

## SUMMARY AND CONCLUSION

Identifying the problems of urban and rural sectors of a region, the present study has endeavoured to focus on the syndrome of urban-rural interface and its reflection on or contribution to rural development. The question of urban-rural interdependence is vital to India's developing economy where the rural areas are poverty-ridden and where there exists a wide hiatus between urban and rural areas. Though scholars have been investigating the spatial pattern of this interdependence in different parts of the World, yet the dynamism in the process of urban-rural interaction needs a reappraisal in the Indian perspective, keeping rural development in view because this may ultimately promote an integrated and comprehensive regional development.

In India, West Bengal is a state where urbanisation is characterised by a top-heavy pattern, with Kolkata at its apex and thousands of villages at its base. The colonial imprint in West Bengal's urbanscape has resulted in large concentration of population and benefits in few urban pockets amidst vast rural deprivation.

In the two districts of KochBihar and Jalpaiguri, the phenomenon of urbanisation is apparently of recent origin, and its extent is low. Basically, small and medium towns comprise the urban scenario in these districts.

In this milieu, the present study has intended to explore the fundamental issues underlying the interdependence of some towns (viz., Koch Bihar, Dinhata, Tufanganj, Jalpaiguri, Alipurduar) of KochBihar and Jalpaiguri districts and their rural surroundings; by identifying the nature and the intensity of interaction, the degree of interaction has been sought to be correlated with the levels of development of the selected villages. As a backdrop of the study, the pattern of rural development has been viewed in the light of urbanisation in the state of West Bengal with the supposition of a positive relationship between them.

Thus the study has been carried out in two parts. At the outset, a *macro-level district-wise analysis* has been carried out for the state of West Bengal associating the two

phenomena of urbanisation and rural development to obtain an overview of the study. For this purpose, two composite indices, designated in the thesis as 'Index of Effective Urbanisation' and 'Index of Rural Development', have been constructed applying the method of First Principal Component and correlation has been computed between these two indices to find out the causality between them. To identify the influence of urbanisation on rural development, simple linear regression has been worked out.

At the second stage, the present thesis probes into the *micro-level analysis of urban-rural linkage* and its *associated development* in the aforementioned districts. With this aim in view, a number of forty two villages in the different distance zones of urban centres (spread in the two districts of Jalpaiguri and Koch Bihar) have been taken into consideration. The villages have been selected on the basis of the distances from their nearest towns, which are the selected towns in the present study. The method of stratified random sampling has been followed for selecting the villages. Since urban-rural linkage is characterised by the various rural needs satisfied by the urban centres and also by the urban needs fulfilled by the rural areas, the movement of the villagers to their nearest towns for different purposes have been highlighted in the present context: the usual movement is more towards urban from rural areas than in the reverse direction. For this purpose, a household-level survey has been carried out. To conduct the household-level survey, a sample of one thousand five hundred fifty nine households from the forty-two selected villages has been interviewed on the basis of a prepared questionnaire (Appendix-V) used for this purpose. The rural households have been selected by applying the method of stratified random sampling with proportionate allocation.

In this connection, it may be pointed out for clarity that the entire exercise of finding out the correct picture is largely based on macro and micro level investigations which, apparently, include the investigations on meso-level as well (as indicated in the 'Methodology', Introduction), since the latter forms a link between the two.

The interaction, studied at household level, has been clubbed to represent the village-level interaction. As the modes of interaction are indicated by the movement of the villagers to towns, the study has considered the percentage of rural households whose

members commute to the towns for various purposes. The *nature* and the *pattern of different types of interaction* have been studied keeping in view the *availability of urban services* to the rural mass and the *benefits of urban services* derived by the rural people. The urban services availed of by the rural people, recognised here, are transport, medical, education, market, administrative services, banking and communication, the last one being represented by postal services in this context. The benefits derived by the villagers from the urban services have been reflected in three modes of interaction, viz., economic, cultural and social. The circulation of newspapers from urban areas has also been considered as one of the benefits of urban services, which has only been discussed for the hinterlands of the two district towns.

The *intensity of interaction* has been manifested by the frequency of commuting of the rural people to their nearest town. Thereafter, to have a composite picture of *levels of interaction* an 'Index of Urban-Rural Interaction' has been constructed.

To measure the influence of distance on the process of urban-rural interaction, simple regression analysis has been made at the first step. Then, again, to find out the relative influence of various factors explaining the process of urban-rural interaction, the method of step-wise multiple regression has been applied. The explanatory variables, considered here, are 1) *distance*( $X_1$ ) of the concerned villages from their nearest town, 2) *frequency of buses* ( $X_2$ ) plying between the concerned villages and their nearest town, 3) *travel time* (minutes) ( $X_3$ ) between them and 4) *transport fare* (rupees) ( $X_4$ ) between them. The variables  $X_2$ ,  $X_3$  and  $X_4$  represent *transport linkages* between the concerned villages and their nearest town.

A study of *urban influence on rural surroundings* has also been made to evaluate the interaction procedure in an indirect fashion. For this purpose, the demographic and the socio-economic characteristics of the selected rural hinterland villages have been analysed in view of the distance from the towns. This part of analysis is based on the secondary sources of data; an average of the characteristics for each distance zones of the hinterlands has been analysed.

In the final phase of the micro-level analysis, the *urban-rural interaction has been sought to explicate the process of development* of the chosen rural settlements. An attempt has been made here to understand how the process of interaction influences the course of

development of the concerned villages. In doing so, at first a comprehensive perception of development at village level has been obtained from the '*Index of Development*', constructed by aggregating the selected household-level indicators with the help of the first principal component method. Hereafter, the indices of urban-rural interaction and of rural development have been correlated and regressed. Such an understanding of the association between the two processes has been supplemented by the perception of the villagers about the processes of interaction and the processes of development, since people must be at the centre of development and people's participation in the process of development is to be significantly considered in all respects:

The major *findings* of the present study are as follows:

A) The *macro analysis* reveals that the colonially-induced urban landscape in West Bengal is spatially disparate as manifested by the select indicators, viz. percentage of urban population, urban-rural ratio, rate of urbanisation, urban settlements per 10 lakh rural population, town density, percentage of class I cities to total urban settlements, urban population density, and growth rate for urban and rural population. The *index of effective urbanisation*, based on the percentage of urban population, urban-rural ratio, rate of urbanisation, urban settlements per 10 lakh rural population and town density, substantiates the fact of spatial disparity, since only two districts near Kolkata (viz., Howrah, North Twenty four Parganas) are characterised by 'very high' to 'high' levels of effective urbanisation and two others (viz., Bardhaman and Hugli) belong to 'moderate' class, while the rest fourteen districts fall in the low to very low strata in respect of urbanisation. (ref. chapter III, section 3.5). Therefore, only the four districts of Howrah, North Twenty four Parganas, Bardhaman and Hugli form the urbanised zone of the state. The spatial pattern of urbanisation in the state of West Bengal is thus mono-nucleus centring Kolkata because the development is biased towards the primate city of Kolkata and its immediate surroundings resulting in a high concentration of population.

The district-wise design of the levels of rural development, examined through various select indicators, almost match with that of the urbanised zones. Hence, under these circumstances, the proposed hypothesis (no.1) of positive relationship between urbanisation and the levels of rural development has been accepted which leads to the

inference that the bi-modal development of urban and rural areas demands a planned and reciprocal cohesion between them.

B) In the *first phase* of the *micro-level study*, the *nature of urban-rural interaction* in terms of (a) availability of the urban services and of (b) accessing the benefits of urban services and the *intensity of interaction* has revealed the following facts.

1) Regarding the urban *transport services* to rural areas, it has been observed that though distance appears to be the primary determinant of the frequency of bus transport, yet the importance of roads on which the villages are situated happens to be the major deciding factor for the frequency of bus services. Again, the location of the villages, whether on the transport arteries or not may decide the frequency of bus services from the town to the villages. A comparative study shows that among the five towns, the closest hinterland of Tufanganj town has been served by maximum frequency of buses followed by that of Alipurduar, although in terms of average bus frequencies for the overall region, the hinterland of Alipurduar tops the list followed by that of Koch Bihar. This is in consequence of the location of that particular village of Tufanganj along the NH 31 unlike the closest village of the other hinterlands. Thus, the nature of transport arteries, on which the town and its hinterland are situated, has larger impact on rendering transport services to its hinterland than the fact of the mere status of towns.

Therefore, the *transport linkage* between the village and its server town, as measured by *bus-frequencies*, *travel time* and *transport fare*, is largely determined by the distance between them; while the frequencies of buses decrease with distance, travel time and fare increase, which is quite expected. There are of course two variants to this uniformity in regard to travel time and transport fare: a) the spatial extent of availability of bus services and b) the importance of transport arteries.

2) The interaction resulting from the *villagers' dependence on urban medical facilities* is conditioned by their dire necessities to access urban treatment (especially in emergencies) because of the absence of proper health infrastructures in their native places. The distance from the server towns and the nature of transport linkage of the village with the town, although proved to be correlated with the villager's medical commuting, have, in fact, become secondary in this respect. However, in terms of regular course of treatment, a

strong correlation has been established between distance and medical interaction for all the zones except that of Alipurduar.

3) Speaking broadly, the *educational hinterlands* of the two district towns (viz. Koch Bihar, Jalpaiguri) have incorporated the towns of lower order (considered in the present study); yet our observation suggests that the selected villages send students to their respective towns and in that sense these lower order towns have smaller educational catchments.

The proximity or remoteness of the villages from their core towns has happened to be the principal controlling factor for *educational interaction*. Among the other factors, the presence or absence of educational institution in the rural centre, the nature of transport connection with the town, the economic affordability of the family, the educational level of the family-heads, reflected as the psychological desire to educate their children in the urban areas, have been acknowledged as important ones. Our investigation also reveals that the proportion of the household-heads having attained education from their core town is inversely correlated with the distance from Koch Bihar town.

4) As the *urban centres are the areas of transaction of commodities*, villagers behave both as purchasers and as sellers of commodities in their core towns. Considering the villagers as buyers, they have been classified as (a) purchasing regular items (b) purchasing special items (c) purchasing all items and (d) not using urban places at all as their shopping malls. It has been understood that the range of 'special items' is greater than that of the 'regular' and 'all' items because of the non-availability of those items either in rural markets or in the larger market settlements ('Bandar') located as intermediate settlements of the urban and rural settlements. As such, the distance-decay of *shopping behaviour* has been significantly justified for the tributary areas of the towns of Koch Bihar and Jalpaiguri.

The presence of rural market settlements or rural centres in between the village and the core town through interaction has decided the presence or absence of rural sellers of products of their labour in the urban markets. It is in the case of the two larger towns (Koch Bihar and Jalpaiguri) that the presence of such settlements has lessened the number of rural sellers in contrast to that from the smaller order towns (viz., Dinhat, Tufanganj and Alipurduar). Obviously, the adjacent villagers do not follow this tendency. However,

the settlement hierarchy is thus the chief determinant of dependence on urban markets and thereby it determines the mode of interaction of the rural sellers.

5) The *administrative requirement* of the villagers does not depend upon distance, as people even from remote habitats are drawn to the towns by their need for administrative services.

6) The vicinity and the remoteness of the villages along with the presence of banks and post offices in those villages have governed the *villagers' dependence* on the *town banks and the post offices* and their commuting for such purposes. The statistical relationship, in this context, suggests that the urban fields of Koch Bihar district as a whole have shown confirmed inverse relationship between distance from the urban centres and the dependence on the town banks and post offices. The significant negative correlation between distance and the rural households availing of urban banking facilities has been verified only for the urban field of Koch Bihar town among the five hinterlands.

Thus, access to urban services, in general, maintains a negative relationship with distance, i.e., the proportion of rural households availing of urban services decrease with increasing distance from the nearest towns, except in the case of administrative services, which are found to be almost unresponsive to distances, as explained above. In this regard it may be said that the hypotheses (nos. 2a and 3 as referred to in the 'Introduction') of inverse relationship between distance and the proportion of rural households availing of urban services and also between distance and the number of urban services availed of by the rural households have been established for majority of the cases studied here.

7) The character of *economic relation* has been studied from the viewpoint of *sustenance linkage, occupational disposition and economic condition*. It reveals that distance is the major guiding factor for drawing rural workforce to the towns, i.e. the *sustenance linkage*, while it has got a shrinkage effect on the occupational diversities and an inflating effect on the income disparities. The other factors are the importance of the server towns, the self-sufficiency of the participating villages along with the nature of transport linkage between the place of origin and the place of destination. Comparing all the five hinterlands, it has been observed that the distance-decay effect on the number of rural workers commuting to their core towns is more prominent in the hinterland of

Jalpaiguri which also can provide more earnings to the people of its hinterlands than to the others.

8) One of the significant components of the urban-rural interaction is the *cultural interaction* manifest in the recreational commuting of the villagers. Basically, the distance from the source village to the urban destination and the incidence of cultural activities in that village, on the one hand, and the affordability of the villagers, on the other, are the preconditions of such a spatial interaction. In this context, the villages around Koch Bihar, Tufanganj and Jalpaiguri have responded significantly to the correlation between distance and the spatial movement for recreational purpose.

9) *Social contacts* in the present exercise are represented by the meeting of urban relatives and their attending political meetings in towns. In the first case, distance is the main determinant. In the second case, distance does not create any barrier even for the remote villagers since they prefer such costless and cash-obtaining movement.

10) As regards the *circulation of newspapers* to the urban hinterlands of Jalpaiguri and Koch Bihar, it has been observed that the area of newspaper circulation is limited within the concerned blocks for Koch Bihar although it does not cover the distant hinterland selected in the present study. Actually, a part of the distant hinterland (a village named Chhat Singimari) is served by an intermediate settlement (Pundibari) for this purpose. Contrarily, the newspaper circulation zone of Jalpaiguri town serves the entire area of Jalpaiguri block along with some parts of Rajganj, the adjacent block, since unlike Koch Bihar's zone no 'urban centre' or 'bandar' in between can meet the want of newspapers of the villagers falling in the demarcated zone.

Analysing the modes of interaction in the light of benefits derived from urban services, the postulation of negative relationship of the proportion of rural households having different types of interaction with the distance of their villages from the nearest town (hypothesis no. 3, as stated in the 'Introduction') has been established for economic interaction, cultural interaction; for social interaction, the hypothesis is true partly.

11) The *intensity of interaction* manifested by the frequency of commuting is primarily governed by distance which affects the very motivation of the villagers to satisfy their necessities from the core towns. Therefore, the nearby villagers are in general more frequent in moving to towns than the distant villagers: however, the less frequency factor

of these distant villagers is offset by good communication linkage and the urgencies of commuting to towns. Thus, the hypothesis (no.4, as discussed in the 'Introduction') of the inverse relationship between distance and the intensity of interaction has been substantiated for all the regions except for the hinterlands of Dinahata and Alipurduar, where the factor of transport linkage is more important.

12) In the *second phase* of the *micro-level analysis*, an examination of the *levels of interaction* between urban and rural areas, reflected in the *index of urban-rural interaction*, has been found to be principally distance-regulated in our study. Except for the hinterland of Alipurduar, the inverse relationship between distance and levels of interaction (hypothesis no.5, as mentioned in the 'Introduction') has been significantly validated. Among the five hinterlands, the effect of distance has appeared to be the most pronounced in shaping the interaction level in the hinterland of Jalpaiguri town. An inter-district comparison brings out that the impact of distance on interaction is greater in the urban-fields of Jalpaiguri district than that in the Koch Bihar district.

While investigating the relative influence of the determinants of the process of urban-rural interaction by the method of step-wise multiple regression, travel time has emerged as the dominating factor explaining the process of interaction for the region as a whole. The issue of distance from the nearest town comes next in order. However, the inter-district comparison has identified travel time as the single determinant of urban-rural interaction process in Koch Bihar district and distance as the principal deciding factor of the same in Jalpaiguri district. Again, an inter-hinterland comparison regarding this has revealed that distance is the major determining factor of this process in the surroundings of Jalpaiguri, Alipurduar and Tufanganj, travel time and transport fare are the two influencing factors of interaction for the hinterland region of Koch Bihar and transport fare is the single determinant of interaction in Dinahata's hinterland.

The hypotheses (6b and 6c, stated in the 'Introduction') made in this connection have been validated mostly. The hypothesis (no. 6), i.e., the distant villages having better communication with towns may be interacting more with their core towns than the lesser distant villages with poor communication, has been proved in the study. Of course, among the three components of transport linkage, the factor of frequency of buses has been

eliminated by the process of step-wise multiple regression and hence the hypothesis of positive relationship between frequencies of bus services and the levels of interaction has not been substantiated.

Thus any significant changes in the pattern of urban-rural interaction have been induced by proper transport linkage represented by direct metalled road connection and good frequencies of buses involving less travel time and less transport fare, the need for urban dependence, outlook of the villagers to interact with their core towns, the intrinsic character of rural habitat, and the importance of the concerned urban centres etc. A combination of all these characteristics in the positive sense can lead to a symbiotic urban-rural interaction.

13) In the *third phase* of the *micro-level analysis*, the gradient of urban influence on select eco-socio-demographic characteristics of the rural hinterlands has been measured with a comparative approach. Of the five regions, a distinct gradient of demographic and economic features has been noted for the hinterlands of Koch Bihar and Jalpaiguri--the observation that leads to an indirect deduction that the spread effect of urbanism happens to be greater in these two cases than in the cases of the other three subdivisional towns. Between the two, it appears that Koch Bihar has greater influence on its rural surroundings than Jalpaiguri from this viewpoint.

14) In the *final phase* of the *micro-level analysis*, the estimate of the levels of development of the villages has been made with the help of some characteristics such as income, educational level, awareness, non-farm employment, quality of life and economic prosperity. A comprehensive view of development indicates a marked inequality in the regions of Koch Bihar and Jalpaiguri while the disparities are comparatively less in the urban fields of the three subdivisional towns. The village development has been found to be largely affected by the distance from the towns of Jalpaiguri, Koch Bihar and Tufanganj, while for the others, development is independent of the factor of distance.

In conformity with the basic intention of the study, the final result reveals a high positive correlation between the index of urban-rural interaction and the levels of development for the urban fields of Jalpaiguri, Koch Bihar and Tufanganj. On the contrary, the hinterlands of Alipurduar and Dinhata do not show any significant relationship between these two processes on account of which the association between them has become insignificant in the district of Jalpaiguri, considered as a whole. Thus, the said relationship (hypothesis no. 8, spelt out in the 'Introduction') has been validated for the district of Koch Bihar. However, for the entire region under study, this relationship has become statistically significant.

Thus it appears that the extent of influence of urban-rural interaction process on rural development is maximum in case of Jalpaiguri's hinterland, which accords with the hypothesis that the process of interaction with the higher order town would have higher impact on the development of its hinterland (hypothesis no. 9 made in the 'Introduction'). Here, it needs to be mentioned that although in terms of population size Jalpaiguri comes next to the town of Alipurduar U.A., (ref. Table 2. , Chapter II), yet the importance of the district town of Jalpaiguri is more than the subdivisional town of Alipurduar. On the other hand, the impact of the urban-rural interaction on the village development in case of Koch Bihar town, being lesser than that of Tufanganj, discards the hypothesis (no. 9 made in the 'Introduction') as Tufanganj is the smallest town in our study.

It seems that these findings have come up to light for the first time, since, as far as our information goes, no investigation of this nature for the region under study was made earlier.

From our observation it may be inferred that the spatial integration between interaction and development does not always correspond to the size and the status of the urban centre. It is the efficiency of the town to integrate its rural hinterland that is more important for the development of its peripheries.

Thus, from all counts it has been understood that the location of the village, in terms of its distance from the server town (close and distant), has been established as the major controlling factor for the process of urban-rural interaction and its association with the development of villages. But it should also be underlined that the negative effect of

distance can be neutralised by an efficient transport linkage between the village and its feeder town, i.e., the far-off villages with good transport linkage has got a better interaction than the nearer village with worse transport linkage with its server town. The hypothesis (no.6), i.e., the distant villages having better communication with towns may be interacting more with their core towns than the lesser distant villages with poor communication has been proved in the study. It is in this sense that the physical distance is not the sole determinant of the interaction process. Hence, effective communication should be set up for a healthy interaction and this consideration has led us to understand the determinants of communication in the present context.

It has emerged from our study that an intense urban-rural interaction leads to better economic conditions, educational development, better consciousness of the rural people about life, society, culture, i.e., a better eco-socio-cultural advancement altogether. Again, it is also a fact that poverty hinders interaction and poor interaction in turn leads to poor economic condition. Thus, it is a two-way process and acts as a vicious circle. Although, the poor socio-economic condition of the villages hinders its inhabitants to interact with their nearest core towns in a proper way, they may be dependent on the town to a great extent and thus dependence does not always mean healthy interaction with the concerned town.

Therefore, a crucial question is whether the process of urban-rural interaction directs the development process of villages or it is the other way round, i.e. the development in rural areas enhances the degree of their interaction with urban cores. Taking cue from the well-known theories proposed and the work done in this field, we have considered the process of interaction as the explanatory factor determining the course of development in rural areas. But this consideration seems to be modified to some extent when, in tune with the wants of the village people, it may be construed that the establishment of certain infrastructures in the rural centres may generate symbiotic interaction with the towns. Thus, it seems that for generating certain levels of interaction with urban centres, the villages along with their favourable location--in terms of their proximity and metalled road connection with towns-- need to have certain basic levels of infrastructural facilities; and these together ease the path of their relationship with their core towns. For example, electrification in a village without electricity can benefit the

irrigation system which may raise agricultural production and this in its turn increases the commuting of the rural sellers of agricultural products to urban centres and thereby yields increasing financial return to the rural sellers. Further, electrification may help the scope of education of the rural people which in turn may augment the educational interaction reflected by the movement of the rural population to the nearest town for higher education. Hence, interaction--being facilitated by the presence of basic infrastructure--may ultimately lead to the development of the villages.

But, the above inference does not give us the warrant to say that people of the villages with poor levels of basic infrastructures do not interact with their core towns. This category of villagers has relationship with their server towns along with certain constraints and in such cases the relationship takes in the nature of greater dependence of rural on urban centres than of their interdependence. That is to say, there lies a difference between one-way dependence and mutual interaction. Dependence is a form of relationship where mostly the village deriving benefits from urban services does not offer much in return, which would give it a character of reciprocity. As such when there is mere dependence, it may not lead to a betterment of living conditions of the villagers.

However, the two processes of urban-rural interaction and rural development are mutual phenomena, as interaction influences development and development in the rural areas promotes the levels of interaction. One may not, however, be sure about which one of these two processes is actually derivative in their action. But, one is sure that the process of interaction between urban and rural areas initiates development in the very beginning. Once growth and development start, they assist the process of interaction. For this reason, strategies should be such that these two processes continue simultaneously without any hindrance whatsoever.

From the foregoing observations, it appears that the following measures may further the cause of simultaneous progress of the two processes.

First, there should be some forces which can obliterate the distance-related obstacles. Our study reveals that an efficient transport linkage is the first and the foremost factor facilitating the progression of interaction. Travel time seems to be the most significant for transport linkage.

We have already observed that the problem of communication has been identified by the villagers as the major hindrance for interaction. Here communication includes road transport as well as telephone communication. It is interesting to note that the villages, linked with their nearest town by direct metalled road, also have a demand for the proper renovation and maintenance of the roads connecting them with the town and also for the increase of frequencies of buses so that their mobility to towns and thereby the interaction will not be disrupted. Again, many of the villages either having the connection of NH 31 with their nearest town, or having poor road connection, or in close contact with the town, desire to have telephone connection so that their contacts with urban people can increase. Thus communication in various forms has to be developed for improvement and furtherance of the interaction process.

For the villages with poor or no communication, have no other alternatives but to wait for the time when at least an all-weather road will be constructed connecting them with the core town. The people of such unfortunate habitats believe that the road communication will initiate the interaction-led development of their areas.

Second, the spatial linkage between the concerned rural settlement and the concerned urban settlement should, desirably, be such that the existing intermediate settlements in between them may be integrated with them. That is to say, the settlement hierarchy should be properly organised. This may be done primarily by linking the marketing network between the different tiers of settlements.

The planning of infrastructures and services may be envisaged according to the size of population of each of the rural settlements: in this regard, the location of different services should take into account the physical as well as socio-economic factors of the respective village. All this requires resource mapping at the smallest level, i.e, even for the smallest rural settlement. Thus, a Geographer may think that a proper resource mapping may indicate the mobilisation of indigenous resources which may ultimately direct the plan of action for encouraging new activities.

Third, the proximity of urban centres is a significant matter of concern, since it implies nearness to the benefits or advantages of life as a whole, which are centralised in

urban centres. If such facilities and conveniences for living can be made available in some other places beyond the existing urban centres, the question of urban-proximity might be less significant for those requiring such services. The concept of decentralisation follows from this. The decentralisation of services may certainly reduce the dependence of the rural people on the specific core town (nearest in the present context) and so the proportions of rural commuters will decline which, in turn, may lessen the burden on the nearest urban centres. But that does not mean that the interaction between the two settlements, that is the village and the core town, will lessen. In such case, undoubtedly, the form or character of interaction will change, but the degree of interaction will remain unaffected. Besides, it may be envisaged that the degree of interaction may increase in such a way that the movement of excess number of rural commuters will be replaced by that of urban commuters to rural areas.

In support of our suggestion, we can exemplify the case of the village Bhanukumari located in the hinterland of Tufanganj, situated at a distance of 12km from Tufanganj. A college has been set-up in Bhanukumari, which draws students not only from its rural hinterland but also from the town itself. Again, in the kindergarten school of Takagach, located in the closest periphery (4 km) of Koch Bihar town, children even from Koch Bihar town commute regularly. The two examples cited above demonstrate the reverse trend, an ideal, in the usual interaction procedure.

Fourth, the inequality in development and interaction especially in the hinterlands of Koch Bihar and Jalpaiguri may be minimised by adopting some of the steps as follows:

- a) by improvement of transport linkage, i.e., by setting up of proper metalled road connection and by increasing the frequencies of buses connecting them and the town concerned;
- b) by developing agriculture with the help of irrigation and other modern methods;
- c) by improving the existing household industry and by setting up of those suitable to the local environment; e.g. the traditional weaving industry in Chakchaka (Koch Bihar's hinterland), the bidi industry in some of the villages around Dinhatra should be upgraded;
- d) by setting up certain basic levels of need-based infrastructures;
- e) by decentralising a number of urban activities even to the remote villages having a good transport connection with the core town.

Fifth, the present study has considered the nearest town of the villages as their core towns with the obvious expectation that a village would be more integrated with its nearest town than with other towns at greater distance. In other words, the role of the nearest town would be more important for the development of a village falling within its jurisdiction than the other towns.

However, in our investigation we have identified a few villages which are likely to be more interactive with towns other than the nearest one in the district. For instance, the villagers of Sakati (earlier a 'chhit' or enclave of Haldibari P.S. of Koch Bihar district) in the hinterland of Jalpaiguri are economically, socially and psychologically more oriented to Haldibari town of Koch Bihar district than the district town of Jalpaiguri because of its lesser distance from Haldibari town. But as Jalpaiguri is their administrative headquarters, they are compelled to commute to Jalpaiguri for certain administrative services, while Haldibari caters to their other needs. This contradiction has led these villagers to think that either Haldibari should be incorporated into Jalpaiguri district, or their village should be transferred back to the district of Koch Bihar. Again, in Koch Bihar's hinterland, the people of Chatra Chekapdara and Daharerpar (fig. 2.5) are more linked with Dinhatra than with Koch Bihar because of the fact that these two villages have got better road connection with Dinhatra than with Koch Bihar.

Thus the concept of the recorded nearest town in a district has to be contemplated on fresh lines for few cases. It seems that a geographer would be of the opinion that in respect of the designation of the nearest town, the administrative boundary of the district should not be considered; whichever town is the nearest to the village in question, in terms of geographical distance, either within or outside the district, has to be considered. Moreover, the nearest town has to be well connected with the villages falling in its jurisdiction so that the implication of recording it as the 'nearest town' in the Village and Town Directory, District Census Handbook (published by the Census authorities), providing 'amenities' to the villages concerned, would be meaningful in the true sense.

Sixth, in the hinterland of Koch Bihar, the villages of Takagach (fig.6.8), Chakchaka (fig.6.8), Banerwar (fig.6.8), Ghughumari (fig.6.8) and Talliguri (fig.6.8), being placed at moderate to high and very high levels in terms of interaction with Koch Bihar town and in the levels of development, may be upgraded with more services and

facilities to serve the relatively poorer villages in their vicinity. For instance, the people of Nageswarguri (fig.6.8) might be more tied up with Baneswar than with Koch Bihar for transaction of their products of labour. Again, Kaljani (fig.6.8) should be linked more with Chakchaka (fig.6.8) than with the town concerned, at least for marketing of products. Further, the pauperised remote villages of Barapak (fig. 6.8), Daharerpar (fig.6.8), and Dhumpur Balasi (fig.6.8) certainly require an intermediate settlement equipped with markets and other basic services. The village Ghughumari might be an intermediate habitat for those villages for interaction. Of course, Dewanhat, a big village with service facilities located near Barapak Daharerpar, and Dhumpur Balasi serve their purposes to some extent. Similarly, the village Talliguri (10 km from Koch Bihar) has the potentialities to be an intermediate service settlement because of its favourable location on NH 31. This village, in addition to serving its rural neighbours in Koch Bihar Block no. I, might also be tied up with the villages in the Tufanganj Block no. I, since this particular village is situated on the border of the two Blocks.

In Dinhata's hinterland, Bhangni Dwitiya Khando (fig.6.10), the closest settlement, Gokunda and Gosanimari, 8 km and 15 km (fig.6.10) from the town may be selected as the intermediate service settlements. For example, the people of Raja Khora prefer going to Gosanimari hat (market) for selling off their products to commuting to the town because of advantages of communication.

Likewise, in Tufanganj's hinterland, Chamta (fig.6.12), the closest neighbour and Bhanukumari (fig.6.12) at 12km from Tufanganj, might attain the ability to serve the less equipped rural neighbours.

Kharia, (fig.6.14) the next-door neighbour of the town of Jalpaiguri, Paharpur (fig.6.14)-9km from Jalpaiguri on the State highway 12, may be expected to serve their rural neighbours in terms of marketing of products.

In the region of Alipurduar, Birpara, the closest one and Dakshin Sonapur at 15 km (fig.6.16), have got the potentialities to serve their rural neighbours.

The foregoing suggestions about the identification of the rural settlements emerge out of the interviews with the villagers. Of course, there are some differences in between these identified settlements in terms of their potentialities to serve. This is because one village is different from the other in respect of the presence of amenities. For example, it

may be envisaged that some parts of the villages of Kharia, Birpara, and Bhangni Dwitiya Khando seem to be getting merged with the towns of Jalpaiguri, Alipurduar and Dinhat respectively in the coming future, as a variety of urban services have grown up in these adjoining villages, though envisaging this does not amount to making any prediction; for, the decision depends entirely on the administrative policies. However, in view of their present status these settlements may be termed as 'rurban centres'. Baneswar in Koch Bihar's hinterland (fig.6.8) also falls in this category.

Nevertheless, coming back to our discussion of service centres in rural areas, it is true that there are some intermediate market settlements or rural hat (market) settlements which people refer to as 'bandar'. Although, these settlements are not included in our study, reference to a few of those has been made in the chapters IV and V which are predominantly market centres.

In identifying the above settlements as the possible ones approaching to urbanhood, they may be recommended for upgrading as service centres which may render services to the other less equipped rural areas in all aspects of life. That is to say, a proper policy needs to be adopted in this regard on behalf of the administrative authorities to furnish them with required infrastructures for serving their own population as well as the population of other villages. As a consequence of that, the idea of a well-coordinated settlement hierarchy may emerge in future. The levels of infrastructure of these settlements should be such that it might even attract the urban population in a reverse direction. The villages belonging to the lower rung of these service settlements would require metalled road connection with these intermediate settlements in addition to their connection with the core town.

Thus it may be concluded that though urban-rural interaction has been presumed as an explanatory variable of rural development in conformity with the very intention of the present research, yet the investigation, made in this connection, clearly reveals that interaction should, preferably, take place in a modified form to become explicative for the development of rural areas in an ideal nature. To be more specific, the modified version of the interaction process entails the presence of certain minimum life-supporting infrastructure and services in the concerned rural areas that can promote the socio-

economic and psychological independence of the villagers and thereby the scenario of dependent interaction may be transformed into an interdependent interaction procedure. To express it more clearly, this can be done only when the movement of the villagers to towns for different purposes will be supplemented by the urbanites' commuting to rural areas to avail of specific rural services and also for rendering an advisory feedback to the rural people; the second one may take place if medical personnel, teachers, agricultural experts, technocrats, environmentalists etc. from urban centres come to the villages at a regular interval for providing various feedback to the rural people. The location and promotion of small-scale and household industries may be suggested by the technocrats and environmentalists in the villages which have got resource potentials for such purposes. Such activities might replace the sheer urban-rural dichotomy by a symbiotic urban-rural continuum and it is only then that the gamut of urban-rural interaction process will act as an engine of growth for rural development. Consequently, the role of an urban centre, in assisting in the development of its rural neighbours, becomes an essential part of this integral process.

---