

## The Food Security Bill (India)

Can there be a more lamentable picture than that of a Chancellor of the Exchequer seated on an empty chest, by the pool of bottomless deficiency, fishing for a budget?

- Robert Peel, 18<sup>th</sup> May, 1841

### What's the problem?

The Indian National Food Security Bill, 2013 was signed into law on September 12, 2013. This law aims to provide subsidised food grains to approximately two thirds of India's 1.2 billion people. Under the provisions of the bill, beneficiaries are able to purchase 5 kilograms per eligible person per month of cereals at fixed prices.<sup>1</sup>

The bill rides on top the Public Distribution System (PDS) that was already in place. Before the bill, only 45% of the population was entitled to the benefits of the PDS. With the bill targeting approximately two thirds of the population, the percentage of the population entitled to benefits has increased to nearly 70%.

While, at first glance, the bill seems like an admirable attempt by the government to solve the *important problem of hunger*, closer analysis reveals that the bill might be too broad in its entitlement spectrum and thus may be spreading its incremental budget of \$446 million too thin.

Also, the nutritional and economic impact of the bill may cause challenges that the government has not envisaged in the bill.

While it will not be possible to cover every nuance of this bill in this essay, we will try to explain *why the bill is too broad* and how it does not consider the *nutritional and economic impacts* that may follow as a consequence of the bill. Finally, we will look at some proposed improvements in the conclusion of this essay.

### Why is the bill too broad?

To support our claim that that the bill is too broad in its entitlement spectrum, we need to crunch some numbers.

- (i) First, we need to identify what is the *market size* that the bill caters to, i.e. we need to estimate the number of hungry people in India.
- (ii) Next, we need to know the *incremental public spending* that the government plans to do on solving the problem of hunger for the market size we estimate in (i)
- (iii) Next, we can estimate the *optimal per capita expenditure* assuming a completely optimal distribution of the incremental spending in (ii) on the market size we estimate in (i)

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<sup>1</sup> Wikipedia: [https://en.wikipedia.org/wiki/National\\_Food\\_Security\\_Bill,\\_2013](https://en.wikipedia.org/wiki/National_Food_Security_Bill,_2013)

- (iv) Next, we can estimate the *actual per capita expenditure* that will result as a consequence of this bill.
- (v) Finally, we can see the difference between optimal per capita expenditure and actual per capita expenditure and thus calculate the approximate *number of people who are getting benefits that they do not need*.

In the following sections, we will look the five data points outlined above one by one.

#### *(i) Market Size*

To start our discussion, we must first look at the size of the problem that the bill is trying to solve.

According to a survey in which people were asked whether they had enough to eat (i.e., whether "everyone in the household got two square meals a day" or whether everyone eats "enough food everyday"). The percentage of people who consider that they do not have enough food has dropped dramatically over time: from 17% in 1983 to 2% in 2004.<sup>2</sup>

Thus, in 2004, only 2% of the people in India considered that they did not have enough food to eat. At the same time, the percentage of people living below the poverty line (BPL) in India has dropped from 37.2% in 2004-2005 to 29.8 in 2009-2010.<sup>3</sup>

Hence, since poverty has dropped, the number of people going hungry should also have dropped. However, since we lack the data, we will assume that the percentage of people who suffer from hunger has remained the same (2%) since 2004.

This is a very *conservative estimate*. With the current population in India of 1.237 billion, the number of people who do not get enough to eat today (2%) is 24.74 million.

Thus this bill (conservatively) addresses a *market size of 24.74 million hungry people*. We must, however, consider that before this bill, the Public Distribution System (PDS) was still in effect and is definitely a contributor to the statistic of 2%.

Thus, to effectively estimate the impact of this bill, we must look only at the incremental expenditure on this bill and not the total expenditure on the PDS, which includes expenditure that was already in place before the bill.

#### *(ii) Incremental Public Spending*

The Standing Committee estimated that the value of additional food subsidies (i.e., on top of the existing Public Distribution System) "during 2012-13 works out to be Rs. 2,409 crores," that is, 24.09 billion rupees, or about **\$446 million** at

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<sup>2</sup> Banerjee, V., Abhijit, Duflo, Esther, Poor Economics, Random House, 2011, p. 26.

<sup>3</sup> Source: Tendulkar Committee Report and Press Note, Planning Commission

the then current exchange rate, for a total expenditure of 1.122 trillion rupees (or between \$20 and \$21 billion).<sup>4</sup>

***(iii) Optimal per capita expenditure***

Given the market size of 24.7 million people, the total incremental public expenditure of \$446 million and the leakage in the PDS system taken at an average of 12.5%<sup>5</sup>, the ***government should optimally be spending \$15.80<sup>6</sup> per individual per year*** (without changing the budget available towards solving the problem of hunger).

We have not included incremental overheads as we assume that the number of heads, the logistics etc. that were employed by the PDS before the introduction of this bill will remain the same as after the introduction of the bill.

***(iv) Actual per capita expenditure***

Under the provisions of the bill, beneficiaries are to be able to purchase 5 kilograms per eligible person per month of cereals at the following prices:

- rice at INR3 (4.6¢ US) per kg
- wheat at INR2 (3.1¢ US) per kg
- coarse grains (millet) at INR1 (1.5¢ US) per kg.

Assuming that everyone opts for the highest class of grain and their full quota as per the bill, the government would ***actually spend 23¢ per individual per month or \$2.76 per individual per year.***

***(v) Number of people getting benefits that they do not need***

This means that at the current rate of expenditure, the policy spends \$13.04<sup>7</sup> annually less on an individual than it actually should given its current budget and market size.

By spending \$13.04 less on an individual, the government can include 4.72 people more in its benefits at its current per capita expenditure as per the bill.

Thus, approximately 5/6<sup>ths</sup> of the increased population that is getting this incremental benefit does not need it!

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<sup>4</sup> Standing Committee on Food, Consumer Affairs and Public Distribution (2012-13), Fifteenth Lok Sabha, Ministry of Consumer Affairs, Food and Public Distribution (Department Of Food and Public Distribution) (January 2013). "[The National Food Security Bill, 2011, Twenty Seventh Report](#)"

<sup>5</sup> "The leakage, on an average, is nearly 10-15 per cent," Minister of State for Consumer Affairs and Public Distribution K.V. Thomas said in a reply during Question Hour in the Rajya Sabha. December 12, 2011

<sup>6</sup> (\$446 million – 12.5% x \$446 million) / 24.47 million

<sup>7</sup> \$15.80 - \$2.76 = \$13.04

While the attempt by the government to reduce the financial burden of the common man is admirable, it is the opinion of this author that the policy is spreading itself too thin and ***it would be more effective to target the people who are hungry rather than trying to provide more benefits to the public at large.***

#### **Nutritional and economic impacts**

It is easy to think that reducing the price of food will cause more people to buy the subsidised food.

In their book “Poor Economics”, Banerjee and Duflo relate the research of Robert Jensen and Nolan Miller who found a pattern of “flight to quality” in food consumption.

In two regions of China, they offered randomly selected poor households a large subsidy on the price of their basic staple (wheat noodles in one region, rice in the other). They observed the opposite behaviour of what we should expect.

Households that received subsidies for rice or wheat consumed *less* of those two items and ate more shrimp and meat, even though their staples now cost less. Remarkably, overall, the calorific intake of those who received the subsidy did not increase (and may even have decreased), despite the fact that their purchasing power had increased. Neither did the nutritional content improve in any other sense. The likely explanation is that because the staple formed such a large part of the household budget, the subsidies had made them feel richer: If the consumption of the staple is associated with being poor (say, because it is cheap but not particularly tasty), feeling richer might actually have made them consume *less* of it. Once again, this suggests that at least among these very poor urban households, getting more calories was not a priority: Getting better-tasting ones was.<sup>8</sup>

Looking at this research, it is evident that taking the opaque task of eliminating hunger and trying to solve it through subsidies, though well intentioned, demonstrates an incomplete understanding on the part of the Indian government.

If the food security bill does indeed drive the poor to consume less of the subsidised food items like in the China study, and increase their consumption of other “flight to quality” items whose price is bound to go up due to increased demand, then surely the introduction of this bill is lamentable.

If the China scenario occurs in India, not only will the bill drive the poor towards a diet poorer in nutrition, it will also make them poorer as they pursue “flight to quality” food items in their diet whose ever-increasing price shall surely affect the pockets of the poor.

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<sup>8</sup> Banerjee, V., Abhijit, Duflo, Esther, Poor Economics, Random House, 2011, p. 24.

The money that the poor in India would save through food subsidies may be making them “feel richer” contributing to them spending less on the staples and going for other goods that constitute an important “taste” element in Indian cooking.

Shifting consumption patterns among Indians have often been blamed for the rise in food prices, including onions. Indians are consuming fewer cereals, like wheat, and more vitamin and protein rich foods, like onions and chicken, experts say. This means prices for non-grains have been rising faster than those of grains for several years now.<sup>9</sup>

## Conclusion

In this essay we have shown that the Food Security Bill suffers from the defect of overestimating the market size of the people who are suffering from the problem that the bill attempts to address. It also does not fully consider the tangential socio-economic impacts that it may have.

In order to solve the problem of hunger, the government must use the right metrics to estimate the market size. The current metric that the government uses is the number of people below the poverty line (BPL).

However, since the 2004 survey data seems to indicate that only 2% of the population considered themselves hungry, while 37.2% of the population was BPL, it stands to reason that a ***large proportion of the population that is poor is not hungry.***

Thus, if the government wants to tackle the problem of hunger, it must find effective means of identifying the exact subset of the people who are poor who are also hungry.

This is not an easy task. It is the opinion of this author that the government should focus more on poverty alleviation rather than focussing on hunger alleviation.

If poverty is to be eliminated, then people must break out of their poverty traps. To break out of the Mathew effect<sup>10</sup>, people need just a little push. Microfinance schemes have effectively shown how a small amount of capital can change the trajectory of a person’s life.

Thus, the government should promote micro-entrepreneurship through providing micro-loans. It is only when people begin to become self-sufficient that true economic progress will take place. This is perhaps Gandhi’s dream. Micro-finance has only put it in an economic context and provided it a working model.

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<sup>9</sup> <http://profit.ndtv.com/news/cheat-sheet/article-why-onion-prices-are-inching-towards-rs-100-per-kg-370138?pfrom=home-otherstories>

<sup>10</sup> The rich get richer, the poor get poorer

The recent launch of the National Women's Bank (Bhartiya Mahila Bank) is, perhaps, a step in the right direction. It identifies a target market with precision and lays out benefits that empower its users.

In India, only 26% of women have an account with a formal financial institution, compared with 46% of men. That means an account in either a bank, a credit union, a co-operative, post office or a microfinance institution, according to a study by the World Bank.<sup>11</sup>

Furthermore, the results of a study using a global dataset covering 350 Microfinance Institutions (MFIs) in 70 countries indicates that more women clients is associated with lower portfolio-at-risk, lower write-offs, and lower credit-loss provisions, ceteris paribus.<sup>12</sup>

The bank will also place emphasis on funding for skills developments to help in economic activity. Moreover, the products will be designed in a manner to give a slight concession on loan rates to women.<sup>13</sup>

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<sup>11</sup> <http://www.bbc.co.uk/news/world-asia-india-24997277>

<sup>12</sup> [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1711396](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1711396)

<sup>13</sup> <http://www.firstpost.com/business/bharatiya-mahila-bank-all-you-need-to-know-about-first-all-women-bank-1237365.html>