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TAXATION AND SUBSIDIES ON AGRICULTURE:  
A SEARCH FOR POLICY OPTIONS

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In this paper we discuss policy options for reform, and restructuring or enhancement of taxation on agriculture. The discussion follows an examination of issues involved in the existing taxation and subsidies. We deal with subsidies, as these are better described as negative taxation. The discussion on policies is preceded by an examination of issues involved in taxation. It is difficult to measure and much more so to reform when taxes or subsidies are concealed. We shall not look into them since their extent cannot be correctly inferred, nor even their direction indicated with confidence.

I

TAXATION

*General*

Taxation is a part of overall fiscal policies, the latter has to serve diverse objectives. Taxes help in obtaining resources to run the Government. The Government needs resources for meeting expenditure on services, police, defence and development. Taxes are used as an instrument to transfer resources from one section of the community to the other, to serve the ends of equity, which include some general welfare programmes as full employment, poverty alleviation, health, education and nutrition. Resources required for research and for such social overheads as roads, transport, communication, power are meant to help the development process.

Resources are mobilised through several instruments of fiscal policy. Besides taxation, the Government resorts to borrowing and deficit financing. Drawing down foreign exchange balances through negative trade balance, foreign aid or foreign capital inflow are other sources. The overall fiscal policy is followed to serve other objectives of keeping the economy on even keel, curbing inflation, providing protection to selected local industries. Being part of the general fiscal policies, taxation has to contend with wider objectives as well. It is difficult to relate directly the use of the instrument with the objective served.

Since resources are mobilised and deployed for various purposes, in so far as the burden carried by a specific group, section of the community or a sector of the economy is concerned, we consider the net effect or net taxation, or the balance of resources taken out of and resources brought into a sector. Thus defined, the problem runs into additional complications, resources are transferred within the economy through internal trade between

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sectors and through borrowings and lendings undertaken by banks and other government agencies. State intervention is yet another source of impact on resource transfers, and price interventions have become common with inflation, trade deficits or as an instrument of managing production incentive (support prices). Dealing with all these aspects to obtain an idea of net burden is a difficult and a delicate task. Considering taxation (or other ingredients of overall economic policy) in isolation imposes severe limitations for drawing inferences on the net burden on a section or a sector of the economy.

There are data problems, they too add further complications. Taxes are collected at various levels, by the Centre, States, and by local authorities. Information regarding local bodies is fragmentary. Taxes take various forms, they are direct and indirect. The incidence of direct taxes can be easily ascertained; for indirect taxes it cannot be done with equal ease. Taxes on commodities are commonly known as indirect taxes. Incidences of such taxes are borne by the suppliers and consumers depending on price elasticities of supply and demand. Such elasticities are not precisely known for all commodities. Conventionally, they are therefore allocated to the final consumer, who apparently pays such taxes along with the price of the commodity. An element of arbitrariness is involved in such a procedure and the degree of arbitrariness in allocation would vary for different commodities. These are severe limitations.

#### *Taxation on Agriculture*

Tax performance of agriculture does not measure upto tax performance of the rest of the economy. This can be inferred and indicated with evidence based on data.

#### *Direct Taxes*

The incidence of direct taxes on agriculture, as a percentage to net domestic income generated in the sector declined from a low of 0.86 in 1970-71 to a still lower level of 0.66. During the same period, the incidence on other sectors increased from 4.81 per cent to 4.99 per cent. Since the share of agriculture in the total Net National Product (NNP) declined during the same period from around 50 per cent to 37 per cent, the contribution of agriculture to direct tax revenue for the economy declined sharply. For the economy as a whole, the incidence of direct taxes increased from 2.93 to 3.39 per cent (Table I).

We may add a caveat. Though land revenue is fixed in absolute amounts at varying dates in the past, land revenue collection was not stationary. The total collection increased from Rs. 103 crores in 1969-70 to Rs. 205 crores in 1981-82. Total direct taxes consist of agricultural income-taxes, cesses and special cesses on cash crops. Total direct taxes increased from Rs. 137 crores in 1970-71 to Rs. 294 crores in 1981-82 or by 214 per cent; but during the same period net agricultural incomes (at factor cost) increased by 273 per cent.

Table I. Incidence of Direct and Indirect Taxes:  
1970-71 and 1981-82

Sector	<i>(per cent to income)</i>					
	1970-71			1981-82		
	Direct	Indirect	All	Direct	Indirect	All
Agriculture	0.86	7.41	8.27	0.66	9.00	9.66
Other sectors	4.81	14.60	19.41	4.99	21.10	26.19
All sectors	2.93	10.80	13.73	3.39	16.60	19.99

Thus, direct taxes on agriculture are not stationary, but they are not sufficiently dynamic. At the level of individual States, Karnataka and Kerala are the two refreshing exceptions, the percentage of direct taxes on agricultural income in both the States increased between 1970-71 and 1981-82 from 0.56 to 0.70 (Karnataka) and from 0.75 to 1.50 (Kerala). These two exceptions probably point out the way of increasing tax revenue from agriculture.

#### *Indirect Taxes*

The incidence of indirect taxes—both Central and States—on agricultural incomes has risen. It increased from 7.41 per cent in 1970-71 to 8.27 per cent in 1981-82. During the same period there was a sharp increase in the incidence of indirect taxes on the non-agricultural sectors, from 14.6 per cent to 21.1 per cent.

Consequently, the overall incidence of direct and indirect taxes on agriculture was well below that on the non-agricultural sectors (Table I).

Three qualifications need to be added. The data on break down of indirect taxes paid by agriculture and other sectors are on the basis of consumption data derived from the Rounds of the National Sample Survey (NSS). The extent of incidence based on these data is only approximately measured, for the NSS gives the break down of households in two categories, such as rural and urban and not as agricultural and non-agricultural and the two classifications will not match.

In the economy there is a sizeable amount of unaccounted incomes (and property). The Wanchoo Committee estimated the extent of unaccounted or concealed income to be around 9 per cent for 1965-66 (Government of India, 1971). Its extent would be more in subsequent years. However, the difference between the incidence of tax on agricultural and non-agricultural incomes is too large to be wiped out by the sole consideration of concealed income: it would however considerably narrow down.

While the non-farm economy is almost totally cash or market economy, farm economy is partially so, its extent varies, Punjab for instance would be in a leading position. We can visualise a situation in which cash economy outside agriculture develops at a pace much faster than the non-cash economy within agriculture. In a situation like this, the incidence of indirect taxes, excise, customs and sales tax would be much larger on the farmer.<sup>1</sup> A comparison of the two sectors varying in the extent of impact of market economy would have its own limitation. We find that such comparison gives different results for different States. In Punjab the difference between the incidence of taxes on agricultural and non-agricultural sector diminished over time from 2.4 percentage points in 1967-68 to 1.6 in 1976-77. In a decade thereafter there could be further reduction. In Gujarat in 1980 the difference between the incidence of indirect taxes on rural and urban incomes was 2.94 percentage points, in Uttar Pradesh in 1977-78, the difference was 7.03 percentage points. Varying degrees of cash economy of the three regions seem to have an influence on inter-sectoral tax incidence difference (Shah, 1986).

We have so far compared the average tax burden. Distribution of incomes within a sector could affect the average tax incidence, for a sector with income distribution, skewed relatively more in favour of upper income groups can have higher tax incidence than that on the sector with the same average income but less skewed distribution.

Despite all the above arguments, we would not imply that the difference in the incidence of tax on agriculture and other sectors will disappear if precise allowance is made for several qualifications added to inter-sectoral (or rural-urban) tax incidence comparisons. However, the difference that appears to be large on a straight comparison of available data would considerably narrow down. It is often asked: Is there a potential for additional revenue mobilisation from agriculture so as to eliminate the inter-setoral differences? This question would need a considerable amount of data handling and even with that precise answer may not obtain, for taxable capacity is a concept difficult to apply to a given empirical situation. It is tied up also with the concept and measurement of minimum needs, and there may not be a common agreement between them especially when different regions and different income groups are considered.

## II

### SUBSIDIES

Taxes are intended to achieve three objectives. They help mobilise resources for the Government. They may provide protection to a section of industry (handloom or powerloom versus textiles, in the case of excise). They also help in transferring resources from one section of the community

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1. In Uttar Pradesh foodgrains attracted sales tax, in 1978-79 tax on foodgrains accounted for 8.15 per cent of the total sales tax revenue. In U.P., in 1977-78 even at low levels of total monthly expenditure of less than Rs. 25, urban households carried a tax burden of about 7.27 per cent while those in the rural areas, of about 1.68 per cent. Such large differences were not observed in other States such as Punjab and Gujarat for which data are available (Shah, 1986, pp. 51, 54-55, 57).

to the other. Most of the transfers are through welfare programmes. Subsidies are direct transfers and as such are in the nature of negative taxation; they put resources in the hands of the section for which the subsidies are meant.

Two major subsidies in the economy pertain to foodgrains and fertilisers. Together they accounted for over 48 per cent of total subsidies provided by the Centre and the States in 1985-86, the percentage share of these two has sharply increased recently, it was nearly 34 per cent in 1981-82.

Table II Fertilisers: Production and Imports

*(nutrients: '000 tonnes)*

Year	Installed capacity	Production	Imports	Total	Imports (per cent to total)	Value of imports (Rs. crores)
1951-52	148	27	52	79	60	5
1961-62	N.A.	220	382	602	63	14
1965-66	611	374	301	675	45	22
1971-72	2,040	1,240	997	2,237	45	90
1981-82	6,131	4,093	2,041	6,134	33	717
1984-85	7,176	5,180	3,646	8,826	41	1,435

Source: CMIE (1985 a), Table 12.6. N.A. = Not available.

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Subsidies take various forms. Information regarding them is scattered over budget documents, some of it is tucked in departmental details. Recent estimates suggest that the levels of subsidies were higher for some of the past years than the data available would suggest. Till 1972-73 subsidies on all accounts accounted for between 3 and 4.5 per cent of total (Centre and States and Union Territories) government expenditure. After the oil shock the percentages climbed up and remained high for the entire period from 1974-75 till the latest year for which data obtain, viz., 1985-86 (BE), with the exception of two years 1975-77. According to CSO data, in 1973-74 food and fertiliser subsidies accounted for 40 per cent, subsidies on food alone accounted for over 35 per cent. In 1985-86, the shares of subsidies on food and fertilisers in total subsidies were 18.33 and 30.02 per cent respectively, together accounting for 48.35 per cent of the government expenditure on subsidies. Sharp increase in overall subsidies and prominent increases in the shares of subsidies on foodgrains and fertilisers have made these subsidies eyesores. Direct and indirect taxes on agriculture in 1981-82 are estimated to total upto Rs. 4,307.5 crores; in the same year subsidies on fertilisers amounted to over Rs. 375 crores. With subsidies on foodgrains of Rs. 765 crores for the same year, the net tax revenue from agriculture amounted to Rs. 3,167.5 crores. With further increase in subsidies in subsequent years, the net revenue mobilisation from agriculture would be further eroded. In the general debate regarding the relative burden of taxation on agriculture, this particular aspect of the relative magnitude of subsidies on foodgrains and fertilisers has featured prominently.<sup>2</sup>

#### *Issues regarding Fertiliser Subsidies*

The overt position regarding subsidies could be misleading. Some caution needs to be exercised in the overall judgement.

Subsidies are in existence from the start of the Five Year Plans, but the oil shock of the early seventies increased their proportions. It can be argued with some conviction that the use of fertilisers for crop production is not solely guided by the relative prices of crops and fertilisers. The use of fertilisers is facilitated by access to irrigation, evolution of better techniques of production can encourage it further, extension work can add to its pace and better delivery system can sustain the expansion of use of fertilisers. Absence of any one or all of these factors can hinder the use of fertilisers, no matter how favourable prices are. This general statement would be unexceptionable. In 1973-74 the situation posed a different problem and the same

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2. It could be convincingly argued that those farmers benefiting from fertiliser subsidies may have even net gain, after providing for outgoings on account of direct taxes paid by them. They would be mostly in irrigated areas using high-yielding varieties and with relatively larger holdings or larger incomes or both. Their needs for subsidies to keep up incentive may be relatively low. We have not examined this argument. Elsewhere it has been shown that while direct taxes are not progressive, indirect taxes are highly progressive in the rural areas.



continues to pose now. In the wake of new fertiliser-seed technique—the Green Revolution, the use of fertilisers spread rapidly and the much needed foodgrains production reached higher levels. Was sudden steep increase in fertiliser prices advisable at this stage? Would it not limit or even reduce life to the economy in the decade of the seventies and subsequent years? Foodgrains yields definitely increased and the increase in foodgrains production helped to reduce food imports. The history of fertiliser production and imports makes an interesting reading. In 1966-67 and 1967-68 fertiliser imports spurted up, the signal of Green Revolution switched open the sluice gates. The internal production caught up with the demand gradually. In 1966-67 imports accounted for 66 per cent of total fertiliser supplies, this percentage remained high for the following two years. Since then it declined, fluctuating between 21 (1982-83) and 51 per cent (1974-75), for the recent year 1984-85, it was 41 per cent. Total fertiliser supplies increased at an annual compound rate of 10.5 per cent between 1966-67 and 1971-72, and at 11.14 per cent in the subsequent years upto 1984-85. The level has fluctuated and taking different specific years comparison would give higher or lower rates of growth of fertiliser use. Per hectare use of fertilisers was 10.7 kg. in 1967-68, it went up to 48.3 kg. in 1984-85. The levels of fertiliser use varied between States, Punjab being at the top with 157 kg. per hectare and Assam at the bottom with 4.1 kg. per hectare in 1984-85. One can infer that the mounting fertiliser subsidies if withdrawn even at this stage is likely to send shock waves, the use level may drop sharply in the States which are the bread-baskets for the nation. Subsidies on fertilisers hurt the economy, but our options are limited. We can take a hard look at them regarding future direction for the policy. We shall discuss that later. We may add before we close the discussion on fertiliser subsidies that the period of subsidies has provided a boost to domestic production and capacity utilisation of fertiliser industry, which was never above 60 per cent in the past, it improved to 72 per cent in 1984-85. Reduced demand may hurt the industry as well (Table II). With the expansion of local production, despite improved capacity utilisation, subsidies per tonne of fertilisers are now larger on domestic supplies than those on imports.

Year	Subsidies on Fertilisers (Rs. per tonne)	
	Imports	Domestic supplies.
1979-80	1,406	1,076
1983-84	1,047	1,985
1984-85	1,745	2,316

A look at the ailments of fertiliser industries may help improve the fertiliser situation. Obsolete units may have to be shut down or modernised. It would appear in view of the condition of the domestic industries that fertiliser subsidies serve better the industry than the farm producer.

And lastly, it can be argued that a part of the fertiliser subsidies is passed on to the consumer, and this part could be large for those selling their produce to food procuring authorities since the procurement price takes the actual cost of fertilisers into account.

#### *Foodgrain Subsidies: Issues*

Dantwala has labelled lowering food prices as 'instant socialism' inasmuch as it would enable the poor to buy a little more food (Dantwala, 1986). Lowering food prices does not mean keeping food prices at an unremunerative level—unremunerative to a reasonably efficient producer. His emphasis was on improved productivity for keeping food prices low. However, if such 'remunerative' prices were beyond the reach of a substantial section of consumers, subsidisation for the low income consumers becomes unavoidable, till incomes of such consumers improve through other relevant policy measures.

The problem of foodgrains subsidies, despite declining imports and rising food stocks with the Government, is an enigma.

Foodgrains are 'procured'. In the recent years the procurement is not compulsory, grains are purchased from the market at pre-announced prices. Record levels of procurement in a series of years in the last decade in a way turn procurement prices into 'guaranteed minimum prices', an incentive to producers to increase production, with assured margin of profits. Prices that are considered remunerative to producers may not be affordable by the poor, especially after the costs of transport, handling and charges of retail agencies are added. Hence there develops a gap between the two, which is bridged by foodgrains subsidies. Under inflationary pressure, the gap has widened and the subsidy amounted escalated.

The above argument would lead to a major contention that subsidies are incentive incomes to foodgrain producers, hence they would amount to a transfer of resources in their favour. This contention could be further supported. The procurement prices of wheat and paddy have closely followed the market trend. The lag of 4 to 5 percentage points could be explained by the fact that the procurement prices are fixed for the year and are maintained at the same level, market prices at harvest time dip, subsequent rise could be by a margin of 4-5 percentage points or more depending on marketing, storage, insurance and financial costs even if the supply-demand equilibrium obtains all through.

Index of Wholesale and Procurement Prices  
of Paddy and Wheat (1970-71 = 100)

Year	Procurement Prices		Wholesale Prices	
	Paddy	Wheat	Rice	Wheat
1973-74	131	138	140	108
1980-81	191	171	206	171
1984-85	258	207	273	210

*Notes:*— The above table does not imply equal levels of procurement and wholesale prices in current terms. The margin in absolute levels may even widen over time if the two indices keep pace with each other and there was initially a margin between the absolute levels of the two prices.

Paddy prices for procurement have lagged behind of late by an increasing margin.

There is however the other side of the argument. In 1977 nearly 57 per cent of the public distribution of foodgrains was for the urban areas, and only 27 per cent was for the rural areas. In the urban areas as in the rural areas, the poor were not the only beneficiaries, the poor and the not so poor or those for whom non-subsidised market prices of grains would not be unaffordable, both availed of subsidised retail supplies.

Price elasticities of foodgrains are low, high demand pressures would tend to raise foodgrain prices disproportionately. While high prices would inflict severe hardships on the poor, the producer would earn higher margins. No society that values human lives as precious can allow this to happen in an uncontrolled manner. And that is what the Government of the country did, namely, protected the interest of the poor. However, among them the beneficiaries were largely in the cities. The wage structure in the organised industries and the public sector is closely linked with prices of consumer goods. Higher food prices would therefore fuel inflation. In other words, to construe that foodgrains subsidies only augment the incomes of producers would be a simplistic view of a complex situation.

#### *Resource Transfers: Broader View*

Subsidies are one form of transfer of resources. Flows of resources in and out of a sector, and their net results cover a much vaster field of transactions; their analysis would be out of the purview of the present paper. Nevertheless, we may indicate a few relevant facts that would provide a broad view of the possible final situation. In 1981-82 actual outlays of Plan resources for programmes of agriculture by the Centre and State Governments were Rs. 4,437.2 crores. Total direct and indirect taxes paid by agriculture amounted in the same year to Rs. 4,307.5 crores, or only 3 per cent less than the taxes paid. The share of taxes paid by agriculture in total tax revenue in 1981-82 was about 18 per cent, the share of agriculture in Plan outlays was about 20 per cent. Thus the two—taxes and Plan outlays for agriculture—nearly matched. Subsidies are not accounted for.

Yet another comparison is more enlightening. In 1981-82 gross domestic capital formation in agriculture was Rs. 5,877 crores; the private capital formation in the economy in that year amounted to Rs. 13,536 crores, the total—the private and public—amounted to Rs. 25,216 crores. Thus the share of agriculture in gross capital formation in the private sector amounted to 43 per cent and that in the total to over 23 per cent. Outstandings of commercial banks' advances to agriculture (direct) in June 1982 were Rs. 3,450 crores or about 34 per cent of the total outstandings to the private sector. Loans from Land Development Banks amounted to Rs. 1,716 crores. Net additions in 1981-82 to outstandings amounted to Rs. 495 crores for commercial banks. These data which suggest a net inflow of resources into agriculture would be much less compared to investment efforts in agriculture. Investment resources came overwhelmingly from within the sector and

were over and above the taxes paid. The above facts need to be emphasised for one special reason. There is a vital difference between agriculture and other sectors, for agriculture there is no capital market, risk capital has to be provided by the producers themselves. They can only avail of loans which do not participate in risks. Resources flowing out of agriculture reduce directly the capacity of the sector to invest. Add to this the fact that the share of agriculture in NNP was around 37 per cent, rural population dependent mostly on agriculture accounted for over 76 per cent in 1981, suggesting low incomes and hence low capacity to save for households in the rural areas.

### III

#### POLICY OPTIONS: APPROACH AND ISSUES

By any standard, the resource mobilisation effort of the Government would be judged adequate. By 1984-85 (BE) 32 per cent of GNP accounted for government expenditure, 65 per cent of the latter was for development purposes. Resources mobilised on current and capital account met 96.6 per cent of government expenditure. Of the total resources mobilised, current resources accounted for 71.5 per cent, and tax revenues represented 74.5 per cent of total current resources. Thus, development expenditure by the government would be about 21 per cent of the GNP. Tax revenues would amount to 53 per cent of total resources mobilised or nearly 17 per cent of GNP. A somewhat irksome feature is that the share of indirect taxes in total tax revenue has steeply increased and has come to dominate; indirect taxes represented 83 per cent of total tax revenue in 1983-84.

The problem the Government faces, despite satisfactory achievement of resource mobilisation, is two-fold. The growth of the economy has remained subdued. Per capita net national product in real terms increased by not more than 3 per cent during the Sixth Plan. Secondly, poverty continues to be widespread, its extent, on the basis of head count, was 37 per cent. In the rural areas the poor accounted for 39.9 per cent of total households.

Should the resources mobilised for development be increased? The question is outside the purview of the present paper. However, it can be mentioned that since most of the tax revenues are generated through indirect taxes, the question involves a judicious balancing between development effort and runaway price rises which steep increase in indirect taxes may involve. Direct taxes have remained low, they have low elasticity (and buoyancy); indirect taxes have relatively higher buoyancy (though their elasticity is below one). Between the Centre and the States, both elasticity and buoyancy of State taxes are higher than that of the Central Government taxes. Under the circumstances, overriding importance of indirect taxes is going to remain a main feature (Shah, 1986, p. 45).

The policy options are thus severely limited. Additional impost can be marginal and may not serve the major purpose of higher growth and lower poverty ratio. Tax revenue expansion through indirect taxes is a powerful

instrument for revenue collection but hurts the economy when carried beyond a limit. Reducing poverty through direct transfer to the poor, adds to the burden on the budget which, with a margin of deficit, is precariously balanced.

Proposals are made from time to time for reallocation of resources among different uses. The subject has underpinnings of theories (witness the argument regarding wage goods expansion, the echoes of which have not died down) as well as empirical assumptions.

Rising incremental capital-output ratio has caused concern. The incremental capital-output ratio was 5.7 for the economy, and 4.7 for agriculture in the Sixth Plan period, 1980-85. The search for remedies to reduce it so that with available investible resources higher growth rates can be achieved would include possibly more intensive research for developing capital-saving production techniques, restructuring of investments in favour of low capital component production areas and others along these lines. These are long-term propositions and would in effect imply efficient use of resources through reallocation. In the immediate Seventh Plan period, the incremental capital-output ratio is expected to further go up, for agriculture 6.6 and for the economy 6.0. More resources or low growth is the option, the choice between the two is difficult and painful.

Subsidies are irksome. Suggestions are made to improve the working of extension agencies, increase the number of outlets and thus extend the delivery line and it is claimed that more intensive use of fertilisers can be encouraged with one or both of these measures (Desai, 1986). Bait of subsidies can then be contained. While these are welcome suggestions, they too imply essentially reallocation of resources between incentives (now less efficient) and increased expenditure on extension, number of outlets, etc.

It is not unlikely that better management of resources like irrigation water and fertilisers can improve the efficiency of resources and thus increase their productivity. Precise measurements of the gains are not available.

Most of the above measures, welcome as they are, need detailed examination which is outside the purview of the present paper. They essentially suggest reallocation of resources and this is of relevance to our search for policy options.

#### *Tax Proposals*

We suggest as a policy measure restructuring and realigning of tax incidence on agriculture across the States. We shall elaborate this in some detail. Table III gives data on the incidence of direct taxes on agriculture for States for 1970-71 and 1980-81. They suggest a close association between levels of income and tax incidence across the States. We find that higher per capita incomes are by and large associated with lower tax incidence. Between the two years, while agricultural incomes measured in current prices sharply increased, tax incidence declined, further, for all the States except two. As such, the incidence is low, in no State it was above 1.5 per cent. The lowest 0.14 per cent obtained for the Punjab. Chart I brings out the association

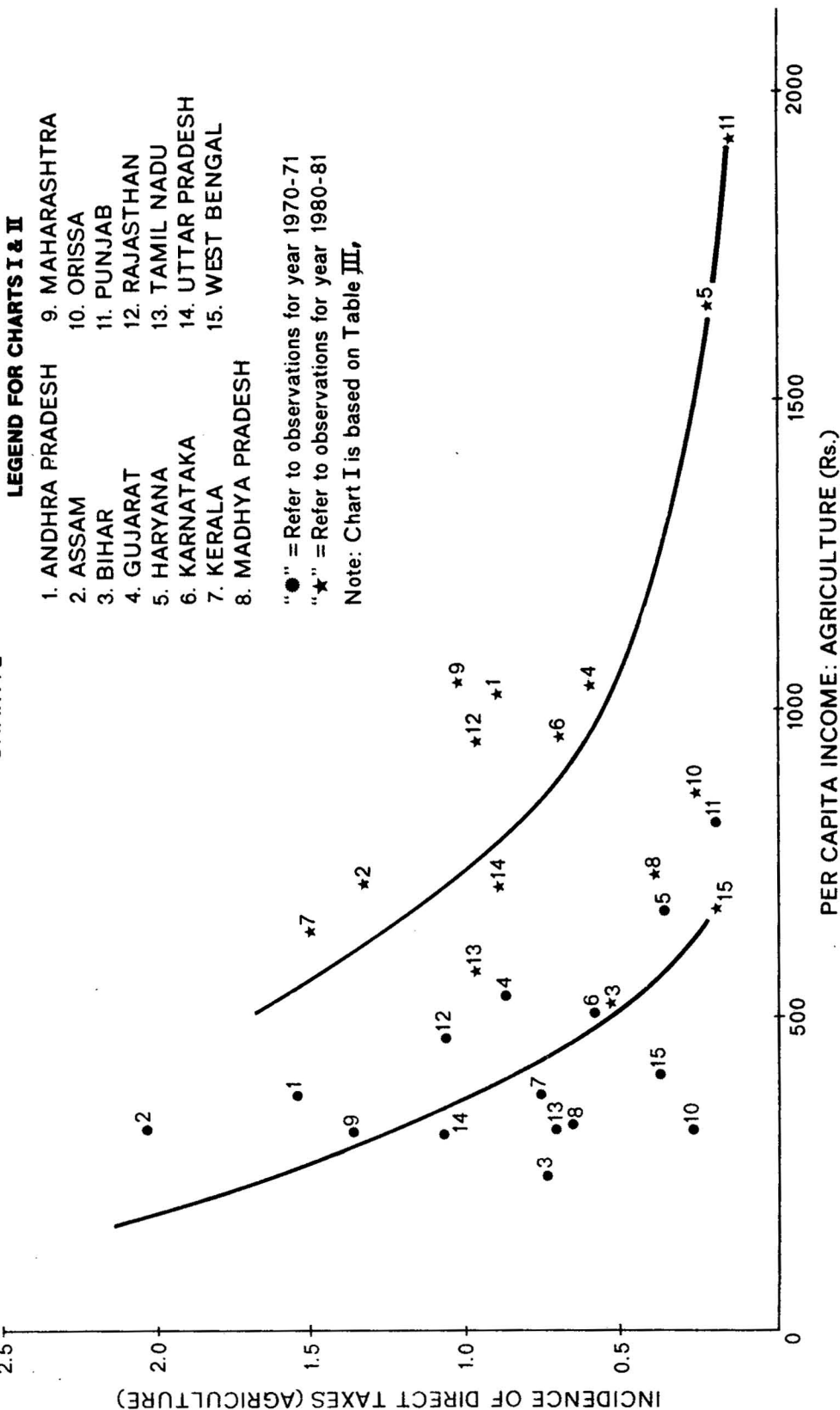
Table III, Per Capita Income and Direct Tax Incidence:

State	Agriculture			
	Per capita agricultural income per year (Rs.)		Incidence of direct taxes (per cent to income)	
	1970-71	1980-81	1970-71	1980-81
Andhra Pradesh	395	1,028	1.53	0.90
Assam	334	719	2.05	1.32
Bihar	258	519	0.73	0.53
Gujarat	538	1,035	0.87	0.60
Haryana	683	1,654	0.36	0.23
Karnataka	505	969	0.56	0.70
Kerala	375	643	0.75	1.50
Madhya Pradesh	319	718	0.60	0.39
Maharashtra	301	1,040	1.37	1.03
Orissa	328	861	0.27	0.26
Punjab	810	1,935	0.20	0.14
Rajasthan	471	949	1.07	0.97
Tamil Nadu	315	571	0.70	0.96
Uttar Pradesh	327	701	1.08	0.89
West Bengal	404	682	0.39	0.19

Source: CMIE (1985 b).

Note:— Incomes relate to Net State Product at factor costs; States use somewhat different methods of estimating State Product, these differences limit comparability. Per capita income is obtained by dividing State Product originating in agriculture by rural population. Direct taxes include land revenue, cesses, agricultural income-tax and cesses on cash crops like cotton, sugarcane, etc., where imposed.

CHART: I



vividly. Such inverse relationship between income and tax incidence across regions is the worst instance of regressive character of agricultural taxation, particularly of taxation on land. To remedy this situation, the guidance of experts was sought in the past. The latest of such advice is contained in the recommendations of the Raj Committee (Government of India, 1972). The major recommendation is known as Agricultural Land Holding Tax. It attempts to build an element of flexibility in the tax rate by linking it to prices and production. The method suggested for estimating the income involved minimum of calculations and for large sections it involved a uniform tax for a given period. Since it provided also for exemption for lower incomes, some of the States found that the implementation of the recommendation would reduce tax revenue, not increase it. While the progressive feature of the tax proposal would be welcome, reduced revenue is unacceptable to most States. The States therefore preferred to continue the existing system without change, perhaps as a line of least resistance for them.

Calculation of income for agriculture even for a district or a region below it would lead to the opening of Pandora's box. Many unwelcome compromises may have to be accepted, especially for areas with more alert and perhaps prosperous peasantry. Hence an intermediate step has to be considered for immediate implementation. The regressive character of the land tax across the States needs to be corrected first. This will be the first part. The second part will be of releasing the land revenue from its tie with the dead past.<sup>3</sup>

Before we elaborate both these we should mention that taxation on agriculture (either on land or on farm income) is the constitutional right of the States. This right cannot be withdrawn. States would not agree to it. We accept this position. We however see a way out from this impasse. We shall discuss it while elaborating the proposal from the point of administrative feasibility.

We make two propositions, which form a bedrock for evolving a fresh proposal for reform of direct taxes on agriculture even as an interim measure.

Firstly, evidence goes to show that higher rates of growth are associated with lower ratio of households below poverty line. This relationship is observed across nations with the income data duly adjusted for the purchasing power parity. Within India it can be observed across States (Table IV and Chart II). The data and Chart are presented to emphasise that there is a trade off

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3. Lower incidence of direct taxes on agriculture, which is largely a land tax, may be interpreted as reflecting declining importance of land in agricultural production. This may appear appealing for higher incomes are associated with intensive use of irrigation, fertilisers, new seeds and pesticide as well as new machinery. However, tax incidence is very low both for higher and lower income levels. It has a historical background, since the absolute level was fixed in the past and in certain States (or areas within certain States) where Zamindari system obtained, for lands now in the possession of Zamindars the amounts of tax were fixed in the remote past. In view of this, the rising proportion of non-land inputs cannot be considered a sufficient reason to account for 'regressive' relation between tax incidence and incomes across States. Though there existed even in the past uneven tax incidence among States, the situation has further worsened because of nearly rigid levels of taxes against uneven increases in incomes in the recent decades (Shah, 1986).



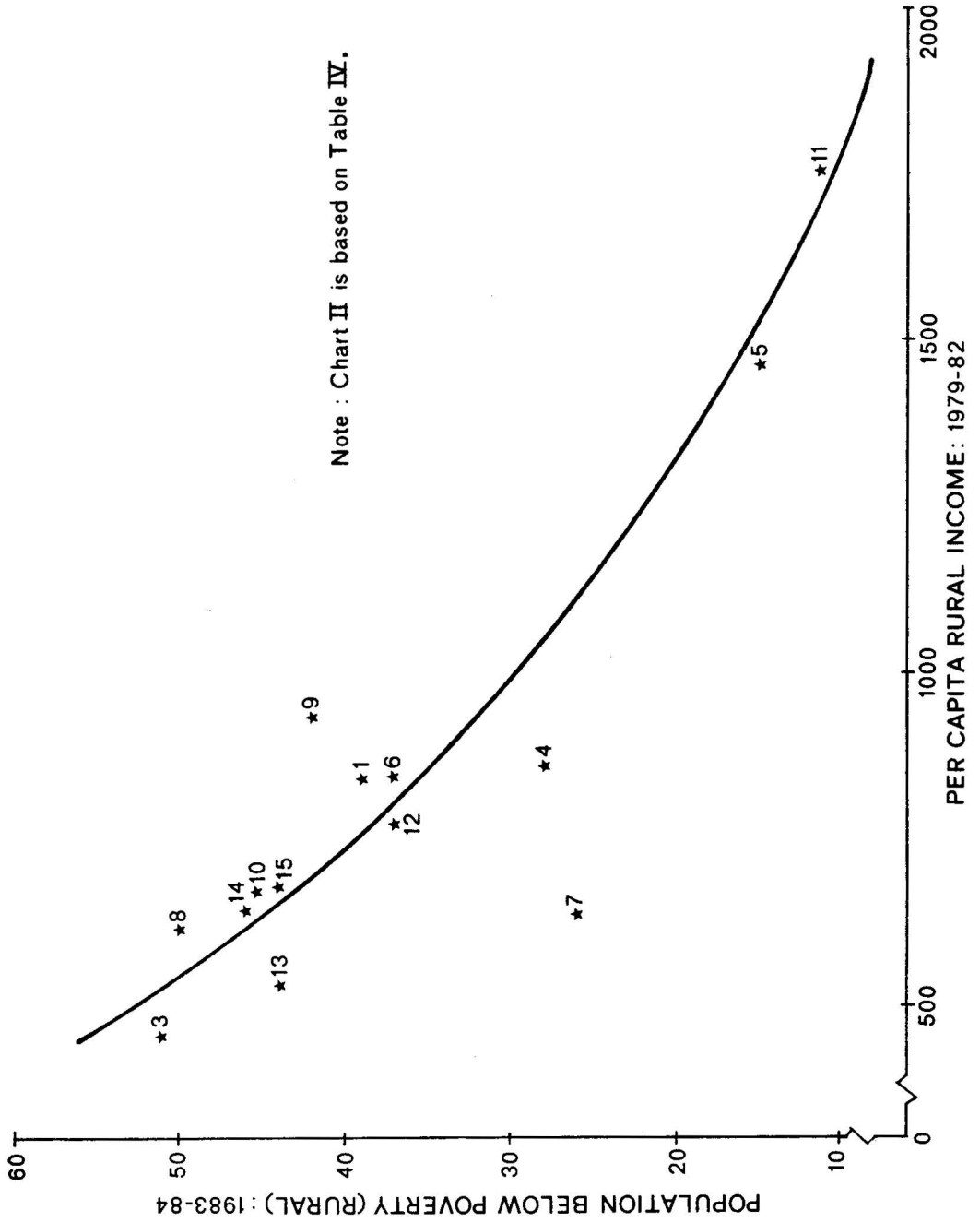
Table IV. Rural Incomes and Poverty

State	Per capita rural income (Rs.)	Incidence of poverty(per cent of population below poverty line to total population)
	1979-82	1983-84
Andhra Pradesh	836	39
Assam	656	N.A.
Bihar	450	51
Gujarat	858	28
Haryana	1,413	15
Karnataka	837	37
Kerala	631	26
Madhya Pradesh	605	50
Maharashtra	922	42
Orissa	684	45
Punjab	1,756	11
Rajasthan	771	37
Tamil Nadu	522	44
Uttar Pradesh	648	46
West Bengal	686	44

Source: CMIE (1985 a), Table 12.6. N.A. = Not available.

*Note:—* Rural income is based on agricultural incomes only. State level data for poverty incidence would have limitation, since precise measure of poverty line involves local level cost of living data. There would be other factors, besides average income level such as land distribution, remittances, etc. The association is so strong that evidence though crude, may be accepted as a preliminary important observation.

CHART: II



between development and poverty alleviation and hence there is a need for forcing the pace of development in order to contain poverty. Since poverty is more widespread in the rural areas than in the urban areas, rural and particularly agricultural development should be an integral part of the overall strategy for poverty alleviation. Further, since in the short run, measures to effect improvement in efficiency of resources used for production are unavailable, or ineffective, increased mobilisation of resources is necessary for development of agriculture. If we can find a potential for it in agriculture, we would be retaining the resources within the sector, there will be no draining out of resources from agriculture.

Secondly, incomes as high as four times the lowest observed level has not eliminated poverty. In fact, a difference of about Rs. 300 in per capita income between Punjab and Haryana has effected a four percentage points reduction in the incidence of poverty. There is one possible interpretation for this observation; while households nearer the poverty line can be lifted above the poverty line by the sweep of the development strategy, the hard core poverty would require supplementary target oriented measures involving resource transfer, to ameliorate the condition of the abjectly poor. For strategy of the transfer of resources, if resources are found from within agriculture, agriculture as a sector will not carry additional burden and other sectors of the economy can find their resources released for the development of the economy as a whole.

We propose two-step tax reform measures. In the first place the States may be prodded to reduce the inequality of direct tax incidence. This may be done over the period of the Seventh Plan. Since the highest incidence is in the States with low incomes, increase in the incidence would apply to the States with higher per capita income. This should not hurt them.

Secondly, a date in the past may be selected for untying the absolute level of land tax. Assuming that it is 1961 (or 1971), the land tax should be adjusted upwards by about the same extent as the change in the price of the main produce (or crops). Since prices would be common for the regions considered as units, no further calculations will be involved. Besides, simple calculations can be done in offices at higher level. If, for instance, it is decided to take the procurement or minimum prices fixed by the Commission for Agricultural Costs and Prices as the basis, land revenue can be fixed even in advance. Tax adjustment for prices can be through cesses. Cesses are the accepted instruments and are widely used by the States.<sup>4</sup> It is suggested that additional revenue realised through incidence equalisation across the States

4. Land revenue collection has increased over time in terms of rupee amount in current prices.

Year	Amount (Rs. crores)
1961-62	95
1971-72	101
1981-82	205
1983-84	267

The increased collections reflect partly cesses and partly the effect of land reforms. Despite the increase, the share of direct taxes on agriculture in total tax revenue of the government has continuously declined (CMIE, 1985 a).

should be allowed to be retained by the States to be used for agricultural development. The Centre may insert a condition while allocating Plan funds to the States to adjust the expected accrual of revenue against Plan allocation for agricultural development. The scheme may hold reward too for better performance. The core of the strategy would be augmentation of resources for investment within the sector.

The revenue accrual through adjustment against product price escalation may be pooled to be used by the States to meet expenses of programmes for alleviation of core poverty, i.e., the lowest decile group in the rural areas. It should also help the management of crisis caused by floods and famines. Since the programme would consist mostly of guaranteed employment (or IRDP or both), funds may be used to pay for foodgrains subsidies representing the difference between procurement prices and prices of grains distributed under the programme.

In essence, the above suggestions would not drain the resources out of the agricultural sector of the economy, but would involve allocation among the States and between the States and the Centre. Suggestions are broad and would need detailed examination to fill up details and to add to administrative feasibility. An appropriate body may have to be set up to examine all aspects of the suggestions or to come up with acceptable recommendations for reforms.

Broad calculations suggest that price escalation adjustment to 1970-71 may net around Rs. 600 crores additional revenue per year (or less depending on levels of cesses, etc.). Incidence equalisation across the States may net additional revenue around Rs. 400 crores per year. These are not large sums. However, over a period of five years after full adjustment is effected, collections may equal to the share of the Centre in the cost of rural development programmes in the Seventh Plan.<sup>5</sup>

#### IV

#### CONCLUSION

We have examined the existing situation regarding taxation and resource allocation and have made suggestions for reforms. Our observations lead to following conclusions.

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5. It is proper that a special body may be set up to consider all aspects of agricultural tax reforms. Issues to be considered by such a body would include (i) period over which adjustments are to be carried out, (ii) the manner of adjustment both regarding prices and inter-State differentials, (iii) pooling of part of additional revenue, (iv) use of additional revenue, (v) use of pool revenue for different purposes and in different States, (vi) retaining initiative of State to tax agriculture to be balanced against community needs, and (vii) State participation at various stages of increased collection of revenue and their disbursement.

We may also state that the proposal envisaged allows retention of gains of technology and considers only 'adjustment' of taxes to price changes. No calculations are involved at any level for fixation of taxable income, as well as determination of tax rates and income slabs for injecting progressive feature in taxation. The latter though desirable, on it founded the Raj Committee recommendation.

Apparently agriculture would seem to be under-taxed, the incidence of overall tax revenue is lower than that on other sectors, and the incidence of direct taxation has even declined over time. This phenomenon however does not imply that there exists large enough room for additional taxation that can make resources available for a larger plan. We have argued that agriculture faces a different situation. First, agriculture accounts for a smaller share in total GNP, and the rural population has relatively a much larger share in total population. In contrast, the urban population, constituting 25 per cent or less, has a share of 63 per cent in GNP. The levels of average incomes would therefore differ by a wide margin. Secondly, agricultural households have to finance their investment largely out of their savings. Low savings mean low investment unless resources are transferred into agriculture. We find that investment under the Plan would not exceed tax revenue from agriculture, despite low tax incidence. Private investment in agriculture is not matched by long-term institutional loans.

For the economy as a whole, resources mobilised by the Government were about one-third of the GDP. Additional mobilisation can be marginal; pushing mobilisation of resources by the state beyond a point may not add to overall investment effort in the economy.

Subsidies are negative taxes, they are instruments to transfer resources in favour of those who receive them. Food and fertiliser subsidies have steeply increased in the recent period. They are found irksome for the economy. We find however that though they appear to be transfers in favour of agriculture, fertiliser subsidies help largely the industry and food subsidies predominantly the urban poor. Withdrawing these subsidies would put out of gear a part of development programmes and poverty alleviation efforts.

Despite the above situation at the overall level, we have made suggestions for tax adjustments which would not add to the net burden on the agricultural sector. Suggestions involve mainly reallocation of resources among the States and between the States and the Centre. Improvement of resource position as a whole can be no more than marginal. Our suggestions are broad, details would require to be filled in by an appropriate body.

## REFERENCES

Centre for Monitoring Indian Economy (CMIE): Basic Statistics Relating to Indian Economy, Vol. I: All India, August 1985 *a*; Vol. II: States, Bombay, September 1985 *b*.

CMIE: Indian Economy Since 1950-51, Bombay, February 1986.

M. L. Dantwala "Technology, Growth, and Equity in Agriculture, in John W. Mellor and Gunvant M. Desai (Eds.): Agricultural Change and Rural Poverty: Variations on a Theme by Dharm Narain, Oxford University Press, Delhi, 1986.

Gunvant M. Desai, "Policies for Growth in Fertiliser Consumption: The Next Stage", *Economic and Political Weekly*, Vol. XXI, No. 21, May 24, 1986.

Government of India: Direct Taxes Enquiry Committee: Final Report (Chairman: K. N. Wanchoo), Ministry of Finance, New Delhi, 1971.

Government of India: Report of the Committee on Taxation of Agricultural Wealth and Income (Chairman: K. N. Raj), Ministry of Finance, New Delhi, 1972.

Government of India: Basic Statistics Relating to Indian Economy, 1950-51-1979-80, Central Statistical Organisation (CSO), Department of Statistics, Ministry of Planning, New Delhi, 1981.

Government of India: Seventh Five Year Plan 1985-90, Planning Commissions, New Delhi, 1985.

Government of India: Economic Survey 1985-86, Ministry of Finance, New Delhi, 1986.

C. H. Shah: Taxation and Agricultural Development in India, Himalaya Publishing House, Bombay, 1986.

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