Maryland, US, where I joined the university at College Park, happy to restart life as an undergraduate, studying Comparative and English Literature, which was always my first love. Tipu's father, Syed Nuruddin, had just been posted to Washington as the Press Attaché, and at an embassy reception, I was thrilled to be reunited with my class friend. He was then enrolled in the George Mason University's Public Administration department. In those first years of homesickness, it was a blessing to have not just the sight of Tipu's familiar, ever-smiling face and encounter his humorous bonhomie, but also the warmth and affection generated by the network of Bangali families, among whom were his wonderful parents and three sisters. One of the other families, who became for my husband and I, almost in loco parentis, not in the strict legal terms, but within the terms of human relationships and emotions, was the family of the beautiful and accomplished girl, who later would become Tipu's wife and soul mate. To this wonderful

family, which showered me and my husband with love and affection in those early years, we can never repay our gratitude; and today, I extend to them as to that lovely and loving younger sister, my heartfelt condolences. I can only say that my husband and I share completely in their grief. We are equally bereft of the wonderful human being that was Tipu, and we are together in our prayers for his soul. Fahim Munaim, was a generous, positive and supportive friend, whose witty and endearing company enriched you. In my career as a writer and columnist, he appeared at many junctures, encouraging and supporting me. My favourite memory is when he spoke at the book launch of my first book, the collection of columns I wrote for a decade for *The Daily Star*: 'An Abiding City: Ruminations from Rome'. For me, it mattered that he was the one to represent *The Daily Star* at an important moment in my life. Fahim kept all our university friends together, getting the old International Relations buddies to come together at reunions. His friendship and warm personality was one of the things I always looked forward to during my winter trips home to Dhaka. It will be a cold homecoming in many senses, this December, my friend. You may have left us, Tipu, but we refuse to leave you. Your memories and your beaming persona will remain the light by which you will glow in our midst. Refusing to say goodbye, dear friend. Rest in eternal peace.

The writer is an author and columnist.

## THE CRY WE'VE GOT TO HEAR

MARIO PALMA  
At the recent launch of her newest audio CD, *Gane Gane Nazrul Jeeboni*, after seeing some foreign nationals in the audience, singer and writer Nashid Kamal displayed her usual kindness by saying that she would introduce each song in English for the benefit of 'non Bengali-speaking' guests. Yes, just like that, she didn't use the word 'foreigners'. Nashid's simple strategy for inclusiveness worked well: I instantly felt like a part of the local people, and the informal, extended family of staunch admirers of the great national Poet Nazrul Islam. Feeling like an adopted son of this country: it can happen only if you subscribe to the peculiarly re-drawn maps of the Italian artist Nicola Strippoli, better known in the art world as Tarshito. An act of pure will and you will find the Bangladeshi Delta bordering Italy, turning my country into the boot of the eastern part of the Indian subcontinent, or any other country in the East or West. This speaks volumes about the wonders of the geography of emotions. It is little wonder then if we, too - the adopted sons of Bangladesh - feel the impact of any adverse event or trend on the country's social and cultural fabric. Most of you are familiar with the subject and characters of Syed Waliullah's novel *Cry, River, Cry* (*Kando Nadi Kando*). The cry of a dying river that is first heard by a young female teacher finally comes to be heard by all the inhabitants of the small town of Kumurdanga. In today's Bangladesh, the cry that all of us are hearing, even more clearly now that the number of tragic events are increasing

almost weekly, does not come only from the dying canals or 'The Black Gel' once known as the Buriganga River: it comes from people who have been attacked and hacked to death or who see themselves as potential future victims for professing ideas or creeds that are different from those of self-appointed guardians of religious orthodoxy and social customs. The cry of the expatriates' community over the murder of Cesare Tavella and Hoshi Kunio and the cry of local society as a whole over the repeated, incessant attacks on bloggers, intellectuals, religious minorities and even ordinary people - have they really been heard by the authorities? We would like to see more resolve from their side, for what is at stake is the very future of the much-cherished secular features of the State and the rich cultural diversity of this country. To our Bangladeshi friends I would say: please, don't look at our preoccupation - the concern of Italy, the European Union and many other countries here represented - as the unwelcome interference of a handful of foreign envoys on Bangladesh' domestic affairs! Let's instead join hands in fighting the evil of the day: a ruthless, faceless terrorism acting in the name of religion. Only by doing so can we help to make the world in general and Bangladesh in particular a better place to live in, and revert from the sad exclamation we began to utter recently, 'Cry, Bangla, Cry' (*Kando Bangla Kando*), to the ever-inspiring and prideful 'Joy, Bangla, Joy!'

The writer is Ambassador of Italy to Bangladesh. This is a reproduction of his speech on June 2 on the occasion of Italy's National Day.

**QUOTABLE Quote**

**JOHN KEENE**  
Former member of the Dark Room Writers Collective, writer and translator.

... for whenever one looks too deeply beyond the surface of this world of men, one may find truths submerged that not even the most long-held beliefs and traditions can withstand.

**CROSSWORD BY THOMAS JOSEPH**

**ACROSS**  
1 Graceful bird  
5 Deep ravine  
10 Short putt  
12 Brother of Groucho and Chico  
13 Magellan's specialty  
15 Twisty fish  
16 Dine late  
17 Take to court  
18 Early round, for short  
20 Witty remark  
21 Take the wheel  
22 Small bills  
23 Hiker's path  
25 Mexican coin  
28 Cove  
31 Singer Jackson  
32 Space station of the 1970s  
34 Brink  
35 Sassy talk  
36 Historic time  
37 Excuse, for example  
40 Frasier's brother  
41 Cruller's kin  
42 Grove makeup  
43 Citi Field team

**DOWN**  
1 Costly  
2 Furniture workers  
3 Online program  
4 Goose egg  
5 Fellow  
6 Bowler, for one  
7 Out of bed  
8 Husband or wife  
9 Some Impressionist paintings  
11 More inquisitive  
14 Ice cream choice  
19 Pretend  
20 Full of mirth  
24 Stamping need  
25 Mom or dad  
26 Magic potion  
27 Try out  
29 Calahad's mother  
30 Touch, as a runner  
33 Natural gifts  
35 Highlands girl  
38 Golfer Trevino  
39 Huck's friend

**YESTERDAY'S ANSWER**

S	L	A	M	S	C	A	R	F
P	A	L	E	T	O	R	E	U
A	T	O	M	R	A	T	T	L
R	E	F	O	C	U	S	I	L
E	X	T	R	A	C	T	R	E
E	T	R	A	C	T	E	S	T
M	A	L	A	Y	B	U	S	T
O	P	A	L	B	U	T		
L	O	B	D	O	N	O	V	A
A	G	E	E	X	T	R	E	M
R	E	L	L	A	T	E	R	I
S	E	L	L	E	R	A	S	S
S	E	E	R	S	L	E	S	S

**BEETLE BAILEY** by Mort Walker

**BABY BLUES** by Kirkman & Scott