

Pulses can restore India's nutrition needs

By: [Rajesh Shukla](#) | Updated: September 4, 2015 5:34 AM

Our pulses consumption has dramatically reduced from about 60 gm per person in 1951 to 37 gm right now, and there is an urgent need to reverse this

India's score on food security is nothing short of scandalous. Despite growing income and political stability—factors which are primary drivers of universal food availability—food security continues to be a major concern. The latest Global Food Security Index has ranked India at 66th position, much below China, which is at 38th position. The study also emphasises the low quantities of quality protein in India's food supply. The average per capita consumption of quality protein in India is 37 gm, compared to 47 gm in neighbouring Pakistan and 38 gm in Sri Lanka.

As countries rise up in the development hierarchy, food consumption as a share of household expenditure goes down. In high income countries, typically, this is around 20%. At an all-India level, the share of food to total household expenditure stands at almost 55% and the share of food to total income is 39% (ICE 360 Survey 2014). In fact, an analysis of the composition of food to non-food share of household expenditure over a 10-year period (2004-05 to 2013-14) reveals that the share of food has actually increased from 55% to 60% in rural India and 43% to 48% in urban India. In other words, the share of non-food expenditure has declined during this period from 45% to 40% in rural India and from 57% to 52% in urban India. This is against the general trend and the perceived belief that the share of food expenditure is declining. In fact, a primary cause for this is the high food inflation which has persisted over a long period of time.

Given that nearly 43% of all Indians are vegetarian (the urban-rural split is 48% versus 41%), pulses are an important protein source. Let's consider the impact of income growth on protein intake, which is one of the most significant markers in terms of nutritional health. Indians consume nearly 35-37% of pulses produced in the world. The composition of the food basket in 2013-14 has become slightly skewed towards cereals (29%), with protein share going down to 31% compared to a cereals-protein mix of 24% and 34% in the years 2007-12. As mentioned above, food price inflation is a major reason for this shift. Also, as a result of rising pulses prices, middle and lower income households have replaced expensive varieties with cheaper pulses, especially imported ones. It has also been observed that when prices stabilise, consumers move back to their original preferences.

Across all income categories, expenditure on protein foods is more or less the same. Thus, for the bottom 40% income households, 29-31% of their expenditure goes towards protein food compared to about 31-34% towards cereals. For the richest households, this is almost similar, at 31% for protein and 29% for cereals. In terms of actual spends, however, rich households (top 20% population) spend twice the amount (R32,460 annually) on protein foods compared to R16,063 for the lowest income

households (bottom 20%). The difference can be accounted for by the quality of food consumed as well as the price differential of food products in urban and rural areas.

On the bright side, the consumption of milk and milk-based products has gone up, and dairy consumption among rich and poor households in terms of actual expenditure is almost on par—second quintile households (bottom 21-40% population) spend about R9,048 on dairy products annually compared to R10,800 by the rich. Only the bottom most 20% households have a significantly lower spend on milk at R5,339 per annum.

So, while Indians are consuming more cereals and milk products, protein intake has not grown significantly. The primary reason is that pulses cultivation has not increased and the area under pulses production has remained at the 22-25 million hectares level for the last 40 years. On top of that, pulses cultivation has moved from favourable to marginal and poor-resources-endowed regions. Central India has become a major hub of pulses production and states such as Bihar and Jharkhand too contribute to pulses cultivation, while the major consumers of pulses are in the north and south India. Lack of access to innovation in processing and marketing, and the resource constraints of pulses farmers who mostly hail from the underdeveloped rural areas, are proving to be major obstacles—both in terms of improving agricultural yields and nutritional benefits of the population at large.

While the focus on increasing agricultural productivity and experimentation in yield improvement are good long-term strategies, in the short- and mid-term, interventions are needed to bring more farm land under pulses cultivation. Increasing the supply of protein-rich pulses and the consequent lowering of prices would go a long way in a balanced and protein-enriched diet of Indian families in rural as well as urban India. Greater involvement of the private sector in food processing and value-added protein products (such as humus, brownies and other value-added snacks) would also give a fillip to protein intake among urban youth.

Moreover, there is a need to create awareness about the importance of protein-intake among urban consumers as well as those residing in backward areas. A lot of myths exist in consumer minds which need to be addressed. A recent study among urban consumers revealed that the common perception is that higher protein intake would lead to weight gain. Only a fourth of the respondents were aware of the ideal protein requirement for an adult.

Information about balanced diet needs to be propagated through Prime Minister's "Mann Ki Baat" and other communication campaigns. Protein-enriched mid-day meals at schools could also prove to be a beneficial intervention. India can't be like China, which is dependent on animal-fat based protein for nutrition. The Indian approach would have to be largely geared towards pulses-based options. India's pulses consumption has dramatically reduced from about 60 gm per person in 1951 to 37 gm and there is an urgent need to reverse this.

Pulses consumption betrays a high level of price sensitivity and India's ongoing dependence on pulses imports will intensify over the next decade, as low domestic yields fail to keep pace with demand. An initiative that focuses on enhancing consumption of milk and dairy-based products would also be timely. The good news is that pulses already form a major component of the Indian diet and our

strengths in milk production can easily be harnessed to meet our nutritional requirements. With regional political will and focused policy-making, better nutrition targets need to be prioritised by setting achievable short-, medium- and long-term goals.

The author is director & CEO, People Research on India's Consumer Economy (ICE 360°)