Budget: A Retrograde for Agriculture

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According to the author, though the budget has some positive initiatives for agriculture, they are unlikely to pull the sector out of its poor growth in post-reform period. Moreover, the budget shows that the government expenditure for agriculture leaves much to be desired. Therefore, the author suggests that the budget could have had better inter-sectoral perspective for generation and allocation of resources to employment-led economic growth and alleviation of absolute poverty with which agricultural growth is complementary.

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Agriculture is the single largest private sector. Yet, it requires government investment as its development is crucially linked to infrastructure. Agriculture contributes about one-third of the national income and employs close to two-thirds of the country's workforce. Its exports account for about 22 per cent and imports constitute about 11 per cent. While crop-agriculture output contributes 72 per cent, livestock products and fisheries contribute 25 per cent and 3 per cent respectively to agricultural production.

Agriculture is small scale and largely weather dependent. But, neither of these has been a stumbling block to technological transformation that is occurring in agriculture, thanks to the farmers, agricultural scientists, and the past prudent supportive policies. Acceleration of technical change in agriculture is imperative because it averts a trap into Ricardo's Law of Diminishing Returns and increases production at reduced unit costs/prices in real terms. Agricultural growth is a means to larger goals of employment-led economic growth, poverty alleviation, and self-reliance. Thus, the national budget is an appropriate instrument to catalyse this role of agriculture.

Budgetary Initiatives

Some significant positive initiatives of the budget are as follows:

* Fresh equity for Regional Rural Banks (RRBs) and increase in the equity of National Bank for Agriculture and Rural Development (NABARD).
* Government investments in Accelerated Irrigation Benefit Scheme and the Ganga Kalyan Yojana of minor irrigation.
* Increase in fertilizer subsidy.
* Increase in food subsidy.
* Selective liberalization of agricultural commodity markets.
* Dereservation of some agro-processing industries.
* Reduction in some tariffs and excise duties.
* Broadening of the income tax base by including property owners and retail trade.

Appraisal of Initiatives

New/increased equity for rural financial institutions would broaden and enhance their services for agriculture. Increase in fertilizer subsidy unlike, say, irrigation investment will give much needed 'quick yielding' agricultural growth. But, the increase in food subsidy should have been aimed to enhance the coverage of Public Distribution System (PDS) for the needy rather than by selling foodgrains and sugar at half the issue prices to those living below the poverty line.

Liberalization of agricultural trade and reducing protection to (agro) industries and trade are likely to improve the (market) price environment for agriculture. But the two new irrigation investments are more a contribution by the state governments than by the centre. Moreover, the improved price environment is unlikely to infuse 'accelerated' agricultural growth impulses as it is constrained more by public and quasi-public goods like R&D, better seeds, irrigation-water, electricity, rural roads, etc. in whose case the market fails and/or works imperfectly. The Central Government expenditure proposed for agriculture under the budget is highly unsatisfactory to tackle these constraints adequately. What is further disturbing is that the present budget is a significant departure from the previous one in this regard. Indeed, it is a deviation from the government's Common Minimum Programme (CMP) relating mainly to infrastructure development and poverty alleviation. This does not augur well for the ensuing Ninth Plan for which the National Development Council has already accepted a target of 4.5 per cent growth in agricultural GDP.

Three highly critical deficiencies of the budget on government expenditure 'on' and 'for' agricultural and rural development are:

* Inadequate rise in government expenditure.
* Lower relative (i.e. per cent) share of government expenditure.
* Shift in the pattern of government expenditure from that on technological and economic factors to institutional constraints to agricultural development.

Before these are elucidated, it is essential to state what impact prices have on this development in addition to documenting what it has achieved in the post-reform period.

Aggregate agricultural supply response is long known to be price-inelastic. This is because of : (a) land supply being fixed, (b) resource specificity which makes crop-pattern being governed by agro-climatic factors in addition to demand conditions, and (c) initial lower input intensity. But, the supply elasticity for non-price factors is over three times larger than for the relative prices. And the growth of non-price factors is largely determined by the earlier stated public goods that increase total factor productivity. Inadequate growth in these goods even makes agricultural credit deliver little in the rural sector.[1]

Table 1 clearly shows that despite improvement in already favourable relative prices, growth in most of

Table 1 : Agricultural Performance in Pre- and Post-Reform Periods

Details	*Pre-reform 1986-87 to 1990-91*	*Post-reform 1991-92 to 1995-96*
1 Average of Index of Wholesale Prices of Agriculture to Index of Wholesale Prices of Manufacturing (Terms of Trade for Agriculture with Base: 1981-82)	110.40	113.80*
2 Annual Compound Growth Rate (per cent) in these Relative Prices for Agriculture	-1.57	-0.43*
3 Annual Compound Growth Rates (per cent) in		
3.1 HYV Area	4.23	3.89
3.2 Fertilizer Use	10.78	2.86
3.3 Gross Irrigated Area	3.94	2.40*
3.4 Electricity Use in Agriculture	13.99	12.29
4 Annual Compound Growth Rates (per cent) in		
4.1 Real Plan Expenditure on Agriculture and Rural Development in 1980-81 Prices	1.72	3.10
4.2 Real Plan Expenditure on Agriculture Alone in 1980-81 Prices	1.04	0.81
5 Annual Compound Growth Rates (per cent) in		
5.1 Real Total Institutional Rural Credit Issued during the Year	-2.12	5.80
5.2 Real Total Institutional Rural Credit Outstanding	2.16	1.56
6 Annual Compound Growth Rates (per cent) in		
6.1 Foodgrains Production Index	6.36	2.57
6.2 Non-foodgrains Production Index	8.60	4.44
6.3 Agricultural Production Index	7.69	3.34
6.4 Real Value Added (GDP) from Agriculture	6.29	3.70

* These are for four years as data for 1995-96 are not available. **Source** : See Notes 6.

the non-price factors and (hence) in agriculture in post-reform period was much lower than in the five years preceding reforms. And (absolute) poverty is alleged to have worsened.

The preceding discussion suggests that the price fundamentalism of the new economic policies cannot be the growth 'engine' of agriculture. On the contrary, it may even hurt poverty alleviation as higher farm prices are injurious to the poor just as lower agricultural growth is. Neutral (harmonious) prices are a better option to serve the complex goals of containing inflation and industrial costs, besides encouraging more conducive agricultural growth and reduction in poverty ratio.

Inadequate Rise in Government Expenditure

Increment in government expenditure 'on' agriculture proposed in the 1997-98 Budget over the 1996-97 Budget is just 8.7 per cent which compares poorly with the current inflation and its expectations (Table 2). More distressing is that the corresponding 'for' agricultural development is barely 3.6 per cent suggesting

Table 2 : Growth in Government Expenditure in Current Prices 'on' and 'for' Agricultural and Rural Development

Budget Periods	*Percentage Change in Government Expenditure*	
	*'On' Agriculture and Rural Development**	*'For' Agriculture and Rural Development***
1997-98 over 1996-97 (Budget)	+8.66	+3.60
1996-97 (Budget) over 1995-96 (RE)	+14.45	+15.40
1996-97 (RE) over 1996-97 (Budget)	-6.49	-11.46
1997-98 (Budget) over 1996-97 (RE)	+16.21	+17.01

* This includes plan expenditure on agriculture and allied activities, rural development, irrigation and flood control plus non-plan expenditure on fertilizer subsidy and food subsidy.

** This includes plan expenditure on fertilizer industry, power, petroleum, roads and bridges, foreign trade and export promotion, and export market development in addition to what is stated in the above footnote.

Source : Budget for 1996-97 and 1997-98, Ministry of Finance, GOI.

thereby that, in real terms, it is negative (see column 3 in row 1 in Table 2). But, what was budgeted in 1996-97 for both of these was much higher than the inflation (see row 2 in Table 2). Moreover, the increment in achievement in 1996-97 was far short of what was budgeted (see row 3 in Table 2). Indeed, it was so for both the government expenditure 'on' and 'for' agricultural and rural development. The former includes such agricultural infrastructure as research, extension, better seeds, irrigation-water, soil and water conservation, dairy development, and rural financial institutions. And the latter includes such public and quasi-public goods as roads, power, petroleum, and fertilizer industry in addition to the agricultural infrastructure illustrated above.

Lower Relative Share of Government Expenditure

This share for both the narrower and broader aspects of agricultural development in the 1997-98 Budget is lower compared to that in the 1996-97 Budget. Moreover, the achievement for the 1996-97 Budget was even further lower (Table 3). Relative neglect of agriculture is thus quite evident.

Table 3 : Relative (Per cent) Share of Government Expenditure 'on' and 'for' Agricultural and Rural Development in Total Plan and Non-plan Expenditure

Budget Periods	*Percentage Share in Government Expenditure*	
	*'On' Agriculture and Rural Development**	*'For' Agriculture and Rural Development***
1997-98	9.86 (25782.97)	19.31 (50499.05)
1996-97 (Budget)	10.01 (23728.30)	20.56 (48745.17)
1996-97 (RE)	9.86 (22187.38)	19.19 (43158.91)
1995-96 (RE)	10.10 (20786.94)	20.07 (41924.37)

* As in Table 2.

** As in Table 2.

Figures in brackets are Rs crore of government expenditure considering these two aspects of agricultural and rural development.

Source : As in Table 2.

Undesirable Pattern of Government Expenditure

Table 4 reveals a shift in government expenditure from technological and economic resources to institutional programmes like storage and warehousing, IRDP, and rural employment. This is so for both the 1997-98 Budget and the achievement under the 1996-97 Budget (compare first three rows in Table 4).

Larger allocations for such rural development programmes without integrating them with the development of agriculture and allied agriculture through research, extension, soil and water conservation, better seeds and feeds, irrigation, etc. would have much less impact on both agricultural growth and poverty alleviation. It seems that the United Front (UF) Government has the same deficiencies that the previous one had in this regard.[2]

Relative share and/or absolute amount of government expenditure on the basic agricultural infrastructure in addition to that on fertilizer industry, power, petroleum, export market development, and land reforms have declined or marginally increased or remained stagnant.[3] This may have been prompted by the approach of economic reforms that emphasizes larger role of the market and privatization. But, as stated earlier, neither the market nor the private sector would respond to invest in these public and quasi-public goods. This is because investments in such avenues are lumpy and have long gestation period, besides the fact that returns on them cannot be much internalized.

Concluding Observations

In conclusion, the budget for 1997-98 seems to generalize that rapid agricultural growth can be achieved through liberalization and market forces (even for public goods and services). Such a reliance may have also been preferred because, agriculture being a state subject, its needs for government investment should be fulfilled by the states.[4] However, this is contrary to what the budget itself has proposed by way of some of the positive initiatives stated earlier. Similar catalytic role of the centre is required for basic infrastructure for agriculture. It is in this context that we suggest

Table 4 : Pattern of Government Expenditure 'on' and 'for' Agricultural and Rural Development

	Budget Periods	Government Expenditure					
		'On' Agriculture and Rural Development*			'For' Agriculture and Rural Development**		
		Technological Factors[1]	Economic Factors[2]	Institutional Factors[3]	Technological Factors[4]	Economic Factors[5]	Institutional Factors[6]
		.... Percentage to Total					
1.	1997-98	5.06	40.15	54.79	2.58	68.17	29.25
2.	1996-97 (Budget)	5.33	44.02	50.65	2.60	71.41	25.99
3.	1996-97 (RE)	5.49	41.87	52.64	2.82	68.76	28.42
4.	1995-96 (RE)	5.17	35.30	59.53	2.56	66.91	30.53

* As in Table 2.

** As in Table 2.

[1] This includes plan expenditure on crop husbandry and agricultural research and education.

[2] This includes fertilizer subsidy, plan expenditure on major and medium irrigation, minor irrigation, command area development, soil and water conservation, animal husbandry, dairy development, fisheries, forestry, plantations, other agricultural programmes, and flood control and drainage.

[3] This includes food subsidy and plan expenditure on food, storage and warehousing, agricultural finance institutions, cooperation, special programmes for rural development, rural employment, land reforms, other rural development programmes, and other special area programmes.

[4] Same as in **[1]**.

[5] Same as in **[2]** plus fertilizer industry, power, petroleum, roads and bridges, and foreign trade and export.

[6] Same as in **[3]** plus export promotion and market development.

Source : Budget for 1996-97 and 1997-98, Ministry of Finance, GOI.

that the Finance Ministry could have been more selective and somewhat slow in its (direct) tax concessions. It could have even rationalized intra- and inter-sectoral allocation of resources.[5] Moreover, it could have raised more resources from agriculture and related industries by resorting to what is in its purview.

All this is justified because the Economic Survey itself clearly recognizes that what agriculture needs is more investment and new technology for the crops that are commonly grown. Neither the former nor the latter would much grow from market forces and privatization as public and private investment in agriculture are complementary. The budget proposals fail to recognize this basic doctrine of agricultural growth. They are also wanting in their inter-sectoral perspective as a strategy to raise resources and induce growth that will alleviate absolute poverty in the short run and more deeper poverty in the longer run. Time has come to prioritize the former rather than pursue mixed priorities that have little 'perceptible' dent on either growth or poverty. Agricultural (like economic) reforms are besieged with policy instruments rather than strategy of technical change that is both seed and resource-centered.

Notes

1. Agricultural growth through increased total factor productivity results into higher production at reduced unit-costs/prices in real terms which benefit the poor most. Post-Green Revolution (GR) experiences suggest that this has occurred for wheat, rice, maize, and foodgrains in general. Moreover, agricultural employment elasticity in post-GR was 1.37 per cent compared to 0.52 per cent earlier. Thus, a clear policy lesson is to sustain this process by according the highest priority to the growth of public goods and services.

2. For more details, see, Desai, Bhupat M and Namboodiri, NV (1997). "Government Expenditure on Agriculture under Planning Era," in Desai, Bhupat M (ed), *Agricultural Development Paradigm for the Ninth Plan under New Economic Environment*. Oxford & IBH, New Delhi.

3. This even includes irrigation projects in whose case the budget has reduced the allocation by over 60 per cent. If the earlier referred investment in two irrigation schemes is considered, then the increase is just about 6 per cent. In comparison with what the 1996-97 Budget proposed, these represent a 'decline' of 74 and 15 per cent, respectively.

4. But the same does not seem to result as is evident from the 1997-98 Budget of the Gujarat State which envisages 43 per cent of outlay on agricultural and rural development as compared to over 49 per cent in 1996-97. The corresponding figures that include energy are 57 and 64 per cent.

5. For some illustrations on this for Gujarat see, Desai, Bhupat M and Namboodiri, NV (1997). "Developing Agriculture in Gujarat: A Strategic Perspective for the Ninth Plan," *Economic and Political Weekly*, 32:13, March 29-April 4, 1997.

6. Updated from Desai, Bhupat M and Namboodiri, NV (1997)."Strategy and Sources of Growth in Crop-agriculture," in *Agricultural Development Paradigm for the Ninth Plan under New Economic Environment*, see Notes 2.