

A Study on the Nepalese Industrial Sector

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Introduction:

Efforts at planned industrial development in Nepal began after the launching of the first-five year plan in September 1956. Prior to this period, some growth of the industrial sector has resulted on account of temporary stimulants such as scarcity conditions created by the Second World War. As the initiative was haphazard, sudden and devoid of any preliminary investigation of their soundness, many of the ventures suffered losses and some went into liquidation. Thereafter a series of studies and policies have regularly punctuated the industrial development rhetoric. Both private and public sectors have made attempts at what might be called a "take-off" in the industrial sectors, but the results have not matched the expectations.

Current State of the Industrial Sector

Role of the Industrial Sector:

Table 1 provides a brief summary of the role of the industrial sector (defined as manufacturing and cottage industry) in the overall context of Nepal. Figures earlier than 1974 have not been used because these figures are also very illustrative.

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Table-1

Growth of Nepalese Industries

	Rs. Million		
	1974/75	1975/76	1976/77
GDP	16571	17300	17853
Manufacturing	463	537	716
Cottage Industry	1155	1161	1081
% Change in manf. interms of GDP	2.79	3.10	4.01
% Change in Cottage in terms of GDP	6.97	6.71	6.06
% Change in Maf. + Cottage in t.o. GDP	9.76	9.81	10.07

% Change	Manufacturing	Cottage	Manf. + Cottage
1974/75 to 1975/76	16%	0.9	4.94
1975/76 to 1976/77	33%	6.8	5.83
1974/75 to 1976/77	55%	6.45	11.06

Source: Central Bureau of Statistics, 1978

During the three years under review, the role of the industrial sector in terms of the GDP of the country, did not contribute more than ten percent. Of this more than half is attributable to the cottage industry sector. Although the absolute size of the cottage industry is greater than manufacturing, the latter has registered satisfactory growth. As it will be evident later on also, these high growth rates of the manufacturing sector alone fail to create any significant impact upon the overall GDP simply because its absolute size is so small. As a matter of fact a one percent increase in the cottage industry sector makes a larger impact upon the GDP because its size is almost double that of the manufacturing. Although even within a period of only three years, the manufacturing seems to be catching up rapidly with the cottage industry in relation to its role in GDP, one must be careful to draw conclusions. The big question is at what cost is this being achieved since both the capital output ratio and capital labour ratios are significantly

different for the two types of industries. It is unfortunate that practically no information exists about the cottage industry sector. Consequently a large part of this review will be directed towards the modern sector. Also bulk of the planning efforts have been structured towards the development of the modern sector.

According to the various census of manufacturing establishments, the average growth rate of manufacturing is around 16 per cent per annum.

Table 2

Characteristics of Manufacturing Establishments

	1965/66	1972/73	1976/77
1. No. of Establishment	1257	2434	3500
2. Persons Engaged	14397	47638	53900
3. Wages and Salaries (Rs mn)	31.17	69.10	
4. Gross Output (Rs mn)	417.00	1758.00	
5. Gross Input (Rs mn)	356.00	1446.20	
6. Value Added (Rs mn)	60.25	311.80	
7. % Change in employment	1965/66 to 1972/73 — 213 %		
	1972/73 to 1976/77 — 13 %		
8. Average Employment per Establishment	1965/66 — 11; 1972/73 — 20; 1976/77 — 15.		
9. Proposition of labour Inputs to gross inputs	1965/66 — 9 %		
	1972/73 — 5 %		
10. Proxy Measure for Capital Intensity per worker			
= (5) - (3)/(2)	1965/66 =Rs. 22, 590		
	1972/73 =Rs. 28, 908		

Source : (1) - (6) Census Information. (7) - (11) all derived from (1) to (6). The information for 1976/77 was verbally communicated as the information of the latest census.

Table 2 shows that the growth rate was 13 percent between the first two census and 11 percent between the last two. Although these growth rates are very high and possibly with the exception of the construction, no other sector has achieved these rates over the eleven years, the challenge for the industrial sector seems to be far greater than the response that has been evident so far.

Employment Aspects:

Since employment aspects have figured so prominently in the current development debate, it is useful to look at the employment side in the industrial sector of Nepal. In 1965/66 the average employment per establishment was 11. This increased to 20 in 1972/73 but is reported to have dropped to 15 in 1976/77. From Table 2 it is apparent that despite a three fold increase in employment from the first to the last census, the employment has not exceeded half a lac. In other words, over the census period the industrial sector has been able to absorb on an average only around 3500 people per annum, whereas the annual entrant to the labour force exceeds 100,000 for the period. If the industrial sector was able to successfully absorb even half of the new entrant every year, the growth in industrial employment would have had to absorb at least 46,000 persons per annum. This figure is close to the current total employment of the industrial sector.

How about employment structure by types of industries? This is shown in Table 3. Jute and Jute products show the greatest employment per firm, followed by cigarettes and milk products. Only four types of industries employ over two hundred employees per industry. Nine industries employ over 100 persons per industry. The lowest levels of employment per industry is seen in food, Livestock Feed, Plastics. Obviously these are all average figures and one should be careful in not putting too much weights upon them because even within a particular industry, there are possibilities for substantial variations.

Capital Intensity

Having talked about the employment structure of the Nepalese Industry for a selected number of cases, it is appropriate to raise the question at what cost is this being done? What is the nature of the capital intensity of Nepalese industry?

Table-3

Average Employment per firm and average
Capital/worker for Industries with
Investments over Rs. 200,000.
and Capacity Utilisation
rates.)1976/77

Industry Type	Employment/Firm (No.)	Capital/Labour (Rs.)	Capacity Utili- sation rate (%)
1. Food (Paddy, oil, Flom)	31	18,188	51.03
2. Bakeries, Bisenit, etc.	59	42,048	64.58
3. Sugar & Knandsari	217	30,842	—
4. Tea	102	63,698	—
5. Milk Products	259	24,905	71.80
6. Beverage	67	23,323	58.37
7. Cigarettes & Biri	447	8,896	84.00
8. Livestock Feed	37	7,291	49.57
9. Clothes	83	24,285	28.00
10. Handicrafts	117	954	70.00
11. Wood Works & Furniture	108	19,657	41.92
12. Leather & Leather Goods	71	11,816	68.42
13. Jute and Jute products	1147	9,539	5.00
14. Chemical products	63	19,641	71.50
15. Matches	190	1,912	54.00
16. Plastics	16	10,063	28.50
17. Metal Works	66	16,314	14.00
18. Tools & Equipments	71	5,444	41.00
91. Construction Materials	119	23,516	54.00
20. Miscellaneous	39	16,443	50.00
Average of Total	124	14,031	50.00

A more detailed breakdown of the capital components for a selected group of industries is available in one study.¹ Investments include capital going into machinery and transport. It does not include the costs that have been incurred for land and building. If the capital per unit of labour for these selected industries is worked out one gets an interesting picture and this is shown in the Table 3. There are two industries that have a investments per unit of labour of over Rs. 40,000 and these are Bakeries, Biscuits and Confectionaries followed by tea. Interestingly enough both of these employ less or close to hundred people. There are four industries that have over twenty thousand per employee but even in all four these industries the employment is less than 250 per establishment. The two largest employers have an investment of less than Rs. 10,000 per employee and the average for 16 industries is Rs. 14031. Comparable figures for the tourism industry has a range from Rs. 30,000 according to one study.²

Although more careful analysis is required to answer questions like whether these types of capital labour ratios are justifiable on a industry to industry basis, the general conclusion is that Nepalese industries seem to be more biased towards capital than labour. In other words a capital intensive technology is being preferred over a labour intensive one and this is not in line with the objectives of the both the earlier and recent plans. A number of other issues also support this contention. The fact that loans are provided only for investments in fixed assets has an incentive to build capital intensive structures. Real interest rates on loan are very low and possibly do not even reflect the cost of the the services, given prevailing inflation rates. This encourages capital intensity. Under valuation of hard currencies vis-a-vis the Nepalese rupees also reinforces these tendencies even further.

Thus there exists sufficient grounds to believe that government policies have been encouraging a capital intensive approach to the development of the manufacturing sector. The possibilities for increased substitution of labour is therefoe not only necessary but also possible.

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1. See Nepal Rastra Bank, A Survey of Some Industries (Mimegraphed) Kathmandu, 1976/77.
 2. See Viet Burger, Tourism Sector of Nepal (A Ph. D. Dissertation) Comell University, 1978.
 3. For discussions highlighting this aspect, see Shiva Raj Lohani, An Econometric Study on Factor Substitution in Selected Public Enterprises. (M. A. Dissertation), Tribhuvan University, 1978.

Composition of Nepalese Industry:

The next issue is the question regarding the extent to which Nepalese industry has diversified in the last two decades of its growth. Table 4 shows the situation until 1972, but the pattern remains much the same as is confirmed by a later study.⁴

Table-4

Composition of Nepalese Industry
(1965/66—1972/73)

	1965/66		1972/73	
	No.	% Change	No.	% Change
Cereal Processing & Oil	819	65.0	1860	76.0
Bakery	7	0.5	25	1.0
Sugar Refinery	10	0.7	8	0.3
Tea Packing	3	0.2	6	0.2
Biri Making	113	9.0	56	0.2
Cigarettes	3	0.2	2	0.08
Yarn and Textiles	11	8.0	32	1.0
Jute Processing	3	0.2	4	0.2
Caps Making	10	0.7	5	0.2
Saw Mills	17	1.3	31	1.0
Wooden Furniture & Coust. Mater.	40	3.2	75	3.0
Printing Press	39	3.0	80	3.0
Metallic Furniture & Caust. Mater.	5	0.4	15	0.6
Soaps	6	0.5	11	0.4
Matches	6	0.5	6	0.2
Brick & Tiles	80	6.0	83	3.0
Metallic Vessels	3	0.2	15	0.6
Repair Works	31	2.0	23	0.9
Jewelling	5	0.4	7	0.3
Ice and Ice Cream	5	0.4	10	0.4
Footwear	—	—	5	0.2
Carpet	—	—	11	0.4
Miscellaneous	38	3.0	64	3.0

Source : Census of Manufacturing Establishment, 1965, 1972.

4. Nepal Rastra Bank, Op. cit.

According to the Table, the share of food products, (i.e., cereal process and oil, bakery, sugar and tea) has increased from 66 percent to 77 percent during the seven years shown in the Table. Even here cereal processing and oil accounts for almost 99 percent of the total increases. Almost a thousand new units were opened in cereal and oil processing during the seven years. There was a marked increase in bakeries, yarn and textiles, saw mills, wooden furniture and printing press. Two completely new industries, one in footwear and the other in carpet manufacturing were established. Some increases were also observed in metallic vessels, ice cream and soap. In most others they either remained the same or declined. The most significant decline is observable in the case of biri making.

Trend in Nepalese Industrial Output:

Since valuewise production figures are unavailable and breakdown of GDP components is still very aggregated, one has to refer to the quantity reportings in order to evaluate the performance of Nepalese industry.

Table-5
Relative Performance of Nepalese Industries
(1=Base Year Production)

	1st 9 months				
	73/74	74/75	75/76	76/77	77/78
Jute Goods	1	0.95	1.24	1.30	0.94
Sugar	1	0.84	0.75	1.15	1.74
Cigarettes	1	1.19	0.97	0.70	0.46
Matches	1	0.98	1.02	0.99	0.75
Liquor	1	1.08	2.81	2.54	1.97
Soap	1	0.93	1.02	1.95	1.60
Shoes	1	0.85	0.72	0.66	0.53
Leather	-	-	1.00	1.65	1.40
Agricultural Tools	1	2.00	-	1.91	-
Tea	1	1.06	7.48	9.13	11.09
Stainless Steel Utensils	1	0.75	0.84	0.75	0.76
Straw Board	1	1.09	0.94	1.39	0.74

Brick & Tiles	1	1.11	1.08	1.03	0.64
Beer	1	1.27	1.50	1.16	1.11
Fertilizer	1	0.79	1.03	0.80	0.64
Cotton Textile			1.00	1.34	0.70
Cement			1.00	1.59	1.04
Plastic Goods				1.00	0.51
Biscuits				1.00	1.29

Table 31. Economic Survey, F.Y 1977/78, HMG, MF, 1978.

In Table 5 this is shown on a relative basis for each industry using 1973/74 as a base for most industries. The indices are extremely erratic indicating the very uneven nature of industrial output over the four year period. Tea seems to be doing very well in terms of the annual increases in output, whereas shoes are apparently having a declining trend. Although new industries have entered, there were 7 out of 14 products in 1974/75 whose output was lower than the base year. This reduced to 5 out of 16 products in 1975/76 and 5 out of 20 products in 1976/77. The increased number of industries over the years have not however made any major impact upon industrial output. It is doubtful to what extent these have contributed either to export promotion or import substitution. The leading exporters are still agriculture based - jute, rice, leather and woolen goods.

Capacity Utilization:

We next take up the question of capacity utilisation. Unfortunately there is no time-series data in this respect. What will be attempted will be to present the results of two studies.

First let us look at the study that examined the structure of industries with over Rs. 200,000 as their investment.⁵ The results are shown in Table 3. As would be expected, the variation in capacity utilisation is very great. Cigarette and biri industries have the highest capacity utilisation rates, followed by bakeries, milk products and leather goods. The lowest levels of capacity utilisation is seen in industries such as clothes, plastics and metal works. The high capacity utilisation of the chemical industry is rather surprising since it is also a new type of venture in Nepal. What is striking here is that those industries like plastics, metal works and

5. *ibid.*

clothes that have a very high import content also have low capacity utilisation rates. Could this be on account of the problems in acquiring raw materials? It will also be noticed that these are also the industries having over Rs. 10,000 as investment per units of labour.

The second study⁶ deals with the capacity utilisation rates of number of industries in the public sector, and these are shown in Table 6.

Table-6

Capacity Utilisation in some Major Industries

	(in %)				
	28/29	29/30	30/31	31/32	32/33
Birgung Sugar Factory	30.6	47.4	59.9	44.8	31.7
Janakpur Cigarette	71.0	75.0	44.0	44.0	58.0
Timber Corporation	30.3	31.7	12.6	17.4	25.6
Agricultural Tools	-	23.0	32.3	35.5	23.8
National Rice Mills	-	11.05	15.7	42.10	25.44
Brick and Tile	99.0	99.0	75.0	82.0	74.0
Milk Corporation	-	-	31.0	42.0	57.0
Himal Cement	-	-	-	19.0	63.8
Raghupati Jute Mills	89.9	89.4	85.6	93.1	120.8

Source : Corporation Coordination Council, **Productivity of Public Enterprises**, Kathmandu, 1977.

The Table speaks for itself. What is noteworthy, however, is that some of the industries have had a consistently low capacity utilisation suggesting serious over capitalisation in plant and equipment. It either implies that raw materials problems are very serious or that demand conditions were not adequately studied prior to the establishment of the factories. This undoubtedly suggests inefficient use of scarce resource-capital

6. Corporation Coordination Council, HMG, A Study of the Productivity of Some Public Sector Enterprises. (Mimeographed), Kathmandu, 1977.

Regional Distribution:

Reduction of regional disparities has been among the major objectives of the government since 1970. According to a survey taken in 1976/77, the distribution of industries with over two hundred thousand rupees still showed the same type of bias as was evident in the case of the entire industrial structure. 30 percent of the industries were found in Eastern, 56 percent in central, 6.7 percent in Western, and 7.3 percent in the Farwestern regions.⁷ Regional identification itself may be misleading since the entire industries are concentrated in groups in a few districts like Kathmandu, Morang, Rupandehi, Kaski and Parsa. The widest regional distribution by industry goes to cereals and oil processing units.

Industrial Investment:

Among the four key sectors—agriculture, transport, social services and industry, the latter has continually been the lowest receiver of budgetary funds in the first three years of the current plan. It received only 15.32, 15.70 and 20 percent in 1975/76, 1976/77-1977/78 respectively. In terms of the annual rate of increases, between the three years, however the industry sector has shown the highest gain. It increased by 33.43 percent per annum while the other three sectors showed far lower rates of increase (Table 7).

Table 7

Budgetary Allocations

(Rs. Million)

	8%	9.98%	19%	13%
	1975/76	1976/77	1977/78	% Change
Agriculture	457.2	527.2	600	12.59
Transport	402	449	502	8.29
Industry	223	280	440	33.43
Social Services	374	527	576	18.00

Source : Fifth Plan, Mid Term Evaluation, National Planning Commission
1977/78 p. 33.

Since bulk of the public sector industrial investments are channelled through the Nepal Industrial Development Corporation (NIDC), the types of investments made by NIDC provide clues as to where these funds are going. During the first three years of the current plan, tourism has consistently received more than forty percent of the annual investments, followed by agriculture and manufacturing. A more detailed breakdown of the industrial investments are not available for a more through enquiry. It is therefore difficult to evaluate the actual impact of this type of industrial investment structure. Several general conclusions are nevertheless in line. First despite the foreign exchange earnings of the tourism sector, it is plagued by a high capital intensity, high skilled labour component, and an equally high foreign exchange maintenance import content. The high foreign exchange maintenance component is the result of Nepal having to import a large portion of the goods required by tourists. Second, and probably more significant is the fact that bulk of these investments are of necessity urban biased. In the final analysis although tourism sector can be a net gain for the economy, it does not seem to be very commensurate with the needs of the rest of the economy unless some of its prevailing characteristics are significantly altered.

Planning, Policies and the Administration Dimensions :

Nepal has now been under five plans and will soon begin another one. Planners as usual expect to exploit all the latent potentials at the beginning of the plan and probably even believe that they can do so. But let us face facts. Plans are seldom implemented, the question of success quite aside. Particularly in a country like Nepal, this is even truer. It is subject to every type of vicissitude that India as well as the contiguous states of India experience. The timing of the monsoon determines the next years economic outlook. A vast majority of the individual decisions makers are for a large part outside the influence of conventional fiscal and monetary instruments. The country does not produce even some of the basic goods or ensure their continued supply so that development projects can be uninterruptedly continued. Ironically these are probably just the circumstances where planning is most required but it is exactly here that planning can not function effectively. The uncertainty elements tend to make planning an unrewarding task.

In so far as the industry side is concerned, the picture is not much different. Irrespective of what industries have been planned, the establishment of any new industry in the

private sector is still largely a question of private initiative, and planners have lacked ways to convince the viability of their own plans as opposed to private proposals. Beer factory, stainless steel mills, synthetic fabrics, are some of the examples. In the public sectors, the criteria are also difficult to discern. One would expect to find, natural monopolies, basic utilities and possibly a few strategic industries to be in the public sector. But in Nepal anything with foreign assistance seems to qualify for public control, consequently it is difficult to say whether the public sector's role vis-a-vis the private sector is competitive (jute, sugar, bricks, all have private counterparts), supportive or even pre-emptive. What role should it be is undoubtedly a political issue depending upon the basic goals and objectives of the political system.

Following from what has been said, the administrative dimensions are equally complex, cumbersome and counter productive. Even apart from the normal influence of governments through factors like taxation, registration, etc., there are a variety of procedures, rules, limitations, etc. that deluge any prospective entrepreneur with a sea of ridiculous paper work. And as usual with bureaucracy, the speed with which papers move is a direct function of power, linkage, contacts etc. It is not designed to facilitate the process of acquiring assistance, but rather the favours of the bureaucrat.

Conclusions:

1. The size of the Nepalese manufacturing sector is very small. Although the growth in the number of establishments is around 16 percent per annum, its impact upon national output and employment has been negligible. The response has not matched the challenge before this sector.

At present this sector employs less than one percent of the total labour force. Its current average absorption rate of labour is around 3500 people per annum. By 1980 the labour force will be nine million. In another five years it will be 10 1/2 million. With an annual increase of over 300,000, the challenge seems formidable. If employment expansion is at current rate, by 1985, the labour force in the industrial sector will be only 77,500—only 1/3 of annual increments, even if we forget about the backlog at the present.

2. Despite its small size, the average capital per unit of labour is at around Rs. 14,000 for a large part of the industries, (excluding food processing ones).

This seems to be very high compared to what the economy can afford. The largest employing industries have less than Rs. 10,000. Increased employment could certainly result from decreased capital per unit labour in a large number of industries.

3. The high capital intensity of Nepalese manufacturing seems to have been encouraged by existing policies that favour loans for investment in fixed assets, low interest rates on loans, overvaluation of exchange rates (the existence of dual rates may serve to reduce this problem to a certain extent), etc. all of which tend to artificially lower the costs of capital. In the long run such a policy strengthens the trends toward increasing concentration of industrial assets in favour of capital owners rather than labour. The excessive screening of projects, loan requests and permits also reinforces these biased tendencies towards capital owners. Following from this, the resulting incentives to build up fixed assets and the consequent underutilisation rates are also not unexpected.
4. Industrial output has been very erratic. At least 30-35 percent of the industrial products have registered lower levels than in 1973/74. Even among the nearly established industries, output levels seem to be dropping.

Implications for Future Policies:

With a brief discussion of this type, it is not possible to narrow the policy options to any meaningful extent. Furthermore as the Nepalese experience in industrial development is very limited at best, the conclusions cannot be considered to be blanket prescription for what ought to be or not to be done. **Industrial Development is a highly uncertain process.** Were it otherwise, industrialisation would have succeeded every where, Leaders would not be quarrelling over ideological commitments if the paths of successful industrialisation was an obvious process. Similar sorts of stimuli have resulted in completely different types of responses in different countries. In our efforts to escape from the equilibrium of poverty, industrialisation is without doubt a possibility but with too many "ifs" to be a firm promise by anyone. Uncertainty is however no prescription for inaction, and certain possibilities are clearly worth examining and reemphasizing.

(a) Nepal must seriously begin to think about the **urgent need to invest adequately in these capital goods and intermediate inputs that serve as basic inputs to**

agriculture, industry and construction. A modest beginning has been made in the field of cement and hydro-electric power. Both the magnitude and extent of current industrial production is grossly inadequate in the respect. There are inputs like cement, power, iron, and steel that will be necessary under any type of development strategy. The current controversy is not with respect to the production of the basic goods, but with their use. If cement, power and iron and steel go for urban expansion, automobiles and refrigerators, rather than to the development of agricultural and industrial infrastructure, then certainly it is not in line with the needs of the economy. The debate therefore should be in the area of how we use these products rather than their production.

Furthermore the disadvantages emanating from landlockedness are particularly in the area of these goods, whose heavy bulk and weight subjects them to severe transport cost disadvantages. With the option of their imports from India using IC being virtually out, serious consideration of domestic production merits a clear out priority.

In so far as the choice of technology is concerned, it certainly makes more sense to use what is available in India than say Japan, USA, or Germany. Problems of technical expertise, spare parts and maintenance are more easily handled if technical co-operation is from India rather than from other countries. The Indian private sector in many of these fields affords adequate choice an expertise to merit careful considerations of our policy makers.

(b) The second point I want to raise is the question of rural industrialization. Given the underemployment problem this country is going to face in the future, there are few choices but to make this i.e. rural industrialisation work successfully. This emphasis here in no way reduces the validity of what was said earlier about strategic development inputs-like cement, iron and steel and energy. As a matter of fact the question is one of use of these products rather than their production pese.

Certain findings about rural industrialization are now available from both the ILO studies and others. It may not be inappropriate to reiterate them here. With respect to production.⁸

8. For a discussion of this see Herbert Michel and Wolfgang Ochel "Rural Industrialisation in Developing Countries, in Economics, Institute for Scientific Cooperation, Tubingen, Landhausstr, 18, Federal Republic of Germany, Vol. 18, 1978, pp. 42-76.

- rural industries and crafts produce greater effects on employment & income than industries & crafts not represented in rural areas.
- within rural industries - the following sectors produce the greatest effects on employments, furniture, clothing, footwear, wood products, textiles, pottery, chinaware, leather & leather goods.
- important indirect effects on employment are produced by the food, drink and tobacco industries - with are all product of labour intensive agriculture.
- The biggest contribution towards raising income is made by increases of production in the sectors concerned with food, beverages, and tobacco with leather & leather goods and with nonmetallic minerals.
- the smaller the enterprise, the greater are the effects produced by their investments on employment.

In so far as the ILO findings are concerned, they emphasize factors like ease of entry, reliance on indigenous resources, family ownership of enterprise, promotion of skills acquired outside formal school system and unregulated and competitive markets,⁹

(c) The third major issue is the role of the state. No country that has industrialised in modern times—Japan, Taiwan, Brazil or Mexico has done so without intensive state intervention and support.

Some of the problems with the current type of governmental support has already been identified earlier. Given these along with the need for an even more dynamic supportive role of the government for the future, the entire philosophy, management and operations of the public enterprises needs a major overhaul.

First public enterprises, as a major source for generating surplus and investment decisions, cannot be considered as a subsidiary wing of the bureaucracy. They must exist on their own right, free from the interferences of the government on day to day matters.

9. See The World Employment Programme, ILO, Geneva, 1967.

Second bureaucrats cannot run business—at least not successfully and possibly not with their guaranteed jobs in the government. The need for a new managerial class of manpower has been conspicuous by its absence. Since the inadequancies are so great and these cannot be created overnight, stop-gap solutions must be devised. Even if such manpower is available, their recruitment in public enterprises should be subjects to at least four or five years of creditable experience in the private sector. This training period is insisted upon for lawyers and doctors, there is no reason why it should not be used for professional managers. The proof of a good manager is not in his appearances and linkages but in his performance.

Third no government in a mixed enterprise system should willingly accept a perpetual burden of public enterprises. With increasing maturity and profitability, these should be based on to the public. Here participation equity must become a genuine process. In order to diversify and reduce the concentration of ownership in industrial assets, workers must be entitled to participate also. The state should always lead by paving the way for others to enter, as it moves increasingly into newer and newer fields. Its functions in areas other than basic services and utilities should essentially be catalytic.

(d) The next major issue is in the field of spatial reorganization. Industries require basic services. Policy of regional integration demands a comprehensive industrial location policy. These basic services are undoubtedly very costly and should be viewed within the framework of a location policy. Since both of these require adequate review of spatial organization—the distribution of population over space, its neglect, despite continued predominance of geographers in the National Planning Commission, comes as a surprise. The current landscape in Nepal is essentially one of agrarian subsistances, although in some parts this is changing in a very haphazard manner. While this is a very difficult issue, lack of thinking in this respect will give rise to costly locational decisions regarding these basic services. In areas where they are needed most, they may be awfully inadequate while in others, they become superfluous. Moreover, bringing people together in different hierarchical settlements has immense advantages for the development of small scale crafts and industries.

A Final Note:

The challenge for one form of industrialisation or another is immense. Whatever the macro and micro issues, the epitome of the economic problem is the miserable condition of

over 40 percent of the Nepalese steeped in absolute poverty, virtually at starvation without the faintest glimmer of hope, struggling for a few morsels of food which must then be prudently allocated in the family among the malnourished children, the working male and the always suffering wife. If after two decades of socio-economic planning under a politically stable environment we fail to bail out the absolute poor and instead push an increasing number of people to the subsistence margin, then what we have planned for and where have we gone wrong ?

Are these the symptoms of a more powerful malignancy or is this the warranted path for small and poor countries ? Hopefully other smaller nations have performed better in some parts of the world, and there are no reasons why Nepalese should be unduly pessimistic.

Industrial issues are only a part of the overall system. Other sectors like agriculture, population, trade and resources mobilization have significant bearing upon the courses taken by the industrial sector.