

Rural-urban Linkages, Models and Approaches: An overview

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Abstract-Development of a region presents in an entity of rural and urban interactions particularly in developing countries where the population for daily food items and energy depends on the rural spaces. However, the flows of manufactured edible items, industrial materials for agriculture, physical infrastructure, health, finance and administration are from urban to rural spheres. This overview on rural-urban linkages presents how the different models and approaches have been accepted for integrated development of a region. The planning and development agendas in Asian and African and Latin American countries may get benefit through the consideration the applications of these models and approaches for the rural urban linkages and regional development.

Key words: Rural-linkages, region, integrated development, models and approaches. Introduction

I. INTRODUCTION

Rural and urban linkages are continuous interactions to fulfill to basic needs and development in different civilizations at local, regional, and worldwide since millennia [1]. Rural and urban areas are considered the binary parts of the development which make compliments for each other in many ways; services, supply and consumption of commodities and administration. The rural and urban linkages include sectors related management of natural resources, agriculture, decentralization industries, market flows, socio-economic interdependence, employment opportunities, infrastructure, health dimensions, and so on. They also advocate about migration of people temporarily or permanently for urban-based services. Besides, these linkages appear through the information on market mechanisms—from price fluctuations to consumer preferences, employment opportunities, and administration. They include financial flows, remittances from migrants and native places [2]. Rural based commodities form producers transact to urban market and procedures by forwarding to regional, national, and international markets, in the opposite direction flows of manufactured, imported goods from urban centres to rural settlements. The rural-urban linkages are considered in a form of interaction regarding flows of people, services, information, market mechanism, the spatial distribution of economic activities and investment. Consequently, they also have a huge impact on the nature of both rural and urban development [3].

In the past, the paradigms of regional development to achieve economic development have changed over time. In the 1950s and 1960s, the governments of most developing

countries were emphasizing industrial development in urban areas. In the 1970s, the development approach shifted to integrated rural development, which involved infrastructure and social services to achieve food self-sufficiency in addition to the increase in agricultural production. In the 1980s, it was recognized that the expected economic development from such development approaches had failed to realize their objectives mainly because they had resorted either to sectoral (agriculture or manufacturing) or spatial (rural or urban areas) approaches. As a result, a new approach to development called rural-urban linkages began to emerge in the early 1980s [4]. This approach emphasizes the mutual development of both rural and urban areas by assuming that the two are interdependent localities characterized by the flow of resources as well as other linkages [5].

II. VON THUNEN'S REGIONAL LAND USE MODEL

The rural urban linkages were appeared firstly in documented form by a model developed by Von Thunen (1783-1850). He described how to urban market processes determined rural land use at different geographical locations [6]. He was a German farmer. Inspired by Adam Smith he developed his model with the interest of the laws to govern rural land use by transport costs to urban markets and the land rent that reflects rural urban linkages. He explained logically that the different types of rural farming might be connected to urban demand during that time was in the practice as following ways [7].

- Dairy and Intensive farming (produce & perishables)
- Ranching (raising animals for slaughter)
- Timber (high demand for wood to heat/cook was at pre-industrialization)
- Field Crops (grains and other non-grain field crops)

He conceptualized the model of concentric rings of agricultural activities around a central city, with dairy and intensive farming such truck farming (vegetables), followed by timber and firewood, grain production, and finally, ranching and livestock activities (Fig 1). Urban demand was considered a key driver of spatial allocation of economic linkages of marginal returns to assets and labour. He described that the goods were produced in rural areas by the farmers had to be transported to the central city to be sold. The intensity of demand of rural products was based on the transport costs and locational rent of the agricultural farm. The costs acquired with the transporting the product, which Von Thunen called

Luftlinie, T. The costs of possessing land, which Von Thunen called Locational Rent, L. Land closer to the city was more expensive, but transportation costs, were lower. Land further away from the city was cheaper, but transportation costs were higher [7].

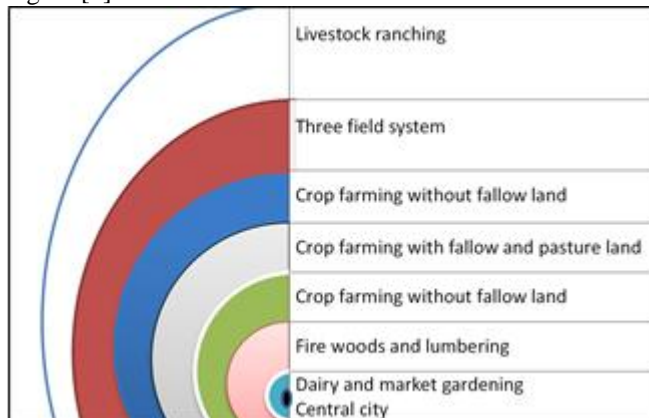


Fig 1. Regional land use Model of Von Thunen

On the basis of the model the urban-rural linkages reflect the nearby rural areas has a strong market relation with intensive use of agriculture, however, according to distance the intensity of rural land use in concentric the form of market gardening and milk production, firewood and lumber production, crop farming without fallow, crop farming, fallow and pasture, three-field system and livestock farming.

II. DESAKOTA MODEL

The social and economic disparities between urban and rural spaces particularly in developing world are considered to be tended to limit the discussion to more traditional [8]. Regarding Asian context, Ginsburg and McGee presented their views against the conventional method to accept the distinction between rural and urban. They made distinctive agricultural and non-agricultural sectors those were emerging between urban areas and their peripheries having direct relation to existed conditions, time-space collapse, economic change, technology, and regarding labour force [9].

Ginsburg's stressed to describe a complex and compound regional system consisting of central cities, fringe areas of those cities, exurbs, satellite towns, and extensive intervening areas of dense population and intensive traditional agricultural land uses in which wet paddy tends to dominate [10].

McGee developed a territorial model namely desakota, which showed formation of territorial patterns: desakotasi of Indonesia, whereas the words Desa(village) and Kota (town). Regarding this he made description of the intense mixture of agricultural and non-agricultural activities of the region. Following Firman and Douglassin McGee's model, five main regions were identified:

- The main cities (regarding Asia an extremely big city);
- The peri-urban: the areas surrounding the cities within a daily commuting range from the centre characterized as high interaction zone.

- The desakotaregions: the areas lying along the corridors connecting a large city core to smaller town centres [11];
- Densely populated rural regions;
- Sparsely populated frontier regions.

The desakotaparadigm has been considered an empirically tested paradigm in several case studies. Firman made its application to the Bandung extended metropolitan region in Indonesia, while confirming the failure of the counter magnet strategy (issuing from the growthpole theory) [12]. Wang made an analysis in Shenyang-Dalian region regarding application of desakotamodel to the rural-urban convergence resulting from socio-economic and labour changes in the peri-urban area [11]. He suggests that the territorial restructuring of the area make that villages of the region are simultaneously rural and urban, thus, calling for a new definition of the rural-urban relationship.

III. THE NETWORKED MODEL

Douglass made analysis in favour of a new paradigm for rural regional development that integrates the realities and the potential of rural-urban linkages in the process of regional development. He emphasized to develop the network concept based on a clustering of many settlements, each with its own specialization and localized hinterland relationships rather than trying to make a single large city into an omnibus centre for a vast region. He developed the model in contrary to growth pole model. A major difference between the growth pole paradigm and the networked model is thestyle of planning encourages. The model presented the counter part of the growth pole model that lead to necessity of the urban node for all-important spatial actors anddemarcating its hinterland which is not fundamental but is rather an ineffective and unreasonable task [13].

Moreover, he considered that regional boundaries are remaining misty. Generally, development policies are built around incentives to attract industrial investment. There were public provision of economic infrastructure for urban industry and upgrading communication links, especially roads those facilitate to local production with the capital city and terminal markets. The multi-sectoralnature of the networked model reflects the requirements link local capacity for the coordination of a large number of interrelated and complementary activities. To achieve the necessary connectivity of the network, the model recognizes the need of upgrade infrastructure both at rural and urban level, but it also gives strong emphasis to local roads among major centres, villages and towns within the region. Upgrading local infrastructure services available to households is a key factor, the quality of regional daily life being considered a key for economic growth. Even from the point of view of the growth centres (balanced regional development) an integrated network ofdynamic centresis more likely to counterbalance a big city than some artificially boosted growth centre [13].

III. AGRO-POLITAN APPROACH

REFERENCES

Both the networked model of regional development concern with the involvement of civil society in planning decisions that Douglass and Friedmann presented in their last book evolved from an earlier concept to develop any region political and administrative [14]. Friedmann and Douglass suggested the agro-politan approach that the rural development could be best pursued by linking to urban development at the local level and regional level [15]. The town was seen as the principal site for non-agricultural and political-administrative functions rather than as a growth pole into planning processes at the local level, and the district scale was seen as the appropriate unit for development. Thus, the decentralisation, democratization and participation were key factors for the processes of regional development [13]. Starting such processes of development require at least three factors;

- Access to agricultural land and water;
- The devolution of the political authority to local level (decentralization)
- A shift in national development policies in favour of a diversified agricultural production.

Regional development needs of a new paradigm constitution that integrates the realities and the potential of rural-urban linkages in a process of policy formulation regarding ecological and social constraints. Although it was partially applied, the agro-politan approach which has contributed to the advancement of decentralisation and participation on the Asian planning agenda [13]. It shares with the bottom-up strategy a similar ideological approach to the planning for rural development that decentralises, the participatory, and deeply immersed local settings [15].

Conclusion

It has been considered to get maximum utility and benefits through virtuous circle model of rural-urban development. It leads to an efficient interaction of rural-urban linkages and flows, allowed by the proximity of urban markets to bring the rural production to domestic and international markets. The facts for Agro-Politan approach recognized and described are; a). Rural households earn higher incomes from the production of agricultural goods for non-local markets, and increase their demand for consumer goods; b). This leads to the creation of employment in non-farm and job diversification, especially in small towns close to agricultural production area; C). It absorbs surplus rural labour, raises demands for agricultural products and boosts agriculture, rural economic growth and development [16].

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