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# The bumpy road from food to nutrition security – Slow evolution of India's food policy



Prabhu Pingali\*, Bhaskar Mittra, Andaleeb Rahman

Tata Cornell Institute (TCI), Dyson School of Applied Economics and Management, Cornell University, Ithaca, NY, USA

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#### ABSTRACT

Food Policy, in much of Asia, has been slow to transition from its historic focus on staple grain self-sufficiency to a more integrated approach to nutrition security. Research and policy discussions continue to focus on hunger and calorie deficiency rather than on the need for a balanced diets to address chronic micronutrient malnutrition and the emerging problems of over weight and obesity. Social welfare schemes aimed at improving nutrition also focus on ensuring calorie sufficiency, neglecting quality and diversity of diets and behavioral change towards better nutrition. This paper provides a detailed review of the evolution of food policy in India and a way forward in the transition towards nutrition security.

#### 1. Introduction

Despite increases in agricultural productivity and overall food production, high levels of undernutrition in its multiple forms continue to persist across the developing world. Effectiveness of agricultural policies for improved nutritional outcomes in a particular country, depends on the importance of agriculture in the overall economy, specific nutritional challenges in the country and the stage of structural transformation (Pingali et al., 2015). Countries in the Asia have used modernization of agricultural systems as a pathway for income growth and structural transformation of the economy. The Green Revolution (GR) led to greater production of staple food crops – rice and wheat - and kick started economic growth in much of Asia (Pingali, 2012). However, the strategy of promoting staple crop productivity inadvertently resulted in the crowding out of traditional micronutrient-rich food crops, such as coarse grains, millets and pulses from areas in which they were historically grown (Pingali, 2012; Pingali and Sunder, 2017).

While the historic success of staple grain productivity growth resulted in ensuring adequate quantities of staple food, such as rice and wheat, and in defeating the specter of famine and hunger in Asia, micronutrient malnutrition continues to persist. There is a growing disconnect, common across the developing world but particularly glaring in India, between food policy and contemporary nutritional challenges. Food Policy continues to be focused on calorie availability and has been slow to respond to the persistent problem of micronutrient malnutrition and child stunting, as well as, the emerging challenges of

overweight and obesity (Gómez et al., 2013; Meenakshi, 2016).

India's food policy attempts to ensure that agriculture is remunerative and farm prices are stable through assured minimum support prices (MSP) to farmers while at the same time ensuring subsidized food access for poor consumers through the Public Distribution System (PDS). Decoupling the government's consumer welfare objectives from producer protection objectives lies at the heart of food policy reforms that are urgently needed in India. The twin objectives of a remunerative farm price and low consumer prices have considerable political economy ramifications. Open ended procurement at the MSP has led to the creation of a "farmer lobby" mainly in the higher producing states of Punjab and Haryana.1 This lobby has been successful in garnering significant influence in policy making in the name of promoting the "peasant cause" (Krishnaji, 1990). Ramaswami and Murugkar (2015) argue that the government has always taken a "play it safe" stand in such matters given the electoral influence of the farm lobby. Critics of food and agricultural policies have argued that as long as the "in-kind" food transfer program through PDS remains in place, procurement and MSP has to continue for its support (Kotwal, 2011). However, moving away from the current sub-optimal system towards a more efficient system, such as cash based transfers, is also beset with the same set of problems in terms of mode of transfer, identifying the beneficiaries and the preferences of the targeted population (Khera,

Although this paper focuses on India, the evolution of food policy from its current staple grain focus to one that addresses the broader

<sup>\*</sup> Corresponding author.

E-mail address: plp39@Cornell.edu (P. Pingali).

<sup>&</sup>lt;sup>1</sup> Open ended procurement means the government is committed to purchasing any amount of grain through its procurement operations at the announced MSP.

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concerns of nutrition security is a challenge faced across Asia. The next section of the paper argues that Indian food policy has been slow to make the transition from a focus on food grain self sufficiency to one of promoting a nutritionally balanced food system. Part of the reason for the slowness is that the paradigm of food security is still based on hunger alleviation through the provision of a staple food and calorie rich diet. Policy fixation with staple grains has put a limit to the ability of agriculture to diversify into other crops in response to growing market demand. The transition from a staple grains based food policy has also been constrained by political economy factors discussed above. Even programs that had health and education objectives, such as the Integrated Child Development Scheme (ICDS) and the Mid-Day Meal Scheme (MDMS) have morphed into conduits for the provision of subsidized grain. Hence the "bumpy road" in the evolution to a policy that focuses on improved nutrition outcomes. The third section of the paper presents a detailed set of steps necessary for transitioning from the current food policy to one that promotes nutrition security. Concluding remarks are provided in te final section.

## 2. Food Policy evolution: from national self-sufficiency to improved individual access

Food Policy in India has been centered on calorie consumption as the primary means of achieving food security. Prior to 1970's, staple food availability and price stability were major concerns which led to an emphasis on self-sufficiency in food grain production. Large scale productivity gains and self-sufficiency in food grain production through the Green Revolution (GR) subsequently led to a shift in focus towards ensuring food access at the household level (Radhakrishna, 2005). To achieve this policy objective, procurement of food grains from farmers at assured Minimum Support Prices (MSP) and their distribution at subsidized prices to poor consumers through the Public Distribution System (PDS) have been the operational tools. Over time a symbiotic relationship evolved between food grain producers, especially in high productive areas, such as Punjab and Haryana, the parastatals responsible for grain procurement and poor consumers who benefitted from the access to subsidized grain. However, this nexus has also been the cause of much of the policy failures in shifting the focus from staple grain sufficiency to promoting a food system that provides balanced nutrition. In fact, Ganesh-Kumar et al. (2007) have said that the policy of food grain self-sufficiency as a means of achieving food security has "outlived its usefulness".

#### 2.1. The Green Revolution strategy of staple grain self sufficiency

In the early years after independence, India was a food deficient country with frequent droughts and famines. Though India was primarily an agrarian economy at that time, agricultural productivity was low and food grains (rice, wheat, millets, maize and barely) contributed to 75% of the total cropped area (Chakravarti, 1973). In 1966-67, high yielding varieties of rice and wheat were introduced in India together with massive public investment in agricultural research and development. Improved GR seed varieties, along with investments in irrigation, promotion of fertilizers and pesticides led to massive gains in agricultural productivity (Janaiah et al., 2005; Pingali, 2012). Annual per-capita availability of food grains increased from around 140 kg, in 1950s to more than 160 kg, in the 2000s (Fig. 1). However, the GR crowded out the production of other nutrient-rich food crops such as coarse cereals and pulses, from their traditional production environments (Kataki, 2002; Pingali et al., 2015). This was particularly true in the Indo-Gangetic plains which account for over 12 million hectares of intensively cultivated land commonly referred to as the "food bowl of India". Punjab and Haryana which constitute a bulk of the staple crop production zone, contribute around 84% and 54% of the total wheat and rice in the country (Singh and Sidhu, 2014).

The GR not only benefited producers through rise in production, but

also led to a decline in food prices for consumers. Technological advancement, food self-sufficiency and rising income through the GR ushered India and other countries in Asia onto a path of agricultural modernization and structural transformation (Hazell et al., 1991; Pingali, 2012). Rising income also lead to a greater demand for non-staples such as vegetables, fish and meat as the consumption of staples comes down in accordance with the Bennet's law. This is evident in India as empirical studies suggest a dietary transition with consumption demand moving away from staple crops towards a more diversified and higher quality diet (Pingali, 2006).

While there was a secular decline in the price, as well as, seasonal variation in the price of staple grain crops, the relative price levels of other nutritious food, such as pulses, fruit and vegetables have not come down commensurately (Rahman, 2012). The staple grain supply approach through GR did lead to an increase in calorie availability, but diversity in the food system suffered (Headey et al., 2012; Thow et al., 2016). High relative price differences between staples and non-staples impeded the extent of diet diversification, especially for the poor. For example, the increasing price of legumes has been associated with a consequent decline in pulse consumption across all income groups (Kataki, 2002). Hence, while the GR was very successful in addressing calorie sufficiency, it failed to address micronutrient malnutrition, the problem of "hidden hunger" and dietary quality.

Despite the relative high price differentials, the supply responsiveness has been low for non-staple crops and livestock products. Fig. 1 shows the temporal decline in the per capita availability of coarse cereals and pulses. The persistence of GR era policies targeted towards staple grains hampers farmer incentives for the diversification of food production systems. Poorly developed markets for non-staples is also an important reason for the lower growth in their supply (Pingali, 2015). While government parastatals have focused on the procurement of staples, non-staple food supply depends largely on private sector investments in the agricultural markets and value chains, which continue to be low. Creating a "level policy playing field" that corrects the historical bias in favor of staple crops would improve incentives for diversification of production into non-staple foods. That however continues to be THE challenge facing India's food policy.

#### 2.2. Addressing food access through the Public Distribution Scheme (PDS)

With achievement of self-sufficiency in staple food crops at the national level, policy orientation moved towards ensuring food access at the household level (Radhakrishna, 2006). Public Distribution System (PDS), Integrated Child Development Scheme (ICDS) and the Mid-Day Meal Scheme (MDMS) are the three main pillars of the food based assistance programs in the country. According to an estimate by Narayanan and Gerber (2015), the central government's allocations to the ICDS, MDMS, PDS and Mahatma Gandhi National Employment Guarantee Act (MGNREGA) constitutes to about 1.7% of the Gross Domestic Product (GDP). Collectively, the total budgetary allocations in terms of proportions are quite small when compared to other low and middle income countries.

Under the PDS, rice, wheat, sugar and kerosene are provided to the consumers through a chain of Fair Price Shops (FPS) in the country. Although in most states the focus is primarily on staple grain access. Staple grains procured by the Food Corporation of India (FCI) from farmers in high productive environments, such as Punjab, are distributed through PDS outlets known as the Fair Price Shops (FPS) across the country. The PDS was considered a failure in terms of its coverage and escalating fiscal costs (Jha and Ramaswami, 2010; Ramaswami, 2002).

<sup>&</sup>lt;sup>2</sup> We are not discussing MGNREGA here because that is an employment program. Though MGNREGA has potential impact on nutrition, we chose to ignore this for the present study since we are focusing on food based assistance schemes in this paper. For details, please refer to Narayanan and Gerber (2015).

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