

Chapter I

THE LEGACY OF URBAN-RURAL INTERACTION: HISTORICAL ASSESSMENT AND OVERVIEW OF LITERATURE

The idea of Urban–Rural Interaction has been a matter of concern among Social Scientists, especially among Geographers for a long time. The usual dependence of the city life on its immediate countryside for its food and its ability to serve the area beyond its boundaries has fascinated the Geographers. This is because of the fact that underlying the processes of an integral association and complementary dependence between urban and rural sectors of a region are the seeds of their progress. Integration between urban cores and rural surroundings is thus a prerequisite for balanced regional development.

It is but natural that urban centres, because they are more developed, influence their rural surroundings. But, historical records hint at the reverse images too, i.e., rural areas also influence the urban centres, as the per capita productivity of the farmers set certain limits on the degree of urbanisation. So, each of these two sectors (urban and rural) exerts influence on the other and “neither constitutes a world isolated from the other”¹(Gibbs, 1961, p.542). Of course, the episode of urban-rural interdependence varies from country to country and from time to time.

The commencement of urban civilisation marks the *neolithic revolution*, when agricultural productivity increased with domestication of plants. Since this epoch, certain surges in urbanisation were closely associated with technological improvements in agriculture, “culminating in the almost complete mechanisation of farming in the most urbanized countries.”²(Gibbs, 1961, p.542) In this regard, one has to acknowledge the contribution of the village culture in neolithic period which met every requirement as, according to Mumford, “each village was, in effect, a world in itself”³ (Mumford, 1961, p.19). These so-called primitive villages had contacts with more developed cultures, i.e., with the complex national group or urban unit. The villagers were self-content with their products and culture. The origin of urbanisation lies in the process of transformation of village into town. The food-producing communities in the Near East were the first to experience this great dynamism in the life of mankind, the magnitude

of which has been expressed as the 'urban revolution' by V. Gordon Childe. According to Emrys Jones, "The urban revolution could only have been based on the neolithic revolution, i.e., the change from food gathering and hunting to food-producing. This was the necessary condition of the rise of the towns which followed it."⁴(Jones, 1966, p.18) Hence, the neolithic country town was a little more than an overgrown village and so "the embryonic structure of the city already existed in the village"⁵(Mumford, 1961, p.19). Actually, the ability to produce surplus by these villages led to the evolving of their links with cities

Considerations of interlinkages between urbanisation and rural change led some commentators to use the term 'generative' and 'parasitic' for cities. The 'parasitic' cities drain the resources from their surrounding regions without giving much in return. The 'generative' cities permeate their influence into their surrounding region serving as a stimulus for change and development.⁶ (Hoselitz, 1955, p.278-294).

In the early stages of urbanisation, cities were parasitical as they offered little economic return to the villages in lieu of their great dependence on farmers for support, the fact which follows massive exploitation of rural masses rather than their dependence on the cities. That is why, for quite a long time in history, people have been conditioned to look upon 'city' or 'urban centre' and 'village' or 'rural centre' as two unrelated terms, connoting two disparate and sometimes even antagonistic realms for man considered as a being, pursuing his biological, social, economic and cultural interests. We have been conditioned to think of the city and the villages as dual centres of human habitat and the general consensus was that those cities developed as parasites thriving on the surplus food produced in the rural hinterland. But Ramachandran has disagreed with this idea of parasitism by advocating that in exchange of the surplus produces parted by the rural folks to the urban areas, they were assured of their security by the cities from external aggression, thugs and dacoits. Moreover, the city rendered other services particularly, "leadership and guidance in several walks of life—religion, education, medicine and entertainment."⁷ (Ramachandran, 1989, p.87-88) Thus, in his opinion, the earliest cities of the world used to offer tertiary services to their hinterland.

In the highly urbanised countries, where urban population is the primary market for agricultural products their tastes, size, location relative to areas under cultivation and degree of concentration in large cities determine the items and the quantities of the

farmers' production and their access to the major markets. Again, industrialisation and associated urbanisation was the only alternative for the technological improvements and mechanisation of agriculture. Therefore, the cities of highly urbanised countries have stimulated agricultural productivity through mechanisation and the development of transport lines and the creation of efficient marketing systems.

Contrary to this, the cities in the unindustrialised nations happen to be parasitical, similar to that of the ancient towns. In the case of developing countries the villages, feeder of the cities, have come to be pauperised and the cities have grown so much at the expense of the villages that they have created social, economic, cultural imbalance between rural and urban life. Most of the cities of the developing economies are of the parasitic type⁸ (McGee, 1971, p. 34) and so urbanisation in less developed countries is not concomitant with economic development. India also exemplifies this picture, where urbanisation and modernisation have created a gulf between cities and countryside which is termed as 'Rural-Urban dichotomy'.

Indeed, thinkers and men of affairs have felt the need to have a fresh look at the relationship between city and village. What has led the thinkers to make a review of the idea that city and village are unrelated is the fact that such thinking had baneful effect on both the village and city life. Thinkers like Lewis Mumford have conceived of an ideal relationship between city and village; to quote Mumford, "Each village will be an embryo of a modern city, not the discouraged, depauperate fragment of an indifferent metropolis"⁹ (Mumford quoted in Mukherjee, 1972, p18).

We cannot just treat Mumford as a visionary. When he projects his thinking into the future, he has the support of past history, particularly the history of India.

With a long heritage, the first phase of urbanisation in India is associated with the *Harappan civilisation* dating back to 2600 B.C.¹⁰ (Gordon, 1960, p. 63) which found its full expression in the two metropolitan cities of Mohenjo-daro and Harappa. At this time, a number of urban communities flourished in the Indus Valley and the civilisation was basically urban in its essence. For instance, Lothal, a large city and the greatest port built by the Harappans at the head of the Gulf of Cambay, was basically a village with antecedent culture and "it did not take long for the local village culture to lose its identity under the over-powering influence of this greater, more developed culture"¹¹ (Bhattacharya, 1979, p.34); and very soon Lothal became the most important

commercial and industrial centre of the Harappan Empire. In spite of this transformation, the dual pattern of human settlement--rural and urban communities—continued unaltered and maintained peaceful life for centuries during this civilisation. Actually, the Harappan culture was recognized as a fully developed urban society, “supported by rural villages around larger urban centres”¹²(Ramachandran, 1989, p.32)

An idea of the nature of town-country relationship during this time may be obtained from archeological evidence. The rural villages were typified by agriculture and a few industries like pottery and textiles for ordinary wear. The cities on the other hand produced a greater variety of luxury items including jewellery, expensive clothing and artistic ware and articles of everyday use, including metal ware and tools. Thus both the cities and the villages were centres of production of goods and in terms of language, religion, customs and beliefs they shared a common culture. Though at the eco-politico-cultural level the city provided the leadership, yet there was no conflict of interests; instead a mutual co-operation and harmony existed between them. The underlying factor behind this unification of rural and urban society is the city-generated ‘little tradition’, based on common beliefs and mythology. Thus the city-country relationship “encompassed all aspects of life—cultural, political and economic.”¹³(Ramachandran, 1989, p.32)

In 1500 B.C.¹⁴ (Hawkes and Woolley, 1963, p. 397) the Harappan civilisation was destroyed by natural disaster and by the *invasion of the Aryans*, who “being essentially a rural folk made no efforts to revive the cities”¹⁵(Ramachandran, 1989, p.32). The pre-urban Aryans used to live in enclosed rectangular villages where the communally owned lands were used for agriculture and grazing. During this period of 1500-600 B.C. the society was egalitarian with no distinctions between the different sections of people. This rural-oriented civilisation was represented by the self-contained rural communities and the complete disappearance of urban culture, since, at that time, the country was not favourable for the emergence of urban culture. The Aryans, instead of being the lovers of urban life, were known as the ‘city-destroyers’ in the Rigveda as they were inexperienced of city life when they came to India¹⁶ (Bhattacharya, 1979, p.67). Thus the urban-economy did not fit in well with their mode of life.

In the *post-Vedic period* (800-600 B.C.), the emergence of cities led to an urban-oriented society with marked sectional differences. The stage of urbanisation was set by the use of iron tools by the Aryans--not known by the Harappans-- for three reasons: 1) it helped to clear the land for settlement 2) surplus production of agriculture was possible through the usage of iron plough and other agricultural implements and 3) manufacturing of transport vehicles increased the mobility of people. These factors in turn eased out the strides of urbanisation in this era and hence the country experienced a kind of fresh beginning of urbanisation in this time. The process of colonisation of the Aryans---aptly coined as the 'land-grab policy'¹⁷(Bhattacharya, 1979, p.69) by Bhattacharya---led to the transformation of some of the village settlements into market centre or trading ports and ultimately to the capital cities. The city planning followed the same principles of the original Aryan village units. An essentially rural-centric civilisation, converted into an urban society, had an obvious psychological tie between the villages and the cities.

The rural areas in both these urban and rural centric civilisation were self sufficient units.

In the post-Aryan period, i.e., from 600B.C. onwards, as urbanisation made remarkable headway, the relations between the city and the countryside underwent important changes.

During the *Mauryan period* a distinct division was reflected by the 'Pura', meaning the capital and the 'Janapada' the remaining territory which spread into a number of villages and townships and a sudden change from rural to urban culture was rather imposed. The Mauryan city was often surrounded by craft villages, where people were reed makers, salt makers, potters etc.

The *golden age* of Indian history, ruled by the Guptas (4th and 5th century A.D.) was characterised by an overall prosperity in agriculture, industry and trade followed by an increasing security of life. Villages on the one hand were equipped with technologically improved agriculture, and a strong industrial base and direct transport linkage with the towns on the other. It is interesting to note that industry in those days was not the monopoly of urban centres. Generally, the industrially specialised villages were located near the immediate neighbourhood of the urban centres. These urban cores used to act as the markets for their products and rendered necessary services to

these villagers as well. From the old Buddhist literature instances of 'Professional Villages' are found which used to supply different agricultural implements to the villages lying around them.

Although the then rural environments were the location of a number of industries, e.g., pottery, food industry, some branches of textile industry, etc., yet they were principally dependent on the urban market as it is today. That is why, the rural industries always sought location near the urban centres to avail of the support of the urban market. In this context, one may infer that the urban-rural nexus was intimate. Along with this economic interaction, the social as well as the religious relations were manifest by the participation of the people of both areas in different activities. But underlying this apparent harmony in all respect, "towns and cities were hardly giving anything in return to the countryside"¹⁸ (Kaur, 1995, p.15), which implies a strong backwash effect from the rural to the urban areas. The nature of such a relationship may be interpreted as exploitative.

The story of urbanisation during the *medieval period* (A.D. 600—1800) is a story of turmoil in North India and of rapid growth in the South. Urbanisation in the North suffered from Muslim invasions from the north-west. But once the dynasty was established, new cities were built and left undisturbed to prosper. The Islamic influence made its distinct impact on the urban landscape. The urban-based Muslim rulers favoured urban growth a lot.

The temple represents one of the major features of the medieval South Indian cities. Streets radiating from the 'gopurams' or the four gates of the temple were the arterial roads, mostly devoted to commercial activity and acted as the linking roads of the core city with the rural periphery.

Agriculture in rural areas was given special attention with improvement in irrigation, introduction of land revenue reforms etc. as a result of which peasants "grew rich and were satisfied"¹⁹(Majumdar, Ray Chaudhury and Datta, quoted in Bhattacharya, 1979, p.193), especially throughout the reign of Ghiyas-ud-din Tughluq, Sher Shah etc.

But contrary to this prosperity in urban as well as rural areas, a cultural hiatus was distinctly manifest in India's urbanscape arising out of the religious dichotomy

expressed in the social space with the confinement of Muslims in the cities and the non-Muslims in the villages. This cultural gap was widened with time and it also led to administrative divisions: while the rural officials were mainly hereditary Hindus, the urban areas comprised officially appointed Muslims. "The anti-urban bias of the Vedic tradition received renewed support" and thus "City and country were largely alienated from each other during this period."²⁰(Ramachandran, 1989, p.52) During Mughal times, Akbar made commendable efforts to bring about the cohesion between the Hindu and Muslim societies and thus to bridge the rural -urban gap. The division of city and village on the basis of religion was there, certainly with a substantial section of Hindu population residing in major cities. Yet, the rural-urban socio-cultural hiatus persisted which not only affected the urban-rural interaction, but also damaged the relationship of the intra-urban population.

The extent of urban development during this medieval period was largely a product of soil, as majority of the industries were agro-based and thus the "fertility of the land with a greater variety of products had an important part in contributing to the prosperity of the urban centres"²¹(Bhattacharya, 1979, p.199). The large number of industries, localised in rural areas, was mainly oriented to urban needs. In these circumstances an exploitative relationship between urban and rural areas was inevitable.

Thus before the advent of the British, i.e., in the pre-colonial period, the trait of urban-rural interface followed an upward gradient to reach its highest level of exploitation in the Muslim terrain whereas a symbiotic relationship was evident in earlier days.

But it should not escape one's notice that the rural areas were indeed very prominent with their self-sufficient economic and administrative functions. There was a widespread system of self-government in towns and also in the villages and the central government seldom interfered. Many of the villages, i.e. Karnasuvarna, Adisaptagram, Santipur, Surul, Padachinagram were examples of such independent villages in Bengal. To quote Sir Charles Metcalfe, one of the British officials in India, "The village communities are little republics having nearly everything they want within themselves; they seem to last where nothing else lasts. This union of the village communities, each one forming a separate little state in itself... is in a high degree

conducive to their happiness and to the enjoyment of a great portion of freedom and independence”.²² (Metcalf, quoted in Nehru, 1946, p.260) The most striking fact is that the urban centres, “in spite of offering easy access to people from all walks of life...were never places of attraction for the village folk who remained content in the rural surroundings”²³ (Bhattacharya, 1979, p.275) precisely because of their self-sufficiency. “A close, intimate relationship had always remained between the rural and urban sectors, people having special needs to be fulfilled would move over to urban places”²⁴ (Bhattacharya, 1979, p.275-276).

The *modern period* (1800-1947) experienced the processes of urbanisation in the country with certain new elements as the country came under the British crown at that time, although the European phase of India’s urban history began ironically when the Mughal supremacy was at its height. According to Ramachandran, “The course of urbanisation after 1800 in all parts of India was determined by the British colonial economic policies and social attitudes”²⁵ (Ramachandran, 1989, p.60). Indian urbanisation witnessed a thrash from British who initiated the disintegration of the traditional industrial (e.g. cotton textile industry) structures of India leading to the destruction of the export-oriented traditional urban centres of the country with the main intention to turn the face of Indian market for British goods produced in consequence of industrial revolution in England. The 19th century, until about 1870, was marked by decline of urban centres, whereas a slow upward growth was evident till 1931, after which *rapid strides* of urbanisation was observed. Thus the *pre-British urban centres* were ruined giving places for three metropolitan port towns, some hill stations in the Himalayas and the South and the new industrial townships, all of which developed with all benefits of urban life, industry, mercantile trade, business etc. for the purpose of the administrative and commercial convenience of the British rulers. A drastic change was introduced in this new era of urbanisation when the colonially implanted towns gained monopoly in containing most of the industries as against the spread of the earlier native industries both in the urban and rural areas. The village community, which had so far been the basis of Indian economy, was disintegrated losing both its economic and administrative functions and as a result the whole structural basis of the Indian economy was disintegrated. Gradually, the centres of gravity of villages were diverted outside its soil; i.e. towards the more developed urban centres.

Thus the revised economic policy of the British Government with its dual goals of keeping effective administration in India on one hand and flourishing their native industries in England on the other generated strong centrifugal forces of the metropolitan economy represented by the commodity flows towards them. The role played by these metropolises, viz., Kolkata, Mumbai, Chennai and Karachi was just to serve as focal points of suction mechanism. Through this new turn in Indian urbanisation, the healthy harmony in the rural-urban interactions was replaced by the export-import oriented commodity flows. For maintaining the new colonially implanted urban centres there was a great horizontal redistribution of population for which the core-periphery relationship was ruptured all the more²⁶(Kundu, 1980, p.22). The new urban centres with “primary instincts for trade”²⁷(Moorhouse, quoted in Kundu, 1980, p.22) had little spread effect over their surroundings because of their economic alienation from the indigenous hinterland and more transaction with world markets. As sketched by Ramachandran, “The British, even more than the Muslim rulers, were conscious of their alien identity and hardly attempted to acquaint themselves with the people over whom they ruled”. ... As a result “the social distance between the urban and rural areas increased.”²⁸(Ramachandran, 1989, p.67) Thus since the colonial era major changes introduced in the scenario of urbanisation transformed the urban-rural interactive system which has really become the casualty of this process. The consequent damage in economic sphere of the country has been interpreted by Kundu thus: “The colonial policy of industrialization, together with the powerful backwash effects exerted through the large cities, resulted in liquidation of the secondary activities in the rural hinterland. The substitution of an interactive and symbiotic relationship by an exploitative one resulted in an overall weakening of the economic base. ... The cultural superstructure imposed on the urban areas was not rooted in indigenous institutions which led to the fragmentation of tradition along the rural-urban interface”²⁹(Kundu, 1980, p.22). It may thus be summed up that the process of westernisation widened the gap between city and countryside and the “the rural-urban conflict continues to plague the Indian social and political system”³⁰(Ramachandran, 1989, p.69).

In the *post-independence era*, the colonially surfaced regional disparities could not create viable economic complexes necessary for the diffusion of growth impulses to the rural neighbours of cities. Moreover, the concentrated investments in the large

agglomerations resulted in the persistence of the urban-rural dichotomy. The percolation and diffusion of benefits from the centre to the peripheries did not take place in this arrangement. As Kundu has observed, “The assumption of percolation and diffusion of growth impulses from the centre to the periphery—characteristic of the Anglo-Saxon regional development theories—proved to be invalid in the Indian context as the multiplier effects got impounded within the large agglomerations”³¹(Kundu, 1980, p.24). Thus the concentrated investments in the large agglomerations induced rural-urban migration at a large scale and a consequent degradation of urban environs. The already rootless rural areas continued to be poverty-stricken: the results of urban growth did not trickle down to these areas. The urban areas actually became dysfunctional in relation to the rural areas. However some steps have been taken to abate these dysfunctionalities. Special attention has been given to various rural development programmes under the national dispensation, e.g., Urban Community Development Programme and Integrated Development of Small and medium Towns, which were intended to strengthen urban-rural linkages and to promote the path of progress both in rural and urban areas. The concept of decentralised planning has emerged aiming at strengthening the urban-rural nexus.

It has been found that there has been a distinct dynamism in the evolving character of urban- rural interaction throughout the urban history of India. And the present-day rural-urban interface in India may be interpreted in terms of the conceptualisation proposed by Friedmann (1956) as the evolving relationship between the developed core and the less developed peripheries or surroundings.

Following Friedmann, Kaur has identified four successive phases in urban-rural interaction, viz., those of a) exploitation b) unequal exchange c) conscious inequality d) equilibrium.

In case of India, the phase of exploitation is the period of British rule, though exploitation was there in a subdued form even in the earlier days. It is, however, interesting to note that the earlier times witnessed a much healthier relation as the villages had a strong foothold. It may be thought that India is in the third stage today as people have taken conscious efforts to reduce the urban-rural gap, so as to induce harmony in their relationship.

Indeed, it will be quite in order in the present context to make a review of the relevant literature in which the manifestation of urban impact on surrounding regions and the city-hinterland interface have been documented both in World and Indian contexts. A brief sketch of these works is drawn here.

Review of Literature

J.F. Steiner (1927) approached the question of city-country interrelationships from the standpoint of organization and administration of comprehensive social work in rural districts. He feels that the social welfare of the rural community life must be recognized through various social work programmes along with that of the urban social work and a closer rural-urban relationship would be “a thorough-going alliance of rural and urban forces in dealing with rural social problems”³² (Steiner, 1927).

To find out city-region relationship, *Harris*³³ (1940) delimited the sphere of influence of Salt Lake City on the basis of retailed trade, wholesale grocery trade, the state boundary, the area served by the Federal Reserve Bank of San Francisco, newspaper circulation area, religious boundary, telephone area, bakery area and petroleum products area.

For *Green* (1950)³⁴, country bus services is a very effective method of determining the boundaries of urban sphere of influence of England and Wales.

Duncan (1956)³⁵ studied the gradients of urban influence on the rural population of metropolitan and non-metropolitan counties in USA considering certain indicators spelt out as percent population, dependency ratio, fertility ratio, median school years completed, percent female labour force, percent white collar workers, percent rural farm males in non-farm occupations, percent farm operators working off their farms 100 days or more, percent farms with non-farm family income exceeding farm income etc. and came to the conclusion that the economic activities, family organisation, functions and demographic structure of the rural population are profoundly affected by their residence near cities.

The complexity of the structure of the city region and city-hinterland relationships is brought out by *Ellefsen* (1962)³⁶ through a comparative study of five cities-Delhi,

Madras, Hyderabad, Bombay, Baroda, based on demographic, socio-economic characteristic and gradients from the cities. The indicators are (i) density of population (ii) sex ratio (iii) literacy rate (iv) proportion of population dependent on commerce as percent of total population and as percent of non-agricultural population (v) proportion of workers in non-agricultural activities. He finds accessibility as an important factor in spreading urbanisation in the hinterland and has made four-tier zonation of urban rural profile.

In response to the impact of urbanisation, the village communities reflect changes in many ways. *Lambert* (1962)³⁷ emphasises that this process leads to the integration of villages into the regional and national economic systems, having important, but locally different repercussions on the social and political systems. But in the Indian context, social change may not be consequential upon the economic development.

R.L.Singh's study on the 'umland' of Banaras (1964)³⁸ used Western techniques as bus services and newspaper circulation for delineating the area of influence of Banaras. The areas supplying milk, grains, vegetable to the city have also been taken into consideration.

The metropolitan district of Hyderabad has been delimited by *Manzoor Alam* (1965)³⁹ on the basis of 'principal' and 'reflective' elements. The 'principal' elements are some urban services provided to villages. The 'reflective' elements are those socio-economic aspects which respond to urbanising impulses of the metropolis. A three-fold classification of the metropolitan region i.e. (i) the metropolitan core extending up to 6-8 miles from the city-centre. (ii) peri-urban zone-up to 16 miles and (iii) the rural hinterland up to 40 miles have been found.

While studying the relation between Delhi and village situations, *Rao* (1970)⁴⁰ identifies three types of urban impact, the nature of which varies according to the kind of relations a village has with a city or town. There different situations are:

- i) Villages in which a sizeable number of people have sought employment in far cities. They leave the members of their families living behind in the native villages.

- ii) Villages near an industrial town have a sizeable group of emigrants where the nature of influence follows the nature of industry.
- iii) The growth of metropolitan cities accounts for the third type of urban impact of the surrounding villages. Normally with its expansion, the city sucks up or incorporates the villages lying on the outskirts. This process explains the existence of rural pockets in the city area.

According to *McGee (1971)*⁴¹, 'the role of city cannot be separated from the territory to which it is linked'. In this context, formulation of a conceptual model is necessary concerning the city incorporating its relationship to the countryside of the Asian societies, which transcends the dichotomy between city and the nation at large. Citing examples of various cities of different Asian countries and referring to many researchers' work, the author concluded that there is a wide gap between the preconceived roles of cities and their actual functions: the Asian cities are both catalysts and cancers 'aiding and hindering the development process'.

While delineating the hinterlands of the urban centres of West Bengal using bus frequencies, *Lata Chatterjee (1973)*⁴² has differentiated the Indian scenario from that of the Western countries, where overlapping and truncated hinterlands develop around the close urban mesh. In contrast, in West Bengal, except the Calcutta/Howrah metropolitan area, the urban hierarchy is simple with small market towns, sub divisional towns and district towns. Here, the large extent of urban-tributary areas does not indicate the extension of proper service facilities; instead their large size symbolizes ill served urban-fields and thus the existing towns have not been able to build an adequate rural-urban nexus. According to Chatterjee, the predominance of administrative towns as bus centres is a reflection of the weakness of the Indian urban structure.

The structure of the city-region of Bangalore has been studied by *Rao V.L.S.P.* and *Tewari, V.K. (1974)*⁴³ on the basis of (i) population variables and (ii) land use variables. Furthermore, the commuters' zone has been delimited by the frequency of bus services to suburban destinations.

The comprehensive volume of *Potter and Unwin (1989)*⁴⁴ is concerned with urban-rural interaction in the Third World in which a theoretical perspective of urban-

rural interaction has been depicted followed by different case-studies, e.g. urban-rural and regional disparities in Maghreb, the rural migration to towns and cities in Sudan, labor migrants in southern Africa and studies concerned with Tamilnadu, Barbados, Caribbean, Jamaica etc. Taking the example of Cuba, the book concludes with an identification of the issues related to planning strategy in a spatio-eco-political context.

The study of *Nangia* (1976)⁴⁵ is concerned with the city region of Delhi. Taking a radius of 40 km. from the city into consideration she finds distance to have an important bearing on the settlement structure and the population size of the region. The region with maximum urban impact is limited to an average distance range from 7 miles to 18 miles from the city-centre. These distance limits are really the inner and the outer limits of the “boundary girdle bunch”.

Lewis and Maund's paper (1976)⁴⁶ on “The Urbanization of the Countryside: A Framework for Analysis” questions the place-oriented behavioural approach to the understanding of the urban-rural divide within a sociological framework.

It points out that the place-oriented construction of urban-rural differences involves a person-neutral approach which is, however, not borne out by facts. The authors point out that the large cities may display many of the characteristics of those located in rural areas. Social change involves whole societies—whether located in the urban or in the rural areas. According to the authors change of places is determined by people with a similar social background instead of places determining the life-style of pupils.

Because of the present-day advanced technology leading to social change, a tertiary sector has actually emerged and it offers an increase in employment opportunities and creates new aspirations in more people. This is reflected in three ways in the countryside, viz., 1) in ‘depopulation’ which is a decline in population resulting both from outward migration, i.e., migration to cities and from fall in birth rate; 2) in ‘population’ which involves the growth of population in consequence of net in-migration of people and colonizing the countryside and 3) in ‘repopulation’ which refers to recolonisation of villages by people who are retired.

1), 2) & 3) above bring about the structural changes within the communities involved----alteration of the social, demographic and economic structure of the

community. These structural changes entail the socio-economic value system which again creates two classes, viz., the middle class and the working class.

The authors, in brief, seek to substitute emphasis upon socio-economic structure, behaviour and value-systems for the more familiar morphological and landscape approaches to the understanding of rural-urban differences, without ignoring their interrelations.

Deshpande, Arunachalam and Bhat's work (1980)⁴⁷ portrays rural-urban interaction with special reference to the impact of Bombay metropolitan city on South Kolaba region of Maharashtra. Translating the rural-urban interaction processes of India into a spatial model and recognising certain zones of urban influence, the authors have investigated some aspects (viz., demographic characteristics and settlement hierarchy) of rural-urban interaction in a belt of urban influence that lies beyond the zones of commuting and direct impacts of urban spill-over, but yet is subject to the urban dominance in internal structuring. The study reveals that 'a metropolitan city operates to the disadvantages of its rural hinterland by drawing on its manpower and by bringing it powerfully within its economic influence through the regional transport system it develops'. The authors thus conclude that drastic planned measures, i.e. provision of heavy social inputs to the respective region can only be a remedy for the deterioration and stagnation of the region.

While elucidating the concept of Urban Fringe and its delimitation, *Hira Lal* (1980)⁴⁸ has illustrated the 'process of accretion' outside the margins of towns and has considered this process responsible for the 'finger-like' trend of development of a transitional zone termed as 'rural-urban fringe'. The emergence of this amorphous territory around the cities is a consequence of mechanised transportation and the extension of public utility services beyond city's limit. According to him, 'This is a new phenomenon in the urban landscape of the developing countries of the World in general and of India in particular.' After analysing the available literature, Hira Lal has visualised the fringe belt as a dynamic area that fluctuates with time. Urban growth leads to diffusion of innovations in the surrounding areas which again leads to fluctuation in fringe areas on account of which delineation of fringe areas becomes difficult. The author narrates some important methods which were used by scholars for delimitation of different urban fringes in the world.

method. Then the different socio-economic and demographic characteristics of the city-region have been analysed in relation to distance from cities.

Comparative zoning of central place interactions in two different ecological areas (two development blocks of hills and plains) situated in Nainital district of U.P. Himalaya is the main focus of *Pandey, Tiwari and Rawat's* research (1986)⁵⁴. The central place interactions have been identified in three-tier hierarchy employing both quantitative and qualitative techniques. Moreover, the factors affecting spatial interaction pattern have been analysed for these two different ecological set-ups. In the hilly block, interaction over space economy is governed more by physical features (e.g. slope, direction influenced by accessibility etc.) and least by cultural environs while the contrary situation exists in respect of plains. Travel distances and degree of nodality of transport are important non-physical factors influencing interaction processes. These are dominant in the plains. According to the authors, central place interaction areas may be regarded as the basic planning units to investigate spatio-functional gaps through integrated spatial organization of the region. And, thus they concluded with the idea of formulation and implementation of Integrated Area Development (IAD) plan for these basic planning units defined as central place interaction areas.

Dutt, Monroe, Charles and Vakamudi (1986)⁵⁵ refer to previous attempts to relate urbanization to occupations; and then they seek to be more specific in respect of the indicators of urbanization and rurality in India.

Following are the conclusions arrived at by the authors:-

- 1) Cultivators are better indicators of rurality than agricultural labourers.
- 2) Female agricultural labourers are less significantly correlated with urbanisation than males.
- 3) The number of people engaged in household activities is more in the urban areas than in the rural areas.
- 4) 'Other workers' i.e., those engaged in manufacture and service, is a significant indicator of urbanisation.
- 5) While literacy is an indicator of urbanization, female literacy is a better indicator of urbanisation than male literacy.

Dennis Rondinelli's article (1986)⁵⁶ entitled "Integrated Urban and Rural Development: The Emerging Spatial Strategy of Development Policy" has been designed to illustrate the processes of integrated urban and rural development in Nepal and Brazil, which are at the opposite ends of the spectrum of developing nations. Emphasising the problems of both urban and rural environs in developing countries and thus highlighting the need for the integration of spatial development of urban and rural areas, the author discusses the strategies for balanced rural -urban development in Nepal and Brazil. The major questions requiring attention in this regard are: a) generation of non-agricultural work opportunities in rural areas; b) the costs of creating jobs in rural areas as compared with cities; c) the comparative costs of providing infrastructures and social services in cities and rural hinterlands; and d) the potential impacts of alternative spatial structures on rural to urban migration patterns.

Identification of hierarchical order of service-centres in the umland of Lucknow on the basis of their centrality index is the central theme of *Soni's* article (1986)⁵⁷. In the backdrop of the major theories of this line, he has applied popular method (persons engaged in non-agricultural activities) for computing centrality index of the service centres. The centrality scores have been correlated with the population size of the service centres. It has been revealed that 'the relationship between size and centrality is not consistent at all levels of size of service centres'. Rather, centrality is more directly related to the route pattern and the nodality of the centre. The socio-economic factors also influence them. Finally the author has identified eight categories of centrality grades in the hinterland of Lucknow, which are as: Regional Capital, Regional Centres, Sub-Regional Centres, Large Rurban Centres, Medium Rurban Centres, Small Rurban Centres, Rural Market Centres, and Market Villages.

The aim of *Funnel's* paper (1988)⁵⁸ is to pinpoint important themes relating to urban-rural linkages with the intention to provide directions for future research as this subject has a long pedigree in Geography.

The extension of cities beyond their physical bounds, characteristic of urbanization in LDCs, has inspired the author to refer to the views of Harvey that 'the process of capitalist penetration into 'traditional' economies manifests itself geographically by the encapsulation of the countryside into new social and economic circuits largely controlled by towns'. The fundamental nature of this encapsulation

processes should guide future research. According to the author, there are three themes which offer research directions, which are: 1) The Role of the city, 2) The Politics of urban-rural relationship and 3) Rural-Urban Exchange.

Lillian Trager (1988)⁵⁹ discusses the role of small urban centres comprising a system within which rural –urban linkage has been sought to be established in Nigeria. He takes his cue from earlier attempts which have been made in a number of conferences and projects undertaken in 1978, 1980, 1983 and 1984 to examine the role of small and intermediate cities in development. These bring out the systems of cities that include small and intermediate regional centres and that provide for rural-urban linkages in various ways.

It is the region-systematic approach which Trager adopts and within which he shows how rural-urban linkage leading to regional development of parts of Nigeria, takes place.

There is a second aspect in Trager’s treatment of the present issue relating to rural-urban linkage. It is his functional approach. He seeks to explore some of the functional aspects of small urban centres within the systems of cities.

Trager makes note of two kinds of studies that have been made on the rural-urban linkages on rural development.

Early studies of urban migration discussed hometown or community associations as useful for assisting the adaptation of migrants to large cities. More recently, studies have been made on monetary remittances from the migrated places. These studies highlight the activities of increasing importance in rural development in Nigeria; and they also throw light on the role of indigenous migrants as resources for rural development in parts of Aweland in Nigeria.

Panneerselvam (1991)⁶⁰ has attempted to trace out the rural-urban relationships in two districts of Karnataka in the background of the objective of district-level planning. The rural- urban relationships for both farm and non-farm sectors have been assessed by him under three heads: i) Growth ii) Migration iii) Employment.

The salient observations are---

- a) The linkages of small and medium towns with the rural settlements in their hinterlands extend up to a radius of 10 km by and large, although they vary widely as between individual towns.
- b) Small and medium towns of the selected districts as above act as focal or service centres for their hinterlands. Villages within 10 km radius depend on these towns for both higher order social infrastructural facilities as well as for off-season employment opportunities.
- c) Increase in the agricultural productivity in rural areas has definite reflection consequently on the nearby urban settlements in terms of economic base (non-farm activities). The economic growth of small and medium towns has been observed as the phenomenon of the agricultural potential of the region.

Relevant issues and suggestions addressed by the author are as follows----

- i) Development of rural infrastructure, particularly non-farm activities, should be considered to raise the economic level and employment potentials of the rural areas.
- ii) Education of the rural mass is essential in this regard.

Sengupta (1991)⁶¹ points out at the situation of dichotomy between rural and urban India. Comparing India with the developed industrialised nations, he has identified the basic problems of urban as well as of rural India.

He has referred to the term 'urban transition' used by the Executive Director of United Nations Centre for Human Settlements, the last phase of which is taking place in the developing countries, though *Sengupta* is not fully satisfied with the application of the expression. The problem-ridden urban India has been ruralised continuously and thus the rural-urban exodus has not been provided with full benefits and infrastructure.

The author envisages the reduction of the rural-urban imbalances in India on the lines of integrated planning of urban and rural areas: this, according to him, would lead to "urbanization of rural areas and ruralisation of urban areas in such a manner that all of India will become urbane in a metaphysical sense and rural in the physical sense..."

Advocating that agrarian growth has created employment opportunities in rural as well as in neighbouring towns which in turn resulted in strong rural-urban linkages during the seventies and the eighties, *Kundu (1992)*⁶² has analysed the linkages through the pattern of agricultural development and that of non-agricultural activities. Data at district (belonging to different agro-climatic zones) level have been dealt with and districts have been categorised according to the productivity levels. An examination of the regional variation of interdependencies was made from the emerging pattern in ten agro-climatic zones. Kundu observes that the districts with low levels of land productivity present weak interrelations between agricultural and non-agricultural activities and vice versa. Thus, a certain level of agricultural development is a prerequisite for establishing a healthy spatial interaction and the success of programmes such as the Industrial Estates leading to economic diversification of rural areas. But observing that very few districts with high land or labour productivity have strong rural-urban linkages, the author has concluded that agricultural development alone cannot be a 'major factor in establishing rural-urban linkages in our country'. The socio-physiographic peculiarities of any region, infrastructural development, the process of market integration, inter-settlement linkages are also important matters of concern for developing the desired pattern of spatial interdependency. Hence, 'rural-urban linkages tend to develop a logic and dynamics of their own.'

A state and regional level picture of urban-rural interaction in India has been drawn by *Kaur (1995)*⁶³, who, on the basis of the data at NSS regional level, has selected five parameters, viz., percentage of rural non-agricultural workers, percentage of villages connected by pucca roads, agricultural productivity per worker, density of towns per 10,000 sq. km., and percentage of intra-district migrants, assuming that the first two represent the magnitude of rural-urban commuting, the third and fourth indicate commodity and service exchange and the last one shows the strength of urban-rural nexus. In terms of these surrogate variables, she depicted the inter-state variations of levels of interaction and finally recommended the strengthening of such interaction.

Nandi in her work (2001-2002)⁶⁴ has made an attempt to demarcate the hinterlands of seven towns of Birbhum, West Bengal using Reilly's method and focused on Bolpur whose zone of influence has been specified with the help of certain indices, viz., i) students' enrolment in the town secondary schools from surroundings, ii) distribution of necessary retail goods, iii) collection and exporting zones of the rice mills of the town

and iv) the newspaper circulation zone. She came to the conclusion that the town-nucleus is intimately related to the demarcated area.

*Ravi Kiran Sharma (2005)*⁶⁵ has attempted to analyse the role of central places in the development of the Ranchi Plateau region. Adopting the popular “weightage technique”, he has recognised a five-tier growth foci system in accordance with the hierarchical order, which is classified as:-

Growth pole, Growth centres, Growth point, Service centre and Central village.

Highlighting the constraints, he has ultimately proposed micro-level planning for the regions of each order indicating major and minor development programmes in a very successful manner.

*Bansal's study(2005)*⁶⁶ focuses on the delineation of fringe areas of urban centres in upper Ganga-Yamuna Doab. The fringe villages have been delimited by using select indicators, such as, 1. Rural population density, 2.Sex Ratio per 1000 males, 3.Literacy rate, 4. Work participation rate, 5.Percentage of non-primary workers to total workers. The fringe characteristics have been compared in view of the size of the respective urban centres.

*Rajrani (2005)*⁶⁷ has conveyed the information on transformation of urban fringe of the National Capital Region of Delhi-the fastest growing metropolitan areas of India. According to the author, as a result of ‘the land acquisition and amalgamation of the village with the urban area, the urban sphere of influence has increased’ for which the urban fringe area has become ultimately a part of the urban area. This had led to ‘socio-economic transformation’ of the rural communities.

With two hypotheses, viz., that urban encroachment has resulted in adoption of secondary and tertiary occupations from primary occupation and that it has brought about economic prosperity among the inhabitants of the encroached areas, the author has observed that----

1. Urban encroachment has carved out occupational transformation of the rural population of the urban fringe;

2. The villages in the urban fringe have passed through six stages to be converted into an urban area. The stages are: - The rural stage, the rural-urban linkage, the transformation of occupation, the change of land-use, the urban village, the urban village redevelopment.
3. Urban encroachment has led to rise in standard of living;
4. The social scenario has degenerated in consequence of the fast pace of urbanization.

Rudra Prakash (2005)⁶⁸ seeks to examine the impact of urbanisation on rural non-farm employment and rural poverty in Indian economy by using household survey data of 71 NSS regions in two different time periods. The author considers urbanisation as a 'finite process' the cycle of which leads to 'transition from agrarian to industrial society'. The basic premise of this work is that the non-farm activities (manufacturing and service sectors) with their higher productivity generate more employment and income in rural areas and thus providing a substantial solution to rural poverty, play 'a catalytic role for rural development in terms of income and employment'. Analysing the importance of rural poverty and rural non-farm employment in the context of Indian economy, different parameters of urbanisation has been regressed with rural poverty and rural non-farm employment to find out the impact of urbanisation on them.

The study reveals that the impact of urbanisation is more impressive on rural non-farm employment than on rural poverty though both are significantly influenced. Thus, the author feels the necessity of healthy urbanisation for the growth of rural non-farm sectors and for the alleviation of rural poverty. He recommends acceleration of the pace of urbanisation and its integration with the process of national development.

The foregoing review of literature, mostly referring to cases in the developing countries and particularly those of India, makes it clear that most of the studies of the city-region relationship have concentrated on delimitation and zonation of the area of urban influence either by some city services available to villages or by the sensitivity of certain characteristics of the rural areas to distance from cities. A good number of works have examined the characteristics of the fringe settlements as a reflection of urban influence. Barring a few, majority of these have dealt with secondary data sources. Although most of the studies are in the same tune that development in rural

and urban areas cannot be considered in isolated manner, but through the process of urban-rural interaction, yet a concrete approach to associate the two processes of urban-rural interaction and of rural development has been lacking. Moreover, not much study involving this approach has focused on the state of West Bengal, especially on its northern part.

The poverty and prosperity of both rural and urban areas are interdependent. The problems of urban development cannot be solved within the municipal limits or without real advancement of rural areas. "Integrated approach to planning, therefore, not only recognizes rural-urban continuum but also reciprocity between urban and rural development processes".⁶⁹ (Misra, 1976, p.49)

What we need today is an integrated vision such as is encapsulated in Rabindranath Tagore's observation, "Cities have their functions of maintaining wealth and knowledge in concentrated forms of opulence, but this also, should not be for their own sake; they should be centres of irrigation; they should gather in order to distribute; they should not magnify themselves, but should enrich the entire commonwealth. They should be like lampposts, and the light they support must transcend their own limits"⁷⁰(Tagore, 1924 p.226). Tagore's warning has to be heeded today, otherwise we bring our own peril: "a civilization which comprises mainly villages cannot advance very far...when the town predominates the individual is all powerful, the community negligible. There civilization burns itself in its own fires, the more brilliant its flame, the blacker its fuel, until at last it is reduced to ashes...Greed severs the relation between the town and village."⁷¹(Tagore, quoted in Mukherjee, 1972, p.21). A balanced relationship between city and village can only be the outcome of the translation of such a vision as the one of Tagore's.

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