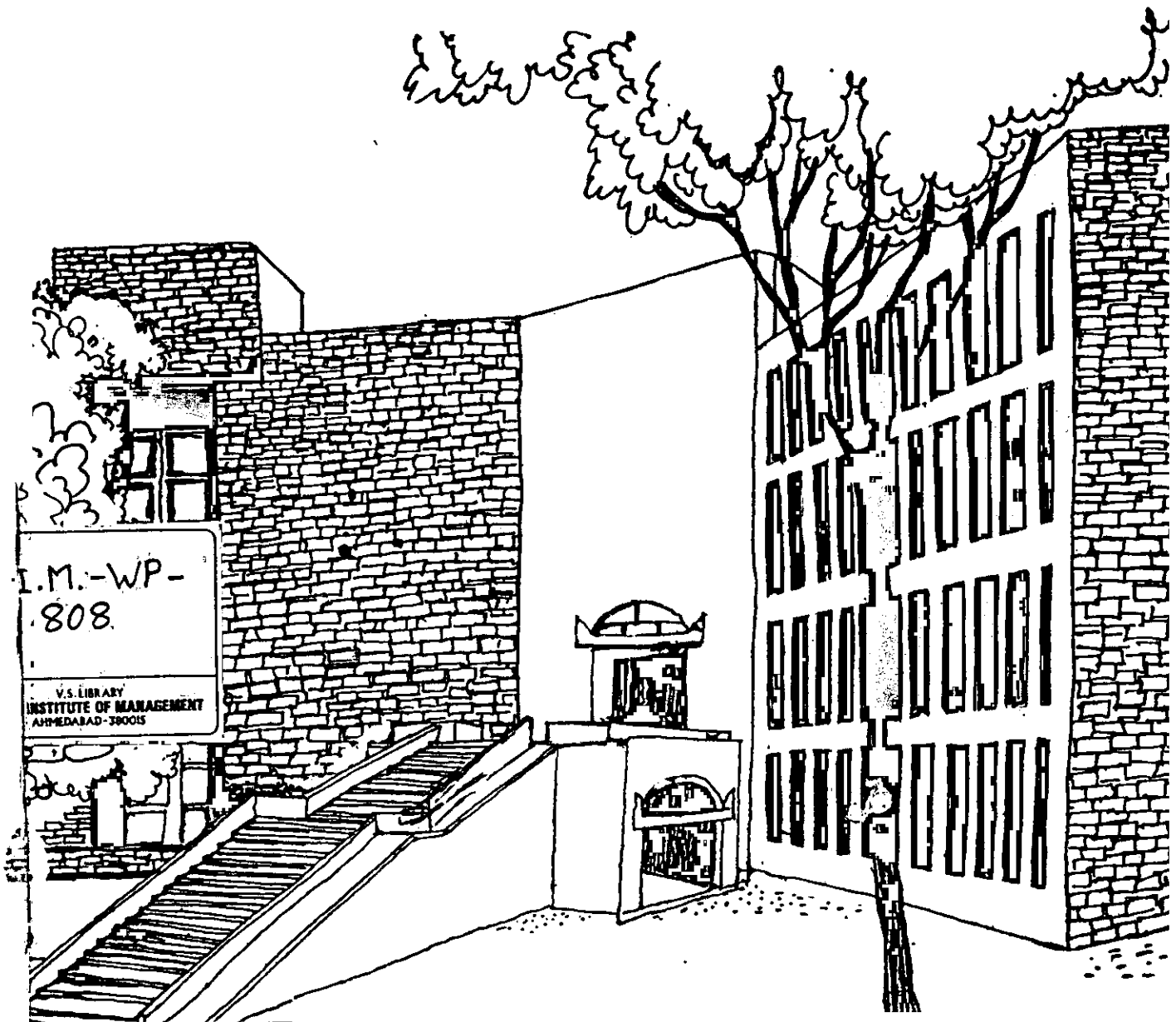




# Working Paper

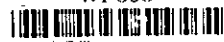


PUBLIC FINANCE ASPECTS OF  
INDIAN AGRICULTURE

By

Anand P. Gupta

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# PUBLIC FINANCE ASPECTS OF INDIAN AGRICULTURE\*

By

ANAND P. GUPTA

## 1. Introduction

A much disturbing aspect of Indian agriculture relates to its relatively small contribution to the country's public sector funds. Another equally, if not more, disturbing aspect of Indian agriculture relates to its rapidly growing demands on the country's public finances. This paper first reviews both of these aspects and then addresses itself to the issue of what may happen if things on the two fronts in question keep on going the way they currently are.

## 2. Agriculture's Contribution to Public Sector Funds

The agricultural sector contributes to public sector funds in a variety of ways: agricultural income tax, land revenue, plantation tax, stamp duty and registration fee, customs duties, central excise duty, state excise duty, central sales tax, state sales tax, taxes on vehicles, taxes on goods and passengers, entertainment tax, market fees, contribution of public enterprises in the agricultural sector,<sup>1</sup> and so on. Although estimates of these sources' contribution to public sector funds are not readily available, it can be asserted that Indian agriculture is undertaxed and that this is wholly due to political reasons.

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\*This is the first draft of material prepared for inclusion as a chapter in the forthcoming second edition of Indian Society of Agricultural Economics' Indian Agricultural Development Since Independence.

Take, for instance, the Indian Income Tax Act of 1961. Under the current provisions of this Act, an individual earning non-agricultural income is liable to pay income tax when his taxable income in a year exceeds Rs.18,000, and the marginal rate increases progressively from 20 per cent with the size of the taxable income, reaching a maximum of 50 per cent on income exceeding Rs.100,000. In addition, an individual with taxable income exceeding Rs.50,000 is liable to pay an 8 per cent surcharge on income tax. Thus, if an individual makes an income of Rs.20,000, his income tax liability amounts to Rs.400. In case he makes an income of, say Rs. 120,000, he ends up paying as much as Rs.42,012 by way of income tax and surcharge.<sup>2/</sup> But the story is entirely different when it comes to tax on agricultural income.<sup>3/</sup> In terms of Section 10(1) of the Income Tax Act, agricultural income is exempt from tax. Under the Constitution of India, the power to tax agricultural income vests exclusively with the States. And as things stand at present, the States have not done much to tax agricultural incomes, with the result that the total collections on account of agricultural income tax do not add up to much: Total revenue from agricultural income tax amounted to Rs.99.5 crore in 1988/89, which works out to only 1.3 per cent of the revenue from non-agricultural income tax in that year.

Only seven States tax agricultural incomes, with only two of them accounting for over 70 per cent of the total revenue. States like Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Orissa, Punjab, Rajasthan and Uttar Pradesh do not raise any money by way of agricultural income tax. Table 1 provides the details.

Table 1

STATE-WISE NET DOMESTIC PRODUCT, INCOME FROM AGRICULTURE AND  
COLLECTIONS ON ACCOUNT OF AGRICULTURAL  
INCOME TAX

(Rs. crore)

States	Net Domestic Product at Current Prices (1986/87)	Income from Agriculture at Current Prices (1986/87)	Collections on acco of Agricultural Inc Tax (1988/89, budge estimates)
Andhra Pradesh	13,883	5,692	-
Assam	5,259	2,666	50.00
Bihar	14,184	6,454	-
Gujarat	12,279	3,684	-
Haryana	5,897	2,842	-
Himachal Pradesh	1,382	549	-
Jammu & Kashmir	1,614	590	-
Karnataka	10,381	4,163	10.50
Kerala	6,681	2,599	20.97
Madhya Pradesh	11,897	5,366	-
Maharashtra	26,718	6,279	0.75
Manipur	416	206	-
Orissa	5,708	3,710	-
Punjab	8,931	4,653	-
Rajasthan	8,556	4,483	-
Tamil Nadu	14,493	3,362	8.80
Tripura	546	362	0.03
Uttar Pradesh	26,731	13,178	-
West Bengal	18,203	7,682	8.40

Source: Based on data from various sources.

One may argue that tax burden on agricultural incomes in India is not as low as the data on State agricultural income tax collections suggest. In addition to State agricultural income tax, agricultural incomes in India, it may be argued, also bear the burden of tax levied as the result of a provision, introduced in 1973, which provides for inclusion of net agricultural income of individuals, Hindu undivided families, other association of persons, etc., in their total income for determining the marginal rate of tax applicable to taxable non-agricultural income. This takes effect only if a taxpayer has taxable non-agricultural income exceeding the exemption limit. In determining the marginal rate of tax applicable to non-agricultural income, the agricul

and non-agricultural incomes are combined in the following manner and order: (1) the initial exemption allowed out of non-agricultural income; (2) agricultural income; and (3) balance of non-agricultural income. The amount of income tax payable by a tax-payer is calculated in the following manner: (1) the agricultural and non-agricultural components of a tax-payer's income are first aggregated and income tax calculated on the aggregate as if such aggregate is the total income; (2) income tax is then calculated on the net agricultural income as increased by an amount equal to the initial exemption, as if such increased net agricultural income is the total income; (3) the amount by which the income tax calculated under (1) exceeds the amount calculated under (2) is the income tax payable by the tax-payer.

To illustrate the operation of the provision, if an individual earns during the fiscal year 1989/90 an agricultural income of Rs.25,000 and a non-agricultural income of equal amount, he will be liable to pay income tax of Rs. 2,100. If his non-agricultural income

is Rs. 25,000 and he earns nothing as agricultural income, his income tax liability will amount to Rs.1,400. On the other hand, if his non-agricultural income is Rs.50,000 and he earns nothing as agricultural income, he will be liable to pay income tax of Rs.8,900.

This provision has not made much of a difference to the picture of tax burden on agricultural incomes in India. The rate of tax (indirectly) applicable to agricultural income as a result of this provision, as can be gathered from the foregoing illustration, is much lower compared to that applicable to non-agricultural income. What is more, the provision has not been of much help in enhancing resource mobilization from the agricultural sector: The additional revenue attributable to the provision amounted to Rs.4 crore in 1974/75, Rs.4.4 crore in 1975/76 and Rs.4.6 crore in 1976/77 (data relating to more recent years are not readily available). One wonders why the Government of India, in the face of all this, continues to provide for inclusion of agricultural income in total income for determining the rate of tax applicable to taxable non-agricultural income.<sup>4/</sup>

One may point out that the provision regarding inclusion of agricultural income in total income was thought of in response to the need to check large scale tax evasion by those who, in order to reduce their income tax liability, used to show a good part of their incomes as agricultural income, and that it was not intended to be a revenue-raising provision. Given the fact that the revenue attributable to the provision does not amount to much, does this mean that the provision has been effective in checking the misuse of the tax expenditure provision relating to exemption of agricultural income from income tax (Section 10(1) of the Income Tax Act of 1961)?



But what about the possibility of people arranging their affairs such that almost all the income they make is shown as agricultural income and practically nothing is reported as non-agricultural income? Given the not-too-happy performance on the front of collections on account of income tax<sup>5/</sup>, the probability of this happening on a fairly large scale cannot be easily ruled out.

The upshot of all this is thus clear: income earners belonging to the higher strata in the agricultural sector pay either no tax or much less tax than those in comparative strata deriving their income from non-agricultural sources.

### 3. Agriculture's Demands on Public Sector Funds

The agricultural sector has been a major user of public sector funds. It demands public sector funds for a variety of activities: agricultural research, training and extension; irrigation; soil testing; development of new seeds; supply of fertilizers at subsidized prices; provision of agricultural finance at subsidized interest rates;<sup>6/</sup> writing-off of agricultural loans;<sup>7/</sup> waiving of recovery on account of lining of water courses;<sup>8/</sup> supply of electric power at subsidized rates; financing losses under the comprehensive crop insurance scheme;<sup>9/</sup> and so on. There is reason to believe that of Indian agriculture's various demands on the country's public sector funds, agricultural subsidies account for a substantial proportion.

#### 3.1 Agricultural Subsidies

Although subsidies have been used as a major instrument for achieving the various objectives set for the agricultural sector, one does not know much about the level and composition of these subsidies. Data on agricultural subsidies are presently compiled

and issued by the Central Statistical Organisation (CSO),<sup>10/</sup> Ministry of Finance<sup>11/</sup> and several state governments.<sup>12/</sup> But these arrangements suffer from two major deficiencies. First, the methodologies used by these agencies differ, with the result that their subsidy estimates do not tally. Second, none of these agencies publishes a complete list of all agricultural subsidies, with the result that most people are not even aware of the existence of several subsidies. Very few people, for example, seem to know that state governments also provide fertilizer subsidies, the general impression being that it is only the central government which provides fertilizer subsidies.

As per the latest available CSO data, the subsidies given by the central and state governments totalled Rs.11,756 crore (3.5 per cent of GDP) in 1987/88. Of this, agriculture, forestry, fishing and hunting accounted for Rs.5,672 crore (1.7 per cent of GDP). It must be noted rightaway that these figures do not fully reflect the magnitude of subsidies currently being provided by the central and state governments in India. The reason for this lies in the CSO not taking into account the various hidden subsidies - hidden in the sense that in official documents they get covered under heads other than subsidies rather than explicitly listed as subsidies. Electricity and irrigation subsidies are obvious examples of such subsidies.

Of the various agricultural subsidies, hidden or otherwise, the major ones include: central fertilizer subsidy, state fertilizer subsidies, electricity subsidy and irrigation subsidy. These are discussed in some detail in Sections 3.1.1 - 3.1.4 below.

### 3.1.1 Central Fertilizer Subsidy

Of the various agricultural subsidies, the fertilizer subsidy provided by the central government is by far the largest - Rs. 3,651 crore (0.9 per cent of GDP) estimated for 1989/90, up from Rs.505 crore (0.4 per cent of GDP) in 1980/81.<sup>13/</sup> Most of the central fertilizer subsidy is currently on account of domestically produced fertilizers, with imported fertilizers accounting for only 14.5 per cent of the 1989/90 subsidy, down from 66.3 per cent of the 1980/81 subsidy.

The subsidy on domestically produced fertilizers is substantially more than that on imported fertilizer because of two reasons. First, domestically produced fertilizers account for a substantial proportion of the total availability of fertilizers - 86 per cent in 1988/89, up from 51.7 per cent in 1980/81. Second, average subsidy on domestic fertilizers is currently much higher than that on imported fertilizers: in 1988/89, average subsidy on domestic fertilizers worked out to Rs.3,198 per nutrient ton, against Rs.1,783 per nutrient ton on imported fertilizers; in 1980/81, the two figures were Rs.566 per nutrient ton and Rs.1,214 per nutrient ton, respectively. In other words, between 1980/81 and 1988/89, whereas the average nominal subsidy on imported fertilizers has risen by 46.9 per cent, that on domestically produced fertilizers has jumped by as much as 465 per cent.

One may ask: Why has the subsidy on domestic fertilizers risen at such a rapid rate? A good part of the answer to this important question lies in the substantial increases

in the various items of costs involved in producing fertilizers in India. Take, for example, the costs associated with the use of gas as a feedstock for producing fertilizers. With the natural/associated gas prices revised upwards beginning February 1, 1987 to reflect its economic value (gas is valued at its fuel oil equivalent value), the costs associated with the use of natural/associated gas for producing fertilizers have gone up substantially - by nearly 500 per cent. Under the Government of India's Fertilizer Retention Price Scheme,<sup>14/</sup> higher fertilizer production costs, resulting from upward revisions in the prices of inputs, including natural/associated gas, get reflected in higher retention prices payable to fertilizer producers. With the Government of India-administered consumer prices of fertilizers having remained unchanged since July 1981, the implications of substantially higher retention prices for average fertilizer subsidy are obvious.<sup>15/</sup>

One may now ask: How much of the present central fertilizer subsidy is to the agricultural sector? The answer to this question depends on the economic cost of potential fertilizer imports. With the current not-so-low international fertilizer prices (e.g., urea prices ranged between US\$ 113-123 per material ton in April 1989), average insurance and freight of about US\$ 25 per material ton of fertilizers, an exchange rate of US\$ 1 = Rs.16, a tariff of, say, 25% to reflect the scarcity value of foreign exchange, and port handling, internal transportation costs, etc. estimated (by Fertilizer Association of India) at Rs.1,000 per material ton of fertilizers, the economic cost of potential urea imports can be put at Rs.3,860 per material ton. This means that, with the net

realization from the sale of urea currently at Rs.2,210 per material ton (consumer price of Rs.2,350 per ton minus average distribution margin of Rs. 140 per ton) and with the average 1988/89 subsidy on domestically produced fertilizers estimated at Rs.3,198 per nutrient ton, or Rs.1,471 per material ton, the entire central fertilizer subsidy can be said to be currently accruing to the agricultural sector.<sup>16/</sup>

### 3.1.2 State Fertilizer Subsidies

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A striking feature of the state government fertilizer subsidies is their variety. In some states, such as in Himachal Pradesh and the states of the north-east, the government gives 100 per cent subsidy on transport of fertilizers beyond points covered under the central fertilizer subsidy scheme. Subsidies are also given on the central government-announced consumer prices of fertilizers, for certain categories of farmers, for certain districts, crops, or for certain quantities. For example: The Government of Haryana has recently announced a 50 per cent subsidy on urea to farmers who suffered 50 per cent damage to their kharif 1988 crops; for other farmers, the subsidy rate is 6.2 per cent.<sup>17/</sup> And the Government of Uttar Pradesh has announced a 7.5 per cent rebate on the sale of urea to all farmers.<sup>18/</sup>

Precise data on the total fertilizer subsidy given by all the state governments are not available, but a recent compilation of partial data shows that fertilizer subsidies provided by the Governments of Haryana, Himachal Pradesh, Maharashtra, Punjab and Uttar Pradesh alone amounted to Rs.88.6 crore in 1985/86.<sup>19/</sup> This is a substantial sum.

### 3.1.3 Electricity Subsidy

There is a widespread practice in India of substantial underpricing of electricity for agricultural purposes. In Tamil Nadu, for instance, the cost of supplying one unit (Kwh) of electricity to agriculture was 87.49 paise in 1984/85, against which the average sales realization was only 10.50 paise per unit.<sup>20/</sup> Given that agricultural electricity consumption accounts for a substantial proportion of total electricity consumption (52 per cent in Haryana, for example<sup>21/</sup>), and given the declining trend in the ratio of average sales realization to cost of supplying electricity to agriculture (from 29% in 1980/81 to 12% in 1984/85 in Tamil Nadu, for example<sup>22/</sup>), the amounts currently involved in agricultural electricity subsidy at the all-India level are bound to be substantial. This is especially so if account is taken of the current estimates of long run marginal cost of supplying electricity to agriculture.<sup>23/</sup>

Precise estimates of electricity subsidy to Indian agriculture are not available, but if commercial losses of various state electricity boards in the country are taken as a proxy, the subsidy can be put at Rs.3,247 crore (0.8 per cent of GDP) in 1989/90, up from Rs.590 crore (0.4 per cent of GDP) in 1980/81.<sup>24/</sup>

### 3.1.4 Irrigation Subsidy

Public spending on irrigation comprises (a) investment spending on minor, medium and major irrigation projects, and (b) operation and maintenance spending on various irrigation projects. Although information on irrigation spending in

accordance with this classification is not available, it is a well-known fact that irrigation is the principal investment in Indian agriculture: plan spending on irrigation amounted to Rs.3,858.7 crore in 1988/89 (budget estimate), up from Rs.1,777.3 crore in 1980/81;<sup>25/</sup> information on non-plan spending on irrigation is not available, but given the large area under public irrigation in the country and given the wage and other costs involved in operating and maintaining public irrigation systems, the total non-plan spending on irrigation is bound to be substantial.<sup>26/</sup>

Access to irrigation facility benefits farmers in several ways - for example, it enables them to enhance crop yields and intensity of cropping as also to raise higher-value crops. Given this, there is a strong case for making farmers pay 100 per cent of their share of both development and recurrent costs.<sup>27/</sup> They can be made to do so either through some existing tax instruments (e.g., land revenue) or through instruments (e.g., water charges) that may be explicitly instituted for the purpose, or through a combination of both. Unfortunately, this is not being done in India: The total receipts from the irrigation systems currently in place do not cover even the actual maintenance costs which themselves fall far short of requirements for the proper upkeep of irrigation systems. Take the Tamil Nadu case, for example. During the period 1976/77 to 1980/81, the total receipts from commercial surface irrigation in that state added up to only 49 per cent of the actual maintenance costs, with the figure for non-commercial surface irrigation being a mere 26 per cent.<sup>28/</sup>

Given the above state of affairs, the irrigation systems are bound to incur huge losses, and thus be a major burden on public sector finances. According to the available official data, commercial irrigation losses budgeted for 1988/89 added up to Rs.1,546.4 crore (0.4 per cent of GDP), up from Rs.324.6 crore (0.2 per cent of GDP) in 1980/81.<sup>29/</sup>

These figures, however, do not tell the full story - the actual losses may be substantially higher. There are at least three reasons for this. In the first place, the above figures relate to commercial losses of departmental public enterprises in the irrigation sector (e.g., Uttar Pradesh Irrigation Department). Although one is not sure of how these enterprises compute their losses, there is reason to believe that the cost of capital taken into account by these enterprises for computing their commercial losses is substantially lower than the market cost of capital funds. Second, non-commercial irrigation is also a losing activity; the losses involved here also may be substantial. Third, the irrigation sector also comprises many loss-making non-departmental public enterprises (e.g., Irrigation Development Corporation of Maharashtra and Punjab State Tubewells Corporation). Obviously, such losses should also be taken into account for determining the total irrigation losses.

The message is thus loud and clear: Publicly-financed irrigation in India is a highly-losing activity. Of course, one may argue that the losses are high partly because of the various abuses of the system such as widespread leakages from irrigation funds and extortions from farmers for allocation of water.<sup>30/</sup> But how does one explain the emergence of such abuses? It seems the answer lies in the



incentives created by the regime of open-ended irrigation subsidies and the consequent lack of financial accountability.

4. Major Risks Associated with the Current Regime of Open-ended Fiscal Favours to Agriculture

Table 2 puts together data on central fertilizer subsidy, electricity subsidy, irrigation subsidy, and collections from agricultural income tax and land revenue for 1980/81, 1985/86, and 1988/89. Although these data suffer from certain major limitations (e.g., the data on irrigation subsidy do not reflect any adjustments for subsidy attributable to indirect beneficiaries of irrigation facilities), they nevertheless serve a very useful purpose: they help one draw a fairly realistic picture of what agriculture is doing to Indian public sector finances and, what is more, of the likely scenario if things keep on going the way they are. The data, for example, reveal that just three items of public spending on agriculture - central fertilizer subsidy, electricity subsidy, and irrigation subsidy - account for nearly one-fourth of the increase in India's public sector deficit in recent years. The contribution of the agricultural sector to recent increases in India's public sector deficit, if other such items (e.g., credit subsidy, crop insurance losses, state fertilizer subsidies) are taken into account, will turn out to be far more daunting.

It seems that a vicious circle has already set in. The policy-makers have justified agricultural subsidies on the ground of the country's poor's inability to pay market prices for food. But subsidies, by promoting inefficiencies in the use of inputs, have had the effect of raising input intensity of farm output and thereby of raising the costs of food production. This, in turn, has led to demands for more fiscal favours. What is more, the regime of subsidies has also encouraged rent-seekers to get what

Table 2

CENTRAL FERTILIZER SUBSIDY, ELECTRICITY SUBSIDY,  
IRRIGATION SUBSIDY, AND COLLECTIONS FROM  
AGRICULTURAL INCOME TAX AND LAND REVENUE,  
SELECTED YEARS

(Amount in Rs. crore)

Particulars	1980/81	1985/86	1988/89
1	2	3	4
1. Central fertilizer subsidy	505	1,923	3,250
2. Electricity subsidy	590	1,545	2,702
3. Irrigation subsidy	325	872	1,546
4. Total of 1 to 3	1,420	4,340	7,498
5. Collections from agricultural income tax	46	127	99
6. Collections from land revenue	157	353	521
7. Total of 5 and 6*	203	480	620
8. Total current (tax and non-tax) revenue of the Central and State Governments and Union Territories	23,189	50,810	75,046
9. Public sector deficit	9,346	22,428	34,223
10. 4 as per cent of 8	6.1	8.5	10.0
11. 4 as per cent of 9	15.2	19.4	21.9
12. 7 as per cent of 8	0.9	0.9	0.8

\*Some states have delegated powers to the local bodies to levy some taxes on the agricultural sector. In Maharashtra, for instance, Zila Parishads have imposed cess on land revenue. Information on the amounts raised through such instruments is not available.

Source: Compiled from data available from various sources.

they can from the system, with politicians seeking high-profile new projects, not proper maintenance of existing systems, and farmers employing political pressures to get what giveaways they can, rather than organizing for improved agricultural extension services. All this has contributed to rapidly-rising fiscal outgoes.

The above vicious circle urgently needs to be broken; otherwise it will keep pushing India inexorably towards a situation of rising public sector deficits - a situation which may pose the following major risks, or a combination of them, for the Indian economy during the 1990s: substantially higher real interest rates, crowding out of some investment, lower growth rates, debt trap, substantially higher inflation rates, and excessive external debt service burdens.

#### Notes

- / There are a large number of public enterprises in the agricultural sector. Of these, some (e.g., National Fertilizers Limited) contribute to public sector funds through corporation tax, dividends and internal resources.
- / On account of numerous tax expenditure provisions (e.g., sections 80C, 80CC, 80L), the actual progression is much less steep than what the nominal rate structure suggests.
- / According to Section 2(1) of the Income Tax Act, agricultural income means any income derived from any land which is situated in India and is used for agricultural purposes, and includes any income derived from any building situated on or in the immediate vicinity of any such land.
- 4/ The Finance Bill each year contains a provision regarding inclusion of agricultural income in total income for determining the rate applicable to taxable non-agricultural income. For instance, this is what the Memorandum Explaining the Provisions in the Finance Bill, 1989 says on this practice: "As in the past, the Finance Bill provides that in the case of individuals, Hindu undivided families, other associations of persons, etc. the net agricultural

income will be taken into account for the computation of "advance tax" and charging of income tax. These provisions are broadly on the same lines as those in earlier years."

- 5/ The revenue from income tax (other than corporation tax) has grown from Rs.625 crore in 1972/73 to Rs.3,660 crore in 1988-89. However, as per cent of GDP, it has declined from 1.3 per cent in 1972/73 to 1 per cent in 1988/89.
  - 6/ The Government of Karnataka, for example, is reported to be liable for payment of an interest subsidy of Rs.74 crore to Farmers' Cooperative Societies. (See The Hindustan Times (New Delhi), May 25, 1989.)
  - 7/ For example, the Government of Maharashtra has recently relieved farmers in Maharashtra of debts totalling Rs.219.7 crore. It has also decided to freeze farmers' outstanding cooperative bank loans totalling Rs.290 crore, with the farmers now being required to repay these loans in ten equal instalments without incurring fresh interest. (See The Hindustan Times (New Delhi), November 8, 1988.)
  - 8/ The Government of Haryana has recently waived the entire recovery on account of lining of water courses. This has meant a loss of Rs.113 crore. (See Government of Haryana, Speech of Shri K.S. Chhokar, Finance Minister, Haryana, Presenting the Budget Estimates for the year 1987/88, to the Haryana Vidhan Sabha, Chandigarh, March 2, 1987, p. 23.)
  - 9/ The comprehensive crop insurance scheme, introduced in April 1985, is run jointly by the central and state governments, with the General Insurance Corporation of India operating as the implementing agency. Losses reported for the first four years (1985/86-1988/89) of the scheme's operation have totalled about Rs.530 crore. (See The Economic Times (New Delhi), June 1, 1989.)
- CSO
- 10/ The data on subsidies appear regularly in its National Accounts Statistics (annual).
  - 11/ For the data on subsidies compiled by the Ministry of Finance, Government of India, see its Indian Economic Statistics: Public Finance (annual).
  - 12/ Several State Governments regularly publish documents giving economic/economic and functional classifications of their budgets. These documents contain data on subsidies. In addition, the Government of Maharashtra has begun putting before its legislature a detailed document on the subsidies it provides. It has so far issued two such documents.
  - 13/ These figures make no adjustment for the poor performance of central public enterprises in the fertilizer sector. Central public enterprises account for 61 per cent of the total fertilizer output in the country, with some (e.g., Fertilizer Corporation of India) reporting huge losses and some (e.g., Rashtriya Chemicals & Fertilizers Limited (RCFL) reporting inadequate profits (See Anand P. Gupta, "RCFL's Performance", The Economic Times, March 14-15, 1989). If an adjustment is made for all this, the central fertilizer subsidy figures will be much higher.

For a detailed review of the Scheme, See Government of India, Report of the High Power Committee Constituted to Review the Retention Price and Subsidy Scheme of Indigenous Fertilizers (Chairman: B.B. Singh), Mimeo., 1986.

The Fertilizer Retention Price Scheme (FRPS) provides for the determination of a retention price for each fertilizer plant. If a producer's net realization from the sale of fertilizer (consumer price minus distribution margin) falls short of the retention price allowed under the FRPS, the central government pays the difference as a subsidy to the producer. In case the net realization exceeds the retention price, the difference is recovered from the producer. Costs incurred on transportation of fertilizer are not taken into account for determining the net realization as they are separately accounted for under the central fertilizer subsidy scheme.

With urea accounting for a substantial proportion of the total domestic fertilizer production, what holds true of the subsidy on urea can be assumed to broadly hold true of the subsidy on all domestically-produced fertilizers.

See The Economic Times (New Delhi), January 5 and May 12, 1989.

See The Hindustan Times (New Delhi), January 28, 1989.

Anand P. Gupta, India: State Government Subsidies for Fertilizers, The World Bank, New Delhi, August, 1987, p.3.

Based on data in: S. Guhan, State Finances in Tamil Nadu, 1960-85: A Review of Trends and Policy (Madras Institute of Development Studies Working Paper 77), Madras, September 1986, p

See the Government of Haryana's advertisement in The Hindustan Times (New Delhi), June 20, 1989.

See S. Guhan, op. cit., P.65.

Discussions with knowledgeable people suggest that the long run marginal cost of supplying electricity to Indian agriculture currently works out to as much as about Rs. 2 per unit for supplies during peak hours and about Rs.0.80 per unit for those during off-peak hours.

For data on losses of state electricity boards, see Government of India, Economic Survey (annual).

The figures here relate to spending on irrigation and flood control, with most of it on irrigation. The break-up of these spendings into spendings on irrigation and those on flood control are not readily available.

The term "non-plan spending on irrigation" refers to that public spending which is incurred on irrigation projects not included in a Development Plan at a given point of time. A public expenditure incurred on a project included in a particular Development Plan, becomes non-plan expenditure after the end of that plan. Non-plan spending occurs under both revenue and capital accounts.

- 27/ It is not only farmers who benefit from creation of irrigation facilities. There are some others also who may benefit. For example, construction contractors and suppliers of labour and other factors may earn economic rents, at least in the short run. There is a case for making such indirect beneficiaries also pay for their share of irrigation cost.
- 28/ The figures <sup>here</sup> have been computed from data in: Guhan, op. cit., Table 25.
- 29/ For data on commercial irrigation losses, see Government of India, Indian Economic Statistics; Public Finance (Annual).
- 30/ For discussion on these and related aspects, see R. Wade, "The System of Administration and Political Corruption: Canal Irrigation in South India", Journal of Development Studies, April 1982; and James A. Roumasset, Public Finance Aspects of Irrigation Management and Cost Recovery, The World Bank, Washington, D.C., June 1987.

