

## 1. REGIONAL PLANNING: FUNCTIONAL AND NODAL\*

Regional Planning attempts to analyse the territorial systems which are based on functionally homogeneous characteristics or are organised around settlement nodes which command exchange regions of heterogeneous character. These two basic types of territorial systems are not mutually exclusive but Indian scholars have tended to treat them separately and consequently there are very few studies which have analysed a territorial system in terms of both its functional specialisation and nodal exchange characteristics. Of the two territorial systems Indian scholars have paid greater attention to the functionally homogeneous regions without discussing the integrating role of urban centres. There are indeed very few studies which have discussed the functional, cyclical and nodal aspects within a single region. It is proposed to review in this paper some important studies relating to both the functional and the nodal regions. In the concluding section of this review paper some suggestion will be offered with regard to the type of studies which may be sponsored to understand the organisation and functioning of the system of nodal regions of India.

### *Five Year Plans and Regional Planning*

Initially the regional approach to planning was not accepted by the Planning Commission and consequently we find scant reference to it in the first two Five Year Plans. The concept of regional planning and balanced regional development as understood by the Commission then merely implied "a judicious location of new industrial units with due emphasis on

balanced regional development as a vital step in the direction of wider diffusion of employment opportunities. (Planning Commission 1952: 20). It is in the Third Five Year Plan (1961-66) that the Planning Commission approved the regional approach to planning and commended this approach to the planning of large industries which will serve as focal points of development for areas far beyond their immediate environs. It also stressed the need for integrated rural urban development because of the need to strengthen "economic interdependence between town and the surrounding rural areas" (Planning Commission, 1961 : 689).

It is also in the Third Five Year Plan that the key role of urbanisation in stimulating social and economic transformation has been realised and the need to plan the urban centres stressed (Planning Commission, 1961). Consequent upon this increasing emphasis on urban development, master plans have been prepared for 322 towns/cities and their immediate region in the country as a whole. These master plans have been prepared by the Departments of Town Planning of the respective states and therefore lack a national focus. Even at the State level an integrated approach for a co-ordinated development of these towns is totally absent. As for instance in the State of Andhra Pradesh master plans of its three most important towns Hyderabad, Vijayawada and Visakhapatnam, have not been formulated as part of the overall urban system of the State. Despite this major drawback these master plans are a distinct advance over the previous plans as they treat the city and

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their immediate rural hinterlands as integral units for purposes of urban planning.

While the need for regional and metropolitan planning has been greatly emphasised in the Fourth Five Year Plan, it is the Fifth Plan which examines the problem in the national perspective and suggests the formulation of a national policy of urbanisation to minimise the pressure of urbanisation on metropolitan cities by promoting "the development of smaller towns and new urban centres". This focus on urbanisation at the national level has led to the formulation and enunciation of a National Urbanisation Policy by the Town and Country Planning Organisation of the Government of India.

The National Urbanisation Policy attempts to draw a framework for spatial planning as part of the strategy of national economic planning (Town and Country Planning Organisation, 1974: 17). The Town and Country Planning Organisation of India sets out the following five principal aims of the National Urbanisation Policy:

- (1) "Evolving a spatial pattern of economic development based on regional planning and location of a hierarchy of human settlements....
- (2) Securing the optimum distribution of population between rural and urban settlements within each region..... and also among the towns of various sizes.
- (3) Securing the distribution of economic activities in small and medium towns and in new growth centres (to achieve) the desired population distribution and maximum economic growth.
- (4) Controlling and where necessary, arresting the further growth of economic activities by dispersal of economic activities, legislative mea-

asures and establishment of new counter magnets in the region.....

- (5) Providing minimum level of services for improving the quality of life in rural and urban areas and gradually reducing differences between the rural and urban life" (Town and Country Planning Organisation, 1974: 17).

This is a welcome document in the sense that it clearly establishes the need to view the urban and metropolitan development problems in the national perspective. Despite a reference in this document that a "system of cities" ought to be developed for a successful spatial planning the document fails to highlight the pivotal role of settlement nodes to organise and integrate the regional economy at the macro, meso and micro levels. The document further fails: (i) to identify the existing system of metropolitan cities, (ii) to explain the organisation of territorial system around these metropolitan nodes, and (iii) to explain the connectivity between the nodal and functional system. The document further overlooks the level of development of the national economy when it suggests that "towns and cities with a population ranging between 50,000 and 250,000 having developed infrastructure and necessary conditions for self sustaining growth should be designated as growth centres" (Towns and Country Planning Organisation, 1974.27).

The document shows unawareness of the dynamic role which the growth centres should play in transmitting impulses of growth, diffusing innovations, and transforming the regional economy through the cyclical movement of the nodal exchange system when it restricts the definition of growth centres to those settlements which have the favourable climate "for the development of industries" (Chandrasekhara, 1972).

### *Regional Surveys and Studies*

Since the beginning of the Second Five Year Plan studies on regional planning both official and quasi-official were actively advanced through the initiative of the Indian Statistical Institute. Of the many studies conducted the following five have been briefly reviewed:

- (1) The Pilot Regional Survey of Mysore State.
- (2) Macro Regional Survey of South India.
- (3) The Damodar Valley Survey.
- (4) Southeast Resource Region.
- (5) Indo-Soviet Research Project on Regionalisation.

The Pilot Regional Survey of the Mysore State (Karnataka) was a pioneering research carried out under the aegis of the Indian Statistical Institute (Learmonth *et al.*, 1962). The major contributions of this study, in addition to explaining the theoretical formulation of planning regions, was to highlight the "distinct regional structure and patterns within the Mysore State (now Karnataka)" and to identify its planning regions. The Indian Statistical Institute followed it up with a Macro-Regional Survey of South India, the aim of which was to account for disparities in the levels of development with the help of selected indicators. It is however, valued more for its methodological contribution in identifying the key variables for a scheme of economic regionalisation at the macro scales.

The Southeast Resource Region Study is taken up by the Town and Country Planning and Organisation "for organisation of planning and economic management of the resources of the area" (Town and Country Planning Organisation, 1968). This region, the study points out, possesses not only a certain degree of geographic, economic and

social homogeneity but also "functional unity which will permit effective common foresight and policy in planning". Although the study does not offer any blue print for development it does however highlight significant development characteristics of the region. It draws pointed attention to the inadequacy of linkages of rural settlements with urban market and also to its inadequately developed central place system which is evident from the fact that on the average one urban settlement serves 570 villages. Consequently urban centres fail to act as foci of development. The Southeast Resource Region, it is further pointed out in this study, is oriented towards Calcutta and to a lesser extent towards the port of Visakhapatnam in the south, because the other major settlements of the region fail to act as effective countermagnets to Calcutta. The study therefore proposes, and rightly so, that as against the creation of new towns as growth poles, the existing and the emerging major urban centres be so functionally strengthened as to effectively counteract the drift to Calcutta (Town and Country Planning Organisation Government of India, 1968: 4.36). In a subsequent study of this region the authors have emphasised the "growth centre" approach to the planning of this region, in order to promote effective integration of the primary urban system consisting of the market service towns and the secondary urban system consisting of the growth centres and growth points (Chandrasekhara *et al.* 1972: 36-70).

While the Southeast Resource Region Study cuts across the State boundaries the *Regional Planning for West Bengal* confines its observations within the political boundaries of the State. It is explicitly stated in this work that "a metropolitan regional plan for Greater Calcutta would not be a complete instrument of public policy implementation unless it is supported by an overall regional plan for the State" (Calcutta

Metropolitan Planning Organisation, 1967). While this study does maintain a clear regional perspective and recognises the importance of urban centres in formulating a strategy for regional development, it however conceives narrowly the scope of regional planning programmes when it restricts to the promotion of "planned urban growth" and the prevention of "unplanned hasty sprawl of urbanism" (Calcutta Metropolitan Planning Organisation, 1967 : 62). On account of this restricted approach to regional planning the document fails to indicate a clear-cut urban development policy to counterveil or even to minimise the magnetic pull of Calcutta. Jakobson and Ved Prakash in a critique of regional planning for West Bengal have also stressed the need to break Calcutta's magnetism by changing the existing transportation flow patterns converging on Calcutta. In addition to the radial east-west running transportation corridors to Calcutta they suggest the strengthening of the north-south running transport system oriented to the ports of Haldia and Paradeep. This perpendicularity of flow between the transport systems, they feel, "could contribute to a reduction of Calcutta's influence in its hinterland" (Jakobson and Prakash, 1966-67 : 36—65).

The Tennessee Valley Authority inspired the Damodar Valley Survey which was initiated in 1959. This is one of the earliest diagnostic regional surveys but it did not make any headway beyond the diagnostic stage. The valley was divided into a number of sub-regions (upper, middle, and lower) and survey reports of resource potential of the valley as a whole or of its three sub-regions were prepared without suggesting any strategy for development. It can serve as a handy reference material to scholars who intend to probe deeper into the matter.

The Indo-Soviet Project Report on

Economic Regionalisation of India is of great theoretical value. It starts with the assumption that "a correct delineation and articulation of economic regions in geographic terms is an essential prerequisite of economic development in a developing country and an aid to judicious investment and optimum utilisation of scarce resources" (Gupta and Sdasyuk, 1968: ii). It explains lucidly the need for economic regionalisation in planning for the eradication of economic backwardness and minimisation of disparities in the levels of regional development. Five distinct types of economic regions have been identified based on (i) natural resource and natural regions, (ii) population characteristics and resource development (iii) agricultural resources (iv) industrial development, and (v) transport and urban nodes. (Gupta and Sdasyuk, 1968 : 25-26). It further explains the practical applicability of these schemes of regionalisation to regional planning in India. This work is noted for its conceptual clarity, scientific methods and pragmatic approach and constitutes a significant contribution on the theoretical formulations on economic regionalisation for India.

In addition to these institutionally sponsored studies on regional planning some scholars have also made a notable contribution in this field. A pioneering contribution in this respect was that of Deshpande who as early as 1948, even before the initiation of the five year development plans, suggested a scheme of planning regions for the then state of Bombay and stressed the need for regional approach to economic planning to achieve optimal level of development in each region based on its resource potential (Deshpande, 1948). The application of regionalisation to economic planning was further advanced by Prakasa Rao and Bhat through their regional survey of the Mysore State (now Karnataka). The State was divided into 21

micro planning units which were regrouped into six planning divisions (Rao and Bhat).

Misra's edited volume on Regional Planning includes a set of valuable articles relating to concepts, techniques, and policies on regional planning ((Misra *et al.*, 1969). Expressing his own views Misra states that "regional and national goals should, at least in theory, coincide". He is against the idea of equalisation in the levels of regional development for inter-regional differences must continue as they are due to differences of culture and resource potential (Misra). Bhat in his thesis on Regional Planning in India highlights that spatial framework for planning based on resource structure of regions is more realistic in terms of development planning than linguistic framework. Although planning regions ought to be a combination of both formal and nodal regions yet Bhat would like them to be derived more from nodal regions arranged in hierarchical order (Bhat, 1972).

The regional planning studies reviewed so far have advocated planning based on homogeneous (functional) regions. These functional regions do highlight interregional differences and can be of some help in formulating realistic plans to achieve balanced regional development. None of these studies however have discussed centring policy in regional planning and hence have failed to appreciate the integrative and transforming roles which towns can play on market and metropolitan centres. Christaller's theory of a nested system of settlement hierarchy within a region (1933) (Christaller, 1966) and Francois Perroux' theory of growth poles (poles de Croissance 1961) (Perroux, 1950 : 90-97) have stimulated a large number of planning studies oriented to a system of market or metropolitan centres. These studies reveal greater awareness of the key role of urban centres as agents of modernisation, and centres for the diffusion of innovations.

Their approach is pragmatic and of relevance to planning problems at different area levels. They have therefore gained momentum and wider acceptability.

*Market Town, Growth Pole or Metropolitan Oriented Studies on Regional Planning*

The National Council of Applied Economic Research (NCAER) initiated the first major study on market towns in order to work out a strategy for the social and economic transformation of rural areas through a network of market towns (National Council of Applied Economic Research, 1965). The study holds the inadequate development of intermediate level of urbanization in India as a critical factor in retarding the country's economic development. It, therefore, feels that the "transformation" process can be set in motion by "creating both cities and market towns to which villages could be functionally related". Hence the study suggests that the existing number of 1936 towns should be raised in number to 12,500-14,000 if the dualistic structure of our economy is to be eliminated, the national economy is to be spatially integrated, and the productive capacity of the rural sector is to be significantly improved and surplus marketed. These points were stressed again in a seminar conducted by the NCAER in 1972. The Background Note on the Development of Market Towns presented at this seminar emphasised the need of "a well spread out network of intermediate towns, which are readily accessible to most villages; can function as processing and marketing centres for rural populations within their zones" (NCAER, 1972). Johnson who directed NCAER's first Project on market towns (1962) has re-emphasised, in this seminar, the need for intermediate level urbanization and "centrally located market towns where appropriate facilities will be provided and where a variety of ancillary services

will be available (Johnson, 1972 : 60). Furthermore Johnson conceives of them as "investment clusters" where "rather full range of opportunities is available — mechanical, clerical, entrepreneurial or professional" (Johnson, 1972: 65).

It is also stipulated in his work that agro-urban communities should be linked through a hierarchy of central places for the eventual linkage of the rural community with the national economy. The NCAER proposal for a national strategy for the development of market towns was not pursued further and consequently no action followed.

Meanwhile the Planning Commission came out in a big way to support the study of metropolitan cities and the preparation of their master plans because of their social, political and economic importance and also the gravity of their problems. This naturally stimulated a number of metropolitan centred regional plans. The master plan for Delhi (1969) was the first of such regional plans (Delhi Development Authority, 1962).

The master plan for Delhi examines comprehensively the planning and development problems of the national capital at three levels viz. (1) Central City; (2) Delhi Metropolitan Region; (3) National Capital Region. This is a sound approach because the planning problems of Delhi, the national capital, have to be viewed in the wider context of its region. In order to arrest the growth of Delhi and counteract its magnetic pull the master plan for Delhi has stipulated the growth of a number of counter-magnets on the periphery of the National Capital Region. These counter-magnets will be fully developed metropolitan centres with diversified economic base and large employment potential. Unlike the master plan for Delhi, the Basic Development for Calcutta (1966-1966) does not look beyond the metropolitan district and

effective counter-magnets to Calcutta have not been clearly visualised (Calcutta Metropolitan P.O., 1966). It may also be noted that despite all the developmental inputs Durgapur and Asansol cannot possibly counteract the magnetic pull of Calcutta. In this respect the suggestion of Jakobson and Ved Prakash referred to earlier sounds more reasonable.

The Kanpur Regional Study, which includes the papers and proceedings of an international seminar focused on the developmental problems of Kanpur, emphasises the need to promote integration of city and countryside by spreading urbanization and securing adoption of non-traditional modes of thought by villagers (Desai *et al*, 1969). In his paper presented at this seminar Berry suggested a four tier K-7 (1-7-49-343) system of settlement hierarchy for the adequate spatial integration of the economy of the Kanpur region (Berry, 1969 : 203-19). In the same seminar Johnson drew pointed attention to the inadequate development of the central place system and intermediate level urbanization. He observed that with one town on the average serving nearly 450 villages within the region one cannot expect metropolitan Kanpur to operate and control efficiently the economy of its region. Hence he concluded that to maximise spatial integration the "goal of the regional development plan, therefore, be the creation of about 300 more urban centres in the Kanpur region" (Johnson).

Manzoor Alam and Waheeduddin Khan in their study on Metropolitan Hyderabad And Its Region, have strongly stressed the need to view the planning and development problems in the larger regional, state and national perspective. The study brings out the impact of metropolitan Hyderabad in transforming the economy of its immediate rural hinterland. However it has been observed that despite this impact of

the metropolis over the region, the interaction between them is not of the desired degree and therefore the economy of the region is not adequately integrated with the metropolis. Alam and Khan have therefore suggested the development of growth centres and 42 "rural service centres" for the spatial integration of the regional economy with the metropolis. This strategy, it has been claimed, will improve the efficiency of the "trickle down" mechanism, quicken the pace of spread-effect which will thereby accelerate the regional development (Alam and Khan, 1972). Earlier Alam in his paper on the Re-alignment of the Urban System of Andhra Pradesh examined the development of the urban system of Andhra Pradesh in its political context and suggested a multiple growth centre or alternatively a single growth pole strategy for the economic development of a backward region of the state of Andhra Pradesh, Rayalaseema (Alam, 1971 : 499-501). Alam has further expressed the hope that through this developmental strategy the magnetic pull of the three metropolises — Madras, Bangalore and Hyderabad over this region can be counterveiled and optimal spatial integration of the economy accomplished.

Wanamali in his work on the Nagpur Metropolitan Region has examined in detail the level of social facilities available in all the settlements located within the Nagpur Metropolitan Region (Wanamali, 1970). He observes a sharp decline in the level of social facilities between Metropolitan Nagpur and its rural hinterland. This 'developmental dualism', Wanamali observes, hinders spatial integration of the economy. Hence to accomplish an integrated development of the metropolis and its region the author has suggested the creation of seventeen service centres within the rural hinterland of Metropolitan Nagpur. These service centres, it is hoped, if

approximately linked with the metropolis can transmit efficiently developmental impulses down to the lowest settlement unit within the region.

A number of studies in India on problems relating to urban and regional planning have focused attention on metropolitan cities and their regions and have used data on traffic, transport and communication flows to highlight planning and development problems. In the Interim Report of the Planning Commission on Traffic and Transportation Problems in Metropolitan Cities concern has been expressed over the hyper-concentration of passenger and commodity flows on metropolitan cities due to the "mounting cycle of concentration of economic activities in these few large urban centres" (Planning Commission, Government of India, 1967:11). As a solution to this problem the Interim Report has recommended "a rational distribution of future urban development into existing small and medium size towns within the metropolitan region" (Planning Commission, Government of India, 1967: 11). This Report is vague on the concept of metropolitan region, but one however presumes that the region here implies major trade and traffic flow blocks of the national metropolises Delhi, Calcutta, Bombay and Madras. Berry's study of commodity flows also identified a set of regional economies organised around metropolitan centres. Each of the four national metropolises, according to Berry, commands the trade of a well defined region called the "trade blocks" (Berry, 1966). Areas within the macro trading regions vary in their degree of accessibility and hence in their ability to receive growth impulses which drop off with distance. Consequently in these trade blocks according to Berry, "the more commercialised village and town economies are found in areas of good access, while isolated tribal economies prevail in the inaccessible peri-

pheries" (Berry, 1971:122). Berry further observes that although at the national level, the urban centres of India conform to rank-size distribution, at the sub-regional levels they do not. This is due to disparities in the levels of regional development and can be minimised by maximising accessibility and establishing a well articulated system of settlement hierarchy. Reed in his paper on Indian Communication Flows using air passenger flow data and applying sophisticated statistical techniques identifies three chief types of flow regions which he suggests can be used as planning regions since they indicate the degree of connectivity and the volume of flow integrating the region (Reed, 1969: 145-171).

Lewis, on the other hand, is apprehensive of the metropolitan centred growth approach since in many respects "full-blown metropolitan agglomeration is an appalling destination for India" (Lewis, 1964:217). He has, therefore, suggested a town centred approach as "towns in the 20,000-300,000 range offer the most congenial physical setting for a synthesis between traditional, rural and the western-urban strands of contemporary Indian culture" (Lewis, 1964: 194). Lewis further stresses the point that only through town centred development policy that India can achieve its goal of organising a "technologically progressive, politically integrated, but geographically decentralised society" (Lewis, 1964: 217.) Lewis and Johnson seem to agree on decentralised development for India focused around towns.

The growth centre approach to regional planning has been strongly advocated in a paper on Southeast Resource Region by Chandrasekhara and others. The authors of this paper feel that "agglomeration and urbanization economies are expected to accrue to investments if they are concentrated in such centres" (Chandrasekhara *et al.* 1972:36-37). They lay greater em-

phasis on the development of the secondary sector and therefore tend to ignore the tertiary sector which can be equally relevant in promoting this strategy. Although the authors seem to suggest integration of the primary and the secondary urban systems their splitting of a unified urban system into two independent systems is logically incompatible. Misra's growth centre strategy is rather metropolitan oriented for he does not want investments to be made in non-metropolitan centres before the take-off stage. The main thrust of Misra's argument is that through growth poles and growth centres a nation can achieve maximum productivity, optimal pattern of population distribution and total integration of regions or nation's economy (Misra, 1972: 1-22). Misra's prescription of linking up investments with take-off stage could rather lead planners into a vicious circle and development dilemma. His argument is fallacious as it overlooks the point that unless investment is pumped into a settlement it can never reach the take-off stage. Moreover, Misra's argument is not supported by any empirical study.

The concept of growth centres has been advanced to cover rural settlements as well, and a number of micro-regional studies advocating intergrated area development focussed around rural growth centres have also been undertaken. The National Institute of Community Development initiated a study on rural growth centres in Miryalguda Taluq (smallest viable administrative unit in a district) in Andhra Pradesh with a view to (i) developing methods for identifying growth centres and their hinterlands in our rural areas; and (ii) preparing a plan based on growth centres for an integrated development of the immediate study area (Sen, Wanamali *et al.*, 1971). This study discloses that even in such small administrative units a discrete three-tier hierarchy of service centres based



on functional characteristics is discernible. In order to organise and integrate the economic space of this taluqa the study has proposed the establishment of two high-level service centres (one located outside the Taluq but within the District) linked to the individual villages through a chain of 4 middle order service centres and 15 lowest order service centres called "central villages". Based on this hierarchy of service centres a perspective plan for the development of Miryalguda Taluq has been proposed. This is no doubt a pioneering study, for it has for the first time explored the possibility of using the growth centre concept at such a micro level. However, some of the important problems which are likely to emerge in Miryalguda Taluq as a result of new developmental inputs have not been touched upon. A certain degree of intermediate level urbanization is likely to be generated with the growing agricultural prosperity of the Taluq consequent upon the introduction of canal irrigation. These new urban centres are also likely to function as market towns to serve as an outlet for the agricultural surpluses of the area. The perspective plan for Miryalguda as given in this study does not provide for this. There is also a reference in this study to development of "self-sufficient" villages which are located outside the influence of service centres. One would associate these *self-sufficient* villages with subsistence economy and as non-central function settlements. To include them in the higher level of K-4 system of hierarchy is methodologically unsound. Despite these drawbacks one cannot overlook the fact that this study on Miryalguda does provide a perspective for spatial integration at micro level through a nested system of central places.

The location of market settlements in the command area of an irrigation project has been emphasised by the Small Industries

Extension Trading Institute (SIET) in its report on Integrated Development of Pochampad Ayacut (Andhra Pradesh). This study has identified 12 growth centres in the command area and would like these to "serve as market centres and centres for industrial development in order to minimise waste of scarce resources and to optimise the use of the existing resources" (Small Industries E.T.I., Hyderabad, 1973). Bhat in his work on Karnal district has attempted to translate area development strategy into a spatial development framework" (Bhat, 1974). This economically prosperous, and topographically homogeneous district provides a good example to discover the problem of spatial integration in an isotropic surface. Bhat has discovered wide gaps in the settlements hierarchy due to lack of functional development among the rural settlements. He has, therefore, prescribed the generation of a "three tier pattern of central places from among the rural settlements" (Bhat, 1974:126), for the total spatial integration of the economy in the Karnal district. The assumption in this study, as in many others, is that the western system of hierarchy is considered as the standard and valid system for our socio-economic conditions as well. It would be of great theoretical value to test the validity of this basic assumption itself. At this stage one would like to postulate that the system of hierarchy develops in response to socio-economic conditions and therefore, a uniform global system of hierarchy is not likely to be a valid concept.

#### *Regional Planning and Urban System*

This brief review of the studies and researches in regional planning does point out the fact that the scholars are more inclined to accept the nodal system of regions as a more pragmatic approach to regional planning. It is also evident that the vali-

dity of a growth-centre oriented strategy for spatial integration has been widely accepted. The role of urban centres and market towns as agents of social and economic transformation at all regional levels has been fully established and appreciated. In the light of these, it is surprising that no effort has been made so far to understand the totality of the urban system of India and the role which metropolitan settlements can play in integrating the economy spatially. Although the urban population of India has not been growing very fast, nevertheless the fact remains that the 2641 urban settlements including 147 metropolitan settlements\* organise and control the social and economic space of India. Because of the concentration of the major secondary and tertiary activities in and around these metropolitan nodes, their population during the last four decades has grown at a phenomenal pace and as per the 1971 census 56 per cent of the urban population is concentrated in them (Alam *et al*). In view of this growing importance of urban and metropolitan settlements we must have adequate understanding as to how effectively and in what manner the national network of urban settlements, including metropolitan, function as a system. This would enable us to appreciate the organisation of our national and regional economies. One of the primary tasks, therefore, is to identify the national urban system of India and its sub-systems. This could lead to the formulation of an appropriate strategy to use the metropolitan settlements of different orders in order to accelerate intra-re-

gional development and reduce inter-regional disparities. It is only then that we can formulate a national policy for the development of counter-magnets to arrest the growth and reduce the magnetic pull of the national metropolises. In this connection it might be worth examining the French policy to encourage the growth of regional metropolises as counter-magnets to Paris (French Embassy in U.S.A—New York, 1965) or the British policy of identifying the development regions in the United Kingdom and developing new towns within each of its nine development regions based on their respective needs (Ministry of Housing and Local Government, U.K. London, 1964).

It may be recalled that the studies on market towns have particularly highlighted the dichotomy in our urban and rural economies and the consequent development of dualistic structure between the two sectors. This dualistic structure of economy exists even within the major metropolitan settlements and is evident from the fact that the jobs and work centres relating to high and low level of technologies coexist in such settlements with a minimal of mutual interaction. Such a situation prevents organic development of the metropolitan economy and ought to be eliminated to achieve optimal internal integration and maximum diffusion of the benefits of metropolitan economy to its rural hinterland. It might be, therefore, useful to initiate a number of studies relating to the dualistic structure of metropolitan economies and their impact on rural hinterlands.

\* All cities with 100,000 + population are being treated as metropolitan cities. According to the Census of India, 1971, there are 147 such cities ranging in population from 100,000 to 7,000,000. These however, can be broadly classified into three orders of settlements according to their size and functional importance.

Ist Order	2,000,000	Distinguished for their pronounced metropolitan character and including only the primate cities.
IInd Order	500,000 2,000,000	Including mature metropolises but lacking the characteristics of Primate cities
IIIrd Order	500,000	Nascent metropolises.

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