

## Target agricultural subsidies

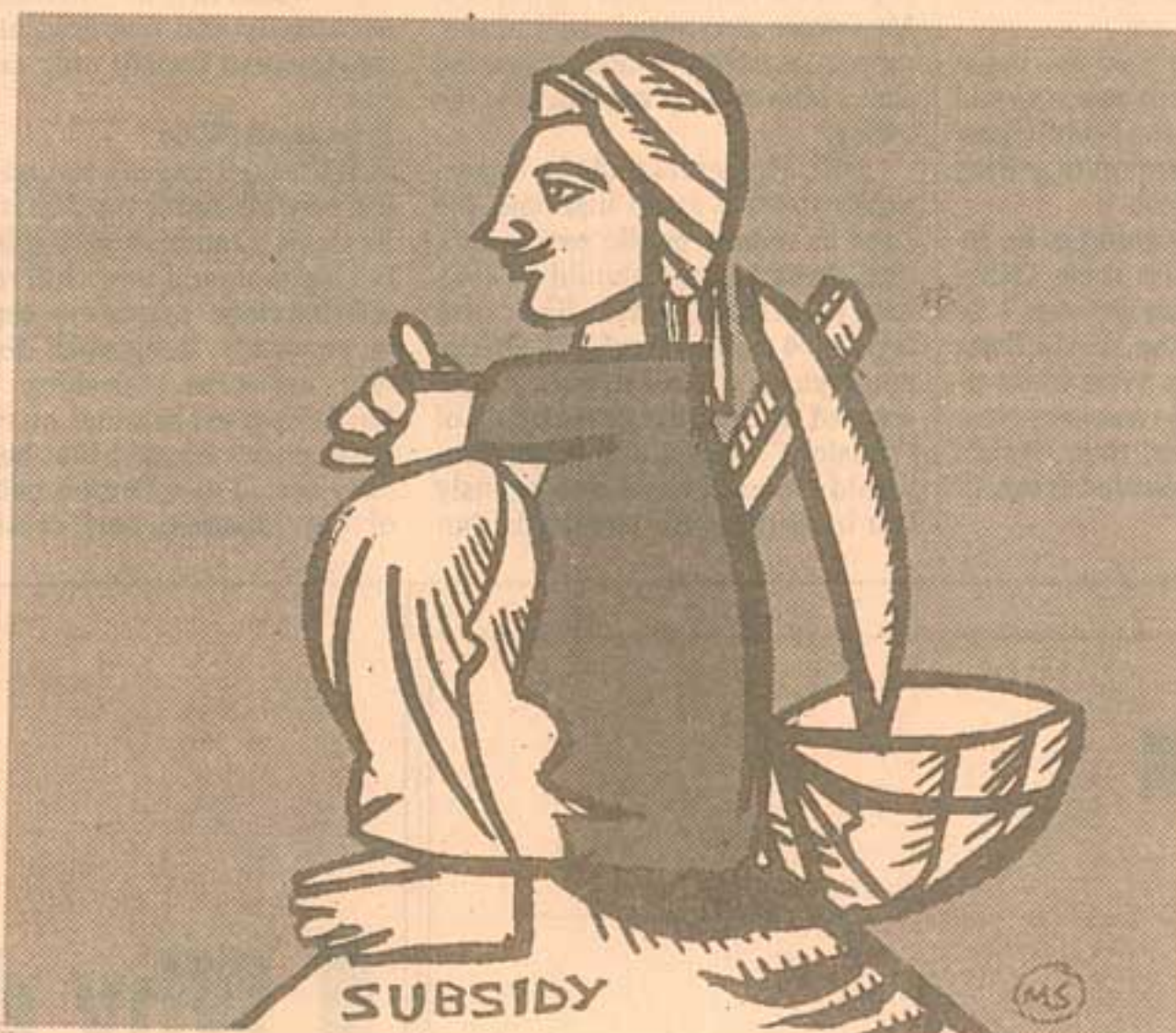
The question that is being posed often is whether the better off farmers really deserve subsidy on inputs? Are they entitled to it irrespective of their profitability calculus? Should they get it automatically just because a small and marginal farmer has to be supported? Or is it the fear of any misuse of target oriented subsidy that makes the government settle for giving subsidy to every one? These questions need to be answered to facilitate best use of tax payers' money and ensure equity. For this, it is necessary to study the economics of crop cultivation.

Consider a wheat growing farmer from Punjab. On one acre of cultivated land area, normally he would use 1-1/2 bag of DAP and one bag of urea for basal application and two bags of urea for top dressing. Putting together, these would translate to 82.5 kg of nitrogenous (N) and 34.5 kg of phosphatic (P) nutrient. Considering 2.5 acres make up one hectare, the nutrient requirement on a per hectare basis would be 206.25 kg 'N' and 86.25 kg 'P205'. Taking post decontrol selling price of P (through DAVP) at Rs 15 per kg without ad hoc subsidy and that of N at Rs 7.22 per kg corresponding to Rs 3,320 per tonne being the controlled selling price of urea, the total expenditure on fertiliser on one hectare would be Rs 2,779 or about Rs 2,800.

Add expenditure incurred by the farmer on other inputs; seeds 5 quintals at the rate of Rs 100 per quintal or Rs 500; irrigation Rs 600 (5 irrigations at the rate of Rs 120); labour Rs 1,800 (60 mandays including sowing and harvesting at the rate of Rs 30) and finally on pesticide i.e. Isoproturon Rs 300. These would aggregate to Rs 3,200. Together with fertilisers, the cost of cultivation would be about Rs 6,000 per hectare. It is not at all necessary to include the input towards the cost of land as for acquiring that piece of land, the farmer would not have incurred any initial investment. As regards mechanical implements or tractors, etc., the situation may vary depending on when the tractor was purchased and whether or not the farmer has already fully recovered the interest and the amortisation cost.

Now, consider an average yield of a wheat growing farmer in Punjab of about 4,000 kg per hectare and a price of Rs 3.75 per kg that he would realise, the consequential revenue from sale of the produce would be about Rs 15,000 (4000 x 3.75), thus yielding a net profit of about Rs 9,000. Even after making some allowance for repairs and maintenance of the agricultural machinery and implements or interest on loan (related to agricultural operation only) remaining uncovered, the profit margin available would still be substantial. On an an-

*Equity and sound economics demand a transparent system of targeting fertiliser subsidy, says Uttam Gupta*



nual basis, it might be argued, this number may look small. But, let us not forget, there is scope for multiple cropping which can multiply the earnings.

The economics of farmers growing commercial crop reveal even more startling facts. Consider a banana farmer from Maharashtra or UP or Bihar, on a one hectare farm (the actual holdings are much larger). The requirement of N, P and K on an average is 250, 150 kg and 1,400 kg respectively. On the basis of prevailing price levels Rs 7.22 per kg N, Rs 15 per kg P205 and Rs 8.0 per kg K20 (latter two without ad hoc subsidy), the total expenditure on fertiliser would be about Rs 15,000. Together with expenses on irrigation, labour, pesticides and spraying, the total cost of cultivation will not exceed about Rs 45,000. As against this, the yield per hectare is about 3,500 bunches (being the plant population and each bunch fetches a minimum of about Rs 50. The consumers paying at the rate of Rs 10 per dozen, shell out something like Rs 120-150 per bunch assuming at least 12-15 smaller bunches of a dozen each.

Even at Rs 50 per bunch, the farmer's revenue would be a staggering Rs

175 thousand (3500 x 50). And, given the cultivation cost of about Rs 45,000, this would leave a net profit of about Rs 1,30,000. Even after making allowance for any damages or losses in storage or transit, the profit margins would remain substantial. It may also be noted that the realisation for such sales is all cash which saves on interest cost besides enabling uninterrupted operations.

At the other end of the spectrum is a wheat growing farmer, say, from Eastern UP for whom the economics may not look that attractive. He would be using less than half the quantity of fertiliser that a farmer in Punjab would be using on an average. On a per hectare basis, the money spent on, say, 90 kg N, 45 kg P205 would be about Rs 1,200. Together with other inputs, total cost of cultivation would be about Rs 3,000. However, in his case, the yield is much lower at about 2,500 kg per hectare. Taking Rs 3 per kg as the selling price, the farmer's revenue would be only Rs 7,500. This, in turn, yields a net profit of about Rs 4,500.

Studies after studies have demonstrated that bigger farmers have been the major beneficiaries of subsidy even

though the small and marginal farmers may have also been supported in the process. And, yet no serious effort has been made to exclude the former from any subsidy dispensation. This is largely true of the ad hoc subsidy on decontrolled fertilisers. The problem arises mainly because the very fact of their being economically better off gets suppressed under the overall upsurge of sympathy for the agricultural sector on the whole. That the debate revolves mostly around the highly emotive food security issue, further helps to conceal these stark realities. Even worse is the articulation of the concerns of small and marginal farmers by the rich which result in the continuation of subsidies even for the latter and some times, for them only on a *de facto* basis.

The only alternative that addresses the needs of the weak farmers and excludes the rich from government support is a system of target oriented subsidy. Such a concept was tried in 1991-92 on a limited scale when the government exempted small and marginal farmers from 30 per cent increase in selling price of fertilisers. This experiment failed; the government abandoned the scheme the very next year. And, we got back to subsidy for all farmers. It is understood, that decline in consumption of P & K during 1992-93 and 1993-94 was caused mostly due to the weak farmers dispensing with use of P & K altogether. The net result was that only the better off benefitted.

Unfortunately, we have been caught in a mindset whereby either no subsidy is given to anyone or subsidy support is provided to all (of which the major slice is invariably concerned by the rich). A targeted subsidy that would help only the needy, is unacceptable because administratively either it cannot be implemented or we do not want to implement it. The first of the two alternatives might seem feasible within the evolving socio-economic milieu; second was in place for several years before the government tried the first when it initiated economic reforms in July 1991.

But, none of these is sustainable in the long-run, Subsidy dispensation for all farmers has already started cracking under the mounting pressure of the fiscal stabilisation programme. But Subsidy for none, not even the needy which is the inevitable outcome of a market oriented economy, would completely eliminate the weak, put mind-boggling strain on social security system and have unprecedented socio-economic repercussions.

So for equity considerations and for the purpose of economy, what is required is a transparent system of targeting the fertiliser subsidy.