How to Reform the NFSA?

The National Food Security Act (NFSA), passed recently by the Indian Parliament, offers 5 kg/person/month of cereals at highly subsidized prices to more than bottom two-third of the population. It has been rightly hailed as the largest welfare program ever undertaken in a country to provide nutrition and food security to its poor. Passed in an election year, it is supposed to deliver rich political dividends to the party of the government of the day, but the bill for the program will have to be footed by the future governments. Given its huge fiscal implications (estimated to be INR 1.15 lakh crore a year and rising), the future governments may have little option but to reform the program and make it better targeted and fiscally less burdensome.

According to Planning Commission estimates only 13.7% of the rural and 25% of the urban populations are below the official poverty line. Thus the programme covers both extremely poor and not-so-poor and those eligible can be divided into two groups: the not-so-poor who irrespective of the subsidy would consume at least 5kg/month of cereals and the extremely poor who would consume less than 5kg/month if no subsidy were available. Such a division of the people covered by the program is implied by the fact that cereals are a normal good, that is consumers with *higher* incomes consume *more* of the good, and thus it is the extremely poor who would consume less than 5kg/month in the absence of the subsidy.

A regressive subsidy

The subsidy available under the NFSA will impact welfare and consumption of the not-sopoor, who would consume at least 5kg/month even in the absence of the subsidy, in exactly the same way as direct unconditional income transfers equal to the cost of the subsidy, since they will substitute kg-for-kg their open market purchases of cereals with the subsidized cereals and use the cash so saved to purchase more of other goods such as edible oils, pulses, and vegetables etc. as well as some more of cereals. But the impact on the extremely poor, who would consume less than 5kg/month in the absence of the subsidy, will not be the same as that of direct unconditional transfers, since they will not be able to substitute their open market purchases with subsidized cereals to the same extent as the not-so-poor and therefore may have to consume less of other goods and more of cereals than they prefer. In other words, unlike direct unconditional income transfers, the price subsidy on a limited amount of 5kg/month of cereals does not allow the extremely poor as much flexibility in choosing their consumption bundles as it allows the not-so-poor. Reports that some recipients of the subsidized rice sell it off to flour mills at below market prices only reinforce this view as they are merely attempts to purchase a more preferred consumption bundle. A similar phenomenon has been reported in the case of free laptops provided by a state government to poor students. Some students were found to have sold off their laptops at below market prices in the open market soon after receiving them from the government. Obviously they did that to obtain a more preferred consumption bundle.

In sum, the price subsidy available under the NFSA has exactly the same impact on consumption and welfare of the not-so-poor as revenue neutral direct unconditional income transfer but not so in the case of the extremely poor. In fact, the extremely poor, who need help the most, will be better off if instead of the price subsidy they were given direct unconditional income transfers equal to the cost of the subsidy. (This can be confirmed more formally in a mathematical model of consumer choice.)

Thus the price subsidy available under the NFSA is regressive in the sense that it is equivalent to smaller direct unconditional income transfers for the extremely poor. This is true especially since the extremely poor in India are indeed very poor and would consume less than 5kg/month if the price subsidy were not available. The recent 66th round of the *National Sample Survey* discovered huge disparities in incomes and found that 10% of rural (urban) India lives on *less* than INR 453 (599) a month and some of them are really very poor. Thus replacing the price subsidy with revenue neutral direct unconditional income transfers would benefit the extremely poor more than the not-so-poor.

The same can be said in the case of the subsidy on cooking gas cylinders. Since cooking gas is also a normal good, the extremely poor, who in the absence of any subsidy would consume fewer gas cylinders than the number of cylinders on which the subsidy is available, would be better-off if instead of the price subsidy; they were given direct unconditional income transfers equal to the cost of the subsidy as was the government policy earlier. Government's recent decision to stop giving direct unconditional income transfers in place of the price subsidy on cooking gas regressive and would affect the extremely poor, but not the not-so-poor who would in any case buy at least as many gas cylinders as the number of cylinders on which the price subsidy is available. The government seems to have two justifications for abandoning the income transfers: first the poorest, even

in urban areas, do not have at present access to any financial services and second the open market price of gas cylinders has spiked.

The arguments above also imply that the price subsidy available under the NFSA is not regressive if incomes of even the extremely poor are high enough such that everyone would choose to consume *more* than 5 kg/month of cereals in the absence of the subsidy. In that case the price subsidy would impact consumption and welfare of every eligible beneficiary in exactly the same way as direct unconditional income transfers equal to the cost of subsidy, and the price subsidy, as a device for reducing hunger, would not achieve anything more than direct income transfers equal to the cost of the subsidy. Thus the impact of the price subsidy on welfare and consumption of cereals by the poor can be different from that of direct unconditional income transfer equal to the cost of the subsidy *only if* the price subsidy is regressive or equivalently only if consumption of cereals by at least some poor before the subsidy is less than 5 kg/month of cereals.

This regressive nature of the price subsidy made available under the NFSA seems to have escaped attention of experts and policymakers. E.g. Dreze and Sen in their book oppose price subsidies on diesel and petrol on the ground that they are regressive, but forcefully support the NFSA as if it were not. Actually it should be, since if it were not, then as argued above, it is equivalent to revenue neutral direct unconditional income transfers, but the government unnecessarily incurs huge costs of distributing cereals through the public distribution system (PDS). The case for direct unconditional income transfers in place of the price subsidy then becomes even stronger.

The coarse grains

To keep the arguments simple, the discussion above abstracted away from the fact that the price subsidy under the NFSA is available on three different varieties of cereals, namely, rice, wheat and coarse grains and one of them is not even a normal good. In fact, coarse grains, unlike wheat and rice, are an inferior good, that is consumers with *lower* incomes consume *more* of them, and consumed mostly by the extremely poor, who are habituated to an ancient diet. They are mostly cheaper than wheat and rice, but not less nutritious. In fact, a body of science asserts that some varieties of coarse grains are even more nutritious than wheat and rice. If the price subsidy were available *only* on an inferior good such as coarse grains then the same arguments as above also imply that the subsidy would not be regressive. Thus, restricting the price subsidy to coarse grains *alone* will work better from both fiscal and

equity points of view without compromising on the amount of nutrition made available. Taking note of some additional facts concerning coarse grains vis-à-vis wheat and rise only reinforces this view and suggests how the program may be reformed to make it more effective and better targeted.

The PDS currently depends to a great extent on production and procurement of wheat and rice. These two crops together constitute more than 78 % of yearly production of cereals whereas coarse grains constitute only 15 %. Production of coarse grains rose steadily during the period 1950 -1970, but from 1970 onwards, with the advent of the green revolution, the area under their cultivation started shrinking rapidly as government's pricing and procurement policies shifted heavily in favour of wheat and rice and farmers took the rational decision to grow more and more of these. However, the impact of green revolution - large increases in production and yield – seems to be now petering out for wheat and rice. In recent years rice output grew by around 5.5% a year and wheat by less than 1% a year. In comparison, coarse grains grew by nearly 20% a year despite a decline in the area under their cultivation as yields for coarse grains have been growing much faster. In addition, coarse grains, unlike rice and wheat which require lots of water to grow, are hardy and flourish in relatively dry weather. Policies (support prices, procurement, and distribution) to induce greater consumption of coarse grains can raise incomes of farmers in the arid zones lacking irrigation who have remained relatively poor as they could not benefit from the green revolution. Moreover, the nutrient contents of some coarse grains such as jowar, bajra, and ragi are not less than those of wheat and rice. In fact, they are richer in proteins, calcium, and iron and many poor are habituated to consuming them. Their consumption in place of wheat and rice can improve health as is being gradually realized. Thus there is every reason to promote production and consumption of these neglected grains.

The reforms

Since the price subsidy available under the NFSA is regressive, replacing it with revenue neutral direct unconditional income transfers would benefit the extremely poor more. Thus it seems natural to replace it with direct unconditional income transfers. However, there are significant challenges to rolling out income transfers at present which is unlikely to change anytime soon. At the minimum, the poorest must have access to bank accounts or other money solutions. Furthermore, direct unconditional income transfers, even if possible, may provide stronger incentives for graft and corruption as gains from that would be significantly higher than diverting subsidized cereals for sale in the unofficial market. Thus the number of people claiming eligibility and the fiscal burden may both go up. Furthermore, if the poor receive a fixed sum in place of physical transfers of food, their food security could be at risk if the prices of cereals spike in certain regions and seasons. In fact, the need for distributing cereals through the PDS came originally from government's objective to stabilize market prices and availability of cereals across regions and seasons. Subsidizing cereals as much as is being done now became a policy goal much later. Doing away with the PDS developed over five decades can destabilize the markets for cereals even today. Direct unconditional income transfers can also be criticised on the ground that there is no guarantee that they will indeed lead to higher food consumption by the poor. Given these concerns regarding direct income transfers, restricting the price subsidy to coarse grains *alone* will not only work better from both fiscal and equity points of view but also weaken the incentives for graft, since pilfering and fraudulently obtaining the relatively cheaper coarse grains would be significantly less rewarding but not less risky. Such a policy would also lead to better targeting and lower fiscal burden as many among the not-so-poor who do not really need the subsidy would voluntarily opt out of the program. It would effectively reduce the coverage to much less than two-third of the population. Moreover, coarse grains, though an inferior good, are not less, if not more, nutritious than wheat and rice.

Such a reform of the program, however, may be considered too drastic and politically unwise. Moreover, the amount of coarse grains currently procured and distributed through the PDS is miniscule. Therefore, restricting the price subsidy to coarse grains alone can be done only gradually. A start can be made by raising the entitlement for coarse grains to 6kg/person/month but keeping the entitlements for wheat and rice unchanged, if not reduced, as that would be more equitable and provide more food and nutrition to the extremely poor, who need help the most and prefer to consume coarse grains, without affecting those who have strong preferences for wheat or rice. Such a reform would not impose additional fiscal burden as the relatively higher entitlement for coarse grains would induce many beneficiaries to voluntarily switch to consuming them in place of the more costly to subsidize rice and wheat. Over time, as more and more people opt for subsidized coarse grains in place of wheat and rice and their cultivation, procurement and distribution through the PDS rise, the price subsidy would effectively become a subsidy on mainly coarse grains. This process can be accelerated by gradually reducing the price subsidy on wheat and rice from a suitable point of time onwards. That would induce the not-so-poor even more to voluntarily not avail the subsidy and eventually lead to a better targeted and fiscally less burdensome program. In addition, it would indirectly reduce poverty among the relatively poor farmers in arid zones.

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