

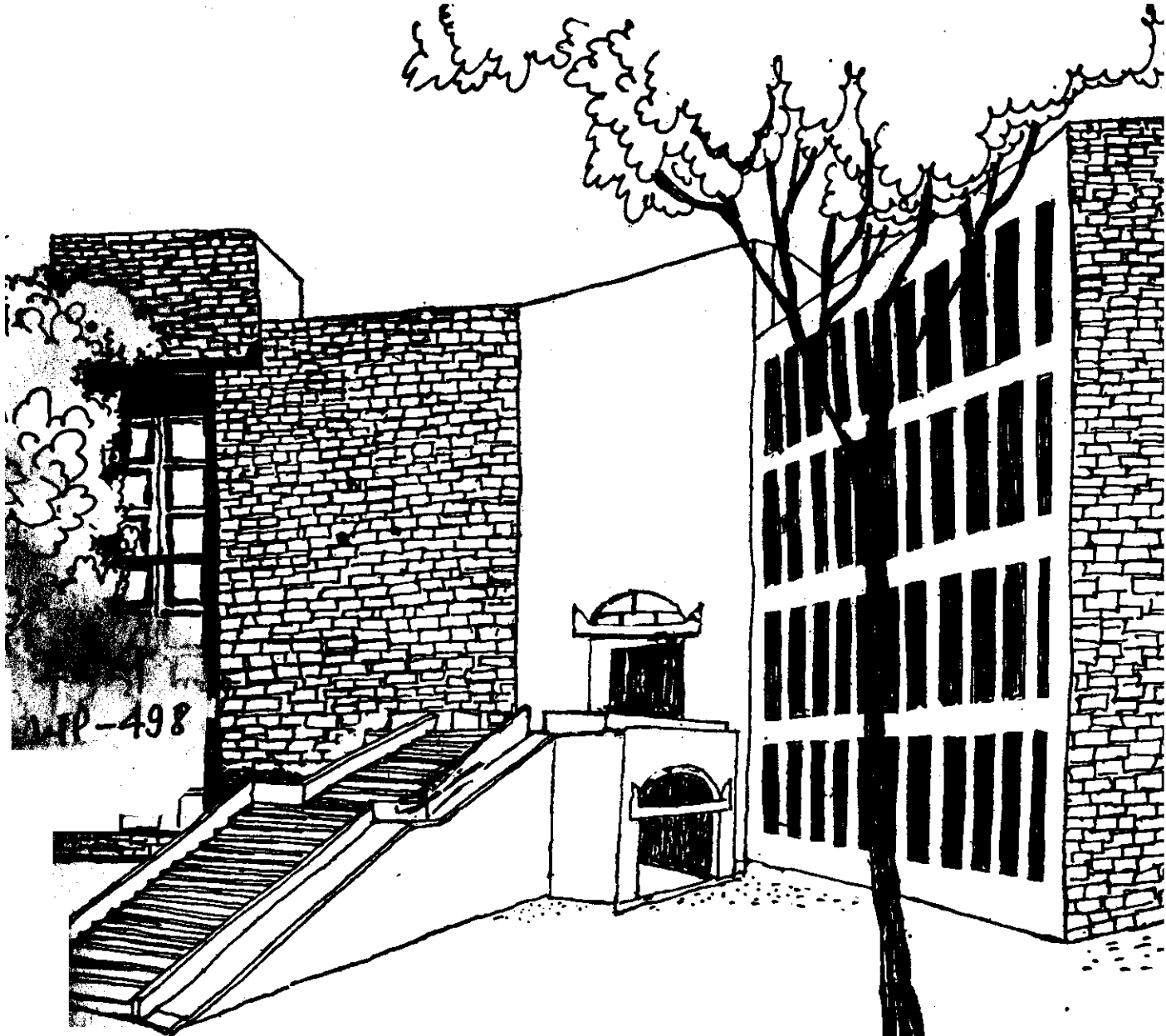


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INFRASTRUCTURAL NEEDS OF SMALL
SCALE INDUSTRY IN GUJARAT

BY

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INFRASTRUCTURAL NEEDS OF SMALL SCALE INDUSTRY IN GUJARAT

By

P.N. MISRA*

Introduction

Small scale industry provides an essential link between primary activities like agriculture, mining and quarrying on one end and modernised large scale industry on the other end of developmental expanse . It provides a sound base for take off to modern industrial society which in turn is seen to claim dominant role within world society. Looking at historical growth of industrialisation one usually finds that agriculture, cottage industry, small scale industry, large scale industry and industrial giants have normally emerged over time in that order. Several vital changes occur while transitions take place from small scale industry to higher stages of development. Some of these changes may be described as organised large scale production, adoption of modern technology, relevant organisational development, need for specialised managerial skills, professionalisation of management, sharpening of corporate policy, relevant public relation, etc. These needs are felt by small scale units in varying degrees but they find themselves small enough to afford the same in an effective manner by introducing them within their own organisational frame as is usually possible for large scale units in view of economies of scale available to them. For small scale units these services are like public goods which are needed by all the units but none of them can afford to install them exclusively for their own

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use. Consequently, they have to depend upon private, or, in some cases publicly provided consultants who not only happen to possess varying degree of competence but are so numerous as well as located at so many places that their use, in practice, turns out to be more costly both moneywise and time-wise without any inbuilt assurance about the quality of services provided. This fact is dangerous enough to reduce competitive edge of small scale units. In fact this problem is worth studying in its own right. Thus there is a good case for providing these services at properly determined central places with assured quality and reasonably reduced time and money costs. This consideration should constitute integral part for planning of industrial estates. Some such appropriate effort should also be made to provide such services for units outside industrial estates. Viewed in this manner, these services are as essential infrastructural helps as road, water supply, electricity, etc. These services could be named as managerial infrastructure.

Small scale units are usually better linked with the economy of the States than large units or industrial giants. These units derive their raw materials mostly from the region around them and supply their goods and services to areas close by in most cases. Their propensity to employ local people is much higher than large units. They contribute to the resources of the States because their head offices are located within the State. In this way these units are linked with the economy of the State in a much more intensive manner than large units transplanted from outside. In fact questions relating to net benefit of inviting central public sector projects and large units with head offices located elsewhere

has already been started being asked in Bihar and elsewhere and hopefully in very near future these issues will be studied quantitatively also for evolving optimal policies of investment of State resources in relevant mix of industrial units. The concept of mix needs to be extended to cover size, location of registered office, centrally and State sponsored projects, etc. These possibilities reinforce the case of small scale units to be taken up systematically on relatively more vigorous scale.

State of Gujarat is widely acclaimed of taking sincere steps in a rather comprehensive manner to promote small scale units. For this purpose several corporations have been floated to help small scale units to resolve such problems which they found difficult and costly to get over by their own efforts. As pointed out above, since infrastructural needs of small industry are more diverse than those of large industry, it is possible that some gaps still exist in this regard and the same may have to be tackled by creating new corporations or redefining the role of existing ones. The purpose of this paper is to ascertain the infrastructural needs of small industry in Gujarat on the basis of secondary information and then to match the same with what is already supplied by existing organisations to arrive at an idea of existing gaps. The paper also deals with how best these gaps could be bridged in the short run as well as to suggest the preparations that ought to be initiated by the Government to tackle or avoid such problems that may arise in long run.

Section 2 of this paper contains a brief account of birth, death sickness and problems encountered by small scale units in Gujarat on the basis of available information and the implications thereof. Concept of a

system's view of industrial development is described in Section 3 to conceptualize the kind of preparedness to tackle the problems that might exist presently or arise in the long run. Section 4 contains description of infrastructural needs of various kinds relevant to small industry. Section 5 provides a picture of organisational preparedness of Gujarat to meet the needs of small industry and the gaps emerging therefrom. Last section contains conclusions and suggestions.

2. Birth, Death, Sickness and Problems Encountered

Data relating to small units as registered with Directorate of Industries are easily available but no reasonable estimate is available about units in the unorganised sector. Following table gives an idea of growth of registered units at the interval of two years:

Table-1: Registered Units

<u>Year of Registration</u>	<u>No.</u>
1966	147
1968	1745
1970	2368
1972	1922
1974	2773
1976	2042
1978	2968
1980	4809
1982	5546

Data on number of registered units show almost smooth increasing trend of the exponential variety. Simple growth rate for the entire time span is 17% per year but the same is only 3.0% over initial 10 years, namely, from 1966 to 1976 and 19% over the latter 10 years, namely, from 1972 to 1982. Thus as the years have gone ahead growth rate has been going up besides the number of units. This is a very encouraging factor because the overall average growth rate of number of units has far more surpassed corresponding growth in variables pertaining to real sector of economy.¹ Under normal circumstances one would have expected similar growth rates of number of units and industrial production. In the present case, however, entrepreneurial push has surpassed actual production to a significant extent and if relevant infrastructural support is not coming forth the phenomena is bound to give rise to sickness. This has in fact happened as we shall see later on. In other words, this impressive performance of the economy can be sustained only by greater preparedness on the part of government to ensure that the units that have come into existence may not only continue to survive but grow and thus help in industrial development of the State.

¹ See Misra [1] for growth rates of variables pertaining to real sector as well as expenditure sector for greater details. However, compounded growth rates for selected variables are reproduced below:

Variable	Compounded growth rate
Agricultural production	10
Industrial Production	12
Tertiary sector production	13
State Domestic product	12
Industrial workers	2
Total workers	1
Rural population	2
Urban population	4

Since data are maintained relating to registered units over years and no systematic effort has been made to ascertain the survival rate of these units, one does not have any clear picture about the number of dead units and age of their death. Availability of these figures would have been extremely helpful in understanding the magnitude of the problems that may be causal in making the units disappear from the scene after registration. However some estimate is available about reported sick and assisted units pertaining to the year 1983. These are reproduced in Table-2 below:

Table-2: Registered, Sick and Assisted Units

<u>Description</u>	<u>No.</u>
Total No.of Registered Units as on March 1982	51028
Total No.of sick units as on February 1983	392
Total No.of Assisted units as on February 1983	300
Total No.of sick units closed	92
Total No.of dead units	Not known

There are identifiable causes that make the units sick or dead. Infrastructural planning should aim at eliminating such causes which are single in lesser number of cases and multiple in majority of cases. The nature of difficulties faced at various stages of growth of small units in Gujarat was ascertained about a decade ago in a survey of Gujarat State [2] and the following table gives a brief account of the same:

Table-3: Problems Faced by Small Industry in Gujarat

<u>Problem type</u>	<u>% of units facing problems</u>
<u>At Inception Level</u>	
Lack of information	36
Financial worries	41
Availability of machinery	30
Availability of skilled workers	15
<u>During Project Implementation</u>	
Production	13.5
Raw materials	37.5
Pricing	6.0
Marketing	24.0
<u>During First Two Years of Working</u>	
Technical	21.0
Labour	18.0
Managerial	5.0
Finance	40.5
Raw materials	43.5
Marketing	29.0
<u>Operational Problems</u>	
Dealing with local authority	28.5
Dealing with State Government	37.0
Dealing with Central Government	26.0
Owing to Corporations' Policies	13.5
Working Capital and Finance	51.2
Production Technology	13.0
Labour	34.5
Raw materials	67.0
Marketing	18.0
Pricing	18.5
Competition	34.5
Purchase	16.5
Marketing	10.5
Import export	18.0
Others	1.0

Some additional problems are revealed in case studies. Those relating to legal issues include complexity of rules and multiplicity

of Acts, excise duty, procedural delays, rigidities in regard to export, import, technical collaboration with foreign firms, registration with DGS & D, and factory laws. Problems related to manpower include misuse of ESIC rules, lack of skilled manpower, labour turnover, inadequacy of managerial staff, etc. Problems related to physical infrastructure include staggering of power, delay in electricity connection, distributional delays in raw materials, coal, pig iron, water shortage, shortage of wagons and ships. Some other problems include lack of quality control facilities, need for instrumental help, competition against giants, high interest rate, heavy competition, coordination of purchases, etc.

It is possible that the situation might have got altered by now for worse or better but some useful conclusions could be drawn from the estimates reported in Table-3. These facts reveal that as small units grow older they face more and more problems. It has also been observed that firms with large investments face more number of problems. Thus growth in age as well as investment or turnover invite more problems and if Government does not attempt to help the small units in this regard the problems will lead to sickness and death which not only affects the entrepreneurs but the Governments' performance as well by way of reduced production, employment and state revenue. It was mentioned earlier that the State Government has attempted to resolve these problems by floating several corporations and their function should be seen in context to problems faced by small industry. But before we come to match demand and supply of assistance we wish to organise the areas of assistance required by small industry in a systematic manner in the next section.

4. Infrastructural Needs of Small Units

We have seen earlier that small scale units face all the problems faced by large units and such additional problems which they cannot afford to resolve themselves owing to their smallness. It is clear from Table-3 that such needs are mainly managerial or professional. Presently these are provided to small scale units by several professionals or intermediaries at such costs that ultimately snatch away the competitive edge of small industry owing to increased costs on this account. Strictly speaking these needs can be compared with need for power, transport, etc. and one would note that the two are not different from each other as far as they can be categorised as public services in context to small industry because the latter require only small doses of these for their proper functioning. Therefore supply of managerial and professional needs of small industry ought to be made by government in accordance with same logic as is used to provide public goods and utilities at present. For example every small unit cannot afford to install a precision machine but if a tool room service is located within a complex of small units and the services are sold at reasonable price the need of small units can be met in this context with such reasonable cost that can help them to retain their competitive edge. Looked in this manner, planning for tool room service is similar to meeting an infrastructural technical need of small units. Such needs can be classified systematically as follows:

Table-4: Infrastructural Needs of Small Units

<u>Sl.No.</u>	<u>Need</u>
1	<u>Pre-Investment Physical Needs</u>
1.1	Land or shed if needed
1.2	Relevant mix of road-rail-water-air links
1.3	Drinking and industrial water
1.4	Energy including power, gas, coal, etc.
1.5	Modern and relevant communication mix.
1.6	Disposal of industrial waste, water, gases, sewage, etc.
1.7	Protection against floods and recurring natural calamities
2.	<u>Pre-Investment Techno-Economic Support</u>
2.1	Product decision
2.2	Location decision
2.3	Machinery and equipment information
2.4	Market information
2.5	Financial source information and Finance
2.6	Investment feasibility evaluation
2.7	Preparation of project reports and other documents
2.8	Training of entrepreneurs
3.	<u>Inplant Internal Managerial Assistance</u>
3.1	Managerial accounting
3.2	Financial decision making
3.3	Plant lay out and production planning
3.4	Materials management
3.5	Manpower planning and industrial relations
3.6	Tax management
3.7	Information, returns and correspondence management
4.	<u>Inplant-External Managerial Assistance</u>
4.1	Procurement of raw materials, equipment, machinery, manpower and Technology from home market and foreign markets
4.2	Procurement of finance
4.3	Marketing of products to government, home market and foreign markets
4.4	Modernisation, expansion, diversification and closure decisions
4.5	Liason with relevant external agencies
4.6	Promotion and advertising
4.7	Labour consultancy

Table-4 (Contd.)

<u>Sl.No.</u>	<u>Need</u>
5.	<u>Common Facilities</u>
5.1	Design and product testing centre
5.2	Quality testing and standardisation centre
5.3	Tool room facility
5.4	Tool shop
5.5	Exhibition and display centre
5.6	Technical Training centre for fresh and working manpower
5.7	Technical information centre relating to developments at home and abroad
5.8	Integrated management consultative centre
5.9	Marketing centre with home market and export market wings
5.10	Managerial training and improvement centre
5.11	Raw materials supply centre
5.12	Common policing and security centre
6.	<u>Common Social-cum-Economic Facilities</u>
6.1	Housing complex
6.2	Health care and environmental protection
6.3	Recreational facilities
6.4	Community centres
6.5	Educational facilities
6.6	Fire fighting service
6.7	Godowns
6.8	Banks and regional local centres of financial institutions
6.9	Shopping and exchange centre
6.10	Guest houses, hotels, canteens, etc.
6.11	Effective Civic administration

This list of needs is simply a suggestive list and is based upon experiences gathered so far. Planners should keep their mind open to modify the same depending upon situation prevailing in a particular case. We now turn our attention to organisational preparedness on the part of Government of Gujarat to meet the aforementioned infrastructural needs of small units.

5. Organisational Preparedness in Gujarat

Discussion in this section is largely based upon documents received from various relevant organisations in Gujarat in regard to their aims, objectives, functions and achievements so far. The author will feel grateful for any suggestions or factual corrections in this respect so that misrepresentation of facts could be avoided. Functioning of relevant organisations in Gujarat could be viewed in relation to needs specified in Table-4 above. It is possible to do so in qualitative sense only because quantitative estimates regarding market share of individual organisations in respect of services provided by them is generally not available. Some figures pertaining to a decade ago as emerged from the survey referred to above [2] are however worth recording because it is likely that the situation may not have changed significantly in respect of market share by now owing to matching or even faster growth of number of small units than the efforts of organisations to expand their services.

Table-5: Some Share Estimates

<u>Description</u>	<u>Share as percentage</u>
Partnership or proprietorship	94
Family background experience of entrepreneurs	96
Education upto secondary level of entrepreneurs	59
Education of entrepreneurs upto college level	46
Units financed by Corporations	9
Units getting raw materials via quota system	3.5
Units doing self selling	60
Units using dealers for selling	5.7
Units with investment upto Rs.45,000	72
Units with investment of more than Rs. 45,000	28
Units taking 2 years to get started	40
Units taking 3 years to get started	35

These figures are self revealing. Particularly the market shares of developmental corporations and those supplying raw materials are too low and there exists scope of improving their coverage besides other relevant efforts to help small industry.

Now we use the serial numbers as given in Table-4 to represent respective need and to show in Table 6 below as to whether the corresponding assistance is provided by organisation in question. Symbol F is used wherever the assistance is provided to all units within an industrial estate and Symbol P is used to show that the service is only partly provided. Blank spaces show that the service is not provided at all.

Table-6: Organised Assistance Available to Small Units

Need	State Organisation						Centre SISI
	GIIC	GSIC	GSFC	GITCO	CEO	Directorate of Indus- tries(DOI)	
1.1	F					P	
1.2	P					P	
1.3	F					P	
1.4	P					P	
1.5	P					P	
1.6	P						P
1.7							P
2.1				P			
2.2				P			
2.3				P			
2.4				P			
2.5			P	P		P	
2.6				P			P
2.7					P		P
2.8							
3.1				P			
3.2				P		P	P
3.3				P			

Table-6 (contd.)

Need	State Organisation							Centre SISI
	GIDC	GSIC	GSFC	GITCO	CED	Directorate of Indus- tries (DOI)	Other Departments	
3.4					P			
3.5					P			
3.6								
3.7								
4.1		P						P
4.2								P
4.3				P		P		P
4.4		P						P
4.5		P						P
4.6		P						P
5.1								
5.2								P
5.3								P
5.4								
5.5								P
5.6						P		P
5.7								P
5.8		P						P
5.9		P						
5.10								P
5.11		P						
5.12	P							
6.1	P							
6.2							P	
6.3	P							
6.4	P							
6.5							P	
6.6	P							
6.7	P							
6.8	P							
6.9	P							
6.10	P							
6.11							P	

Table 6 reveals that certain needs are not met by any organisation. For that purpose the small units are entirely at the mercy of private consultants. Even in cases where organisations provide some help the extent of lack of coverage may be so large that dependence of

small units on intermediaries or private professionals may very well be close to completeness. In several cases manner of provision of help is more important than mere provision. Besides managerial problems in providing the help spatial seatter of help centres has to be planned in a meaningful manner to reduce the effective cost of their utilisation on the part of small units. Therefore, a proper planning of infrastructural help should be done in a broader sense. This concept can be termed as system's view of infrastructural planning and we intend to discuss briefly the issues involved in the next section.

6. A System's view of Small Sector Development and Suggestions for Improved Planning

Assuming that Gujarat State opts for the objective of growth with judicious distribution as the country as a whole has set before itself to achieve via the route of planned development and further assuming that industrial development shares the same objective as total production system of the state, it follows that any planning exercise for industrial development should aim at most effective utilisation of resources accessible to the state with minimum possible cost to the people. Minimum cost possible to the people involves cost involved in taking the goods and services at the market places and the cost that individuals have to incur while taking the goods and services from the market places to their homes or places of use. If these two components of cost are to be minimised in a proper manner the production plan will have to be made in such a manner that locations of units along with magnitude of production allocated for various locations are such that total cost to society get

minimised while available resources got utilised to maximum possible extent. This is possible only if spatial view is taken appropriately while deciding location of industrial estates, individual units and the industry mix. This in turn would require to prepare some kind of Master Plan of action in regard to location of industrial units along with production targets allocated to them for properly delineated sub regions in the state.

Such a Master Plan may be prepared to satisfy the following considerations:

- (1) Location and allocation of production of goods and services are optimal in the sense of minimisation of total cost subject to utilisation of local resources in a feasible manner;
- (2) Determination of such configuration of these units so that infrastructural planning for the configuration in question leads best utilisation of infrastructural assistance thus provided;
- (3) Allocation of infrastructural needs so determined to relevant organisations and phasing of implementation of the same to avoid delay and inconvenience to users of the same;
- (4) Maintenance of continuity to revise the Master Plan under changed circumstances and to monitor implementation of the same.

The planning tasks outlined above should be located within the office of Director of Industries. Since District Industries Centres are functioning in various districts, they may be involved in the planning process in a meaningful manner. These regional offices may ensure relevant flow of information to the headquarter where the same could be

processed with the help of computers to evolve the contents of Master Plan described above. Autonomous organisations and corporations concerned with industry may be involved in the process by way of passing on the problems faced by them and implementing the decisions evolved as a result of the comprehensive approach described above.

This effort of planned development will bridge the information gaps, if any, and would evolve a relevant information system for continual appraisal of the functioning of the entire system pertaining to industrial development. Studies relating to Gujarat by the author [1] have shown that industry will continue to remain a major source of growth and increased employment in backward as well as developed regions of Gujarat. Therefore planned industrial development will push up this process further with greater speed to bring the State in the forefront of economic development in the country.

The idea of Master Plan would serve several additional purposes as follows:

- (1) Entrepreneurs would have better idea of what can be produced at what place with advantage;
- (2) Financial institutions will have greater assurance of effective use of funds advanced by them as well as possibility of repayments of the same. They will also have better estimate of demand of funds;
- (3) Developmental organisations and agencies would know better what they ought to be doing and with what kind of phasing over time and space.

- (4) Incentive planning of various kinds will make more meaningful sense because the areas and units that require assistance of this kind would become known in more definite terms;
- (5) Regional disparities would get removed to the maximum possible extent;
- (6) There would not be any need of unnecessary restrictions as they exist today in the hope of having positive action plans at some future date which invariably lead to causing delay in development and welfare of society.

It is possible that relevant public system in this context may take some time to prepare itself to appreciate the feasibility of above-mentioned suggestions from the viewpoint of implementation. Yet initiation of continued dialogue on the issues raised above could prove useful. At the same time marginal changes could be thought of to move the present system in the desired direction and this itself ^{would} require an appropriate policy decision.

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