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Development Through Industrialisation : An Analysis and Case Study of Backward Area Development

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Introduction[1]

Planning for the rapid development of the backward regions of the country has come into prominence, in India, after the mid-'sixties, and has been put into practice from the early 'seventies onwards in specified backward districts spread over the entire country.

There are essentially three issues involved in analysing the question of the development of backward areas. The first issue is the definition of the concept of backwardness itself. Backwardness has been measured in terms of various sets of criteria in the past. These criteria are, however, only conceptualised yardsticks, and behind each of them lies a conceptualisation of backwardness. The second issue, which arises after the first has been adequately answered, is the definition of the term 'region'. Once backwardness as a concept is defined, and the criteria for measuring backwardness drawn up, what is the basic spatial region to which the criteria can be applied? Ideally some sort of zoning, in terms of the criteria themselves would be preferred; contiguous regions classified according to homogeneity in terms of the specified criteria would form the basic unit for identification. In practice, this may not be possible, since the data base generally available is with reference to administrative, rather than economic zones, and variations within the administrative units tend to blur out. The third issue that then arises is that of evolving the strategy to be

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1. The author is grateful to K.Nagaraj for help given in the preparation of this paper.

adopted to lift the area out of backwardness. Several such strategies will always be possible, depending on the definitions involved at the beginning of the exercise, and also upon the limits set by the social and political structure of the region and the country as a whole.

In this paper we are concerned primarily with one particular strategy for backward area development that has been adopted in the country, viz., development through industrialisation. The issues considered in this context are broadly of two types: on the one hand are the questions pertaining to the policy as it evolved in India; on the other are questions relating to the actual working of the schemes on the ground. This paper is accordingly divided into three sections. In the first section, we take up the history of the policy of backward area industrialisation as it evolved in successive five year plan periods, and develop a brief critique of the policy as it finally emerged in relation to the conceptualisation at the start. In the second section, we take up for analysis the working of the schemes that make up the policy in a single area, namely Hosur in Dharmapuri district of Tamil Nadu.[2] In the third and concluding section of the paper we raise certain general questions about the issue of development of backward areas through industrialisation.

SECTION I

The problem of spatial spread of development was given some attention in the first three five year plans in the context of balanced regional development. As such, the question was posed in the overall framework of rapid economic development of an initially backward, largely rural economy.

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2. The study of Hosur was conducted as part of an evaluation of schemes for the development of backward areas in Tamil Nadu. The study was carried out by the Madras Institute of Development Studies on behalf of the Planning Commission, Government of India, in 1980. Views expressed in this paper are not necessarily those of either institution.

Indian Plan documents have consistently seen a dilemma between balanced regional development and rapid economic development, and it is worth recalling the main issues involved.[3] Priority in planning towards balanced regional development was seen as being a good thing insofar as (a) it implied the reduction of regional income inequalities; (b) it would lead to a lowering of the possibility of social and political instabilities in the less developed regions; and (c) it would result in lowering the outflow of resources and labour from the less developed to the more developed regions, thus avoiding permanent damage to the former's possibilities of development. On the other hand, however, given an initial resource constraint and the need to maximise overall growth rates even in the medium term, emphasis on balanced regional development could result in social costs that might well be too high: these costs consisted of (a) expenditures on establishing economic infrastructure and overheads in areas where these did not exist, and (b) the loss of external economics that would be gained if concentration were allowed in the absence of emphasis on balanced growth.

The choices made in the first three plans were biased in favour of overall growth. Where the less developed areas were concerned, attention was paid mostly in the form of developing agriculture and small and village industries, and also in a more passive manner by giving priority, in the licensing system, to investment in these areas. The Government also did undertake some active interest by opting to set up some public sector units in less developed areas and in setting up industrial estates.[4] The choice of programme was thus clearly based on a policy

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3. For a very good summary of the problem, see Mathur (undated). Also see Government of India, Planning Commission (1956), p.36 and (1961), p.142 for a clear exposition of the official stand on the dilemma. Nath (1967) has an interesting analysis of the question.

4. References to these schemes are in various places in the First and Second Plan documents, for a summary, see Government of India, Planning Commission, (1961), pp.143-4. The industrial estates that came up in the period of the first three Plans were by and large in close proximity to, if not within the limits of large urban centres. See Nath (1967)

of encouraging balanced regional development only where there was no conflict whatever with the overall growth objective.

Reference to the basic dilemma noted above is made in virtually every one of the Five Year Plan documents. In the Third Plan, however, the issue of balanced regional development has received more attention than in the previous two plans; in fact a whole chapter is devoted to the topic.[5]

Quite apart from noting that the time had come when more attention could be given to the issue of balanced growth, the Third Plan document introduced a new dimension not found in the earlier documents. It explicitly recognised the importance of introducing industrial production into primarily rural areas. Essentially, two reasons were given in the document for the introduction of industries into rural areas. First, it would mean a reduction of regional inequalities as well as of rural-urban inequalities. Secondly, the arrival of industrial production would mean the altering of the economic structure of the rural areas.[6] Apart from giving greater prominence to the question in the document, however, the Third Five Year Plan had little to offer, with regard to balanced regional development, that was essentially new.

In line with the ideas presented in the Third Plan document, some thinking had also begun, in the first half of the 'sixties, on the practical issues involved in the location of industrial units in less developed regions. The Committee on the Dispersal of Industries had been set up by the Small Scale Industries Board in 1961, in order to go into the question of identifying backward areas for purposes of rural

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5. Government of India, Planning Commission (1961) pp.142-153
6. Government of India, Planning Commission (1961) p.17

industrialisation. As part of the Rural Industries Project, again, several criteria for identifying backward areas for rural small industries were formulated in 1962-'63. An examination of the criteria drawn up by these two Committees, given in Appendix 1, shows that although the idea of area development had caught on, it was still well within the sphere of rural industrialisation and balanced regional development. This phase, however, appears by hindsight, to have been one when the transition was taking place, in policy making circles, from the consideration of overall regional development to specific area development.

The transition took place finally at the time of formulation of the Fourth Five Year Plan. In 1968, the Planning Commission and the Ministry of Industrial Development set up two working groups: The (Pande) Working Group on Identification of Backward Areas, and the (Wanchoo) Working Group on Fiscal and Financial Incentives for Starting Industries in Backward Areas. The reports of both the Groups were submitted in 1969, and decisions based on these reports were taken in the same year and the years immediately following.[7]

The recommendations of the two Groups have had a great deal to do with the whole policy of backward area industrialisation, and it is worth looking at these as well as the modifications made to them in some detail.

The Pande Working Group essentially performed two exercises of identification. Using one set of criteria, they identified the States and Union Territories that were to be regarded as backward. Following this, the group then used another set of criteria to identify districts within these States and Union Territories that were

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7. It is possible that the tremendous attention given in the Fourth Plan period and subsequently to backward area development was related to the dismal performance of the economy after 1965; this aspect needs more research, and is here only offered as a hypothesis that needs examination.

backward.[8] Ultimately, therefore, what the Group did was to identify the most backward of the backward. This process of identification was followed by the Group quite consciously, taking into account the existing resource constraint. In the words of the Group.

> "Since far too large a proportion of the country is industrially backward, it was considered that a large number of districts would qualify to be treated as industrially backward even if criteria were so evolved as to select relatively more backward districts. Taking into account the constraints on resources which are likely to continue during the fourth plan period,... it would be desirable to select certain backward districts only in industrially backward states which may qualify for special treatment by way of incentives for industrial development."[9]

Included in the first list made by the Pande Working Group were all the Union Territories (excluding Delhi) as well as the following States : Andhra Pradesh, Assam, Jammu and Kashmir, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Uttar Pradesh and Bihar.[10] Using the second set of criteria, the Working Group identified no less than around 240 districts in these States and Union Territories, as being backward. For the period of the Fourth Plan, given the resources position, the Group proposed that attention be restricted to not more than twenty or thirty districts on the whole.

The Wanchoo Working Group divided the responsibilities for backward area development as between the Central Government, the State Government concerned, and the term lending institutions, and fashioned three sets of schemes to be operated by each of these. The

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8. See Appendix 1 for both sets of criteria
9. Quoted in Menon (1979), p.50.
10. Details regarding the Pande and Wanchoo Groups are from Menon (1979) Kambadkone (1977) and Government of India, Ministry of Industry, Department of Industrial Development (1976).

State Government was primarily made responsible, in this system, for the provision of infrastructural facilities for industrial production; the term lending institutions were to make long term funds available at concessional terms for investment in the identified backward districts. The Central Government, according to the Group's recommendation, was to take the responsibility for a series of schemes designed to lower production costs in the backward areas through reduction in taxes and duties.

Both the sets of recommendations made by these Working Groups were modified by the Planning Commission, chiefly due to pressure from the National Development Council which met in 1969 to consider the proposals of the Working Groups.[11]

As far as identification of backward areas was concerned it was decided that such districts would be identified in each State and not only in the backward States. It was further finalised that all districts in each State w hich fell below the State average in terms of a set of criteria independently drawn up by the Planning Commission[12] would be regarded as being backward.

As for the Wanchoo Group recommendations, Government decided to streamline the relatively complex set of financial incentives that were recommended by the Group by using one single incentive, namely an outright subsidy on fixed investment in backward districts. Under this scheme, 10 per cent -- later 15 per cent -- of the value of fixed investment in land, building, and plant and machinery undertaken in a notified backward region would be given by the Centre. The Central Scheme of Investment Subsidy, as it was officially called, would not be applicable to all the districts identified as backward, but would be restricted to

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11. Government of India, Ministry of Industry, Department of Industrial Development (1976), Chapter II.

12. See Appendix 1

between one and three districts/areas in forward States and between two and six districts/areas in the backward States, and at present the scheme covers about 121 out of about 240 districts that have been identified as backward.

One important point to note is that the Central Scheme of Investment Subsidy was made available not only in districts, but also in contiguous areas identified for the purpose regardless of the number of districts involved. In the spelling out of this scheme, therefore, it was made possible to identify backwardness in terms of economic criteria with an area unit below the district level. Tamil Nadu and Andhra Pradesh are two States that have gone in for the area, rather than the district application of the scheme, in the process extending it into 11 and 5 districts respectively, although the district is not always covered entirely.[13]

Apart from the Subsidy Scheme, several other schemes are applicable to units locating in backward areas. Among the schemes under the Central Government are:

(1) exemption from import duty for plant and machinery.

(2) deduction of 20 per cent of profits for the first ten years from commencement of production when computing tax liability

(3) transport subsidy, applicable in very selected areas.

(4) priority in licensing

Additionally, term lending institutions, in accordance with the suggestions of the Wanchoo Group, offer loans at concessional rates.

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13. All other schemes, even in these States, are confined to backward districts in their entirety, leading one to suspect that the area choice was intended more to beat the limitations imposed by the Planning Commission rather than to strive for a more realistic operational definition of backward areas! It must be noted that the Nayak Committee made a strong argument for taluk, rather than district level identification, but no action on this recommendation has been taken. See Government of India, Ministry of Industry, Department of Industrial Development (1976).

Such schemes are further augmented by individual States, at varying rates of interest. State Governments have also developed their own sets of incentives, which consist of provision of infrastructural facilities on the one hand and of further financial incentives on the other. Some States, Tamil Nadu being one instance, have tried to use a stick along with the carrot by strictly enforcing a ban on new investment in certain specified centres of industrial concentration, as for example Madras, Coimbatore, Salem and Erode.

The recommendations of the Wanchoo Group were basically aimed at private investment, and were intended to woo private investment into backward areas. The modifications to the Wanchoo Group recommendations did not affect this perspective in any way.

Two points are worth noting about the recommendations of the Pande Group. First, the Group was unable to go beyond the concept of the administrative unit as the basic unit of analysis. This is unrealistic insofar as backwardness -- however defined -- cannot be limited by administrative and political boundaries. However, to the extent that the administrative area in India also coincides with the area unit for planning purposes, it was quite practical, if crude, at the district level. The second point to note is that the identificatory exercise did indeed result in the identification of those districts which are the most backward of the backward. The modification of the Pande Group proposals made by the NDC, however, had the very opposite effect to what the Group had wanted done. Instead of taking those areas which were the most backward in terms of the objective criteria, and pumping the initially limited resources into these districts before turning to others, the Government moved away from the use of one set of standards to identify backwardness to a multiple set represented by State averages, on the one hand, and spread the policy too thinly over a wide range on the other. Under the modified system of identification, there would no longer be any homogeneity in either list of districts, with some districts

being declared backward because they lay in a forward State while other districts, similar in every way to the first set, would be declared forward simply because they had the misfortune to be situated in a backward State. Moreover, several State Governments modified the criteria to suit their own purposes, thus further reducing uniformity in the identification process. Details are given in Section III below.

Finally, given the fact that the same schemes of incentives existed in this heterogeneous lot of 'backward' districts, and were intended to invite rather than regulate investment decisions, private investment displayed a natural tendency to gravitate towards the more forward of the backward districts. This has resulted, in turn, in the bulk of the expenditures on the schemes for backward area industrialisation to flow towards the advanced States. Tables1 and 2 show the share of the Central Investment Subsidy and of financing by the IDBI respectively going to the backward States as identified by the Pande Working Group. Table 3 shows the mid-year population distribution between backward and advanced States. It is to be noted that at best the flow of subsidy and of term financing for backward areas has more or less been in accordance with the distribution of population as between backward and advanced States. This clearly goes against the principle underlying these schemes, whereby one should expect a greater, if not the entire flow of these funds to the backward States.

There is another factor that has led to this phenomenon. Since the Central scheme of subsidy is identical in all the backward areas, the State governments have, in their own turn, been led into competing with one another to woo private investment into their own territories.[14] Such wooing of private investment has been also in the

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14. This point, of course relates not only to the issue of backward area development but also to the issue of development in general and industrial development in particular. For a brief presentation of the issues, see Guhan (1980).

Table 1

Distribution of Central Investment Subsidy: Share of Backward states

(Rs. in lakhs)

Item	1972-73		1973-74		1974-75		1975-76		1972-76	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Share of backward States§	1.51	13.0	4.89	8.0	196.56	49.0	237.01	39.50	439.08	41.08
Total	11.76	100.0	58.90	100.0	400.27	100.0	600.0	100.00	1070.93	100.0

§ Backward states are as identified by the Pande Working Group

Source: From Menon (1979), Table III.2, p.108-9

Table -2

Project Assistance sanctioned by IDBI to Backward States & Union Territories

All figures but Row A.3 and B.3 are in Rs.lakhs

Items	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	July 1970 to June 1979
A.1 Total Assistance sanctioned to all backward States/Union Territories	2247	4316	3050	4609	10168	13113	22408	18637	28476	107023
A.2 Total Assistance sanctioned to all States and Union Territories	8492	13500	12163	16495	26872	38688	63316	62941	95867	338336
A.3 Assistance sanctioned to backward States/Union Territories as a percentage of assistance sanctioned to all States/Union Territories	26.46	31.97	25.08	27.94	37.84	33.89	35.39	29.61	29.70	51.63
B.1 Assistance sanctioned to backward areas within backward States/Union Territories	448	2188	1226	2143	4510	8638	12450	8456	16422	56481
B.2 Assistance sanctioned to all backward areas	2099	4492	4087	5868.	9431	17231	33773	29838	37747	144569
B.3 Assistance sanctioned to backward areas in backward States/Union Territories as a percentage of assistance sanctioned to all backward areas	21.34	48.71	30.00	36.52	47.82	50.13	36.86	28.34	43.51	39.07

Note: The backward States and Union Territories are as identified by the Pande Working Group

Source: Derived from IDBI, Operational Statistics, 1978-79, Table 32

Table 3

Mid Year Population - 1974-1975

Backward states and union territories and total

(Population in '000)

No.	Item	1974	1975
1.	Backward states and Union Territories	169459	188061
2.	All India	389348	401786
3.	Row 1 as % of Row 2	43.52%	46.81%

Note: (1) Backward states and union territories are as per the Pande Working Group's findings

(2) The figure for 1975 do not include Assam and Meghalaya. Data for Mizoram are not available for both the years.

Source : From Office of the Registrar General, India; Vital statistics of India 1974-75 (RG's office 1979) Part II Table 2 pp.38 and 39.

form of subsidies as noted earlier; it goes without saying that the more advanced States have the greater capacity to subsidise private investment.

There is one final point about the evolution of the policy of backward area industrialisation that deserves attention. This is that even though several sets of criteria have been adopted to measure backwardness, there has never been a serious attempt to define the term itself. One aspect of this absence has received some attention in the literature when the Pande Working Group was criticised for having identified backward areas without having identified the backward areas that were particularly fit for industrial development.[15] This criticism, which is a valid one, appears to have been created because the concept of backwardness was left implicit. As already mentioned early in this paper, one of the first problems that would face the planners on the question of backward area development is that of defining the term. We shall return to a discussion of the meaning of the term in the concluding section of this paper, when questions of a more general nature are raised. For the present we note that the policy as it evolved, did not proceed from a clear spelling out of the concept.

SECTION II

Given the manner in which the policy of industrialising backward areas evolved, and the spatial spread of the schemes associated with the policy, the question arises as to how the schemes have worked in practice. Have they had the impact of raising income levels in the area concerned? Have they had any impact in altering the economic structure of the districts in which they operate?

I had the good fortune to study one centre where the schemes have been put into practice, when I was part of a team evaluating the

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15. See, for example, Kambadkone (1977), p.190; Menon (1979), p.156.

development of two backward districts in Tamil Nadu. The study was conducted in 1980, and involved a field investigation.[16] This section of the paper is based on this field study, the method of which is given in Appendix 2.

Dharmapuri district forms the north western corner of Tamil Nadu, and is bounded on the north and the west by the States of Andhra Pradesh and Karnataka respectively. The district accounts for 7.4% of the land area in the State and for about 4% of the State's population.[17] Apart from the hill district of the Nilgiris, Dharmapuri has the lowest population density in the State -- 174 per square kilometre in 1971 and 207 per square kilometre in 1981 as against a State average of 317 and 371 in the two periods respectively.

The population in the district is predominantly rural. Urban population as a percentage of the total for the district stood at 8.6 per cent in 1971 and 9.39 per cent in 1981, making it the district with the lowest urban to total population ratio in the State in both years. Of the 3883 village and hamlets in which the bulk of the population of the district lived in 1971, only 890 -- 23 per cent -- were connected by all-weather roads.

The district is also characterised by the lowest literacy rates in the State, 22.3 per cent in 1971 and 28.6 per cent in 1981.

By any standards, therefore, Dharmapuri is one of the most backward districts in Tamil Nadu. Several schemes for the development of the district are therefore in operation. Dharmapuri was the first district chosen -- in 1977-'78 -- in Tamil Nadu for the implementation of the

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16. The report of the study is to be found in Madras Institute of Development Studies (1980), Chapter 14. Assistance for the field study was provided by Mr.S. Selvam.

17. The data in these paragraphs pertaining to the seventies and earlier is from MIDS (1980), Chapter 3. Data for 1981 are from the Census of India (1981). All other data pertaining to Hosur in this paper are from the field study, and are as on May 1980, unless otherwise stated.

Integrated Rural Development Programme. Apart from rural development programmes, however, Dharmapuri has also been declared an industrially backward area.

There are essentially two types of programmes in operation in the district to hasten industrial development. These are:

(A). Financial Incentives:

1. The Central Scheme of Investment Subsidy
2. The Interest Free Sales Tax Loan Scheme, which is a State Government Scheme.
3. Provision of term loans at concessional rates by the term lending institutions.

(B) Physical Infrastructure:

4. Provision of industrial infrastructure in the form of developed plots, assured industrial water, etc., in the form of industrial estates.
5. Provision of social requirements such as housing, drinking water, medical facilities and education.

Industrial estates offering the necessary industrial infrastructural facilities have been set up in only two centres in the district. There is an estate for small industries at Krishnagiri which has been set up by the Tamil Nadu Small Industries Development Corporation (SIDCO). Three estates have been set up at Hosur. Of the two, Hosur is the far larger centre, and the case study that follows is confined to Hosur.

Hosur is a small town and taluk headquarter located near the north-western boundary of Dharmapuri district and the State. Lying on

National Highway No.7, Hosur is well connected with Bangalore, with Madras and with southern Tamil Nadu.[18] Hosur's proximity with Bangalore -- only 45 km. away -- has been one major factor influencing the decisions of entrepreneurs to invest in the area.

Until about 1970, industrial activity was virtually absent in the taluk. In the opening years of the decade, some silk twisting manufactories sprang up in Bagalur, a large village about 12 km. to the north east of Hosur. The State Government and its institutions have opened, since 1973, three industrial estates in Hosur, and a large number of factories have been set up on these and the neighbouring area after the mid-'70s. The total number of factories in the area as of 1980 is given in Table 4.

The sudden growth of so many factories in the area over a very short time has changed the profile of Hosur town considerably. The population of the town, which stood at 16,591 in 1971 has risen to 27,119 in 1981. The decadal growth rate for the period stood at 63.46 per cent, much higher than the growth rate in the previous decade, which was only 42.01 per cent. In fact, of the seven urban centres in the district, Hosur is the only one that has registered a faster growth rate in the 'seventies relative to the 'sixties. Hosur now accounts for 14.5 per cent of the urban population in Dharmapuri, and is clearly the major contributor to the marginal increase in the urban to total population ratio between 1971 and 1981 mentioned earlier.

It is clear that the growth of the factories, which have themselves led to the changes in Hosur have been due to the schemes that operate in the area. As already noted, these schemes are broadly of two types: those that seek to provide the industrial and social infrastructure for investment and growth, and those which seek to provide the financial

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18. National Highway 7 connects Bangalore at its norther end with Kanyakumari in the south, and passes through Salem, Madurai and Tirunelveli.

Table 4

Distribution of working factories and factories in construction or expected to be constructed at Hosur by size

(number)

Size group§	In production	Expected	Total
Small	27	37	64
Medium and Large	18	31	49
Total ...	45	68	113

§ Small units are those in which investment in plant and machinery is less than Rs.10 lakhs. Medium units are those in which such investment is over Rs.10 lakhs but below Rs.1 crore. Units where such investment is in excess of Rs. 1 crore are large.

Source: Data provided by SIPCOT, SIDCO, and Administrative Officer, Electrical and Electronics Estate, Hosur, and from data collected during field survey.

incentives for industries to be set up in the area. As far as industrial infrastructure is concerned, there are three industrial estates at Hosur. These have been set up by the State Industries Promotion Corporation of Tamil Nadu (SIPCOT), the Tamil Nadu Small Industries Development Corporation (SIDCO), and the Department of Industries of the State Government which has set up an Electrical and Electronics Estate. The type of facilities offered on each estate and particulars of the estates is given in Table 5 overleaf.

Table 5 Industrial Estates in Hosur : Area, Purpose, Facilities offered and Number of Units

Estate	Acreage for industrial plots	Type of units intended for	Facilities offered	Number of allotted units		Units in production	
				Small	Medium & Large	Small	Medium & Large
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. SIPCOT	970.00	Mainly for medium and large units with low water consumption	Plots with water supply, access roads with lights drainage	16	36	2	8
2. SIDCO	50.16	Small units only	All of the above plus ready built sheds (optional)	34	-	10	-
3. Electrical and Electronics Estate	30.00	Small Electrical and Electronics units only	All of the above plus Common Facility Test and Development Centre	12	-	11	-

Source: SIPCOT, SIDCO and Administrative Officer, Electrical and Electronics Estate, Hosur and from data collected during the field survey.

All the three estates have come up after 1973. On all three land is sold at Rs.12,800 per acre. Hire purchase is also possible, with an implicit rate of interest of 13.5 per cent per annum. SIDCO also offers ready built sheds on hire purchase basis at 13.5 per cent. The sale price of the land fully covers the cost of development incurred by the agency concerned, and there is no subsidy involved. Table 4 gives a picture of the size wise distribution of factories on the three estates.

Groundwater is the main source of supply in all the three estates. The existing reserve will not be sufficient for the needs of the SIPCOT Estate when it is fully developed, and arrangements have already been made to draw 2 million gallons per day of water from the Kelavarapalli reservoir currently under construction across the Ponniar a few kilometres from Hosur.

Units located off the Estate -- mostly located on the Krishnagiri Road -- do not, of course have the facility of developed plots and guaranteed water supply offered to them, but these units, along with those in the estates are eligible for the supply of electricity at subsidised rates. This facility, which is available only to units having HT supply, is phased over five years from the start of production as follows:

Table 6

Concession on HT electricity tariff at Hosur

Time period	Concession as percentage of applicable tariff
for first three years	33.33
for the fourth year	20.00
for the fifth and final year	10.00

An additional concession of 15 per cent during the whole of the first five years is also in effect.

No concession is available to LT users. As it happens, the cost of installation of HT lines is quite high, and the Electricity Board do not offer HT connections to units that consume less than 100 kw. Since it is the small units that usually fall into this category, the concession is effectively offered only to the medium and large units.[19] The differentiation between small units on the one hand and medium and large units on the other, with the latter being favoured, is a feature of several of the financial incentive schemes, as will be seen below.

Among the financial incentive schemes, the three listed at the beginning of this section are the most important, and need to be discussed in some detail.

The Central Scheme of Investment Subsidy:

Reference to this scheme has already been made earlier. It has been in operation in Hosur since 15 August 1971. Under this scheme, any new undertaking in a backward area, or any existing unit seeking to expand its capacity by more than 10 per cent is eligible to an outright subsidy of 15 per cent of the fixed capital investment made in the new unit/expansion subject to a ceiling of Rs.15 lakhs.[20]

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19. The definition of small, medium and large units used here and elsewhere in this paper follows that adopted for official purposes:

small units;	units with investment in plant and machinery not exceeding Rs.10 lakhs
medium units:	units with investment in plant and machinery above Rs.10 lakhs but below Rs. 1 crore
large units:	units with investment in plant and machinery of Rs.1 crore and above.

20. Details of the scheme are available in SIPCOT (undated)

Certain aspects of the scheme as it exists have been criticised elsewhere.[21] The main point is that the subsidy has been linked up to only one criterion, namely the value of fixed investment, which includes value of land, buildings, and plant and machinery. This has resulted in two specific problems.

First, the terms of the subsidy do not in any way differentiate between size or between capital intensity of production. Since there is a very large difference between the average investment per unit among the medium and large units on the one hand and the small units on the other, the largest part of the subsidy disbursed in an area tends to flow towards the larger units. Table 7 brings out this fact for the units in Hosur covered by the sample survey, in spite of the fact that the sample was biased in favour of small units. The fact that the subsidy does not differentiate between different size of investment results, in practice, in the larger units being favoured -- larger here being used strictly in terms of overall value of investment. Secondly, this has its own impact on the technology, so that capital intensity is favoured. A criticism of this aspect of the scheme given by Kambadkone is well worth repeating:[22]

> "The Central Subsidy Scheme infringes the well established principle of factor proportion endowment, in that it encourages capital intensive units in areas where labour is relatively cheap. This has another disadvantage in that it does not generate income that is likely to be spent in the backward areas so that any expansionary effect it may have gets muffled at the very start."

Quite apart from such issues, which are related to the structure of the scheme, our survey revealed certain problems in its implementation, with particular reference to the small units.

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21. See for example, Menon (1979), Baxi (1977) and Kambadkone (1977).
22. Kambadkone (1977) p.202.

Table 7

Distribution of Central Investment Subsidy by size class of units.

Sample units

Size class	Number of units	Total subsidy sanction (Rs. in lakhs.)	percentage of total
Medium and large	7	88.97	79.90
Small	20§	22.38	20.10
Total ..	27	111.35	100.00

§ One firm did not reply to the question relating to the subsidy amount sanctioned, because the sanction letter has not been issued. Another in the Electrical and Electronics Estate has not availed of the subsidy.

The Central Investment Subsidy is routed through two agencies, SIPCOT in the case of the medium and large units and SIDCO in the case of the small units. Application for the subsidy is made after the project proposal has been drawn up and the relevant sanction letters from the term lending agencies obtained. These are then scrutinised by a State Level Committee, which is chaired by the Secretary to Government, Department of Industries, and on which are represented both the disbursing agencies. The approval of the State Level Committee is followed by the issue of a letter of sanction by the agency concerned. Actual disbursement is linked to physical investment completed.

The main problem in implementation is that, due to the application having to be put before the State Level Committee, and then sanctioned by the authorising agency, there is a significant amount of delay in sanction and disbursement. The processing of applications takes time; the fact that meetings of the Committee have to be scheduled entails some delay; and the authorisation of the subsidy from the Centre also has its own time lag.[23]

The overall time taken for disbursement of subsidies was generally longer in the case of the small industries, which route their applications through SIDCO than for medium and large units, which route their applications through SIPCOT, SIDCO releases each instalment of the subsidy only after their Project Officer, who is posted at Krishnagiri, conducts an inspection of the progress of investment and submits a report to Madras. Moreover, verification of the value when second-hand machinery is involved, as is very often the case in the small units, is a time consuming process. Disbursement is faster in the case of the medium and large units, on the other hand, because the subsidy is usually geared to the disbursement of term loans, and procedural requirements take less time.

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23. It has been suggested by Kambadkone that the State Level Committee be altogether dispensed with, since the disbursing agencies would surely possess the capacity to make their own assessment of each proposal. See Kambadkone (1977), p.205-6.

Because of the time lag involved several of the small units have opted to take bridge loan pending release of the subsidy. These loans, taken from the Tamil Nadu Industrial Investment Corporation (TIIC), or from commercial banks, involve the payment of interest at rates ranging from 11.5 to 16 per cent per annum. Additional costs incurred in this manner are generally not foreseen by the entrepreneur concerned of the small unit at the time of making the project proposal, and play havoc with investment schedules; small units are particularly vulnerable to increases in project costs. Further, the requirement of a 'no objection' certificate involved in application for the bridge loan has to come from SIDCO, and this very often takes between four to six months. This delay affects entrepreneurs in the small sector quite badly. The manager of a local branch of one of the nationalised banks at Hosur admitted that he had stopped issuing bridge loans to the small units because of the long procedural delays involved. In two small units covered by the survey, the failure to get the subsidy on time led to a delay in installing machinery so much so that the moratorium on the term loan ended before production could begin. In its structure as well as in its implementation, therefore, the Central Scheme of Investment Subsidy is biased against small units. It also has the objective effect of encouraging greater capital intensity of production. We shall return to both these factors when we examine the impact of the schemes on the local population.

Interest Free Sales Tax Loan

The Interest Free Sales Tax loan scheme (hereafter referred to as the IFST) is a State run scheme. The scheme is divided into two parts. Part I provides for sales tax loans to existing industries undertaking substantial expansion or diversification equivalent to the sales tax paid by the existing industries for a period of three years subject to a maximum of 25 per cent of the value of fixed assets created or Rs.15 lakhs, whichever is less. Part II provides for sales tax loans to new units during the first six years of production equivalent to the sales tax paid during each year subject to a maximum of 8 per cent of the initial gross fixed assets of the unit. These incentives were originally

available to large and medium units only, and were extended to new small scale units in September 1978. In the case of small scale units, the sales tax loan is limited to the sales tax paid in the first three years of production, subject to a maximum of 8 per cent of gross fixed assets or Rs.1.25 lakhs, whichever is less. it is available only to units which pay sales tax of Rs.10,000 or more. Units set up with second hand machinery are not eligible for the loans if they have availed themselves of Central Subsidy or any other concession. The repayment terms of the IFST loan in the case of small units -- 3 annual instalments from the expiry of the fifth year onward -- are also more onerous than for new medium and large units viz., 6 annual instalments after the expiry of 9 years.

It is clear from the description above that there is a bias in the scheme in favour of the medium and large units where the nominal amount of the loan is concerned. This gets further accentuated if we consider the grant element involved.[24] Using a discount rate of 12 per cent, the grant element in the IFST scheme to new medium and large units comes to 40.9 per cent, while for new small scale units it is only 29.2 per cent. In the case of expanding medium and large units, where disbursements are scheduled to match the disbursement of term loans, on the assumption that 60 per cent of the loan is released at the end of the first year and 40 per cent at the end of the second, the grant element works out to 40.03 per cent. The actual grant element would, of course vary from case to case depending on the disbursement scheduling. One reason for the bias against the small units in the matter of grant element is due to the terms of repayment, as already pointed out, being more onerous in their case.

Given the nature of the scheme, it is not to be expected that many small units, several of whom generally tend to use second hand

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24. Grant element is calculated as the difference between the present value of the loan disbursement and the present value of loan repayment as a proportion of the loan amount.

machinery, would be eligible for the loan; further, it is to be expected that the units that do avail of the scheme will not obtain the same effective subsidy as would the medium and large units. This proved to be true in the case of the units at Hosur. Tables 8 and 9 which relate to the sampled units, bring out this fact

Mention must be made that the IFST is based on the tax paid by existing units, even though these units are located outside of the backward area concerned, in the case of expansion; further, the limits of the loan are determined by the total sales tax paid, and not by value added in the backward area. As such, it is easy to imagine that a company proposing an expansion of one stage of its production, particularly the final stages of finishing or assembly, would find it convenient to subsidise their investment by locating a unit for this one purpose in a backward area. Since such division of production is possible only by large companies or industrial houses, the scheme has an inbuilt tendency to attract such entrepreneurs to backward areas.

Term loans at concessional rates

The term loans at concessional rates are offered by SIPCOT, SIDCO and TIIC. The IDBI and the ICICI have financed a few units at Hosur. The term loans are given at concessional rates of interest -- 9.5 per cent for rupee loans and 11.5 per cent for foreign exchange loans.[25] The term lending institutions generally finance 65 per cent of the total investment costs in the form of these loans. The loans among the sampled units at Hosur usually carry a two year moratorium on repayment of principal, with the repayment itself being spread over/to ten sixteen half yearly instalments. The conditions of the loans do not vary with the size of the investment.

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25. The rate of interest charged in Tamil Nadu is not as low as those charged by States such as Gujarat, where the rates vary around a 5-7 per cent average. (See Menon (1979), p.141.

Table 8

Interest Free Sales Tax loans sanctioned by size group.

Sample units

Size group	Expanding units		New units		Total	
	No. of units	Total loan sanctioned (Rs. in lakhs)	No. of units	Total loan sanctioned (Rs. in lakhs)	No. of units	Total loan sanctioned (Rs. in lakhs)
Small	--	--	4	3.90	4	3.90
Medium and Large	3	42.32	3	68.15	6	110.47
Total ..	3	42.32	7	72.05	10	114.37

Table 9

Grant element involved in Interest Free Sales Tax loan sanctioned : Sample units

(Rs. in lakhs)

Size group	Expanding units	New Units	Total grant element	Grant element as per cent of total
Small	--	1.14	1.14	2.48
Medium and Large	16.94§	27.84	44.78	97.52
Total ..	16.94	28,98	45.92	100.00

§. On the assumption that 60 per cent of the sanction is disbursed at the end of the first year, and 40 per cent at the end of the second year.

It is possible to compute the subsidy element of such concessional financing as the present value of the difference between the interest actually charged and the interest chargeable at an imputed market rate. Assuming a market rate of 12 per cent, for a loan carrying 9.5 per cent interest with repayment spread over sixteen instalments, the subsidy element works out to 8.52 per cent of the value of the loan.

The total quantum of subsidy from all of the above three schemes can be quite high, depending on the level of the investment involved, the sales tax liability of the product manufactured, and the extent of machinery imported on the term loan.

The total quantum of subsidy in the case of a medium unit with a total investment of Rs.1 crore, whose output is such as to enable the unit to avail of the maximum amount of the interest-free sales tax loan is given below, along with the corresponding figures for a small scale unit whose total investment is Rs.10 lakhs. It is assumed that 65 per cent of the total investment is financed at concessional rates, that repayment is spread over ten years, that both units are new undertakings, and that no part of the machinery in either is imported.

Table 10

Total possible subsidy from three financial schemes

(figures in Rs.lakhs)

Item	Small unit with total investment of Rs. 10 lakhs	Medium unit with total investment of Rs. 1 crore
Central Investment Subsidy	1.50	15.00
Grant Element in IFST loan	1.10	19.60
Subsidy Element in term loan	0.55	5.54
	3.15	40.14

It is apparent that while the effective subsidy in the case of the medium unit is around 40 per cent, that for the small unit is only 31.5 per cent. The actual subsidy, were one to take into consideration the subsidy involved in the electricity tariff concession, and the exemption of import duty on imported machinery, would tend to widen, rather than lessen the gap. This is because as we saw, the electricity tariff concession is available only to HT users, most of whom could be expected to be medium and large units, and because it would be the larger and medium units that would tend to import machinery because (a) they are the ones more likely to have foreign technical collaborations and (b) they can usually afford to go in for sophisticated machinery, and in any case, the extensive use of imported machinery, which is costly, would anyway tend to place any unit within the definition of medium or large unit.

In closing the description of the incentive schemes that operate at Hosur, some points must be taken note of. There exists, first, no corrective to the kind of bias noted above (a) towards medium and large units, and (b) towards capital intensive production. The bias, of course, is not one that actively discourages either small scale or labour intensive production, and units of both types do exist in Hosur as they do in other similar areas. This fact must be recognised.

Secondly, if backward area industrialisation is to make the fullest use of locally available resources, the schemes in operation must take this factor into consideration. The financial incentives described above do not place any emphasis on particular industries or lines of production. It is difficult to conceive of a financial scheme that can do this and yet remain viable. It is rather at the project appraisal stage that selection of particular production lines must be enforced, or at least given priority. In the case of Hosur, this is not done, excepting in the case of the electronics Estate. On the SIPCOT estate, the only condition imposed by SIPCOT is that the unit concerned must not be water demanding; units that require more than 600 gallons of water per day per

acre are discouraged. Although this in itself is a good thing in an essentially water scarce area, it is not sufficient.

Keeping these factors in mind, we turn to the factories at Hosur and their structure.

The factories

The majority of the factories at Hosur are located on one of the three industrial estates, but several are located away from them. All the units in the Electrical and Electronics Estate are small scale units. The distribution of investment in fixed assets in the factories on the SIPCOT and SIDCO Estates is given in Table 11. It is clear from this table and Table 4 referred to earlier, that the area is dominated by large scale units.

The product composition of the factories in the area is given in Table 12.

Among the 13 agro-based units in Hosur, (6 in the tobacco and food processing industries and 7 yarn and cloth mills) only three units make use of locally grown inputs: these are the two fruit juice factories and the one groundnut processing unit. The majority of the remaining units are either metal/based or are electronics units which use raw materials imported into the area. Much of the steel used in these factories is special grade steel imported from abroad. There is thus very little input linkage between the factories taken as a whole and the rest of the backward district. Linkages through the use of local labour do exist, but these are of a particular type, as is shown later in the paper.

Interlinkages among the units themselves are quite high, principally for two reasons. Most of the general engineering units are forging and casting units, a part, if not all, of whose orders are obtained from other factories in the area. Secondly, companies which have set up medium and large units have in several cases, some of which are mentioned

Table 11

Proposed investment in factories on the SIPCOT and SIDCO estates as per project proposals

Size group	Proposed investment in units currently in production	Proposed investment in units expected	Total proposed investment
Small	96.71	290.88	387.59
Medium and Large	2427.93	5743.03	8170.96
Total ..			8558.55

Source : SIPCOT, Madras and SIDCO, Madras

Table 12

Output composition of factories by size group

Industry	Number of units		
	Medium and Large	Small	Total
Transport equipment	2	0	2
Transport components	6	3	9
Textile machinery	3	0	3
Textile machine components	2	2	4
Machine tools	3	3	6
General engineering goods (including forging and casting units)	6	14	20
Electrical and electronics components	5	14	19
Yarn and cloth	5	2	7
Tobacco and food products	3	3	6
Chemicals (including pharmaceuticals) and plastics	6	7	13
Others	8	16	24
Total ...	49	64	113

Source : SIPCOT, SIDCO, Administrative Officer, Electrical and Electronics Estate, and data collected during the field survey.

below, set up ancillary units in the small scale sector which are either directly owned or are otherwise controlled by them, and which cater more or less exclusively to the provision of components for the larger units concerned. Barring these two types of units, the bulk of industrial output at Hosur is intended for national and international markets. Some part of the output of some of the units manufacturing consumer items is of course marketed in Hosur itself, but only insofar as Hosur is a part of the national market. There is no production catering specifically to local needs, if one counts out the satellites.

Several of the leading industrial houses have set up medium and large plants at Hosur, and some have, as already mentioned, set up small scale satellite units as well. Some examples of such investing houses is given below:

Table 13

Major Industrial Houses Investing at Hosur

(As on May 1980)

House/Company	Units
Lakshmigroup (Coimbatore)	: four medium and large units;one small captive unit.
Premier Mills (Coimbatore)	: three units, all in the large and medium scale.
TVS group (Madras)	: two medium units; at least one small unit under indirect control.
Simpsons group (Madras)	: one medium unit; at least two small units under indirect control.
Ashok Leyland (Madras)	: one large unit, the largest in the area.
Easun group (Madras)	: one medium size unit
Kisan group	: one medium size unit
Brooke Bond (India)	: one unit
English Electric	: one unit

While the industrial houses dominate the medium and large units, and thus the overall investment in the area[26] the small units present a contrast. These units are mostly set up by one of two types of entrepreneurs, both well established at Hosur. One group consists of individuals retired from blue and white collar jobs who have put in their life savings into a small factory. Several of these entrepreneurs admitted, during interviews, that they would not have gone in for any investment at all had it not been for the concessions offered by the Government to entrepreneurs at Hosur. The schemes would thus appear to have not only played a role in transferring investment that might otherwise have gone elsewhere, but also in calling out altogether fresh investment. The second group of entrepreneurs consists of much younger individuals, some of whom have a technocratic background, and who have typically borrowed funds to set up units of their own. In the former group are to be found the units that we have earlier characterised as "satellites". These are units where the entrepreneur concerned typically has retired from one of the companies which have set up plants at Hosur, has received some support from the large company, mainly in the form of cheap second hand machinery, and is encouraged to manufacture components on order for the large plant. In at least one such case, an engineering unit, the steel requirement is supplied by the large unit. Another kind of unit, which we have termed 'captive', also to be found in the small sector, has been directly set up by a company having one or more medium or large plants in the area, and has the specific purpose of supplying components. Such units, though nominally under a different management, do not undertake any commercial transactions except with the unit to which they are 'attached'; even these transactions are in fact only book transfers. Most of the small scale units including the captive units, are either single proprietorships or are partnerships. A very few are private limited companies.

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26. It is not only in Hosur that big investors dominate a backward area. Nair et al using an all India sample, have shown that about 70-75 per cent of investment in areas such as Hosur comes from "established industrialists". See Nair et al (1977), p.157.

The small units at Hosur and the medium and large units are also differentiated by the technologies used. A rough index of capital intensity among the units in the SIPCOT and SIDCO Estates was worked out from the project proposals by taking the value of expected investment per person expected to be employed. The average for the medium and large units stood at Rs.1.02 lakhs per person, with a range between Rs. 0.17 lakh and Rs.3.16 lakhs; for the small units, the average worked out to only Rs.0.22 lakhs, with a range between Rs.0.07 lakhs and Rs. 0.98 lakhs, after excluding an extreme value of Rs.2.44 lakhs. In general, the medium and large units have been set up with foreign technical collaboration, while this is not the case there the small units are concerned. In some medium and large units, especially the electronics factories, much of the production process is fully automated, but the finishing work is almost entirely done by hand. The technology mix in Hosur, particularly in the medium and large units, is quite demanding of highly skilled labour. This fact, visually apparent to even the casual visitor, is also visible when analysing the structure of the labour force at Hosur.

Given the nature of the schemes that have been in operation in Hosur, and which have been examined a short while ago, the structure of the units that have come up in direct response to the schemes is not very surprising, especially if it is remembered that it has been the proximity to Bangalore that has given the additional impetus to investment.

Backward Area Development, as we have seen in Section I of this paper, has, as its immediate objective, the task of effecting some change in the income, living condition and employment structure of the population in the area. In the case where, as in Hosur, development is sought to be achieved by schemes which provide an incentive to private investment, it is to be expected that the final objectives will be through the medium of the income, employment, and demands that these industries generate in the area concerned. In order to assess the actual investment, we have to turn to the local population and the impact that the factories have had upon it. It is to this aspect that we now turn.

The workforce

As part of the survey conducted in 1980, a separate survey of a sample of the workforce in the factories was conducted.[27] The survey provided some interesting results. We must assert here that the sample was not rigorous enough to merit statistical testing of the results. However, they do provide a rough sketch of reality.

The distribution of the sample of workers between units of small size and medium and large size is given in Appendix 2. While there are more small scale units in Hosur than there are medium and large ones, average employment in the former is large enough to dominate the scene. The female labour force is more concentrated in relative terms, in the smaller units. This is mainly because the units that largely employ women are in the small sector: electronics units and fruit canning factories account for most of the female employment. In several of the medium and large units -- engineering units and textile units -- there are no women employed.

The skill composition of the labour force (Table 14) as between and small units and the medium and large units is quite different, with the latter group possessing the higher ratio of skilled labour. This is an aspect that has been referred to already earlier in this paper, and is not of any surprise, given the technology mix.

Wage levels proved to be generally lower in the small units than in the medium and large ones, as shown in Table 15. Women's wages at every level are somewhat lower than that for men. It is worth noting that the average wage rate between skilled and semi-skilled categories on the one hand and of unskilled labour on the other, in both types of units show considerable difference. We shall refer to this aspect later.

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27. See Appendix 2.

Table 14

Distribution of workers by skilled, unskilled and supervisory categories. Sample data.§

(percentages)

Workers	Small units	Medium and Large units	Total
Skilled and semiskilled	50.62	67.66	62.77
Unskilled	43.21	26.87	31.56
Supervisory/Inspection	6.17	5.47	5.67
Total	100.00	100.00	100.00

§ Excludes Clerical/Administrative Workers.

Table 15

Average wage by skill : Sample data

(Rs. per month)

Size class/ Workers	Male	Female	Overall
Small units:			
Skilled and semiskilled	252.78	165.00	242.07
Unskilled	125.00	101.32	113.24
Supervisory/Inspection	400.00	175.00	355.00
Overall for Small units	226.79	117.00	194.38
Medium and Large units:			
Skilled and semiskilled	268.10	145.00	250.00
Unskilled	179.44	130.56	171.30
Supervisory/Inspection	370.45	--	370.45
Clerical/Administrative	305.00	158.33	271.15
Overall for Medium and Large units	254.40	142.19	237.62
Overall	247.90	131.14	225.75

Using place of birth as a rough indicator, an estimate was made, in the sample, of the extent of in-migration into the area that finds employment in the factories. The results are shown in Table 16. About 34 per cent of the labour force comes from other districts in Tamil Nadu, and about 11 per cent more comes from outside the state. The importing of labour is in large part due to the fact that the district being a backward area, the reservoir of skilled and semi-skilled labour is not adequate. Table 16 reflects this fact in that (a) there is a higher component of locally available labour in the small units than there is in the medium and large units, and (b) the proportion of 'imported' labour is higher in all categories other than unskilled. Import of labour in certain cases has also been deliberate, and we shall take up this aspect later when we discuss the question of organisation.

The relative inadequacy in the number of local skilled workers and the fact that the wages of the unskilled categories are generally low, as we just saw, has resulted in the relatively low wages of the section of the local population that has been absorbed into the factories at Hosur. This is illustrated in Table 17.

Table 17 also shows another fact which is that the relative inequality of earnings between local and immigrant workers is reflected not just in the overall situation but also at every skill level. This is due to another factor, namely the conditions of employment. In general, we found, during the survey, that most of the local workers have been appointed as either casual employees or as trainees. The term 'trainee' is often only an euphemism for a worker who is not conferred a permanent status, especially among the small units. In general, the lines between permanent, casual and trainee workers is quite blurred in Hosur. Only a few units are in the habit of giving letters of appointment. Where letters of appointment are given, as in the case of some large units, the wage turned out to be a simple multiple of the daily wage. In several of the units, confirmation of workers is somewhat haphazard. In one textile unit, all workers included in the sample were

Table 16

Distribution of workers by place of birth: Sample data

(percentages)

Size class/ workers	Dharmapuri district	Rest of Tamil Nadu	Karnataka	Other States	Total
(1)	(2)	(3)	(4)	(5)	(6)
Small Units:					
Skilled and semi-skilled	73.17	17.07	7.32	2.44	100.00
Unskilled	68.57	14.29	14.29	2.85	100.00
Supervisory/Inspection	20.00	20.00	20.00	40.00	100.00
Small units overall	67.90	16.05	11.11	4.94	100.00
Medium and Large Units					
Skilled and semi-skilled	47.06	42.65	7.35	2.94	100.00
Unskilled	64.81	27.78	7.41	--	100.00
Supervisory/Inspection	27.27	63.64	--	9.09	100.00
Clerical/Administrative	38.46	61.54	--	--	100.00
Medium and Large units overall	50.00	41.12	6.54	2.34	100.00
Overall	54.92	34.24	7.80	3.05	100.00

Table 17

Average wage by place of birth : Sample data

(Rupees per month)

Size class/Workers	Dharmapuri District	Rest of Tamil Nadu	Karnataka	Other States
Small Units:				
Skilled and semiskilled	203.09	291.43	400.00	350.00
Unskilled	115.33	114.00	149.74	150.00
Supervisory/Inspection	175.00	300.00	208.00	560.00
Overall small units	164.28	223.85	239.63	405.00
Medium and Large Units:				
Skilled and semiskilled	219.84	280.45	340.50	325.00
Unskilled	168.22	188.40	171.25	--
Supervisory/Inspection	313.33	376.43	--	590.00
Clerical/Administrative	169.00	345.25	--	--
Overall Medium and Large units	203.20	278.29	292.14	378.00
Overall	189.99	271.28	271.59	390.00

on daily wages; the most skilled worker in this factory earned Rs.9.00 per day. In another case, a large engineering goods factory, there were instances of workers with more than four years of continuous service who had yet to receive letters of appointment. For the purpose of our study, we took all workers who had been given letters of appointment or were receiving any allowances over and above their basic wage to be permanent. Table 18 gives the structure of the workforce according to employment status and the average wage. Reading this table along with Table 17, it is apparent that it is largely the local population that gets employed in the categories of casual and trainee workers. There is another reason why this must indeed be so. If the factories have in fact had to import the largest component of their skilled workforce, and most of the immigrant workers are in the skilled and semi-skilled categories, it is quite likely that the managements would have to provide the immigrant skilled and semi-skilled workers with some modicum of assured employment, while this need not be all that necessary in the case of the local, predominantly unskilled labour force.

Such an explanation, though plausible, must stand modified because of another fact. This is that the wages in Hosur in general, for all categories including skilled workers, is somewhat lower than that in the other industrial centres in Tamil Nadu. We had the opportunity to find out, some time after the field investigation was complete, the starting wage at two factories in Madras belonging to two companies that the wage level at Hosur was approximately one half that prevailing for the same job in Madras.

It is possible to think of certain factors that might operate to correct these two tendencies noted above, namely the tendency for the local labour to be employed in non-permanent, unskilled and hence low paid jobs on the one hand, and the generally low wage level on the other. We take up each of these below.

Table 18

Distribution of workers and average wage by employment status§: Sample data.

(Distribution in percentage, average wage in rupees per month)

Size/Status	Male		Female		Total	
	Distribution	Average wage	Distribution	Average wage	Distribution	Average wage
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Small Units:						
Permanent	57.14	309.07	36.00	174.33	50.62	279.49
Casual	35.71	157.64	52.00	110.04	40.74	138.89
Trainee/Probationers	7.14	150.00	12.00	75.00	8.64	117.86
Total	100.00	--	100.00	--	100.00	--
Medium and Large Units:						
Permanent	33.14	346.03	0.00	--	28.36	346.03
Casual	29.07	189.68	86.21	131.76	37.31	170.37
Trainee/Probationers	37.21	229.10	13.79	200.00	33.83	227.39
Contract	0.58	720.00	0.00	--	0.50	720.00
Total ..	100.00	--	100.00	--	100.00	--

§ Excludes 13 clerical/administrative employees.

As far as the local reservoir of skilled labour is concerned, it may be possible to augment it in the medium term through training, both institutional and on-the-job. On the job training, as we have noted earlier, is a bit of a farce in most units, and the possibility of it being taken seriously in the foreseeable future is quite low, since the factories have clearly found it possible to bring in trained labour from outside.

There is an ITI at Hosur which is the only local institution that is capable of imparting the necessary skills. However, an examination of the capacities of the ITI and the professed needs of the units at Hosur shows some imbalances.

There are facilities for a total of 9 trades at the ITI. The quality of the turnout has been quite high: in each of the last three years at least two students passing out from the Institute have been selected for national apprenticeships. In terms of quantity, however, the sanctioned capacity is not being fully utilised, and there is a consequent shortfall.

The Principal of the ITI, in 1979, requested all industrialists in Hosur to give him a list of their manpower requirements over a period of five years so that he may have some idea of the kind of changes that were required of the Institute in terms of new courses. Nineteen units responded to this request, and the pattern of their demand is given in Table 19, along with an estimate made by the Principal of the expected turnout by trade over the same period of five years. As can be seen from the table, the capacity of the ITI to turn out the requisite skills is very limited on the one hand, and on the other, there is a great deal of mismatch between the numbers that are required and the numbers that are expected to be produced in almost every trade. The planning that is required to raise the capacity of the ITI in specific trades -- fitter, turner, and mechanic (motor vehicles) -- of adding new trades such as

Table 19

Skilled manpower requirement at Hosur in the next five years, as estimated in 1979 from data pertaining to 19 units

(number)

Trade	Total requirement	Anticipated output at ITI, Hosur
Fitter	327	90
Turner	577	130
Machinist	124	65
Electrician	46	90
Wireman	10	90
Mechanic (Motor Vehicles)	330	90
Mechanic (Instruments)	44	90
Mechanic (General Electronics)	5	90
Welder	80	130
Mechanic/Draughtsman	8	-
Blacksmith	2	-
Sheet Metal Worker	1	-
Moulder	30	-
Plate Maker	6	-
Electro-plater	7	-
Grinder	501	-
Driller	25	-

Source : Principal, ITI, Hosur.

grinder and driller, while curtailing others, such as welder, has simply not been taken up. No mechanism as yet exists to bring together the entrepreneurs and the authorities of the ITI to chalk out a phased expansion plan for the Institute.

In the aggregate, moreover, only a small proportion of the graduates from the ITI are at present being absorbed in the local factories. This fact has been brought out in Table 20, which shows that although in some trades such as machinists, fitters, and instrument mechanics, the absorption has been high, that in the remaining trades has been quite poor.

It is thus not to be expected that the ITI can in the absence of careful planning quickly undertaken, take care of the problem by itself.

In recognition of the problem of insufficient absorption of local manpower in the factories and linking this up to the issue of non-availability of technical skills in the area, the town panchayats of Hosur and Thalli -- which lies nearby -- have initiated, from February 1980, a training scheme under the IRDP. This programme needs some detailed examination, if only to show how schemes can be misused.[28]

Under the IRDP schemes, young agricultural labourers and small farmers are selected by the BDO and assigned for training to those factories in Hosur that volunteer to participate in the scheme. The factories are expected to train each apprentice in a pre-assigned trade over a six month period. During the period of apprenticeship, each trainee receives Rs.100.00 per month from IRDP funds, and the factory is paid Rs.50.00 per month per trainee as instruction charges and compensation for wastage.

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28. The analysis that follows relates to the scheme as we found it in 1980. We do not know if it has since been amended, and if it has, in what way.

Table 20

Absorption of students passed out of ITI, Hosur in July '79 in factories at Hosur

Trade	No. passed	No. absorbed	(3) as per centage of (2)
(1)	(2)	(3)	(4)
Mechanic (General Electronics)	17	8	47.05
Electrician	18	6	33.33
Fitter	12	11	91.67
Machinist	12	12	100.00
Mechanic (Instruments)	18	13	72.22
Mechanic (Motor Vehicles)	16	3	18.75
Welder	24	5	20.83
Wireman	17	-	0.00
Turner	26	10	38.46
Total ...	160	68	42.50

Source : Principal, ITI, Hosur

The scheme does not quite work out in the way in which it is intended for several reasons. First, the apprentices are expected to be trained in skilled trades -- fitter, turner, machinist -- each of which takes two years to teach at the ITI, within a period of six months. The officials concerned are quite aware of the inadequacy of such training to impart any long term training of a real nature; they do not conceal the fact in conversation with factory managements that they do not really expect any of the trainees to be permanently absorbed into the factory's workforce. Secondly, there is no limit on the number of trainees that any one factory can take, nor is any assessment made, when a factory joins the scheme, to find out its capacity to employ these apprentices, or even the maximum number that can possibly be trained in a factory given its size. Third, there is no coordination between the two town panchayats involved to ensure that too many apprentices are not sent to the same factory. Fourth, no check whatever is made to ensure that the apprentices are being imparted any training at all. The factory management is expected to maintain a daily attendance register which is sent to the BDO's office once in a month to compute the stipend payable after adjusting for absenteeism. The entrepreneur is also paid his amount from the office after a similar adjustment for absenteeism. The attendance record is not checked at all during the course of the month.

The net result of these factors has been that several of the units, especially the small ones, have elected to take as many apprentices as they can get. Of a total of 365 apprentices in the scheme in March 1980, no less than 323 were in small units. In one of these factories, for instance, which is producing engineering ancillaries, there were 15 apprentices from Hosur and 47 from Thalli. The factory itself has no use for more then ten workers on a normal day, and already had three skilled workers on its permanent establishment. The daily procedure was to shut the gates after a minimum number of apprentices had entered, and to dismiss all the others after giving them their attendance for the day. In effect, therefore, the apprentices get a monthly stipend and no training worth the name, while the factory gets a steady

bonus. In the case of this one factory, the proprietor was being paid Rs.3,100.00 per month from IRDP funds for his participation in the training scheme. In other factories, the apprentices often end up doing odd jobs.

Not surprisingly, several of the apprentices had begun to drop out by May, when the survey was carried out. Inquiries among some of the dropouts indicated that they were doing so largely because of the disappointment at finding that they do not get any training, rarely enter the factory at all, and only get the more menial jobs when they do. Moreover, they are often left at a loose end on most days when they were instructed by the management not to return to the town for fear of their being spotting by the Rural Welfare Officer who recruited them in the first place.

During the field survey, 41 of the apprentices were also covered during the survey of the labour force.[29] This small sample, when analysed, gave some interesting results. It was found that two of the 41 apprentices were in fact ITI certificate holders, the one a fitter and the other a blacksmith. Eleven more apprentices had had some previous experience in semi-skilled and unskilled jobs prior to their joining the programme. Thus, almost a third of the sample were not raw hands.

The IRDP scheme is thus largely a waste and misuse of resources. Its essential objective would appear to be to show a "final achievement" of financial targets in the IRDP scheme and to claim that these funds had been spent in creating employment opportunities for the local youth.

In sum, therefore, it would be reasonable to conclude that the existing facilities for training the local population in skills that might brighten their chances to move up into more remunerative jobs are quite inadequate.

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29. These 41 apprentices were not included in the general sample of workers discussed earlier.

Another possibility that might be conceived to exist would be that of increasing bargaining power on the part of the labour. Obviously, one major way of this happening is by unionisation. Before going into this aspect, it is necessary to mention one more way in which this might occur. In a situation marked as it is by the felt shortage of skilled and semi-skilled labour, at least the skilled and semi-skilled sections of the workforce might hope to achieve an enhanced wage by making use of competition among the factories by job hopping. This possibility has been effectively scotched by the managements themselves. The entrepreneurs and managers at Hosur had, early in 1980, concluded a gentleman's agreement, under which they mutually agreed not to employ any worker already employed at one of the local factories unless he furnished a letter of no objection from his current employer.

Given this action taken in concert by the managements in Hosur, it is not altogether surprising to find that they have done their best to fight union formation. This has been done in two ways. First, the managements have tried, especially in the large units, to ensure that no worker is brought in who might have had an association with an union elsewhere. In the case of one factory, where the company concerned already has a big unit in Madras, we were informed by the manager that no worker would be transferred from the Madras factory unless he had been promoted to supervisory level. The reason for this, in the words of the manager concerned, was because the company was interested in creating and promoting a "new labour culture" in Hosur. We found such an attitude generally prevalent among the managements at Hosur.

Such a policy has, of course, not been strictly enforceable, particularly because skilled labour has had to be brought in from industrialised -- and strongly unionised -- areas such as Madras, Coimbatore and Bangalore.

In several units, unions have indeed been formed, and the managements have invariably tried to smash them. One case in particular is worth mentioning in this context. In one factory, where the majority

of the workers are women, an union was formed in 1978. This union, which initially was formed by the women to jointly confront a floor supervisor who had displayed some tendency to misbehave, quickly grew to the level where a charter of demands was submitted demanding, apart from action against the supervisor concerned, some minimum conditions of safety in the form of gloves and knee-length coats. The management, after having systematically harassed the workers and failing to break the union, simply laid off a large part of the workforce on the grounds of raw material shortage. This layoff, which involved about two thirds of the workers, was quickly followed by fresh recruitment. The new recruits all came from around the native village of the managing director; the management has rented a house in Hosur which has been converted into a hostel for the imported workers, and they are transported to and from work in a van purchased for the purpose. The girls are not allowed to go into town on their own, and at work, the lunch hour has been staggered in such a way that they do not have any opportunity to talk with the few older workers who still remain and are associated with the union. Finally, the wages of each girl, after deductions for board, lodge and sundry expenses, are sent to their parents in the village.

An experience somewhat similar to this one has also taken place, as far as our knowledge goes, in one other factory, where several workers have been similarly brought in from outside. Being males, they are housed within the factory premises itself, but are otherwise as closely guarded as the women in the other factory.

In spite of intimidatory tactics such as this one however, it is apparent from recent events that the unions are gaining in strength in Hosur. There were two incidents of strikes in Hosur in the middle of August 1981,one at the Ashok Leyland factory and the other at the Lakshmi Automatic Looms unit, and these have been preceded by at least three others since May 1980. The earlier ones have centred essentially on only two issues -- increase in wage and confirmation of employment -- with the latter demand being the more important. All three were successful where the immediate demands were concerned.

There is thus some hope that pressures from organisations of the workers will act over time to correct the two types of imbalances referred to earlier. But this in turn is likely to be a long drawn out affair, particularly given recent attitudes taken by the Central Government towards the right to strike, and is bound to be both costly and painful.

There is one other set of schemes that we have not yet taken up, and this is the provision of social amenities to the increasing workforce in the area. There is a housing development programme being effected at Hosur, but the pace of growth of houses is inadequate to meet the demand. The data on the housing construction programme are presented in Table 21. A consequence of this has been a sharp rise in rental values, which tends to erode the living standards of the workers who live in the area. Rentals were, in 1980, about the same in Hosur as they were in a major centre like Madras.[30] The housing conditions of the bulk of the workforce is thus truly miserable; in some cases we found that buildings intended for shops had been converted into one room living quarters at exorbitant rates.

Water supply for drinking and domestic purposes is a major problem in Hosur. The main sources of supply are a couple of wells in the town, and water from these is sold by the cartload to the resident population. An average sized family would spend approximately Rs.40 to 60 per month on water purchased in this manner. This water is not protected, and water-borne diseases are common.

The inadequacy of the water supply in Hosur is likely to be felt even more seriously in the future as the town's population grows.[31]

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30. A one bedroom flat constructed by the Housing Board was available in Hosur for Rs.300.00 per month. A similar flat in Besant Nagar in South Madras would then have cost the same rental.

31. SIPCOT has estimated that at least 1 million gallons of water will be required per day by the year 1991. See SIPCOT (1979).

Table 21

Construction of Housing in Hosur town by State Housing Board (Salem Housing Unit): Plan and Achievement of present phase in three sites

Site	Type of flat	Number planned	Number constructed and occupied
Temple Land	H.I.G.§	4	4
	M.I.G.§	26	26
	L.I.G.§	97	91
	Total ..	127	121
Koyakotai Road	M.I.G.	26	-
	L.I.G.	167	8
	E.W.§	33	2
	Total ..	226	10
Thalli Road	H.I.G.	6	-
	M.I.G.	41	-
	L.I.G.	93	-
	Total .	140	-
Total	H.I.G.	10	4
	M.I.G.	93	26
	L.I.G.	357	99
	E.W.	33	2
	Total .	493	131

§ H.I.G. : High Income Group Housing Flat, 2400 sq.ft. floor area
M.I.G. : Middle Income Group Housing Flat, 2400 sq.ft. floor area.
L.I.G. : Low Income Group Housing Flat, 1800 sq.ft. floor area
E.W. : Economically Weaker Sections Housing Flat, 220 sq.ft. floor area.

Source : Junior Engineer, Thalli Road Scheme, Housing Board (Salem Housing Unit), Hosur.

The only possibility to meet this growing demand is to draw upon the water from the Kelavarapalli reservoir for this purpose as well. This idea was proposed in 1979, but has not won any sympathy from the PWD. Engineers and officials on the project, when interviewed, were strongly of the opinion that the PWD would prefer to use the water primarily for irrigation purposes and confine the non-agricultural supply to the needs of the SIPCOT complex to which they are already committed.

There is only one Government hospital at Hosur. There is no hospital under the ESI scheme. Plans had been announced some time ago[32] that a hospital under the ESI scheme would be completed by the end of 1980, but construction had not even commenced in May 1980 when we conducted the field survey. The bed strength of the present hospital is only 43, and the facilities available are not adequate for the needs of the growing population. Two units in the SIPCOT complex offer medical facilities to their workers (as of 1980) and SIPCOT have set up a first aid centre for handling minor emergencies. On the whole the picture is one of inadequate medical facilities.

The social infrastructural facilities that have been made available at Hosur are thus generally poor in quality and quantity. It is reflective of the pattern of development that has been sought to be generated in Hosur and the attitude underlying the process that while on the one hand the needs of the industries have been met as far as possible, albeit with several inbuilt problems, the requirements of the population that has been resident in the area and mans the factories involved in the strategy have been treated in so niggardly a fashion.

One impact of this sort of situation has been that those who can afford it -- either on their own or, more often, with material support from their employer companies in the form of cars and vans -- have chosen to stay in Bangalore and commute to work every day. Since these

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32. See SIPCOT (1979).

are generally the senior staff and owners of the companies, it has meant that some part of the income multiplier effect that might have been generated within the locality of Hosur has been lost. To this extent the relative absence of social amenities in the area has defeated -- even if only partially -- the overall objective of industrial location in the area.

This does not mean that the miltiplier effect has been altogether lost. In income terms there must clearly be some impact, mitigated to a certain extent by the increased prices -- as for example in house rents -- that has inevitably followed the growth of the factories. In employment terms also there has been some impact. (We do not consider here the fact that several of the factories in the estates have themselves come up because other 'upstream' units have been established.) Most of the employment that has been created as a result of the growth of the units and the consequent increase in population has been in the commercial and service establishments that have come up. An approximate idea of the growth of such establishments was obtained by comparing the lists of licensed establishments maintained by the Town Panchayat Office. The resultant picture has to remain an approximation, since many establishments do not register themselves. But for what it is worth, the data showed that the number of shops, hotels, motor and auto works, etc., had risen from 392 in 1974-75 to 561 in 1979-80. The largest part of this growth has been accounted for by teashops and petty shops, which have risen from 370 to 520. In most of these units, to the extent that we were able to ascertain, it is family labour that is used, and there is very little, if any, hiring in. The growth rate, even though not negligible, has been somewhat below the expectation of SIPCOT, which had estimated that the growth of indirect employment in Hosur town would be of the same order as employment in the factories themselves.[33] This shortfall in expectation is no doubt due, to some extent, to over optimistic expectations in the first place; but to some extent it is also

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33. See SIPCOT (1979).

due to the fact that senior staff in the factories commute from Bangalore.[34]

To summarise the main points made, therefore, we note the following:

- the provision of physical facilities and financial incentives has resulted, in Hosur, in not just a trickle of investment, but in an avalanche, considering the time period involved.

- the investment that has flowed in is dominated by large companies and industrial houses of the State. This is clearly due to the nature of the schemes themselves, insofar as these give a strong impetus to large investors.

- the technology in use in the factories of medium and large size has been capital intensive and demanding of a skilled labour force. The small units, on the other hand, have been characterised by a lower capital intensity and have also absorbed more of the local, relatively unskilled labour force.

- there is little use of available inputs on the part of the units.

- the absorption of the local labour in the factories has not been insignificant, but these generally find themselves in the low paid categories. The overall wage level itself is low, with levels in the small units being below those in the medium and large ones.

- forces to counteract the two tendencies referred to immediately above are not really likely to be strong enough in the forseeable future to change the situation drastically.

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34. One avenue of employment is, of course, construction activity. But this is temporary in nature, and our investigation -- done somewhat sketchily -- revealed that many of the contractors in the industry come from outside Dharmapuri, and bring their own gangs from their villages to do the work. Local employment is thus not likely to be very high, and we are therefore ignoring construction.

- indirect employment, at least so far, has not been as high as expected. In part this is due to the upper income groups staying in Bangalore, and in part to the unenviable conditions of living in Hosur.

- one part of the strategy, that of providing for the social needs of the population, has not been taken as seriously as the other parts.

- finally, managements in general have found it convenient and necessary to retain wages at fairly low levels. The trickle down effect of the subsidies is thus not likely to be very strong, at least in the short run.

SECTION III

Given the nature of the conclusions that have emerged from the study of Hosur, it is necessary to consider just how typical Hosur is as an instance of backward area industrialisation. There are two studies that have been conducted in the last few years which can be used to throw some light on this question, even if only to a limited extent. The first is a study by S.C. Shelat[35] of an industrial estate in Kalol in Gujarat; the second is a survey of a sample of 113 industrial units located in backward areas throughout the country, which has been partially reported.[36]

The Kalol study suffers from two problems that tend to limit the nature of the conclusions. First, it was conducted when only 9 units had gone into the construction or production phase, so that it has been conducted a bit early in the day where the estate is concerned. Second Shelat has failed to go into any depth where the labour force is

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35. Shelat (1977)
36. Nair, et al (1977)

concerned, primarily because his respondents have been prominent persons in Kalol town rather than the workers themselves. Nevertheless, certain important points can be drawn out of the study.

First, Kalol, like Hosur, is not only in an officially designated backward area, it also lies in close proximity to a major town, in this case Baroda, which is only 40 km. away. Secondly, the subsidies have played a major role in drawing industrial investment into the area; where the three units of medium or large size are concerned, the availability of cheap labour in the area has also been an important consideration. For the smaller units, the ready availability of infrastructural facilities has been as important as the availability of cheap labour.

The main industries at Kalol are engineering goods and chemicals, and the output pattern appears to be highly linked up to the existence of raw material supplies as well as output markets in nearby Baroda. Unlike Hosur, there appears to be little inter-unit linkage, but this result may be due to the timing of the study before most of the units on the estate had come up. As in Hosur, there is no production either dependent on raw materials from within the district, nor is there production aimed to cater to local demands.

Shelat found that the absorption of local labour in the factories was quite high, at about 80 per cent of the total in the 9 factories. There is no statement on the wages earned either by the local population or on average, but it may be inferred about the former group that wages are indeed relatively low, since their employment is by and large in the unskilled categories.

The second study by Nair et al does throw some more light on the question we have raised. Unfortunately, it is difficult to decide on just how acceptable the conclusions are, since there is no statement on the method of the survey. Keeping this in mind, the results of the study are presented briefly below.

It was found that most of the units in the backward areas were capital intensive. Most of the investment in the units covered by the sample came from what is referred to as "established entrepreneurs".[37] 29 of 113 units covered in the sample -- or about 25 per cent -- had been set up with foreign collaborations.

Support to the point made on input-output linkages is also provided by Nair et al, who found a lack of both technological and demand linkages within the region concerned where the units were located. Finally, the study also confirms a point made in our study of Hosur, namely that skilled (and managerial personnel) had to be recruited from outside the area.

It would thus appear that in its main characteristics, Hosur is a fairly typical instance of backward area industrialisation.

We have seen, in the first part of this paper, that in the evolution of the policy of industrialisation of backward areas, the definition of backwardness was by and large left implicit. Reading backward from the criteria that were used, it is possible to make explicit the basis of the definitions involved. For this purpose we are taking into consideration only the recommendations of the Pande Working Group and the final set of indicators decided upon by the Government following the NDC recommendations of 1969.[38]

Essentially, both the sets of criteria relate backwardness to three types of issues. First, backwardness has been seen in both in terms of the standard of living. While the Pande Group have been led, on this basis to per capita income as one criterion, the final set has taken the per capita production of foodgrains and commercial crops. Several State Governments have chosen to modify the criteria in identifying backward districts. Some State Governments notably those of Madhya

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37. Nair et al (1977) p.157
38. See Appendix 1 for the indicators.

Pradesh, Orissa, Jammu & Kashmir, and West Bengal, in adopting the criteria for identification purposes, have left out this criterion altogether, while some, as for instance Gujarat, Meghalaya, and Rajasthan, have modified the criterion substantially. In the first, it is foodgrain production per acre that has been taken into account, thus converting the indicator into one linking backwardness to productivity, and in the other two, all principal crops have been taken into account. However, some other states, notably Assam, Karnataka, and West Bengal have adopted per capita income as a criterion for identifying backward districts.[39]

Backwardness has also been seen in terms of the level of development of the secondary sector. The Pande Group used, in this connection, the criterion of per capita income from industry and mining. The government extended this to include the whole of the secondary and tertiary sectors, which would presumably also include household manufacturing.

Thirdly, backwardness was seen by both the sets of criteria to relate to the development of the infrastructure for a modern production base. Thus both took into account the consumption of electricity and of the extent of development of road and railway mileage.

In sum, therefore, one can characterise the definition of backwardness involved in these criteria in the following terms: a backward area is one where the secondary sector has remained relatively undeveloped, where agricultural productivity is not high, and where living standards are low, perhaps as a consequence of the first two.

Given such a definition of backward areas, it is clear that policies to develop them must attempt to create the conditions for

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39. West Bengal, as a matter of fact, chose to develop its own set of criteria, classifying districts into three groups according to income per capita. See Menon (1979) , p.79.

the sustained development of industrial production and to raise real income per capita in the region.

Viewed strictly from the point of view of raising incomes, it is not difficult to see that what is required is more than merely the setting up of several factories. It is essential that the sum of factories that come up in the area have forward and backward linkages, not merely among themselves, but also with the rest of the backward region as a whole. It also requires some parallel developments in other fields that will have their own impact, along with the industrial units, in bringing about a change in the economic structure of the area. In the case of Dharmapuri, in this context, it must be pointed out that not only are institutions of technical training and similar facilities linked up to the factories a necessity, it is also necessary that some changes in the agriculture in the district be made. A major input required for the agricultural development of the district is irrigation. There is hardly any plan for the development of irrigation in the area in the foreseeable future. The only project in hand, the Kelavarapalli Reservoir Project is very limited in scope, covering a total of only about 9,000 acres of land.[40]

To the extent that changes are possible in the present social and economic conditions, the policy that has emerged in India and been implemented in places like Hosur is incomplete insofar as (a) schemes to augment the role of the factories in altering the economic structure are missing, as just discussed above and (b) there has been no effort whatever even in the encouragement of industrial investment, to ensure that some amount of input and/or output linkages with the backward area are built up, and (c) that wage levels have been allowed to stay low.

The first major conclusion that we draw, therefore, is that the schemes that have been evolved for the purpose of backward area development are in themselves inadequate.

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40. Government of Tamil Nadu, Chief Engineer, Madras (Undated).

At another level, we have to examine the choice of Hosur for the location of the industrial estates. The proximity of Hosur to Bangalore sharply distinguishes it from the general run of backward areas. Hosur is only 45 km. from Bangalore and only about 25 km. away from the peripheral industrial areas surrounding Bangalore city. To most entrepreneurs in Hosur, particularly the larger ones, Hosur's closeness to Bangalore has been a distinct attraction. It gives them easy access to city accommodation, schools and hospitals, banking facilities, and travel and communication facilities. Equally important has been the access Bangalore provides for recruiting skilled manpower. Added to these pull factors is also to some extent the push factor of the overgrowth of Bangalore and a consequent movement of industries to outlying areas. It is worth noting, in this connection, that the Government of Karnataka have recently set up an industrial estate at Bommasandra, 20 km. from Hosur, as a counter attraction to Hosur. Hosur is thus not so much in the heart of a backward area as it is proximous to a large metropolitan and industrial centre. It is obvious that it has been this factor -- which would ensure the success of an industrial estate scheme -- that underlies the choice of Hosur on the part of the State Government rather than any of the other urban centres in Dharmapuri for the programme of industrial development. It is apparent that Hosur is not the only such case of choice of location; Kalol has also been admitted to have been chosen on similar grounds. It is hardly to be expected that such a centre as Hosur, located at one edge of the backward region it is supposed to help develop, is likely to do any such thing.

Our second conclusion, therefore, is that the implementation of the scheme itself has been effected on the basis of one criterion - proximity to an industrial centre -- which does not have any place in the identificatory criteria for backwardness.

It is not our task in this paper to produce a blueprint for the development of backward areas. We have rather chosen to study the manner in which the policy has evolved and been put into practice in the Indian economy.

The point has been made elsewhere that development of backward areas in India has been an effort on the part of industrial capitalism to penetrate those areas which have been difficult to access so far.[40] We have no quarrel with this argument. Indeed, we reach a similar conclusion by raising a single question.

What interests have been served by the policy in India?

The points made in Section 1 of this paper show that broadly, it has been the more affluent of the States that have gained the most from the policy. Further, the manner in which industrialisation has been undertaken in Hosur -- with emphasis placed on encouraging large scale, capital intensive industries; with the development of small scale production producing ancillaries to the large ones; with a basis in investment invited from outside the area; without any product linkage with the backward area, and offering only low-paid, unskilled employment to the local population; and above all located on the periphery of the backward region -- has had the net effect of subsiding the investment decisions of a relatively small group of major industrial concerns and little else.

Writing about the spread of factories into the rural areas in turn-of-the-century Russia, Lenin said that "the transfer of factories into the rural districts shows that capitalism is surmounting the obstacles which the social-estate seclusion of the peasant community creates for it, and is even deriving benefit from this seclusion. While the erection of factories in the countryside involves quite a few inconvenience, it does however, guarantee a supply of cheap labour. The muzhik is not allowed to go to the factory, so the factory goes to the muzhik."[41]

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40. See Tyabji (1980).
41. Lenin (1964) pp. 531-3

Without in any way arguing that conditions in Russia of the early twentieth century are similar in every manner to those in India today, it is clearly the same drive on the part of Indian capitalism to expand into all areas of the country and all spheres of the economy on the one hand,[42] and the search for cheap labour on the other that characterises the forces underlying the growth of industries in Hosur. The proximity of a major industrial centre and the willingness of the Indian State to subsidise this expansion is what, in the Indian case, has reduced, if not eliminated the "few inconveniences".

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42. For a further development of this theme, see Tyabji (1980).

APPENDIX 1

INDICATORS OF BACKWARDNESS USED BY VARIOUS OFFICIAL BODIES IN INDIA[43]

A. Criteria of Backwardness suggested by the Committee for the Dispersal of Industries.

1. Poverty of the people as indicated by

   (a) low per capita income and
   (b) low per capita consumption

2. High density of population in relation to development of productive resources and employment opportunities as indicated by the following factors :

   (a) high rate of population to cultivable land (50% below the national average of per capita land holding should be considered as backward)

   (b) low percentage of population engaged in output (50 per cent below the national average).

   (c) absence or under-exploitation of other natural resources viz., minerals, forest and animal.

   (d) low percentage of population engaged in secondary and tertiary activities (25% below the national average)

   (e) low ratio of urban to rural population (districts where the ratio was less than 50% of the national average might be considered as backward).

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43. These lists have been taken from Menon (1979), pp.67-72, and from Government of India, Ministry of Industries (1976).

(f) low percentage of factory employment (50% below the national average might be considered as backward)

3. Poverty of communication as indicated by small lengths of railways and metalled roads per square mile (districts where the railway and road mileage fall below 50% of the national average might be considered as backward).

4. High incidence of unemployment or gross underemployment.

5. Consumption of electric power

B. Criteria for Backwardness used by Rural Industries Projects

(a) Where agricultural conditions are favourable and a considerable agricultural effort is being organised and at the same time, there is heavy pressure of population.

(b) Where agriculture is undertaken mainly under unirrigated conditions and there is considerable need for additional employment.

(c) Where there is considerable underemployment because of unfavourable natural conditions and lack of development of potential resources.

(d) Tribal and other backward areas.

(e) Areas in which large industrial projects have been or are being established so as to achieve integrated industrial - rural development, agriculture and small industries being developed together within the region of the industrial projects.

(f) Areas in the neighbourhood of rural universities and institutions.

C. Criteria used by the Pande Working Group

1. At State Level:

(a) Total per capita income

(b) Per capita income from industry and mining

(c) Number of workers in registered factories

(d) Per capita annual consumption of electricity

(e) Length of surfaced road in relation to:

- the population, and
- the area of the state

(f) Railway mileage in relation to

- the population, and
- the area of the state.

2. For identifying districts

(a) Districts outside a radius of about 50 miles from large cities or large industrial projects.

(b) Poverty of the people as indicated by low per capita income starting from the lowest to 25% below the state average.

(c) High density of population in relation to utilisation of productive resources and employment opportunities as indicated by :

(i) low percentage of population engaged in secondary and tertiary activities (25% below the state average may be considered as backward).

(ii) low percentage of factory employment (25% below the state average may be considered as backward).

(iii) non and/or under-utilisation of economic and natural resources like minerals, forest, etc.

(d) Adequate availability of electric power or likelihood of its availability within one or two years.

(e) Availability of transport and communication facilities or likelihood of their availability within one or two years.

(f) Adequate availability of water or likelihood of availability during one or two years.

D. Criteria put forward by the Planning Commission and adopted by Government in 1969

1. Per capita foodgrains/commercial crops production depending on whether the district is predominantly a producer of foodgrains/cash crops. (For inter-district comparisons, conversion rates between food grains and commercial crops may be determined by the State Government on a pre-determined basis where nedessary.)

2. Ratio of population to agricultural workers

3. Per capita industrial output (gross)

4. Number of factory employees per lakh of population or alternatively the number of persons engaged in secondary and tertiary activities per lakh of population.

5. Length of surfaced roads in relation to population or railway mileage in relation to population.

APPENDIX 2

A note on the method of investigation followed for the field survey at Hosur

Initial investigations for the purpose of the study were carried out at Madras by contacting officials at SIPCOT, at SIDCO, and at the TIIC. A pilot survey was conducted at Hosur in March 1980, with the specific purpose of identifying specific issues that would require field investigations and also to gauge the total population of factories and workforce at Hosur.

The field survey was conducted at three separate, but interlinked levels. First, a questionnaire was administered to a sample of the workers employed in the factories. This was a random sample, weighted to give equal representation to workers in the small and in the medium and large units, and covered slightly over 10% of the estimated workforce. Although the managements in most units were co-operative allowing us to interview the sample of workers during working hours on the factory floor, some were not. In the latter units, we were forced to complete our sample by visits to the workers' homes; this could not always be random, since in some cases we were put in touch with one group of workers through having contacted another. The sample is thus not rigorous in the sense that it cannot be used to test hypotheses. However, we do believe it gave a fairly representative, if rough picture of reality. Table A.1 below gives an idea of the sample

At the second level, the managements of each unit at Hosur -- including those which were in construction and those whose project applications had been sanctioned, as well as those in production -- were given a questionnaire and interviews conducted at the time of collection. Not all the units returned the questionnaire, several

preferring to forward their copy to the Head Office, which in turn did not return the questionnaire in time, or not at all. Thus, although every unit in production, construction, pre-production or pre-construction stage was approached, the returns constituted only a sample of all the units contacted. The structure of the sample was not chosen by us but was dictated by the circumstances. Table A.2 overleaf gives a picture of the sample with relation to the population structure. It may be noted that the sample is somewhat biased towards the smaller units, but the coverage of medium and large units is acceptable.

The third level of investigation consisted of interviewing officials at Hosur who were involved, in various capacities, with schemes for the industrial development of the area. Among those interviewed were officials of the Town Panchayat at Hosur and at Thalli, officials of the PWD involved in the Kelavarapalli Reservoir Scheme, the Project Officer, SIPCOT, officials in the Housing Board Schemes and in the electricity department and the Principal, ITI, Hosur.

Table A.1

Sample size: distribution of workers between small units and medium and large units

(number)

Size group	Male	Female	Total
Small units	56	25	81
Medium and Large units	182	32	214§
Total ...	238	57	295

§ Includes 13 Clerical/Administrative Workers.

Table A.2

Distribution of sample factories

	Sample		Population		Percentage	
	Total	Working	Total	Working	(2) as per cent of (4)	(3) as per cent of (5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Small	23	13	64	27	35.94	48.15
Medium and Large	7	6	49	18	14.29	33.33
	30	19	113	45	26.55	42.22

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