

**Home Market for Industrial Consumption Goods**  
**—A Preliminary Study**

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*Certified that the dissertation entitled HOME MARKET FOR INDUSTRIAL CONSUMPTION GOODS : A PRELIMINARY STUDY submitted by SABYASACHI MITRA in partial fulfilment for the award of the degree of Master of Philosophy (M.Phil) of this University, is his original work and may be placed before the examiners for evaluation. This dissertation has not been submitted for the award of any other degree of this University or of any other University.*

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## CHAPTER - I

### PRELUDE

A major objective of economic planning in an under-developed country is to achieve a high rate of economic growth. This brings in its train an increase in the real-incomes of the individuals in the economy. A rise in the real per-capita income is usually accompanied by an increase in the demand for different commodities. However, there may arise a situation where the supply of these commodities falls short of demand. The ensuing deficit will lead to rising prices of these goods, as also a rise in the general price level. The economy is then generally referred to as - 'Supply Constrained'.

On the contrary, if supply exceeds (ex-ante) demand for different commodities, a surplus will appear in the market. There will be a general situation of over-production, which will inhibit the growth of the economy. This will also lower prices and may reduce the income of the producers. Further, it may lead to a reduction in the demand for both, industrial and agricultural goods. The economy is characterized as 'Demand Constrained'. In either of the situations described above, the process of economic development will be hampered.

The type of economic growth envisaged in the early years of the planning period accorded 'top priority' to the process of industrialization in the economy. Since then, industry has traversed a long path and achieved remarkable diversification and sophistication in the range of products produced. However, a decelerating trend in the industrial growth rate was observed in the mid-sixties. When such a slow-down in industrial growth was noted, 'demand constraint' was cited as one of the factors contributing to the crisis. The adherents of such a view based their conclusion on the empirical findings of Sau (1974) and Mundle (1975). These empirical findings indicated that there had been a shrinkage in (the demand base of) the 'home market' for industrial consumption goods. Various hypotheses, viz., (i) decline in public investment (ii) terms of trade movement in favour of agriculture (iii) Inegalitarian distribution of income (iv) Bad performance of agricultural sector etc., were put forward to explain the operation of 'demand constraint' in the economy.

The purpose of this study is to probe the nature of the 'home market' for industrial consumption goods in India and to see whether there has been a shrinkage in the 'market' for industrial goods or not? How does the 'home market' for industrial consumption goods affect the overall growth prospects of the economy etc.?

Majority of empirical research work in this field has been done by Sau (1974), Mundle (1975) and Rangarajan (1982). The main source of data in all these studies are the reports of the consumer expenditure (both for rural and urban areas) published by the National Sample Survey Organization (N.S.S.O). The aggregate Private Final Domestic Consumption Expenditure data compiled by the Central Statistical Organization (C.S.O) and published in the National Account Statistics (N.A.S) are also sparingly used. Our study makes use of both the N.S.S and the N.A.S reports on consumption expenditure.

The plan of the study is as follows. Chapter two introduces the problem of 'demand constraint'. It is followed by a brief survey of the different hypothesis put forth to explain the operation of 'Demand Constraint' in the economy. The empirical findings of Sau (1974), Mundle (1975) and Rangarajan (1982) have also been summarized. In Chapter three, section I discusses the methodology used, sources of data, biases involved in the data used, definition of industrial consumption goods etc. Section II reveals the necessary information about the 'home-market' for industrial consumption goods. Given the nature of the 'home market' for industrial goods the implications for the growth process of the economy are discussed in the penultimate chapter (four). Finally we conclude (in chapter five) arguing for more active state intervention to promote the expansion of 'home market' for industrial goods.

## CHAPTER - II

### THE ANALYTICAL FRAMEWORK: A BRIEF SURVEY

This Chapter is an attempt to introduce and analyze the problem of 'demand constraint' operating in the Indian economy. In the opening section, we try to probe the reasons, as to why the problems of 'demand constraint' did not catch the attention of the economists in the initial years of the planning period. The second section discusses the emergence of 'demand constraint' as a factor explaining the deceleration in the Indian Industry. We also try to explore whether any such long term demand constraint can act as an obstacle in the process of economic development. The next section is a digression to show the relationship between income distribution, demand factor and industrial growth. The penultimate section is a survey of the various empirical studies which reflect the trends evident in the 'home market' for industrial consumption goods. Finally we conclude with some general observations regarding the trends reflecting the State of the 'home market' for industrial consumption goods in India.



SECTION - I

The slow-down in industrial growth in India dating from mid-sixties has been widely documented. Many factors have been cited in the literature on Industrial Stagnation as being responsible for the poor growth of the industry. One of these is the 'narrowness' or the 'narrowing' of the 'home market' base for industrial goods. This in itself poses a serious problem so far as India's overall economic growth prospects are concerned.

It has been argued that if goods that are produced cannot be sold, the process of accumulation and investment are kept in check and hence growth is retarded. The question of industrial growth has then been posed essentially as a 'problem of what determines the level of investment and the role of demand analyzed within the frameworks involving sectoral dichotomies such as those involving investment and consumption goods or agriculture and industry.'<sup>1</sup>

However the 'market' problem did not warrant any attention from any quarters even when the necessity of economic growth for raising the level of living of the common man and sustaining

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1. N. Krishnaji - 'The Demand Constraint. A Note on the Role of foodgrain Prices and Income Inequalities.'  
Economic and Political Weekly, Aug '84.  
p.1261.

the independence was considered. During the early years of the planning period the focus of attention was on the supply constraints operating in the economy. Chakravarty (1979) emphasizes that such views could not be just ascribed to only the orthodox economists since M. Kalecki observing as late as 1965 wrote -- "The crucial problem facing the underdeveloped countries is thus to increase investment considerably, not for the sake of generating effective demand, as was the case in an under-employed developed economy, but for the sake of accelerating the expansion of productive capacity indispensable for the rapid growth of the national income."<sup>2</sup>

The general consensus among the economists in the post-independence period who were committed to the principles of planning was to raise the rate of economic growth in the country. This in turn implied that the rate of domestic investment should be sufficiently high. Now this problem of increasing the rate of domestic investment was 'at once transformed into the problem of raising the rate of saving in the country.'<sup>3</sup>

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2. M. Kalecki -- "Essays on Developing Economies",  
p. 25.

3. There was an intense debate at that point of time, as to how the increase in savings could be brought about.

Concurrent with this we had the policy of building the capital goods industry which was supposed to maintain a balance with a process of accelerated growth. What is surprising in that, it was assumed that in a poor, under-developed country like India, problems arising from deficiency of demand could be ignored. Bagchi (1985), observes that in this respect, 'thinking of Indian planners was entirely in consonance with the thinking of the pioneers of development economics, such as P.N. Rosenstein Rodan, Kurt Mandelbaum (Martin), Ragnar Nurkse and W.A. Lewis.'<sup>4</sup>

The immediate insurmountable problem faced by the planners were the existence of two 'real constraints' - (i) 'food' bottleneck (ii) 'foreign exchange' inherent in the structure of the Indian Economy. Various strategies were mooted to overcome these two 'real constraints' which acted as an impediment in the process of capital formation. The basic objective of these strategies was at one end to create a 'food' surplus and have a comfortable balance of payments position on the other.

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4. A.K. Bagchi -- 'Problems of Effective Demand and Contradiction of Planning in India'. p 228  
 Bagchi is surprised at the near unanimity about excluding the effective demand problem especially since that was a period of dominance of Keynesianism in the field of macro economics and Public finance.

It was felt that the 'food constraint' could be overcome through the changes in agrarian relations (via adoption and implementation of land reforms, tenancy regulations etc.), Creation of infrastructural facilities through the community development programmes, to provide greater irrigation facilities etc. However, the 'foreign exchange' constraint was likely to remain until the economy could develop the capital goods sectors. To counter this problem a 'two-pronged' strategy which relied on building a capital good base at an accelerated rate, while relying on the inflow of foreign aid during the intervening years was adopted. This was broadly the strategy that was followed during the second and third five year plans i.e. (1955-65) though there were some significant changes in the strategy in the late sixties. However at no point of time it was doubted that the country's growth potential hinged on these two 'real constraints'. There were periods of recession in industry in the sixties which affected the capacity utilisation in many industries, but recession was regarded as a process of adjustment consequent on severe harvest failures.<sup>5</sup> Problems about market were not at all raised.

And for a while the industrial sector did grow at a respectable pace over the period 1951-65. However, after the

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5. S. Chakravarty -- 'On the Question of home market and Prospects for Indian Growth.'  
Economic and Political Weekly, Special  
No. Aug. 79, p.1230.

mid-sixties there was a slow-down in the rate of growth of industrial production. The economists had already started talking about the limits of 'import substitution'. The question of 'market' was now thought to be an essential factor contributing to the crisis. The issue upheld was whether India should change its policy framework and be more 'outward' in its look. Various sets of hypotheses and data were put forward in its support and many important questions were raised. One was that, while the rate of growth of output of foodgrains did not decline and also there was a fairly large amount of unutilized capacity, the industrial growth rate declined significantly to an average of just over four percent per annum. 'It is in this context, given the obvious inadequacy of the official explanations, - - - which only beg the question that a renewal of discussion on the market problem has occurred.'<sup>6</sup> The other point was related to India's dismal performance on the 'export front' as compared with the South-East and East Asian Economies. It was realised that though India had adopted the policy of 'import substitution' in the manufacturing sector, the rate of growth of industrial production could not be sustained because of the inability of both the 'home market' and the 'foreign market' to absorb them. While the failure of exports could be attributed to the lack of competitiveness of the manufactures, the limitations of the

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6. P. Patnaik -- 'Market Question and Capitalist Development in India'. Economic and Political Weekly, Annual No. Aug. 84, p.1255.

'domestic market' were supposed to reflect the unevenness in the distribution of income.

The significant changes that had occurred in the economic policies pursued by the government (from 1966 onwards) had once again tried to emphasize the importance of 'demand constraints'. For a brief period of time in the mid seventies the country had experienced a favourable condition on both the 'food' and 'balance of payments' front. But the easing of these two 'real constraints' did not help to boost the level of investment. It was once again that against the backdrop of this context that the question of 'market' was raised. Chakravarty (1979) attributed the failure of the growth rate to accelerate (even in the absence of supply constraints) to the existence of 'demand constraints' operating in the economy.

An important element to be emphasized while discussing the 'demand constraint' problem is the 'role of the state'. In a mixed economy like India, the state can actively intervene to overcome the 'demand constraint' operating in the economy and also protect the home market for the development of 'domestic capitalism'. This it can perform by promoting public investment and expenditure. Infact, Public Investment was supposed to act as a stimulus for industrial expansion in the initial years of the planning

period.<sup>7</sup> There occurred a rapid increase in the rate of public investment till mid 1960's. However, we do notice that there was a substantial decline in public investment during the period 1964-65 to 1974-75. (see Table 1).

TABLE - 1

GROSS DOMESTIC CAPITAL FORMATION

At 1970-71 prices

GROWTH RATES

TIME PERIOD	TOTAL	PUBLIC	PRIVATE
1950-51 to 64-65	7.0	13.1	3.9
1964-65 to 74-75	4.0	3.2	4.7
1974-75 to 83-84	5.3	5.8	5.0

Source: Govt. of India, C.S.O., N.A.S., various issues.

Quoted from C.P. Chandrashekar "Aspects of Growth and Structural change in Indian Industry" Economic and Political Weekly, Special No. 1988, p.2363.

On the contrary it can also be argued that even if efforts were made to raise the level of demand it would have had an inflationary impact on the economy. This is because of

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7. It is interesting to note that the Bombay Plan which was worked out by Tata & Birla, also felt the necessity of higher public investment for the process of industrialization.

the 'various bottlenecks arising out of controls and the general environment of a shortage dominated economy.'<sup>8</sup> All these would have further inhibited the growth of output and employment in the economy.

While concluding this section a pertinent question that can be raised is - why the 'effective demand' was neglected in the writings of the early development economists or more specifically eluded the framers of the first and second five year plans in India. Bagchi (1985) while investigating this problem had put forth some set of explanations for this omission. Firstly, it was commonly understood that the Keynesian analysis was a short period analysis. 'Hence when problem of economic development were being discussed, Keynesian modes of analysis were eschewed.'<sup>9</sup> Secondly, capital shortage was supposed to be the main factor responsible for poverty and under-development. And unemployment due to effective demand failures was not supposed to be a matter of serious concern. Lastly, many economists were sceptical (and critical) of the Keynesian remedies for the ills of under-development. However, Bagchi failed to emphasize that in a planned economy like ours, it was felt that problems arising due to 'demand constraints' could be overcome through government intervention and hence it eluded the attention of the planners.

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8. V.K.R.V. Rao -- "Investment, Income and the Multiplier in an Underdeveloped Economy." p.210.

9. A.K. Bagchi, *Opcit*, p.233-234.



SECTION - II  
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With the onset of industrial recession in 1965-66, demand failures caught the attention of the economists probing into the nature and causes behind it. At the beginning there was a tendency to come out with an explanation that put the entire onus on the exogenous factors. But this explanation was insufficient because such exogenous factors could not alone account for the persistence of stagnation, 'simply because the economy should have returned to even keel after the event.'<sup>10</sup> Since this did not occur and disappearance of such short-term problems did not result in a revival of industrial growth, exogenous factors alone cannot be held responsible for bogging down industrial progress. There were others who tried to attribute it to the harvest failures or broadly speaking they explained it in terms of the unsatisfactory performance and meagre growth of the agricultural sector.

On the other side of the fence, were a relatively small group of economists who expressed that the real constraints on industrial growth in India was operating from the demand side. The concept of demand constraint did not however lead to a single explanation. The factors leading to demand restriction are different for basic and capital goods industries. However, we can discern three broad set of factors leading to the operation of demand constraint.

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10. D. Nayyar -- "Industrial Development in India: Some Reflections on Growth and Stagnation", Economic and Political Weekly, Special No. 1978, p.1267.

(i) Agriculture - In a developing economy like ours, the importance of agricultural sector can never be underplayed. There are two different channels through which it can affect the demand for industrial goods. First, since agriculture requires industrial inputs such as fertilizer etc. the growth of agriculture generates demand for such industrial products. This link between agriculture and industry will become stronger as the technology of production in agriculture is upgraded. In the Indian case the link was strengthened through the Green Revolution. Secondly, an increase in agricultural income brings about an increase in the demand for industrial consumption goods.

(ii) Income Distribution - This explanation 'merely reiterates the classic under-consumption approach'. It has been argued that in the process of economic development there has been an increase in the degree of inequality in income distribution. The rich are gaining more at the expense of the poor. Since the rich have a higher propensity to save (or conversely a lower propensity to consume), there is a 'macro-shift' from consumption to saving. Alternatively it can be argued that they indulge in conspicuous consumption or hold in the form of liquid money, involve in speculation etc. The result of all these is a shrinkage in the market for industrial goods and a lower rate of industrial growth.

However, the adherents of such an argument fail to see properly the role of the state in a mixed economy like ours. The state through a higher level of investment and increased spending on its part, can in such a situation accelerate the rate of industrial growth.

(iii) 'Real' Investment - It has been argued that the sharp decline in public investment after 1966 was mainly responsible for the decline in the growth of capital goods industries. Associated with this is the theory that postulates a complementary relationship between private and public investment. Therefore, a decline in public investment will have a serious impact on the output of the capital goods industries.

An important question that has to be answered at this juncture is - whether any such 'demand constraint' will have an inhibiting effect on the growth of the economy or not?

We can argue (toeing Tugan-Baranovski) that 'demand constraints' do not act as an impediment in the development process, as long as an economy can achieve an increase in productive capacity. Or in other words, at any level of consumption the entire 'national product may be sold provided the investment is sufficiently large.'<sup>11</sup>

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11. M. Kalecki (1971) -- 'Selected Essays on the Dynamics of The Capitalist Economy 1933-1970.' p.147.

However, Kalecki has demonstrated that any decline in the level of investment can lead to the emergence of the effective demand problem. The process will culminate in a general situation where there is overproduction, which further affects the investment decisions.

In case of India, we have seen that there had been a decline in the level of public investment since the mid-sixties. Further, it can also be argued that there are limits beyond which the level of public investment cannot be raised in a country like ours. Hence, we see that in either of the two situations cited above, the problem of effective demand will make its appearance.

Patnaik (1984)<sup>12</sup> has shown in terms of a macro-model that even if there are no absolute 'demand constraints' operating in an economy, the rate of growth of demand in the economy may slow down because of the re-distribution of the surplus between public and private sectors of the economy. The model assumes (for simplicity sake) that the economy consists of three entities - workers, capitalists and state. An increase in the relative share of any one entity is at the cost of either or both of the other two. Under these circumstances an increase in the share of the surplus accruing to the capitalists can lead to two things. Firstly, it enables capitalists to indulge in increased

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12. P.Patnaik (1984) -- Op.cit., p.1257.

spending on luxury consumption, or it can be held in the form of money, other liquid assets etc. Now such an increase in the share of surplus in total output accruing to the capitalist leads to a decrease in the share of spending by the workers/state or both. 'If productivity is assumed to be constant, the former entails a fall in average real wages and unless state consumption expenditure is assumed to be sufficiently flexible downwards, the latter entails a reduction in the share of state investment in output.'<sup>13</sup>

In the case of Indian economy the scope for an increasing share of surplus of the capitalists in the total output is also very large. This occurs via many channels, mainly through-evasion of taxes, increasing profit margin, by way of subsidies provided etc. In such a situation the problem assumes an important dimension. In the mid-sixties, we witnessed a sharp decline in public investment and later till the mid-seventies there was a shrinkage in the market for industrial consumption goods. Thus, subdued demand in this period held back the growth of the economy.

A cogent version of the under-consumption argument has been put forth in terms of a deliberate shift in the terms of trade in favour of agriculture.<sup>14</sup> The effects of any

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13. P.Patnaik (1984), *ibid.* p.1257.

14. A major problem with the various studies that have been done on the effect of Terms of Trade on the demand for industrial goods is that they precipitate to debates about the differences in the measurement of Terms of Trade and the resulting analysis is bereft of any useful insight.

movements in terms of trade are to be analyzed from both the rural and urban perspectives. The impact of any such change is basically on three different classes - the urban group, the rural poor and rural rich. The urban group (both rich and poor) and the rural poor are net buyers of food while the rural rich is a net seller. Any shift in the terms of trade in favour of agriculture will adversely affect the demand for industrial goods in the urban areas. The cross-elasticity of demand is negative and this is particularly so in the lower income groups of the urban sector where food eats away a sizeable portion of a consumer's budget. In the case of lower income groups in the rural areas, the effect is same as stated above. In the upper income groups in the rural areas, the negative effect on demand resulting from a shift in terms of trade in favour of agriculture can be offset by an increase in income due to higher agricultural prices. Mitra (1979) investigated into this problem and concluded citing Sau's (1974) result that it is not necessary that big farmers will spend more on industrial goods. (Mitra's study covered the time period from mid-1960's to 1973-74 during which the terms of trade moved in favour of agriculture.) On the contrary it has been shown that the real consumption of industrial goods in the rural sector did not move up appreciably at all, during that period. Also that there has been an imperceptible change in the purchase of industrial goods in the urban sector. Mitra concludes - 'While this decline in the rate of industrial growth

is attributable to other factors as well, one major contributory factor must be the levelling off of industrial demand explicitly because of the shifts in the terms of trade.<sup>15</sup> Desai (1981) and Ahluwalia (1985) cast serious doubts on the data used and hence, on the direction of movement of terms of trade as shown by Mitra (1979). Both try to establish that during the time period (as referred by Mitra) there had been a movement of terms of trade in favour of industry.

Rangarajan (1982) has calculated and shown that the total effect in the shift of Terms of Trade in favour of agriculture (taking into account both rural and urban sectors) is negative (i.e. there is a decline in the demand for industrial goods). He used the National Sample survey data and covering a period of broadly improving terms of trade for agriculture (similar to that of Mitra) found that per capita consumption expenditure on industrial product (at constant prices) tended to fall or stagnate for the bottom 40 per cent of the population. There is also a perceptible decline for the middle 40 per cent. The most surprising result is that even for the top 20 per cent there is a fall in the per capita consumption of industrial goods. (See Table 2).

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15. A. Mitra (1979) -- "Terms of Trade and Class Relations - An Essay in Political Economy", p.146.

TABLE - 2

RURAL CONSUMPTION EXPENDITURE ON INDUSTRIAL PRODUCTS 1960-61  
to 1973-74 (PER CAPITA EXPENDITURES AT 1964-65 PRICES)

YEAR	BOTTOM 40%	TOP 20%	ALL GROUPS
1960-61	36	287	105
61-62	37	274	102
62-63	35	242	92
63-64	34	225	88
65-66	32	212	83
66-67	27	173	69
67-68	27	156	66
68-69	28	208	77
69-70	29	209	80
70-71	30	195	78
73-74	32	228	86

Source: C. Rangarajan, Agricultural Growth and Industrial  
Performance in India, Washington DC; IFPRI, 1982.

Ghose (1988)<sup>16</sup> concludes on the basis of Rangarajan's  
result -- "This would indicate that increasing incomes of the  
rich farmer classes are not necessarily spent on a different  
class of industrial consumption goods (luxury commodities) but  
may be actually spent on labour services or other such channels

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16. J. Ghosh -- "Intersectoral Terms of Trade, Agricultural  
Growth and Pattern of Demand", Social Scientist  
Vol. 16, No. 4. Apr 88.



which operate to increase the total demand for foodgrains rather than industrial goods." Therefore, even if Terms of Trade tilts in favour of agriculture, it may not lead to an increased demand for luxury goods.

Roy (1983)<sup>17</sup> had tried to measure the impact of marketed surplus and terms of trade on the 'offtake' of Industrial Consumer Goods (ICG) in the rural areas. He applied the N.S.S. rural/urban proportion to disintegrate the C.S.O. data. The data on terms of trade were obtained from Tamarajakshi (1977)

$$\text{Log ICG}^R = -1191 + .7 \text{ Log Mks} + .98 \text{ TT} \\ (4.5)$$

$$R^2 = .92$$

$$\text{DWS} = 1.9 \quad \text{where ICG} = \text{Industrial Consumer Goods}$$

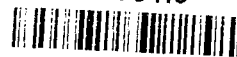
TT = Terms of Trade

MKs = Marketed Surplus

DISS

339.470954

M6973 Ho



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714-2976

This shows that 1% increase in the Marketed Surplus increases demand for industrial goods by .7% and 1% increase in terms of trade in favour of agriculture increases the demand by .98% in the rural areas. However, the results contradict Rangarajan's assertion of a decline in the rural per capita consumption of industrial goods even when terms of trade move in favour of agriculture.<sup>18</sup>

17. S. Roy -- "Demand for Industrial Consumer Goods - Some Pertinent Issues", Indian Economic Journal, Vol.31, Oct-Dec 83.

18. A major problem with these regression analysis is that they tend to loose sight of the macro-economic relationships between the various variables. Hence the result obtained may not be meaningful enough to draw any conclusion.

We will now digress a little and put forward what has been referred to as 'pure-poverty-related deficiency of demand problem.' T.N. Krishnan (1964) had shown that the demand for cloth is inversely related to the price of foodgrains. Krishnan explained how due to a fall in foodgrain prices, there is an increase in the urban consumption of cloth. Krishnaji (1984) tried to find out the effect of price of cereals on the demand for manufactures. He observed that the prices of cereals play an important role in restricting the domestic market for manufactures. Only at very high levels of incomes that 'food constraint' becomes inoperative. Thus he established that 'some items in the food basket are non-substitutable for the great majority of people.' Further Krishnaji adduced Murty and Radhakrishna's findings where National Sample Survey (NSS) data has been used for estimating demand relationships at a more disaggregated level. The interesting feature illustrated by this estimate is that 'the depressing effect of rising cereal prices, on demand for other goods extends (with a few exceptions) not only to all commodity groups listed in the N.S.S. data but also to all parts of the population including the top 20%.'<sup>19</sup> However, the inverse relationship is strongest with respect to bottom expenditure groups. In this fashion Krishnaji's earlier findings are confirmed.

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19. Krishnaji (1984) -- Op.cit. p.1266.

SECTION - III  
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This section is a summary of the various studies which seek to establish a relationship between income distribution, demand factor and industrial growth. All these were subject to intense debate in the mid-seventies and continued thereafter. The list of participants in this discussion includes Bagchi (1970), a partial analysis by Raj (1976), the familiar 'terms of trade' argument of Ashok Mitra (1979) and a preliminary hypothesis put forth by Nayyar (1978).

Raj (1976) has argued that because of the overwhelming importance of the agricultural sector, private consumption expenditure depends to a large extent on farm incomes. Accordingly, the slow growth in agriculture (and the accompanying negligible growth of per capita income in that sector) has restricted the demand for manufactured goods and consequently held back industrial growth. As an illustration of this point, Raj notes that the regions characterized by moderately high and stable rates of agricultural growth have also experienced high growth rates in industry. However he does not substantiate his argument with any correlation between regional growth of agriculture and regional industrial growth.

At the 1968 Candy Conference Bagchi highlighted the problems (and how the expectations were belied) with the adoption

of Mahalanobis model and showed how it failed to generate a 'balanced and sustained industrial growth.' In this context he emphasized the role of unequal distribution of income in holding back industrial development. His main proposition was that the unequal distribution of income was the consequence of the private sector occupying the commanding heights of the economy. Any increment in the amount of income was appropriated and utilised to meet the requirements of the private sector. He argued, unlike the socialist economy the government has no strict control over allocation of scarce resources between (a) consumption and savings (b) of total investment between capital goods and consumer goods industries (c) between 'essential' and 'non-essential' consumption. Hence it becomes difficult for the government to maintain the level of investment as warranted.

Presenting his own explanations for sluggish industrial growth Nayyar pointed out to the relationship between income distribution, demand factor and industrial growth. He put forth unequal distribution of income and the accompanying low consumer demand as the major cause for stagnation. According to him "the pace of industrialization can only be sustained if there is a growth in the domestic market, because the production capacities created in the investment goods sector must be absorbed by final consumer demand."<sup>20</sup> But in a market economy

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20. Nayyar (1978) - Op.cit. P. 1273.

where the distribution of income is unequal the demand base might be very narrow in terms of population spread. Evidence regarding the narrow base for industrial goods is obtained from Sau's (1974) findings for the period 1952-53 to 1964-65. Further evidence about the proportion of expenditure on industrial goods is obtained from C.S.O.'s National Accounts Statistics (N.A.S.). Following Mitra, he also assumes that the income distribution has worsened. The relative few have been able to tilt the scale in their favour. For this group apart from consumption of luxury items, the other outlet was speculation, trade and construction. However Nayyar cautions us that --"an increased production of consumer goods destined for the richer sections of the population can utilise capacities only to a limited extent."<sup>21</sup> It cannot bring about a sustained increase in industrial output. After ruling out the 'export-led' strategy he concedes the importance of domestic market for consumer goods as a source of continuous industrial growth.

Roy (1983) in a partial analysis tried to find out the impact of intra-sectoral distribution of income on the consumption of industrial goods. He applied the N.S.S. rural/urban proportion to disintegrate the C.S.O. data. Using the Lorenz ratios computed from National Sample Survey for both the rural and urban groups, the estimated equations are

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21. Nayyar (1978) -- Ibid. p.1275-1276.

$$\text{ICG}^R = 11587 - 27932.9L_r$$

(3.0)      (2.15)

$$R^2 = .34$$

$L_r$  = Lorenz ratio for the rural sector

$$\text{ICG}^u = 6209.26 - 14606.7L_u$$

(13.6)

$$R^2 = .6$$

$L_u$  = Lorenz ratio for urban sector.

The coefficient of the distribution variable is highly significant but  $R^2$  is not satisfactory. However one can observe the inverse relationship between inequality and consumption of industrial consumer goods.

#### SECTION - IV

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A basic conclusion of most of the studies pertaining to the 'demand constraint' problem was that, there was a shrinkage in the size of the 'home market' for industrial goods. The empirical basis for such a conclusion had been provided by Sau (1974), Mundle (1975) and Rangarajan (1982). We will now focus our attention on their findings.

Both, Sau and Mundle had observed the 'narrowing' of the 'home market' for industrial goods. Though the methodology used by them differs in many respects and magnitudes also

vary, the trend is uniform. Sau's analysis enables us to draw inferences both in aggregate as well as for different deciles of the population. On the contrary Mundle's findings reveal information only at an aggregate level.

Sau (1974) observed that for the rural sector, there was a decline in the proportion of total expenditure spent on industrial goods during the period 1952-53 to 1964-65. This decline was more noticeable in the poorer fractile groups. 'In annual aggregate consumption of industrial goods of rural areas the lower six deciles had lost ground proportionately.'<sup>22</sup> (See Table 3). It can also be gleaned from the Table that the relative position of various fractile groups in the urban areas was volatile. However, the richest 10 per cent of population accounted for 32.19% of total consumption in rural areas and 39.27% of such consumption in urban areas. (See Table 4 also).

Sau concluded - 'The base of the market for industrial consumer goods in India is narrowing, despite the rapid growth of industrial production in the country over the last two decades. The concentration of industrial consumer goods is rising at the thin, top layer of the population.'<sup>23</sup> (as stated above).

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22. Sau (1974) -- Op.cit. p.1281.

23. Ibid. p.1281.

TABLE - 3

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PERCENTAGE OF CONSUMPTION OF INDUSTRIAL GOODS BY FRACTILE  
GROUPS IN RURAL INDIA

(Per cent)

Population fractile	1952-53	53-54	54-55	55-56	60-61	61-62	63-64	64-65
Poorest								
0-5	1.04	0.82	0.97	1.0	0.99	0.87	1.05	1.04
5-10	1.44	1.25	1.28	1.35	1.32	1.23	1.46	1.26
10-20	3.67	3.71	3.18	3.41	3.55	3.26	3.67	3.61
20-30	4.81	4.48	4.02	4.49	4.05	4.11	4.67	4.38
30-40	6.06	4.75	4.83	5.55	5.20	5.03	5.85	5.40
40-50	6.56	6.04	5.78	6.16	6.11	6.56	7.10	6.32
50-60	7.70	7.45	7.04	7.76	7.49	7.57	8.34	7.60
60-70	9.26	9.10	8.87	9.77	8.95	9.64	10.09	9.71
70-80	11.66	11.36	12.19	12.23	11.46	12.97	12.50	12.24
80-90	15.14	17.07	15.43	15.89	15.30	17.0	16.45	16.24
90-95	10.97	11.48	11.34	11.01	11.13	11.62	11.28	11.49
95-100	21.69	22.49	25.07	21.38	24.44	20.14	17.54	20.79
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

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Source: R Sau (1974), *Opcit.* p. 1279.



TABLE - 4

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PERCENTAGE OF CONSUMPTION OF INDUSTRIAL GOODS BY  
FRACTILE GROUPS IN URBAN INDIA

(Per cent)

Population fractile	1952-53	53-54	54-55	55-56	60-61	63-64	64-65
Poorest							
0-5	0.81	0.71	0.82	0.88	0.82	0.87	1.02
5-10	1.16	1.16	1.09	1.21	1.28	1.29	1.29
10-20	3.05	3.21	2.80	3.09	3.41	3.19	3.22
20-30	3.92	3.90	4.0	4.08	4.29	4.08	3.89
30-40	4.95	5.05	4.67	5.07	5.23	4.85	4.69
40-50	5.83	5.95	5.68	6.26	6.10	5.94	5.79
50-60	7.28	7.20	6.90	7.81	7.49	7.42	6.89
60-70	9.26	9.11	9.17	9.81	8.91	8.77	8.24
70-80	11.02	11.15	11.70	12.62	11.65	11.24	9.97
80-90	15.92	17.46	15.92	16.0	16.55	17.36	15.72
90-95	12.09	12.60	12.51	10.99	11.88	12.68	10.89
95-100	24.69	22.50	24.66	21.67	22.39	22.30	28.39
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00

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Source: R. Sau (1974), Op.cit. p.1281.

Mundle's study covers the time period 1951-52 to 1967-68. But his study is only at an aggregate level . During this period the share of rural expenditure on non-agricultural goods declined from 35.5 per cent to 29.3 per cent. While for the urban sector, the proportion of expenditure of non-agricultural goods remained stagnant around 13 per cent. On the whole, therefore, the share of non-agricultural goods in the entire 'home market' for consumer goods seems to have decreased, from 49 per cent in 1951-52 to about 42 per cent in 1967-68. (See Table 5) (Next page).

Rangarajan (1982) observed that though there were some evidences which showed a decline in the percentage of consumer expenditure spent on industrial goods the trend does not appear to be strong, if the data is extended beyond 1964-65. He replicated Sau's (1974) study by extending the exercise upto 1973-74. His analysis showed that there was a very small decline in the percentage of expenditure on industrial products. It is interesting to note that this decline occurred not only in the low fractiles of the population but also in the top echelons.

TABLE - 5  
-----ANNUAL CONSUMPTION EXPENDITURE ON NON-  
AGRICULTURAL COMMODITIES

(Rs. Crores)

Year	Rural Population Non-Agricultural Comm.	Urban Population Non-Agricultural Comm.
1951-52	3493.7 (35.5)	1324.1 (13.4)
1952-53	3349.5 (35.6)	1353.5 (14.4)
1953-54	2753.9 (33.3)	1019.9 (12.3)
1954-55	2495.6 (32.6)	1163.8 (15.2)
1955-56	2909.5 (32.9)	1184.7 (13.4)
1956-57	2702.5 (30.2)	1237.2 (13.8)
1957-58	3133.2 (32.3)	1242.1 (12.8)
1958-59	3404.2 (31.6)	1400.1 (13.0)
1959-60	3551.5 (32.4)	1418.8 (12.9)
1960-61	3916.3 (32.9)	1554.6 (13.0)
1961-62	3983.1 (31.8)	1649.0 (13.2)
1963-64	4130.5 (30.5)	2145.1 (15.8)
1964-65	4646.0 (29.1)	2041.8 (12.8)
1967-68	5844.3 (29.3)	2594.0 (13.0)

Figures in parenthesis indicate percentage of total consumption expenditure by the combined rural and urban population.

Source: S. Mundle (1975), Op.cit. p.167.

SECTION - V

Thus we see that there was a decline in the share of industrial goods in total consumption during the period 1951-52 to 1967-68. However, the empirical backing for such a conclusion is weak if we include the later years. A clear picture that emerges from this analysis is that the industry was catering to only a limited segment of the population.

## CHAPTER - III

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### AN EMPIRICAL ANALYSIS OF THE 'HOME MARKET'

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#### FOR INDUSTRIAL CONSUMPTION GOODS

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In this chapter we propose to measure the total consumption of industrial consumption goods in both the rural and urban sectors of the economy.<sup>1</sup> This will help us to shed some light on the 'home market' for industrial consumption goods. Section I of this Chapter discusses the methodology used, the sources of data used in this study, biases involved in the use of such data, choice of deflators used, classification of industrial consumption goods and some related problems. Section II unfolds the trends in the 'home market' for industrial consumption goods. This enables us to compare the results obtained in this analysis with the earlier findings of Sau (1974), Mundle (1975) and Rangarajan (1982).

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1. We can take the estimates of consumption for rural and urban sectors as proxy estimates for agricultural and industrial sectors. Such instances are there in literature.

SECTION - I

Any analysis of consumer behaviour in India has to be primarily based on the data collected by the National Sample Survey Organisation (N.S.S.O.). The first round of the National Sample Survey started in October 1950 and was collected annually till the twenty eighth round (1973-74). After the twenty seventh round, decision was taken that the survey on consumer expenditure<sup>2</sup> will be undertaken once in five years beginning from the twenty seventh round. The National Sample Survey Organization (N.S.S.O.) publishes data pertaining to per capita consumer expenditure on major groups of commodities (both food and non-food items). The food items are (i) foodgrains (ii) Milk and Milk products (iii) Meat, egg and fish (iv) edible oil (v) sugar (vi) salt (vii) other foods consisting of pulses and products, vegetables, fruits and nuts, spices, beverages and refreshment, processed food and pickles, jams and jellies etc. (After the nineteenth round the different components of the 'other food' item were classified separately and per capita expenditure on them were also given separately). The major non-food items were (i) Clothing (ii) Fuel and light (iii) Rent and taxes

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2. Definition of Consumer Expenditure (as specified in the N.S.S. schedules) is given in the Appendix.

(iv) Miscellaneous goods and services including Pan etc., tobacco and its products, drugs and intoxicants, amusement and sport, education, medicine, toilets and sundry, conveyance, ceremonies, ornaments, domestic utensils, footwear and other durables, semi-durables etc. In the later rounds many of these items like footwear, durable goods etc. were classified separately and per capita expenditure on these items were also separately given.

The N.S.S. reports issued by the Government of India furnish data on consumer expenditure for various broad categories of consumption. Between the different rounds there are however slight readjustments of items into various groups. The per capita expenditure for 30 days is classified into various expenditure classes, all in rupees. For each of the expenditure classes, the standard N.S.S. tables give the estimates of (i) the proportion of persons falling under each group (ii) the average per capita total expenditure (iii) the average size of households (iv) the number of households under each group. N.S.S. is one of the main source of data for this analysis.

To ensure a proper comparability in aggregate terms, we have also used the Private Final Domestic Consumption Expenditure data (by major groups of commodities) published in the National Accounts Statistics (N.A.S.). This is provided by the Central Statistical Organization (C.S.O.)

In actual practice, C.S.O. uses the disaggregate data on consumption expenditure provided by the National Sample Survey and uses its own method to obtain the aggregate figures for consumption expenditure. The N.A.S. data pertaining to the Private Final Domestic Consumption Expenditure is given in aggregate terms, both in current and constant prices from 1960-61 onwards.

#### SAMPLING DESIGN

The sampling design is stratified two stage; the first stage units are villages in the rural sector and blocks in the urban sector. The second stage units are households in both the sectors. The entire rural and urban sectors are divided into a number of strata and an appropriate number of villages or urban blocks are selected from each stratum with probability proportional to the size of the selected unit. From each selected village or urban block, a number of households are selected as second stage units.

A distinguishing feature of the N.S.S. sampling design is the use of independent inter-penetrating samples. This enables us to study the effect of sampling and non-sampling variations in the estimate.



SOURCES OF BIAS  
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In a pioneering work by Mukherjee and Chatterjee (1972),<sup>3</sup> some of the relevant sources of bias in the N.S.S. estimates of consumption expenditure have been pointed out. Earlier Dandekar and Rath (1971)<sup>4</sup> while doing their poverty analysis had put forth some factors which could provide the basis for the existence of bias in the N.S.S. estimates. They had used the N.S.S. estimates of consumption expenditure to measure the dimensions and trends of poverty in India. However, the estimates gave the impression that the inequalities between different classes had narrowed down, which according to them was not true and 'incredible'. So they made a correction of the estimates to show that the gains of development had been unequally distributed. However, Bardhan had shown that if proper deflators had been used by Dandekar and Rath, they would have found the pattern of change in the level of living of different fractile groups between the relevant time period less 'incredible'. Vaidyanathan, Srinivasan and Radhakrishnan<sup>5</sup> also evaluated the data on

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3. Mukherjee, M and Chatterjee, G.S. - 'On the validity of NSS Estimates of Consumption Expenditure', Artha Vijnana, Vol.14, June 1972.
4. DANDEKAR, V.M. and RATH. (1971) - Poverty in India. Economic and Political Weekly, Jan 2 and 9, 1971.
5. SRINIVASAN, T.N. and RADHAKRISHNAN, P.N. and VAIDYANATHAN, A. - 'Data on Distribution of Consumption Expenditure in India: An Evaluation'..

distribution of consumption expenditure in India. They considered both the N.S.S. and those obtained from the official National Income estimates. One of their main conclusions that can be summarized in their own words - "In comparing the series of consumption expenditure derived from the official estimates of National Income and the N.S.S., allowance must be made for the inevitable margins of error in both the estimates."<sup>6</sup> Now a satisfactory answer to the question as to what are these 'inevitable margins of error' leading to bias in the study can be obtained from the study done by Mukherjee and Chatterjee (1972). The process of survey as done by N.S.S. involved the distribution of a schedule and the 'respondents' statements are recorded. Apart from recall lapses there can be response biases, which may lead to overestimation or underestimation in the aggregate. An oft repeated bias is the tendency of the rich or upper deciles of the expenditure class to under report the magnitude of consumption, especially of luxury items. This in turn leads to an underestimation of the aggregate private consumption expenditure.

Dandekar and Rath (1971) had highlighted two more type of biases involved. Firstly, they argued that there are limitations of the procedure, where estimates of consumption expenditure are obtained by inquiry about the expenditure

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6. Ibid. p.21.

incurred during the previous month. This is more so in the Indian case where seasonality influences expenditure. The counter-argument advanced against this is that (i) N.S.S. is canvassed in a number of sub-rounds spread throughout the year and so any seasonality in the purchase will be captured in the sub-rounds covering the period (ii) In any given sub-round the random sampling procedure of the survey will ensure that the purchase of such type are not systematically excluded. Secondly, they argue that the upper income households are inaccessible to the N.S.S. investigators. However, there is absolutely no independent evidence other than the words of the author to test their assertion.

On the other hand, the procedure of obtaining the estimates of Private Final Domestic Consumption expenditure from National Accounts Statistics are well known. However we can briefly touch upon one important point here. This estimate includes final consumption expenditure of the private non-profit institutions apart from that of individuals and households. The magnitude of consumption expenditure of private non-profit institutions are not always known. It is because of this the N.S.S. 'estimates measures something which is smaller than what is measured by the corresponding official estimate'.

CLASSIFICATION OF INDUSTRIAL CONSUMPTION GOODS

The importance of classification of Industrial Consumption Goods cannot be overlooked in an analysis such as ours. However, the domain of such definition cannot be fixed and are subject to changes with the passage of time.

Thamarajakshi (1969)<sup>7</sup> in her study treated all 'food items' except sugar, edible oil and salt as agricultural commodities. Thus Sugar, edible oil, Salt together with all the non-food items were treated as 'non-agricultural' goods. However the exact basis of her classification was not explicitly spelt out.

Sau (1974) considered (i) edible oil (ii) sugar (iii) salt (iv) three-fourth of 'other food' (v) All non-food items as 'industrial goods'. He handled the other food item in a very arbitrary fashion without rationalizing the choice of the weight attached to it. However, Sau did not claim his definition to be accurate. But he tried to justify the composition of the industrial goods (as specified above). According to him - "The single thread which binds them together is that they are not a direct product of agricultural activity as a whole".<sup>8</sup> He stated that a more

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7. Thamarajakshi (1969) - 'Inter-sectoral Terms of Trade and the Marketable Surplus of Agricultural Products' Economic and Political Weekly, June 23, '69.

8. Ibid., p.1279.

appropriate term would have been - 'non-agricultural' goods. But the convenience of expression has directed his choice. He asserts that though many of these industrial goods are not produced in the factories, yet they could be conceived as being 'organized under factory production'. 'If the onslaught of capitalism continues further, in due course they would be brought under factory system.'<sup>9</sup> He concluded by noting that although the classification he adopted was crude from the operational point of view, it was 'quite clear conceptually'.

Mundle (1975) raised objections to Sau's treatment of the 'other foods' item. He recognized it as the third most important item in the consumption basket and therefore treated it carefully. He tried to measure (on the basis of data published by N.S.S. in the nineteenth and twenty second rounds) what proportion of the 'other food' item was agricultural and how much of it was non-agricultural.<sup>10</sup> Mundle's result varied from that of Sau's assumption. For the rural areas, the non-agricultural component of other food item worked out to be

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9. Ibid., p.1279.

10. Information on such break-up was provided in the nineteenth round and in the draft of the twenty second round only. Mundle applied the ratios of 'non-agricultural' and 'agricultural' parts of the 'other food' item obtained from these rounds to the earlier round. However, these are again crude approximations subject to changes over time.

one-fourth, while for the urban areas a little less than half of the total.

In his exercise Mundle used the Indian Standard Industrial Classification (ISIC) 1961 - (which is a modified version of U.N. International Standard Industrial Classification to demarcate between 'agricultural' and 'non-agricultural' sector. ISIC Division 0 was adopted as 'agricultural sector while the rest were considered as 'non-agricultural'.<sup>11</sup>

After a comparison of the major items of consumption and their sub-groups in the N.S.S. tables with the major and minor groups of Division 0 of the ISIC. Mundle defined 'industrial goods' to consist of (i) Edible oil (ii) Sugar (iii) Salt (iv) other food (v) Spices (vi) Beverages and refreshment (vii) Pan, tobacco and intoxicants (viii) Fuel and Light (ix) Miscellaneous goods and services (including consumer rents and taxes) (x) Durable goods and (xi) Clothing and footwear.

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11. Division 0 included the following major group of economic activities

Division 0		
Major	Group	Minor Group
0	0 Field produce & Plantation crop	(000-009)
0	1 Plantation Crop	(010-015)
0	2 Forestry and Logging	(020-026)
0	3 Fishing	(030-032)
0	4 Livestock and hunting	(040-048)

Here we cannot comprehend why expenditure incurred on 'rents' and 'taxes' has to be included in the definition of 'industrial goods'.

However it is interesting to note that inspite of differences in the definition of industrial goods, the results obtained by Sau and Mundle indicate the same trends about the 'home market' for industrial goods. Nayyar (1976) in his analysis also supports the above argument.

It should be evident by now that there is an 'ambiguous category' of goods and activities between those which are clearly agricultural and which are non-agricultural - which cannot be easily classified, no matter how sharp our conceptual definition is. For our study we have adopted Mundle's definition which is more rigid and less arbitrary than Sau's definition. However we have excluded Rents and Taxes which under any circumstances cannot be included under the domain of industrial goods. Hence our definition of Industrial goods includes (i) Edible oil (ii) Sugar (iii) Salt (iv) Other food. (whose agricultural and non-agricultural part have been separately calculated. In our study, for the period of seventies the break up of 'other food' item is specified which makes our task easier). (v) Pan, tobacco and its products, Intoxicants. (vi) Fuel and Power (vii) Clothing and footwear (viii) Miscellaneous goods and services. This definition corresponds (more or less is equivalent) to Mundle's definition of industrial goods. We have also calculated expenditure on

industrial goods using Sau's definition of industrial goods. The series is presented in the appendix.

Our study takes into account four discrete time-periods 1960-61, 1972-73, 1977-78, 1983. N.S.S. data on consumption Expenditure (by major groups/items) are available for twelve expenditure group in the time period covering the 1960's. After that the N.S.S. data are available for thirteen expenditure classes (sometimes more also) for both the rural and urban areas. The per capital consumption expenditure on major items for a period of 30 days is given. We changed it to per capita consumption expenditure per annum for different expenditure classes. Next we compute the percentage of consumer expenditure on industrial goods for different expenditure classes. Now in order to blow up the estimates of per capita consumption of industrial goods into total consumption (i.e. in aggregate terms), it was necessary to construct the time series estimate of rural and urban population. For this purpose we calculated the compound rate of growth of population <sup>between 1971 and 1981</sup> for both the rural and urban sectors. The growth rate of rural population turned out to be 1.81 per cent per annum. While for its urban counterpart it was 3.85 per cent per annum. These growth rates were applied to calculate the rural and urban population in the intervening years. The population estimates corresponding to the calendar years were then adjusted to the financial years following Sau's method. Sau had done this by adding three-



quarters of one year's population to one quarter of the succeeding year's population. In our analysis further modifications were also adopted (according to the given reference period) when needed. The estimated population figures are given in Table 1.

After having known, per capita consumption expenditure per annum, percentage of consumption expenditure on industrial goods and the population series, the calculation of the total consumption of industrial goods at current prices is a straight forward matter of arithmetic.

In order to obtain the total consumption of industrial goods at constant prices, we had to deflate the series (at current prices) by some suitable deflator. Two options available to us were (i) Implicit price deflators used in the National Accounts Statistics (N.A.S.) (ii) The Wholesale Price Index. Since the series given in the NAS do not specify the composition of the commodities and weights, it was difficult to use it. Further the series of implicit deflator used in the NAS can only be obtained from 1970-71 onwards. Alternatively, we had the Wholesale Price Index of different commodities in the R.B.I. Report on Currency and Finance (various volumes). This enabled us to select the group of commodities which nearly tallied with our definition of industrial goods. The commodities selected were (i) Pulses (ii) Fruits and Vegetables (iii) Other food articles (iv) Fuel power and Lubricants (v) Food Products (vi) Beverages, Tobacco and its products (vii) Textiles (viii) Leather Products (ix) Miscellaneous Products. Such a

TABLE - I

RURAL URBAN POPULATION (adjusted according to  
the financial years)

(millions)

Year	Total	Rural	Urban
1960-61	439.07	360.14	78.93
1972-73	569.466	453.007	116.49
1977-78	632.65	493.30	139.35
1983	715.94	544.43	171.51

Source: Census of India 1961, 1971 and 1981.

TABLE - 2

PRICE DEFLATORS (calculated from wholesale price index)

Year	Index No.
1960-61	58.67
1970-71	100
1972-73	129.06
1977-78	202.87
1983	303.61

Source: R.B.I.'s Report on Currency and  
Finance (Vol. II) various issues.

composition enables us to deflate a series of consumption of Industrial Goods based on Sau's definition also. This is because in Sau's definition the 'other food' item included (i) Pulses (ii) Fruits and Vegetables and no attempt was made to segregate the agricultural and non-agricultural part of the 'other food' item. Using the composite Index number formula, where the weights are attached accordingly as in the consumption basket, the index number for the different years from 1960-61 to 1983 were calculated and linked to a common base 1970-71. Table 2 illustrates these index numbers.

## SECTION - II

In this section we have done some exercises which enable us to obtain the total consumption of industrial goods, both at current and constant prices (1970-71). To begin with, we have dealt with the N.S.S. data and tried to find out the magnitude of total consumption of industrial goods for 1960-61, 1972-73, 1977-78, 1983 respectively.

Tables 3 to 10 show the total consumption of industrial goods by different expenditure classes both at current and constant prices for the rural and urban sectors respectively. The main findings have been summarized in Tab 11 given below:

TABLE - 3

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1960-61

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of per- sons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-96	6.38	22.97	78.24	34.32	61.697	1.57	105.159
96-132	11.95	43.03	114.96	33.14	163.935	4.19	279.418
132-156	9.88	35.58	145.2	31.7	163.769	4.18	279.135
156-180	9.82	35.36	168.48	31.28	186.349	4.76	317.622
180-216	13.79	49.66	197.28	32.36	317.028	8.10	540.357
216-252	11.44	41.20	234.0	35.62	343.405	8.78	585.316
252-288	9.03	32.52	269.64	37.17	325.932	8.33	555.534
288-336	7.72	27.80	308.76	40.19	344.971	8.82	587.985
336-408	7.66	27.58	369.96	43.74	446.300	11.41	760.695
408-516	5.93	21.35	454.44	44.82	434.856	11.12	741.189
516-660	3.1	11.23	575.4	55.45	358.303	9.16	610.709
660+	3.28	11.81	991.32	65.15	762.742	19.51	1300.054
Total					3909.287		6663.178
All Classes	100.00	360.14	257.64	41.72	3871.051		6598.007

SOURCE: NSS Report on consumption expenditure (1960-61).

TABLE -- 4

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1960-61

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of per- sons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-96	2.15	1.69	76.56	27.56	3.565	.24	6.076
96-132	5.49	4.33	116.64	35.74	18.050	1.25	30.760
132-156	7.19	5.67	143.04	38.87	31.525	2.19	53.732
156-180	6.86	5.41	167.4	39.8	36.044	2.50	61.435
180-216	10.71	8.45	198.48	42.08	70.574	4.91	120.289
216-252	11.40	8.99	232.44	43.48	90.857	6.32	154.861
252-288	9.68	7.64	267.96	43.78	89.627	6.24	152.764
288-336	11.03	8.70	311.04	46.56	125.993	8.77	214.748
336-408	9.34	7.37	368.52	49.17	133.545	9.29	227.620
408-516	9.61	7.58	457.68	53.08	184.145	12.82	313.465
516-660	7.04	5.55	584.16	55.46	179.806	12.52	306.470
660+	9.50	7.49	1018.32	61.93	472.353	32.89	805.101
Total					1436.084		2447.731
All Classes	100.00	78.93	354.24	51.43	1437.991		2450.982

Ratio of Rural to Urban Consumption = 2.722

SOURCE : As in table 3

TABLE - 5

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1972-73

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of persons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-156	1.62	7.339	111.96	24.24	19.917	.216	15.433
156-180	1.34	6.070	170.52	24.74	25.607	.278	19.841
180-216	3.37	15.266	200.28	27.36	83.653	.909	64.817
216-252	5.12	23.194	237.00	28.51	156.719	1.702	121.431
252-288	6.47	29.309	272.64	29.63	236.768	2.572	183.455
288-336	10.06	45.572	313.92	29.68	424.610	4.614	329.002
336-408	15.53	70.352	371.04	32.15	839.225	9.119	650.259
408-516	19.06	86.343	438.72	32.41	1227.704	13.34	951.266
516-660	16.20	73.387	559.2	36.18	1484.755	16.134	1150.438
660-900	11.84	53.636	739.56	40.91	1622.799	17.634	1257.38
900-1200	5.31	24.055	1004.52	46.88	1132.796	12.309	877.728
1200-1800	2.90	13.137	1395.00	53.12	973.483	10.578	754.287
1800-2400	5.56	2.537	2035.44	60.24	311.074	3.380	241.031
2400+	.49	2.219	4085.64	73.18	663.452	7.209	514.065
Total					9202.542		7130.437
All Classes	100.00	453.007	507.24	38.98	8956.952		6940.146

Ratio of Rural to Urban Consumption = 2.186

SOURCE : NSS REPORT ON CONSUMPTION EXPENDITURE (1972-73).

TABLE - 6

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1972-73

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of per- sons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-156	.35	.408	110.04	38.57	1.732	.041	1.342
156-180	.33	.384	164.28	34.95	2.205	.052	1.709
180-216	.98	1.141	197.04	35.39	7.956	.189	6.165
216-252	1.87	2.178	232.44	37.46	18.964	.450	14.694
252-288	2.89	3.366	267.72	38.16	34.388	.817	26.645
288-336	5.71	6.649	307.44	37.63	76.922	1.82	59.602
336-408	10.91	12.706	364.68	38.35	177.699	4.22	137.688
408-516	16.99	19.786	450.36	40.16	357.859	8.50	277.281
516-660	17.99	20.951	566.16	43.32	513.846	12.20	398.145
660-900	17.96	20.916	737.76	47.02	725.565	17.24	562.192
900-1200	10.87	12.659	988.32	51.31	641.947	15.25	497.402
1200-1800	8.26	9.619	1358.88	55.01	719.039	17.08	557.136
1800-2400	2.61	3.039	1916.28	58.19	338.873	8.05	262.571
2400+	2.22	2.585	3422.52	66.87	591.613	14.05	458.402
Total					4208.608		3260.970
All Classes	100.00	116.459	728.04	53.64	4547.964		3523.914

SOURCE: Same as in Table 5

TABLE - 1

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1977-78

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of per- sons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-120	0.19	.93	54.72	53.83	2.739	.013	1.350
120-180	0.38	1.87	157.80	34.93	10.307	.049	5.080
180-240	1.07	5.27	213.48	32.09	36.102	.172	17.795
240-360	6.77	33.39	310.32	31.96	331.156	1.58	163.23
360-420	6.13	30.23	390.36	32.91	388.357	1.85	191.431
420-480	7.33	36.15	450.60	34.42	560.673	2.68	276.731
480-600	15.95	78.68	538.80	35.98	1525.292	7.29	751.857
600-720	14.87	73.35	656.88	38.11	1836.221	8.78	905.122
720-840	11.87	58.55	774.84	40.62	1842.802	8.81	908.366
840-960	8.97	44.24	894.84	42.71	1690.791	8.08	833.435
960-1200	11.24	55.44	1063.56	45.9	2706.436	12.94	1334.074
1200-1800	10.24	50.51	1421.64	51.7	3712.423	17.75	1829.952
1800-2400	2.72	13.41	2036.28	57.46	1569.032	7.50	773.417
2400+	2.03	10.01	5802.24	80.83	4694.640	22.45	2314.112
Total					20906.971		10305.6
All Classes	100.00	493.30	824.16	47.07	19136.691		9432.982

SOURCE: NSS report on Consumption Expenditure (1977-78).



TABLE - 8

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1977-78

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of per- sons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-120	0.15	0.20	53.28	54.64	.582	.006	.287
120-180	0.11	.15	147.84	45.68	.012	.01	.498
180-240	0.29	.40	210.48	41.34	3.480	.04	1.715
240-360	2.00	2.78	309.24	38.8	33.355	.35	16.441
360-420	2.13	2.96	386.28	40.06	45.804	.40	22.578
420-480	3.18	4.43	443.16	40.69	79.882	.85	39.376
480-600	8.77	12.22	531.72	42.42	275.628	2.95	135.864
600-720	10.81	15.06	644.52	44.42	431.161	4.62	212.530
720-840	11.40	15.88	758.88	48.78	587.848	6.31	289.766
840-960	10.36	14.43	872.52	48.93	616.051	6.61	303.668
960-1200	16.16	22.51	1033.32	51.41	1195.798	12.83	589.440
1200-1800	20.02	27.89	1387.44	56.23	2175.859	23.35	1072.538
1800-2400	7.52	10.47	1944.24	60.35	1228.496	13.18	605.558
2400-3600	4.86	6.77	2684.04	65.26	1185.836	12.72	584.530
3600+	2.24	3.12	5866.8	79.5	1455.201	15.62	717.307
Total					9315.993		4592.096
All Exp. Classes	100.00	139.35	1107.60	57.19	8826.936		4351.031

Ratio of Rural to Urban Consumption of Industrial Goods = 2.244

SOURCE: Same as in Table 7

TABLE - 9

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1983

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of persons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0-360	.21	.36	253.44	47.9	4.370	.023	1.439
360-480	.51	.87	424.08	40.49	14.938	.082	4.920
480-600	1.40	2.40	539.76	41.86	54.226	.297	17.860
600-720	2.93	5.02	657.36	42.78	141.171	.77	46.497
720-840	4.92	8.43	771.48	43.93	285.702	1.56	94.101
840-1020	9.52	16.32	911.76	44.7	665.132	3.65	219.074
1020-1200	10.64	18.25	1085.88	46.9	929.431	5.10	306.126
1200-1500	17.17	29.45	1311.12	49.18	1898.962	10.42	625.460
1500-1800	13.13	22.52	1596.84	51.41	1848.746	10.15	608.921
1800-2400	16.31	27.97	1990.2	54.97	3059.954	16.80	1007.856
2400-3000	8.75	15.00	2251.8	58.79	1985.749	10.90	654.045
3000-3600	5.19	8.90	3101.52	61.75	1690.716	9.28	556.870
3600+	9.32	15.98	5121.36	68.84	5633.819	30.93	1855.610
Total					18212.916		5998.78
All Classes	100.00	171.51	1891.2	57.15	18537.158		6105.582

SOURCE : NSS report on consumption expenditure (1983).

TABLE - 10

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1983

(Rs. Crores)

N.S.S. Exp. Class	% distn. of estimated no. of per- sons in each class	Total No. of persons in each class (millions)	Per capita Expenditure per Annum (Rs)	% of expenditure on Industrial Goods	Total Consumption of industrial goods (current prices)	Share in % terms of different classes	Real Consumption (at 1970-71 prices)
1	2	3	4	5	6 = 3x4x5	7	8
0.360	0.92	4.89	298.32	33.56	48.956	.14	16.124
360-480	2.47	13.44	429.96	33.16	191.620	.55	63.113
480-600	5.11	27.82	545.04	34.53	523.578	1.51	172.450
600-720	7.90	43.00	662.52	36.16	1030.139	2.98	339.296
720-840	9.69	52.75	781.56	37.96	1564.987	4.53	515.459
840-1020	15.24	82.97	928.08	38.77	2985.398	8.64	983.300
1020-1200	13.64	74.26	1105.92	40.17	3298.986	9.55	1086.586
1200-1500	16.99	92.49	1337.16	43.32	5357.554	15.51	1764.617
1500-1800	10.00	54.43	1635.96	46.98	4183.348	12.11	1377.869
1800-2400	9.78	53.24	2047.8	50.52	5507.936	15.95	1814.148
2400-3000	3.96	21.55	2649.48	55.35	3160.279	9.15	1040.900
3000-3600	1.81	9.85	3253.32	59.67	1912.137	5.53	629.800
3600+	2.49	13.55	5220.96	67.26	4758.242	13.78	1567.221
Total					34523.16		11370.89
All Classes	100.00	544.43	1346.64	47.08	34516.75		11368.78

Ratio of Rural to Urban Consumption = 1.89

SOURCE :SAME AS IN TABLE 9

TABLE - 11

TOTAL CONSUMPTION OF INDUSTRIAL GOODS (ACCORDING TO N.S.S. EST.)

(at 70-71 prices)

(Rs crores)

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Year	Total	Rural	Urban
1960-61	9110.909	6663.178	2447.731
1972-73	10391.407	7130.437	3260.970
1977-78	14897.696	10305.6	4592.096
1983	17369.67	11370.89	5998.78

---

Source: N.S.S. Reports on Consumption Expenditure various issues.

The share of the different expenditure classes in the total consumption of industrial goods have also been given in percentage terms in Table 3 to Tab 10. Further we have calculated the ratio of rural to urban consumption of industrial goods for all the four years. The rates declined from 2.722 in 1960-61 to 1.89 in 1983. In the intervening years it was 2.186 in 1972-73 and there was a marginal increase to 2.244 in 1977-78, which was still lower than that of 1960-61. The overall trend was of a declining nature. A closer examination of the aggregate figures reveal that the compound rate of growth of total consumption works out to be 2.97 per cent per annum for the period 1960-61 to 1983. The compound rate of growth of consumption in the rural sector is 2.45 per cent per annum which is less than the urban rate of 4.15 percent per annum.

This increase in the aggregate urban consumption can be attributed to the population shift in favour of the urban sector. Thus the N.S.S. estimates indicate that there has not been a significant increase in the size of the home market for industrial consumption goods since 1960-61.

The same methodology in a slightly different form was applied to the Private Final Domestic Consumption Expenditure (of the N.A.S.) to obtain the total consumption of industrial goods. Here the items listed in the N.A.S. schedule corresponding to our definition of industrial goods were taken into account. Only for 'other food' item, the ratio of non-agricultural to agricultural component obtained following Mundle's methodology were applied. Once the aggregate level of consumption was obtained the N.S.S. ratio of rural/urban proportion was applied to disintegrate the N.A.S. data. In this process the total rural and urban consumption of industrial goods from the N.A.S. was obtained. Again, the share of the different expenditure classes in the total consumption of industrial goods, as obtained from the N.S.S. tables (i.e. in Table 3 to 10 ) were applied to find out the relative shares of different expenditure classes from the N.A.S. data.

However this procedure involved a flaw, in the sense that it is not necessary that the difference in the total consumption (as between N.A.S. and N.S.S.) is distributed systematically between the different classes. This introduces

TABLE - 12

TOTAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE CLASSES  
(According to N.A.S. Est.) in 1960-61

(Rs. Crores)

N. S. S. Exp. Classes	RURAL		URBAN	
	Cons. of Industrial Goods (at current prices)	Real Consu- mption	Cons. of Industrial Goods (at current prices)	Real Consumption
1	2	3	4	5
0-96	66.304	113,011	3.656	6.231
96-132	176.952	301.605	19.044	32.459
132-156	176.529	300.885	33.365	56.869
156-180	201.024	342.635	38.088	64.914
180-216	342.078	583.054	74.805	127.501
216-252	370.796	632.003	96.287	164.115
252-288	351.792	599.611	95.068	162.039
288-336	372.485	634.882	133.613	227.736
336-408	481.866	821.316	141.535	241.239
408-516	469.619	800.441	195.315	332.904
516-660	386.844	659.356	190.745	325.115
660+	823.944	1404.371	501.086	854.075
TOTAL	4223.19	7198.21	1523.547	2596.76

Source: N.A.S. various issues.

TABLE - 13

TOTAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE CLASSES  
(According to N.A.S. Est.) in 1972-73

(Rs. Crores)

N.S.S. Exp. Classes	RURAL		URBAN	
	Cons. of Industrial Goods (at current prices)	Real Consu- mption	Cons. of Industrial Goods (at current prices)	Real Consumption
1	2	3	4	5
0-156	26.076	20,204	2,307	1,787
156-180	33.560	26,003	2,927	2,268
180-216	109.734	85,026	10,637	8,242
216-252	205.465	159,201	25,326	19,623
252-288	310.492	240,579	45,987	35,627
288-336	557.002	431,584	95,877	74,289
336-408	1100.845	852,971	237,500	184,023
408-516	1610.404	1247,795	478,377	370,662
516-660	1947.695	1509,139	686,612	532,009
660-900	2128.775	1649,446	970,262	751,791
900-1200	1485.942	1151,357	858,265	665,012
1200-1800	1276.975	989,443	961,257	744,814
1800-2400	408.033	316,158	453,051	351,039
2400+	870.269	674,314	790,729	612,684
TOTAL	12071.992	9353,783	5627.968	4360,738

Source: N.A.S. various issues.

TABLE - 14

TOTAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE CLASSES  
(According to N.A.S. Est.) in 1977-78

(Rs. Crores)

N.S.S. Exp. Classes	RURAL		URBAN	
	Cons. of Industrial Goods (at current prices)	Real Consumption	Cons. of Industrial Goods (at current prices)	Real Consumption
1	2	3	4	5
0-120	2.942	1.450	.605	.298
120-180	11.091	5.467	1.008	.497
180-240	38.932	19.190	4.034	1.988
240-360	357.634	176.287	35.304	17.402
360-420	418.748	206.412	49.425	24.363
420-480	606.619	299.019	85.738	42.262
480-600	1650.096	813.376	297.564	146.677
600-720	1987.359	979.622	466.016	229.711
720-840	1994.149	982.969	636.485	313.740
840-960	1828.913	901.520	666.746	328.656
960-1200	2928.978	1443.770	1294.153	637.922
1200-1800	4017.724	1980.443	2355.298	1160.988
1800-2400	1697.630	836.806	1329.457	655.324
2400+	5081.573	2504.842	1283.057	632.453
3600+			1575.578	776.644
TOTAL	22635.07	11157.426	10086.93	4972.115

Source: N.A.S. various issues,



TABLE - 15

TOTAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE CLASSES  
(According to N.A.S. Est.) in 1983

(Rs. Crores)

N.S.S. Exp. Classes	RURAL		URBAN	
	Cons. of Industrial Goods (at current prices)	Real Consu- mption	Cons. of Industrial Goods (at current prices)	Real Consumption
1	2	3	4	5
0-360	58.789	19.363	5.110	1.683
360-480	230.956	76.069	18.219	6.000
480-600	634.077	208.846	65.987	21.734
600-720	1251.358	412.159	171.071	56.348
720-840	1902.232	626.537	346.599	114.159
840-1020	3628.098	1194.986	810.954	267.104
1020-1200	4010.225	1320.847	1133.114	373.214
1200-1500	6512.940	2145.166	2315.108	762.527
1500-1800	5085.217	1674.917	2255.119	742.768
1800-2400	6697.705	2206.022	3732.612	1229.410
2400-3000	3842.257	1265.524	2421.754	797.653
3000-3600	2322.151	764.847	2061.824	679.102
3600+	5786.481	1905.573	6872.006	2263.432
TOTAL	41991.88	13830.86	22217.93	7317.91

Source: N.A.S. various issues.

a systematic bias in the measurement of consumption of industrial goods by different expenditure groups. The results can be gleaned from Table 12 to 15, while the main findings have been capsuled in Table 16.

TABLE - 16  
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TOTAL CONSUMPTION OF INDUSTRIAL GOODS (ACCORDING TO N.A.S. EST.)  
(at 70-71 prices)  
(Rs crores)

Year	Total	Rural	Urban
1960-61	9794.97	7198.21	2596.76
1972-73	13714.521	9353.783	4360.738
1977-78	16129.54	11157.426	4972.115
1983	21148.77	13830.86	7317.91

-----  
Source: N.A.S. various issues.

We then proceeded to calculate the per capita consumption expenditure on industrial goods at constant prices (1970-71) for both the rural and urban sectors of the economy. The results are stated below in Table 17 (according to N.S.S. estimate) and Table 18 (according to N.A.S. estimate).

TABLE - 17

PER CAPITA CONSUMPTION EXPENDITURE ON INDUSTRIAL GOODS  
(ACCORDING TO N.S.S. ESTIMATES)

(at 1970-71 prices)

(Rupees)

Year	For All Classes	Rural	Urban
1960-61	206.095	183.206	310.526
1972-73	183.752	153.201	302.588
1977-78	217.877	191.222	312.231
1983	244.075	208.882	355.989

Source: N.S.S. Reports on Consumption Expenditure various issues.

TABLE - 18

PER CAPITA CONSUMPTION EXPENDITURE ON INDUSTRIAL GOODS  
(ACCORDING TO N.A.S. ESTIMATES)

(at 1970-71 prices)

(Rupees)

Year	Rural	Urban
1960-61	199.87	328.99
1972-73	206.48	374.44
1977-78	226.48	356.807
1983	254.84	426.67

Source: N.A.S. various issues.

On the basis of the above two tables an index of per capita consumption of industrial goods for the rural and urban sectors was constructed. For the N.S.S. data the index number (for the rural sector) increased from 100 in 1960-61 to 113.53 in 1983. While for the urban sector it increased from 100 in 1960-61 to 114.64 in 1983. Similarly we constructed a series of index number of per capita consumption of industrial goods for the N.A.S. data. Here the index number for the rural sector increased from 100 in 1960-61 to 127.50 in 1983. While for the urban sector it increased from 100 in 1960-61 to 129.69 in 1983. The values of the index numbers for the intervening years are given in Table 19 and Table 20 below:

TABLE - 19

INDEX NUMBER OF PER CAPITA CONSUMPTION EXPENDITURE ON INDUSTRIAL GOODS  
(ACCORDING TO N.S.S. ESTIMATE)

(at 1970-71 prices)

Year	For All Classes	Rural	Urban
1960-61	100	100	100
1972-73	89.16	83.62	97.44
1977-78	105.71	104.38	100.54
1983	118.43	113.53	114.64

Source: N.S.S. Reports on Consumption Expenditure various issues.

TABLE - 20  
-----INDEX NUMBER OF PER CAPITA CONSUMPTION EXPENDITURE ON INDUSTRIAL GOODS  
(ACCORDING TO N.A.S. ESTIMATE)

(1970-71 prices)

Year	Rural	Urban
1960-61	100	100
1972-73	103.308	113.792
1977-78	113.157	108.455
1983	127.50	129.69

Source: N.A.S. various issues.

It can be gleaned from the tables illustrated above that there was a very slow increase in the total consumption of industrial consumption goods during the period 1960-61 to 1983. There was a decline in the per capita expenditure on industrial goods (according to the N.S.S. estimate) during 1972-73. However, from this it cannot be concluded that the market was shrinking in size, since 1972-73 was a year of bad harvest. Further, even if there is a decline in the per capita expenditure, it does not necessarily lead to the conclusion that the market is narrowing down. This is because even if per capita expenditure is declining the total market can expand so long as this decline is offset by a rising population.

Comparing our result with that of Sau and Mundle's estimates of consumption of industrial goods we find,

(i) The ratio of rural to urban consumption of industrial goods in Sau's study declined from 2.72 in 1952-53 to 2.36 in 1964-65. However it had increased to 2.83 in 1960-61. While according to Mundle's estimate the ratio declined steadily from 2.63 in 1951-52 to 2.51 in 1960-61 and then finally to 2.25 in 1967-68. In our analysis the ratio had declined from 2.722 in 1960-61 to 1.89 in 1983. In the intervening years it was 2.186 in 1972-73 and then a marginal increase to 2.24 in 1977-78. Thus a declining trend in the ratio of rural to urban consumption of industrial goods is observed in all these studies.

(ii) Sau and Mundle's estimate of consumption of industrial goods were in current prices. Table 21, 22 and 23 given below summarize Sau's, Mundle's and our estimate of total consumption of industrial goods in the rural and urban sector (at current prices)

TABLE - 21

SAU'S ESTIMATE OF TOTAL CONSUMPTION OF INDUSTRIAL GOODS

(Rs. Crores)

Year	Rural	Urban
1952-53	3553.1	1304.0
1960-61	4331.5	1529.2
1964-65	4523.8	1911.7

Source: Sau (1974). Op.cit. P.1281, 1283.

TABLE - 22

## MUNDLE'S ESTIMATE OF TOTAL CONSUMPTION OF INDUSTRIAL GOODS

(Rs. Crores)

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Year	Rural	Urban
1951-52	3493.7	1324.1
1960-61	3916.3	1554.6
1967-68	5844.3	2594.0

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Source: Mundle(1975). Op.cit. P. 167.

TABLE - 23

## OUR ESTIMATE OF TOTAL CONSUMPTION OF INDUSTRIAL GOODS

(Rs. Crores)

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Year	Rural	Urban
1960-61	3909.287	1436.084
1972-73	9202.542	4208.608
1977-78	20906.971	9315.993
1983	34523.16	18212.916

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Source: N.S.S. Reports on Consumption Expenditure various issues.

While concluding we note that the trends evident since 1960-61 (based on our analysis) suggest -

(i) that the per capita expenditure on industrial consumption goods is not rising rapidly.

(ii) The per capita urban expenditure on the industrial goods do not increase faster than the rural per capita expenditure.

(iii) Though there is an increase in the total expenditure on industrial goods in the urban areas, this is mainly due to the population shift from the rural to urban sector.

(iv) Lastly, it is interesting to observe that the bulk of the increase in the consumption of industrial goods took place between 1977-78 and 1983. The earlier period is marked by relative stagnation in the market for industrial consumption goods.



## CHAPTER - IV

### PROSPECTS AND CONSTRAINTS

The preceding chapter unfolded certain useful information about the consumption of industrial goods, in the rural and urban sectors of the economy. This enables us to explain the dynamics of the operation of the economic forces which are dominant in the economy today. Our purpose is to find out the factors that led to the emergence of such conditions (as stated below) in the 'home market' for industrial consumption goods and see what are the ways to improve the situation.

The trends evident in the 'home market' for industrial consumption goods during the time-period 1960-61 to 1983 were -

- (i) The per capita consumption of industrial goods is not increasing rapidly .
- (ii) The growth of the per capita expenditure on industrial goods in the urban sector is not significantly higher than its rural counterpart.
- (iii) The increase in the absolute amount of consumption of industrial goods in the urban sector is due to the population shift from the rural to the urban sector.

All these lead us to conclude that the 'home market' for industrial consumption goods is not expanding rapidly in our

economy. However, for a 'balanced industrial' growth the demand for industrial goods must increase. Further, the rate of growth of exports of industrial goods is also not very significant. Under these circumstances it is necessary that the size of the domestic market for industrial consumption goods must increase rapidly.

There has been a lot of debate as to how such an increase in the size of the domestic market for industrial consumption goods can be brought about. We can discern two broad strands of argument that seek to answer the problem stated above. The first argument envisages that an increase in the amount of investment per unit of output, *ceteris paribus*, raises the level of consumption and hence expands the size of the market. The adherents of such a view hold that if investment (especially public investment) can be increased, the size of the 'home market' will also widen.

The literature on the role of investment in promoting the growth of the Indian economy is vast. It has been put forth that there exists a complimentary relationship between public and private investment. An increase in public investment pulls up private investment and vice-versa. Further, it is common to our knowledge that there was a decline in the level of public investment in the mid-sixties (See Table 1) and it was one of the factors that led to the slow-down in the

industrial growth rate.

TABLE - 1

GROSS DOMESTIC CAPITAL FORMATION AT 1970-71 PRICES

Year	Total	Public	Private
1950-51	2379	530	1849
1951-52	2804	614	2190
1952-53	1838	506	1332
1953-54	2127	588	1539
1954-55	2363	868	1495
1955-56	3323	996	2327
1956-57	4271	1239	3032
1957-58	4088	1464	2623
1958-59	3382	1395	1987
1959-60	3741	1498	2243
1960-61	4523	1826	2697
1961-62	4140	1797	2342
1962-63	4808	2181	2627
1963-64	5080	2421	2659
1964-65	5581	2625	2916
1965-66	6170	2846	3324
1966-67	6675	2574	4104
1967-68	6139	2635	3504
1968-69	5758	2397	3361
1969-70	6677	2373	4304
1970-71	7177	2773	4404
1971-72	7556	2957	4599
1972-73	7130	3135	3995
1973-74	9097	3738	5359
1974-75	8244	3517	4727
1975-76	8463	4433	4030
1976-77	9316	4920	4390
1977-78	10207	4184	6023
1978-79	12304	5012	7292
1979-80	11024	5309	5715
1980-81	12227	5576	6651
1981-82	12468	6124	6344
1983-84	13132	6139	6993
1984-85	13846	6842	7004

Source: G.O.I., C.S.O., N.A.S. various issues.

Quoted from C.P. Chaudrashekar, Economic and Political Weekly, '88, p. 2363.

'Given the role that public investment had played in an India-type mixed economy, the impact of the deceleration of such investment was two-fold: first, it resulted in a slower growth of the home market and therefore a slower growth in the demand for products of the private sector; Second, it resulted in a slowdown in capacity creation.....'<sup>1</sup> However, it has started looking up since the mid-seventies, though the increase is not significant. The trend in the home market also indicate the bulk of the increase in consumption (though not significantly high enough) has been after the mid-seventies. But it can be argued that there are limits beyond which the level of public investment cannot be increased in our economy and hence the size of the 'home market' will also be constrained. So, we see that the size of the market depends upon the ability of the state to generate resources to sustain the level of investment. "This ability in turn is determined by the play of class forces in the economy, the fact that state is constrained both to increase proportionately the share of the economic surplus going into the hands of the propertied rich, and at the same time to alleviate somewhat the impact of inflation, at least upon the salariat and the organized workers." However, the government can reduce its expenditure on defence, public administration etc. and channelise it for productive investment purposes. But the politics of the state imposes restriction on its ability to do so.

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1. C.P. Chandrashekar (1988), Op.cit. p.2363.

Thus, the impetus for an expansion in the size of the 'home market' for industrial consumption goods should come from other sources also.

Given the nature of agricultural sector in India, a rapid growth of this sector can contribute to expand the base of the 'home market' for industrial consumption goods. In an economy such as ours, the importance of agricultural sector stems, in principles from its overwhelming share in production and consumption. Approximately a little more than forty per cent of India's gross domestic product originates in agriculture and allied activities and it has been asserted that the influence of agriculture on industry is strong. We can cite certain results from the studies of Rangarajan(1982), Sawant (1986), to show the degree of this influence. The primary focus of Rangarajan's study was to assess the effects of agricultural performance on industrial growth. The channels of influence had been grouped into three type of linkages- (i) Production linkages (ii) demand linkages (iii) Savings and investment linkages. A model was constructed to evaluate these interacting effects. The main conclusion that emerged from the study was that agriculture exercised a reasonably strong influence on the growth of the industry. The simulations indicated that a 1 per cent growth rate in agriculture generates a growth of 0.5 per cent in industry and increases the national income by little more than 0.7 per cent. Sawant (1986), did a

non-parametric regression estimate with the Net Domestic Product Originating in the agricultural sector as independent variable and found out that 1 per cent change in N.D.P. generated in the agricultural sector leads to 0.14 per cent change in the N.D.P. originating in the rest of the economy and further it induces 0.9 per cent growth in the production of agro-based industries.

Inspite of the existence of such strong linkages between agriculture and industry, the agricultural sector (or broadly speaking the rural sector) got slowly alienated from the process of industrialization. The industry assumed a 'top-heavy' character and geared its production to satisfy the demand of the 'relative few'. The 'top heavy' character "was perpetuated and reproduced over time by the fact that the very mode of financing such industrialization kept the markets for mass consumption goods continuously restricted."<sup>2</sup> Due to this shift in demand pattern there also occurred a structural change in the industry, where production was tuned towards consumer durables and allied products. All these stated above are supported by the fact that even in the period of 1960's when the growth of the consumer goods industry was at a slower rate than that of capital goods or basic goods industries, the consumer durable goods industry (sustained by the consumption of the 'relative

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2. P. Patnaik (1979), 'Industrial Development Since Independence', Social Scientist, Vol. 7, No. 11, June '79.

few<sup>1</sup>) registered a higher rate of growth. After the mid-sixties when growth in the consumer goods industries recorded a small decline, consumer durables continued to grow at 6.2 per cent per annum, which was higher than the growth rate of capital and intermediate goods sector (See Table 2).

TABLE - 2

ANNUAL COMPOUND GROWTH RATES IN THE INDEX NUMBER OF INDUSTRIAL PRODUCTION

Industry Group	1951-55	1955-56	1960-65	1965-76
Basic Goods	4.7	12.1	10.4	6.5
Capital Goods	9.8	13.1	19.6	2.6
Int. Goods	7.8	6.3	6.9	3.0
Consumer Goods	4.8	4.4	4.9	3.4
Consumer Durables	-	-	11.0	6.2
Non-durables	-	-	-	2.8
General Index	5.7	7.2	9.0	4.1

Source: S.L. Shetty, Structural Retrogression in the Indian Economy Since the mid-sixties, Economic and Political Weekly, 1978, Table 1, p.186.

So we witness a definite shift in the composition of industrial output. Further it is common to our knowledge that the share of 'agro-based' industries in the total industrial

output has declined to a considerable extent. Further, over the years, the industry has become less dependent on agriculture via the supply side (so far as the supply of raw materials and other inputs are concerned). This is supported by the fact that even the drought of 1986-87 did not affect the industrial growth rate to the extent as it used to, in the previous years.

However, for 'balanced' industrialization it is necessary that the link between industry and agriculture be not only maintained but also strengthened over time. This link will ensure an expansion of the 'home market' for industrial consumption goods. As stated earlier this requires an acceleration in the rate of growth of the agricultural sector. Unfortunately in our economy the <sup>growth</sup> rate of agriculture has barely exceeded the population growth rate. Even in the recent years the per capita Net Domestic Product of the agriculture dependent population increased in absolute term by only 3 per cent during 1970-71 to 1983-84, which indicates a period of virtual stagnation. Coupled with this we have a shift in the movement of Terms of Trade away from the agricultural sector. The stagnation in per capita N.D.P. of the agriculture dependent population together with the adverse terms of trade has led to a squeeze on the agricultural sector.

The failure of the agricultural sector to accelerate its rate of growth stems from the agricultural policy pursued. The policies pursued never envisaged to alter the agrarian relations, the income and asset structure, or increase the level



of investment in the irrigation projects, ensure a proper pricing policy or make proper marketing arrangements etc. On the contrary, the adoption of the 'New Agricultural Strategy' perpetuated and widened the inter-regional and intra-personal inequalities. The ensuing 'Green Revolution' achieved to establish few 'small enclaves' of economic prosperity in the northern states of Punjab, Haryana and Western U.P. and within the region where it was adopted it helped to increase the amount of surplus accruing to the 'relative few'. The huge amount of subsidies and the 'price policy' pursued tended to aggravate the widening inequalities. The ensuing 'surplus' may have been held in the form of liquid money, or used for speculation purposes, or used to indulge in consumption of luxury items etc. The net effect of all these ~~may~~ have been to depress the demand for industrial consumption goods and hence constrict the size of the 'home market' for industrial consumption goods.

On the other hand if certain efforts were made to alter the agrarian relations, income and asset structure, tenancy relations, or increase the outlay on irrigation etc., the distribution of gains from the ongoing development process would have been more equitable. The demand pattern would have tilted in favour of mass consumption goods. The 'top heavy' character would have given way to a more 'balanced' industrialization process and helped the economy to surge forward.

## CHAPTER -V

### CONCLUSION

Economic growth has always remained in focus as the main objective of India's Five Year Plans. In the early years of the planning period, this was to be accomplished by raising the level of domestic investment via an increase in the rate of savings. Concurrently, we had the policy of building the capital goods industry which was supposed to maintain a balance with the process of accelerated growth. The two 'real' constraints acting as impediments in the process of development were (i) food bottleneck (ii) foreign exchange constraint. All efforts were concentrated to overcome the 'supply constraints' operating in the economy. However, the problems of 'effective demand' were ignored.

Industrialization was accorded 'top priority' and was the 'engine of growth' in the early years of the planning period. Industry grew at a respectable rate till the mid-sixties. After the mid-sixties there was a slow-down in the industrial growth rate. 'Demand Constraint' was cited as one of the factors contributing to the crisis. We can identify three broad set of factors leading to the operation of the 'demand constraint' - (i) Agriculture (ii) Income Distribution (iii) Real Investment. The operation of 'Demand Constraint' led to a

shrinkage in the 'home market' for industrial consumption goods. Various empirical studies also indicated the 'narrowing' trend of the 'home market' for industrial consumption goods.

This study focussed its attention on the 'home market' for industrial consumption goods. Any empirical analysis of the 'home market' is fraught with problems with respect to, methodology, data, etc. and ours was also no exception. The main source of data was N.S.S. and N.A.S. data was also sparingly used. The analysis unfolded certain important information about the 'home market' for industrial consumption goods. The basic conclusion was that there has not been any significant expansion of the 'home market' for industrial consumption goods. There occurred an increase in the absolute amount of urban consumption of industrial goods due to the population shift from the rural to the urban areas.

It is recognized that for 'balanced' industrialization the demand for industrial consumption goods should increase. Further, given the dismal performance of the exports, the problem assumes an important dimension. Given the nature of the economy, the market size can be widened -

(i) through an increase in the level of investment (especially public investment).

(ii) or, by accelerating the rate of growth in the agricultural sector.

The growth of public investment had been a major stimulus for industrial expansion in the post-independence period. However, the developing fiscal crisis of the state limits the level of public investment and hence the size of the home market also. On the other hand, given the nature of the agricultural sector, a rapid growth can ensure to expand the base of the 'home market' for industrial consumption goods. But the agricultural policy in conjunction with other economic policies pursued, has ensured a squeeze on the agricultural sector and depressed the market for mass consumption goods.

While concluding we note that given the nature of our economy, the stimulus for an expansion of the 'home market' for industrial consumption goods has to come from the agricultural sector. An increase in the rate of growth of the agricultural sector requires alteration of the agrarian relations, income and asset structure, an increase in the outlay on irrigation projects, dilution of inter-regional and intra-personal inequalities, 'fair' pricing policy and proper marketing arrangement. For this, a greater political will on the part of the state, to solve the problem, is called for.

## APPENDIX

### SECTION-I

#### Definition of Household Consumer expenditure

Consumer expenditure comprises all expenditure incurred by the household, exclusively on domestic account, including consumption out of home-grown produce or transfer receipts like gift, loan etc. The expenditure on household enterprise is excluded from consumer expenditure. While consumption out of transfer receipts is included, transfer payments of all kinds (loans, gifts, charities monetary as well as in kind like grain loan etc.) are excluded. Expenditure on purchase and construction of residential houses are considered to be expenses on capital account and hence are excluded from the consumer expenditure; but the expenditure towards maintenance of residential building are included in the consumption expenditure of the household. Monetary value of food articles consumed during the reference period is taken to represent consumption expenditure on food articles. For semi-durables and durable goods, monetary value of articles acquired during the reference period is considered as the consumer expenditure on the articles. For items of clothing & footwear there is a slight departure from earlier rounds. Monetary value of articles (other than meant for gift etc.) acquired during reference period (even though not used) is taken as consumer expenditure on articles concerned.

## SECTION - II

In this section we have calculated the total consumption of Industrial Goods using Sau's (1974) definition, by different expenditure classes, per capita expenditure on industrial goods (both according to N.S.S. and N.A.S. estimate), index of per-capita expenditure on industrial goods etc.

TABLE - 1

TOTAL CONSUMPTION OF INDUSTRIAL GOODS  
(According to N.S.S. Est.)

(at current prices)

(Rs. Crores)

Year	Total	Rural	Urban
1960-61	5893.333	4393.136	1500.197
1972-73	15000.04	10379.809	4620.231
1977-78	33314.864	23158.001	10156.863
1983	58770.167	38779.533	19990.634

Source: N.S.S. Reports on Consumption Expenditure various issues.

TABLE - 2

TOTAL CONSUMPTION OF INDUSTRIAL GOODS  
(According to N.S.S. Est.)

(at 1970-71 prices)

(Rs. Crores)

Year	Total	Rural	Urban
1960-61	10044.883	7487.874	2557.008
1972-73	11622.532	8042.623	3579.909
1977-78	16421.779	11415.192	5006.587
1983	19357.125	12772.812	6584.313

Source: N.S.S. Reports on Consumption Expenditure various issues.

TABLE - 3

PER CAPITA CONSUMPTION EXPENDITURE ON INDUSTRIAL GOODS  
(According to N.S.S. Est.)

(at 1970-71 prices)

(Rupees)

Year	Total	Rural	Urban
1960-61	228.77	207.91	323.95
1972-73	204.09	177.53	307.39
1977-78	259.57	231.40	359.28
1983	270.37	234.60	383.90

Source: N.S.S. Reports on Consumption Expenditure various issues

TABLE - 4

INDEX OF PER CAPITA EXPENDITURE ON INDUSTRIAL GOODS  
(According to N.S.S. Est.)

(at 1970-71 prices)

Year	Total	Rural	Urban
1960-61	100.00	100.00	100.00
1972-73	89.21	85.38	94.88
1977-78	113.46	111.29	110.90
1983	118.18	112.83	118.50

Source: N.S.S. Reports on Consumption Expenditure various issues.



TABLE - 5

TOTAL CONSUMPTION OF INDUSTRIAL GOODS  
(According to N.A.S. Est.)

(at current prices)  
(Rs. Crores)

Year	Total	Rural	Urban
1960-61	6313.00	4705.820	1607.179
1972-73	19454.5	13461.124	5993.376
1977-78	35641.00	24774.841	10866.159
1983	69479.5	45838.976	23640.524

Source: N.A.S. various issues.

TABLE - 6

TOTAL CONSUMPTION OF INDUSTRIAL GOODS  
(According to N.A.S. Est.)

(at 1970-71 prices)  
(Rs. Crores)

Year	Total	Rural	Urban
1960-61	10760.184	8020.828	2739.354
1972-73	15073.997	10430.129	4643.868
1977-78	17568.394	12212.176	5356.218
1983	22884.457	15097.98	7786.477

Source: N.A.S. various issues.

TABLE - 7

PER CAPITA CONSUMPTION EXPENDITURE ON INDUSTRIAL GOODS  
(According to N.A.S. Est.)

(at 1970-71 prices)

(Rupees)

Year	Total	Rural	Urban
1960-61	245.068	222.714	347.061
1972-73	264.704	230.242	398.755
1977-78	277.695	247.560	384.372
1983	319.642	277.317	453.995

Source: N.A.S. various issues.

TABLE - 8

INDEX OF PER CAPITA EXPENDITURE ON INDUSTRIAL GOODS  
(According to N.A.S. Est.)

Year	Total	Rural	Urban
1960-61	100.00	100.00	100.00
1972-73	108.80	103.38	114.89
1977-78	113.313	111.16	110.75
1983	130.43	124.52	130.81

Source: N.A.S. various issues.

TABLE - 9

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1960-61

(Rs. Crores)

N.S.S. Exp. Classes	% of stn. of estimated no. of persons in each class	Total No. of Persons in each class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Industrial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6=3x4x5
0-96	6.38	22.97	78.24	39.79	71.509
96-132	11.95	43.03	114.96	38.28	189.361
132-156	9.88	35.58	145.2	36.83	190.272
156-180	9.82	35.36	168.48	36.59	217.983
180-216	13.79	49.66	197.28	37.91	371.401
216-252	11.44	41.20	234.00	41.06	395.851
252-288	9.03	32.52	269.64	42.59	373.459
288-336	7.72	27.80	308.76	46.39	398.189
336-408	7.66	27.58	369.96	49.10	500.991
408-516	5.93	21.35	454.44	50.28	487.831
516-660	3.12	11.23	575.4	60.0	389.643
660 & above	3.28	11.81	991.32	68.9	806.646
Total					4393.136

Ratio of Rural to Urban Consumption = 2.928

SOURCE : NSS Report on Consumption Expenditure (1960-61).

TABLE - 10

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S. Est.) in 1960-61

(Rs. Crores)

N.S.S. Exp. Classes	% distn. of estimated no. of per- sons in each class	Total No. of Persons in each class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6
0.96	2.15	1.69	76.56	30.40	3.933
96-132	5.49	4.33	116.64	39.11	19.752
132-156	7.19	5.67	143.04	42.16	34.193
156-180	6.86	5.41	167.4	43.30	39.213
180-216	10.71	8.45	198.48	45.75	76.729
216-252	11.40	8.99	232.44	46.94	98.087
252-288	9.68	7.64	267.96	47.33	96.894
288-336	11.03	8.70	311.04	50.24	135.951
336-408	9.34	7.37	368.52	52.87	143.594
408-516	9.61	7.58	457.68	56.89	197.363
516-660	7.04	5.55	584.16	59.31	192.288
660+	9.50	7.49	1018.32	65.74	501.413
TOTAL					1500.197

SOURCE : Same as in Table - 9

TABLE - 11

RURAL CONSUMPTION INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1972-73

N.S.S. Exp. Classes	% distn. of estimated no. of per- sons in each class	Total No. of persons in each Class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6
0-156	1.62	7.339	111.96	28.93	23.771
156-180	1.34	6.070	170.52	29.58	30.617
180-216	3.37	15.266	200.28	32.68	99.918
216-252	5.12	23.194	237.00	33.14	182.169
252-288	6.47	29.309	272.64	33.9	270.888
288-336	10.06	45.573	313.92	35.23	504.010
336-408	15.53	70.352	371.04	36.97	965.042
408-516	19.06	86.343	438.72	37.49	1420.136
516-660	16.20	73.387	559.2	41.51	1703.487
660-900	11.84	53.636	739.56	46.14	1830.237
900-1200	5.31	24.055	1004.52	51.95	1255.305
1200-1800	2.90	13.137	1395.00	57.99	1062.731
1800-2400	.56	2.537	2035.44	64.97	335.499
2400+	.49	2.219	4085.64	76.77	695.999
TOTAL					10379.809

Ratio of Rural to Urban Consumption = 2.246

SOURCE : NSS Report on Consumption Expenditure (1972-73).

TABLE - 12

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1972-73

N.S.S. Exp. Classes	% distn. of estimated no. of Per- sons in each class	Total No. of persons in each Class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6
0-156	.35	.408	110.04	42.91	1.926
156-180	.33	.384	164.28	39.31	2.479
180-216	.98	1.141	197.04	40.08	9.010
216-252	1.87	2.178	232.44	40.14	20.321
252-288	2.89	3.366	267.72	40.28	36.298
288-336	5.71	6.649	307.44	42.07	85.998
336-408	10.91	12.706	364.68	42.76	198.134
408-516	16.99	19.786	450.36	44.55	396.977
516-660	17.99	20.951	566.16	48.02	569.595
660-900	17.96	20.916	737.76	53.84	799.942
900-1200	10.87	12.659	988.32	56.51	707.005
1200-1800	8.26	9.619	1358.88	60.55	791.453
1800-2400	2.61	3.039	1916.28	63.66	370.729
2400+	2.22	2.585	3422.52	71.25	630.364
TOTAL					4620.231

SOURCE : same as in Table 11

TABLE - 13

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1977-78

N.S.S. Exp. Classes	% distn. of estimated no. of per- sons in each class	Total No. of Persons in each Class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6
0-120	0.19	.93	54.72	60.47	3.077
120-180	0.38	1.87	157.80	40.78	12.034
180-240	1.07	5.27	213.48	37.43	42.110
240-360	6.77	33.39	310.32	37.35	387.005
360-420	6.13	30.23	390.36	38.47	453.968
420-480	7.33	36.15	450.60	40.17	654.337
480-600	15.95	78.68	538.80	41.78	1771.170
600-720	14.87	73.35	656.88	43.91	2115.678
720-840	11.87	58.55	774.84	46.34	2102.301
840-960	8.97	44.24	894.84	48.42	1916.837
960-1200	11.24	55.44	1063.56	51.49	3036.044
1200-1800	10.24	50.51	1421.64	57.41	4122.442
1800-2400	2.72	13.41	2036.28	62.49	1706.384
2400+	2.03	10.01	5802.24	83.24	4834.614
TOTAL					23158.001

Ratio of Rural to Urban Consumption = 2.280

SOURCE: NSS Report on Consumption Expenditure (1977-78)

TABLE - 14

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1977-78

N.S.S. Exp. Classes	% distn. of estimated no. of per- sons in each class	Total No. of Persons in each Class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
0-120	0.15	.20	53.28	62.37	.665
120-180	0.11	.15	147.84	51.38	1.139
180-240	0.29	.40	210.48	47.19	3.973
240-360	2.00	2.78	309.24	44.08	37.895
360-420	2.13	2.96	386.28	45.36	51.864
420-480	3.18	4.43	443.16	46.01	90.327
480-600	8.77	12.22	531.72	47.89	311.171
600-720	10.81	15.06	644.52	49.68	482.217
720-840	11.40	15.88	758.88	52.38	631.232
840-960	10.36	14.43	872.52	54.35	684.292
960-1200	16.16	22.51	1033.32	56.78	1320.705
1200-1800	20.02	27.89	1387.44	61.64	2385.203
1800-2400	7.52	10.47	1944.24	65.7	1337.402
2400-3600	4.86	6.77	2684.04	70.71	1284.868
3600+	2.24	3.12	5866.8	83.80	1533.910
TOTAL					10156.863

Source : Same as in Table 13



TABLE - 15

RURAL CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1983

N.S.S. Exp. Classes	% distn. of estimated no. of per- sons in each class	Total No. of Persons in each Class (millions)	Per Capita Expenditure per Annum (Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6
0-360	0.92	4.89	298.32	38.67	56.411
360-480	2.47	13.44	429.96	38.48	222.362
480-600	5.11	27.82	545.04	40.27	610.614
600-720	7.90	43.00	662.52	41.97	1195.656
720-840	9.69	52.75	781.56	43.93	1811.148
840-1020	15.24	82.97	928.08	44.79	3448.955
1020-1200	13.64	74.26	1105.92	46.16	3790.918
1200-1500	16.99	92.49	1337.16	49.4	6109.492
1500-1800	10.00	54.43	1635.96	52.96	4715.839
1800-2400	9.78	53.24	2047.8	56.37	6145.732
2400-3000	3.96	21.55	2649.48	61.01	3483.445
3000-3600	1.81	9.85	3253.32	65.19	2089.026
3600+	2.40	13.55	5220.96	72.09	5099.935
TOTAL					38779.533

Ratio of Rural to Urban Consumption = 1.939

SOURCE : NSS Report on Consumption Expenditure (1983).

TABLE - 16

URBAN CONSUMPTION OF INDUSTRIAL GOODS BY DIFFERENT EXPENDITURE GROUPS  
(ACCORDING TO N.S.S. EST.) in 1983

N.S.S. Exp. Classes	% distn. of estimated no. of per- sons in each class	Total No. of Persons in each Class (millions)	Per Capita Expenditure per Annum(Rs)	% of Expenditure on Indust- rial Goods	Total Consumption of Industrial Goods
1	2	3	4	5	6
0-360	.21	.36	253.44	53.24	4.857
360-480	.51	.87	424.08	46.13	17.019
480-600	1.40	2.40	539.76	47.34	61.325
600-720	2.93	5.02	657.36	48.36	159.585
720-840	4.92	8.43	771.48	49.39	321.211
840-1020	9.52	16.32	911.76	50.24	747.567
1020-1200	10.64	18.25	1085.88	52.48	1040.012
1200-1500	17.17	29.45	1311.12	54.79	2115.578
1500-1800	13.13	22.52	1596.84	57.09	2053.004
1800-2400	16.31	27.97	1990.2	60.60	3373.353
2400-3000	8.75	15.00	2251.8	64.44	2176.589
3000-3600	5.19	8.90	3101.52	66.95	1848.056
3600+	9.32	15.98	5121.36	74.20	6072.478
TOTAL					19990.634

SOURCE : Same as in Table - 15.

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