



Establishing Urban-Rural Linkage Elements for Growth and Poverty Reduction in India

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This paper redefines urban-rural linkages and establishes its elements organized into a framework to enable better understanding of the urban-rural interactions and the social, economic and political characteristics that determine it. The paper emphasizes on the growing relevance of governance (formal as well as non-governmental) as an implementing medium, which has been overlooked in the earlier definitions. Through the case of India, the paper also aims to find linkages between the poverty reduction, employment and regional growth with urban-rural linkage framework as the background. It also suggests the implementation strategies targeted towards poverty eradication and regional growth.

Keywords: Urban-rural linkages, Governance, Poverty reduction, Regional growth, India.

1. Introduction

Urban areas have been the cradle of civilization for thousands of years. Since long, there has been mutually dependent relationship between urban and rural areas. Recently, the rapid urbanization is creating huge pressure on urban systems and also changing the dynamics of this relationship between urban and rural areas. With the rural and urban population in balance and the enormous increase of urban population in developing countries, there is an immediate need to understand the interactions between urban, its peripheral area and the adjoining rural area, and more importantly, apply the inferences to achieve poverty reduction in the developing countries where majority of population is devoid of basic facilities and rightful earning opportunities. The countries which would experience the largest urban population increase in the next forty years (2010 to 2050) are India (497 million), China (341 million), Nigeria (200 million), the United States of America (103 million) and Indonesia (92 million).¹ The bulk of

this population change will be in Asia which will see a prominent growth in urban population and considerable decline in rural population (see Fig. 1).

Moreover, the developing world is facing the challenge of distributing the benefits of their economic growth to all segments of the society – urban and rural, men and women, and rich and poor. Despite their efforts such countries are not able to achieve equity e.g. In India, urban growth seems to be pro-rich, and the disparities between rural and urban incomes have widened.² The expansion of urban areas is bound to affect the peripheral and rural areas.³ The relationships between the urban and rural area are undergoing transmutation,⁴ and influencing not only those living in cities but also those who are directly or indirectly reliant on urban prosperity. This makes it all the more important for “urban authorities” to consider these phenomena. The research needs to go beyond pro-urban versus pro-poor approaches in development strategies. The urban investment; aimed at urbanization intensification, and rural investment; aimed at poverty reduction, need to be arrayed for overall growth of the region.

There has been innumerable literature on urban rural linkages especially in the last decade and there have also been overlaps and omissions in the way such linkages are defined. With the growth of such literature it has become challenging to understand the concept of urban-rural linkages. This paper redefines and establishes the elements into a simple framework to enable better understanding

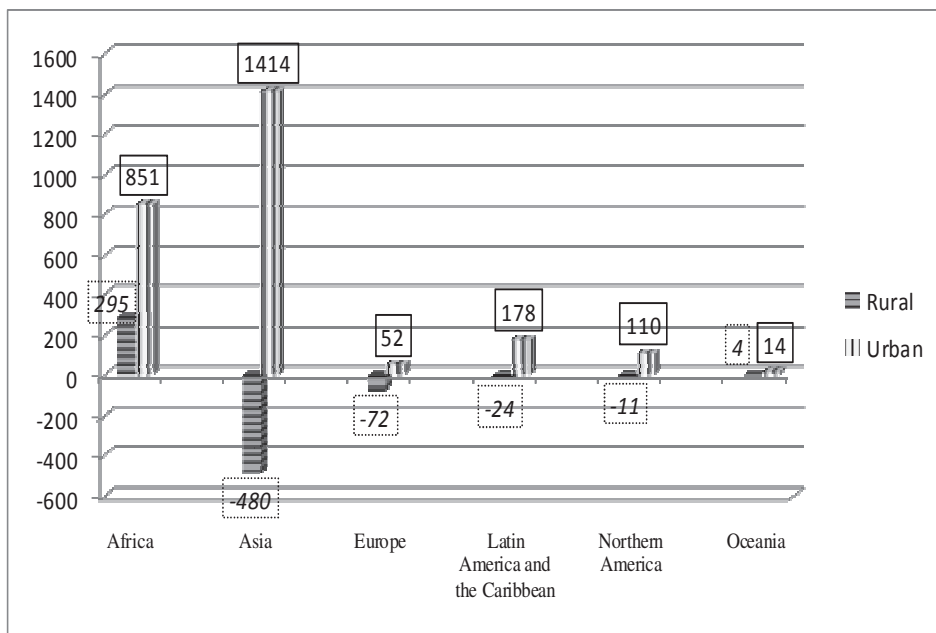


Figure 1 Projected changes in urban and rural population by major area between 2011 and 2050.¹

of the urban-rural interactions in India. The paper tries to include most of the relevant elements in the present context, identifying the relevance of governance element which has not been considered in the earlier classification of linkage elements. In a developing country the governance factor plays an important role in determining the other linkages. Additionally, the paper argues that the poverty reduction measures can be applied through the same framework for employment generation, and thereby achieving regional growth.

The paper is divided into seven sections. The first section has been an introduction to this paper. The next section revisits the work done on the subject from 1970s to the present date, and builds on the research. The third section defines the terms used for the analysis, relying mostly on the government's definition for the sake of synchronous outline with earlier research. The ensuing fourth section reasons out why it is necessary to concentrate the resources on urban-rural linkages and the related behavior, focusing on the rural-urban divide existing in the developing countries. The next section establishes the framework of the linkage elements. This framework not only focuses on the identification of interactions and flows between urban and rural locations, but also tries to identify the social, political and economic conditions that create these interactions, which enables the understanding of the overall process of structural change in the settlement systems. The sixth section deals with the interrelationship between growth, poverty and employment and the implementation strategies. The seventh section concludes with the concerns associated with the application and the road ahead for the framework.

2. Evolution of Concept of Urban-Rural Linkages

The interactions between the urban and the rural area have been referred to in various texts with different nomenclature such as Urban-rural interactions, urban-rural linkages, urban rural continuum and sometimes as urban-rural interface. Interestingly, the order of 'urban-rural' is also seen to be reversed as per the focused geographical area in the study, as in Gashu,⁵ where the term rural-urban linkage is used in the same context, and the focus of the study is agriculture domain and food security.

From J. H. von Thunen's concept (1826); land use is a function of transport costs to market and the farmer's land rent, to Walter Christaller's concept (1933) of 'central place theory'; explaining the formation of urban settlements and their relative location, there have been various concepts explaining the relationship between two settlement systems; urban-urban and urban-rural. Losch's concept (1954) predicted that human settlements exist in a hierarchy around hexagonal shapes with settlements dealing in goods and services of higher order being larger in size compared to those dealing with goods and services of lower order. These concepts were based on idealistic assumptions such as, homogenous geo-

graphic areas with uniform consumer preferences and transportation costs being proportional to linear distances. Nevertheless, they provided clarity to the urban-rural linear differentiation based on their inherent characteristics. Therefore it may be true that there is a transition from very rural to rural to small towns to peri-urban to urban characteristics, but owing to complexities of different factors of market, economics, land, and primacy, it becomes inconceivable to predict the extent of each of this categorization of human settlements.

The world development was biased towards urban areas by 1970s. Harvey⁶ and Preston⁷ provided a significant direction to the research of urban rural linkages. While Harvey pointed out that there has been a development of economies in developing countries, where the countryside is controlled by the towns. Preston arguably provided a framework of interactions between the countryside and the areas. The study of urban-rural linkage gained prominence more than three decades years ago after the publication of works by Mitra⁸ and Lipton⁹. Prior to these publications most of the work was disjointed and isolated in different spheres where economic interrogations were directed towards development analysis but failed to envision urban and rural as distinct spatial investment opportunities.¹⁰ The subjects of politics and sociology had recognized the distinct social and political behavior associated with urbanization, while geography had focused on the physical linkages between the geographical areas. Lipton's analysis provides a description of spatial pattern of resources and the reasons for the same, which causes chronic poverty and explains the pattern of the development. The debate for and against Lipton's conclusion of urban bias gave a new direction to the importance of urban rural linkages.

At the start of 1990s, there was no dearth of categorization of urban and social sub categories in economics, psychology and political science subjects, as pointed by Hoggart.¹¹ However, it needs to be understood that there was paucity of applied literature on combined urban-rural system prior to 1990s.^{10,11} Urban rural linkage is a concept being increasingly recognized at the international level, since about a decade, which is evident by the adoption of the concept of urban rural linkage as the key subject by various organizations in their policies, programmes and publications.

In 1999, UN-HABITAT saw the potential in promotion of urban rural linkages in spreading the development effects across urban-rural continuum and in generation of employment for poverty reduction. The resolution was adopted by UN-HABIAT in its 17th session.¹² The concept was further discussed at international platforms provided by UN-HABITAT in ministerial round table on Rural-Urban Interface and Slums in 2003, followed by international conference on Strategies for Enhancing Rural-Urban Linkages Approach to Development and Promotion of Local Economic Development in 2004. These initiatives tried to link the development issues with the Urban-Rural linkage approach, stressing on government's role.

United Nations Human Settlements Programme defined rural-urban linkages as “complementary functions and flows of people, capital, goods, employment, information and technology between rural and urban areas” at its 19th session.¹³ⁱⁿ¹⁴ Earlier, the Declaration on Cities and Other Human Settlements in the New Millennium, 2001 by United Nations’ General Assembly recognized the role of cities and towns as engines of growth contributing to the development of both rural and urban human settlements. However this notion needs to be changed and a more symbiotic relationship needs to be established against the existing dependent relationship.

Over the last decade or so there has been an evolution of the concept from ‘urban and rural’ to ‘urban-rural’. The boundaries between the two areas have become transitional causing the emergence of peri-urban approach. This approach highlights the problems and opportunities, both in terms of livelihoods and the sustainability of adjacent rural and urban areas. Due to the advancement of urbanization, the urban peripheries are transformed to provide for both poor migrants and semi-rural communities, much to the reinvention of the urban conditions and often leading to the gradational alteration of the urban-rural dichotomy.

Additionally, it has been accepted now that urban rural linkage is not unidisciplinary, but involves overlapping constructs from various disciplines such as economics, geography, and urban planning. For example, spatial allocation of economic activity determined by local government in regional economic policy goes a long way in shaping the urban rural linkages. Often these are assumed to be nationally or provincially consistent; consistent in considering the circumstances under which the urban rural linkages ameliorate, decelerate or remain unchanged due to the development process.

3. Defining Key Terms and Concepts

Urban planning and related terms have been traditionally defined in different ways as per the context. Use of different criteria worldwide has resulted sometimes in overlapping definitions, thereby contributing to the lack of clarity on the concept of urban rural linkages. Nevertheless, over the recent years the importance of the concept has been identified and the underlying view remains the same. Urban rural classification is based on political categorization, and social and geographical relationships.

3.1. Urban Area

The term ‘Urban’ is defined as the ‘characteristic of the city or city life’. An urban area can be defined as “a complex system of infrastructure, accommodating higher density of population, when compared to the adjoining areas”.¹⁵ Therefore, urban

areas are higher in primacy of settlements; consequently they have responsibility of sustaining the peri-urban and rural areas under their zone of influence. However, unguided rapid urbanization may derail the economic growth and may have unfavorable effects on the associated people and environment.

It is however important to note that the comparison of the level of urbanization at the global stage is affected by the definition of urban areas followed in each country. For example; Nepal, being a mountainous country, all localities of 9000 or more inhabitants are declared urban; in Bangladesh places having a municipality (Pourashava), a town committee (Shahar Committee) or cantonment board are defined as urban while in Pakistan places with municipal corporation, town committee or cantonment are declared urban; in Sri Lanka also municipalities, urban councils and town are treated as urban¹. In tune with the sub continent's definition, as per Indian census¹⁶ an 'urban area' is defined as:

- (a) All places with a Municipality, Corporation or Cantonment or Notified Town Area
- (b) All other places which satisfies the following criteria:
 - (i) a minimum population of 5,000.
 - (ii) at least 75% of the male working population engaged in non-agricultural occupation.
 - (iii) a density of population of at least 400 per sq. Km.

3.2. Rural Area

The elementary description of rural areas is an area which has not been urbanized yet. In tune with the statement, the Census of India describes rural area as "all areas which are not categorized as Urban area"¹⁶. In classical geography, the rural area is often termed as hinterland, which literally means 'a land that lags behind' or 'a remote and underdeveloped area'. Even though some rural areas have been the center for agricultural growth in many developing countries, most of them lag behind in terms of socio-economic growth. Geographically as well as from the perspective of development, these areas are more often distant from the urban centers. The main source of livelihood is agriculture and allied activities' based labor as against the urban area. The important assets of rural population are, the access to natural capital and access to land for housing and building materials.

3.3. Peri-urban Area

Of all the constituents of a region, the most difficult to define is the peri-urban area and to determine physically its commencement and its end. In India, there has been no official definition of the term peri-urban. For the sake of the research, this category of geographical area has been considered as a part of the Urban-Rural

system. Thirumurthy¹⁷ asserts that peri urban area is the area where urban-rural linkages are most intense. Peri-urban is 'peripheral or an outlying part' of an urban area or 'a residential district situated on the outskirts of a city or town'. It is the transitory space to bridge the gap between the areas on its two sides – urban and rural. In fact, these spatial locations experience the most rapid transformations in the form of changing land use and agricultural intensification. These peri-urban areas are characterized by the location on the periphery of cities, frequent change in land use, changing farm systems, changing infrastructure systems and intense pressure on the natural resources. In the future, the peri-urban area will have to maneuver the future growth with increased share of responsibilities, i.e. the growth will be peri-urban centric. Kolbl and Haller¹⁸ postulates through empirical studies that urban development in India lags behind US's by 50 to 100 years and follows a similar trajectory. It adds that peri-urban problem has always existed in India though often unrecognized.

4. Rationale to Focus on Urban-Rural Environments in India

The urban rural linkages or interactions exist in numerous forms. There has been unanimity amongst theorists over two broader categories of interactions: 'sectoral' and 'spatial'.^{15,19,20,21} These interactions are also referred to as "key components of livelihoods and local economies" and "engines of economic, social and cultural transformations".¹⁹ Indian economy underwent globalization since early 1990 and this provided increased economic opportunities and has led to rapid rural transformation especially in agricultural sector, driven "by technological progress, improvements in infrastructure, and liberalization and creation of markets".²¹ It has played its role in improving urban empowerment and reducing rural poverty. Braun²¹ attributes three exogenous conditions for the changing 'opportunities for rural-urban linkages as well as the intensification of such linkages'. It includes increasing trade and capital flows, the information revolution and increasingly decentralized governance across the developing world. These conditions hold true for India as well.

These interactions are considered by many theorists as mutually beneficial transactions, while some argue that it is an extractive relationship, where a rural area is losing out to urban area.²² World Bank²³ asserts the need for stronger urban rural linkages, in the absence of which societies can be divided, and thereby contributing to inefficient environment which in turn lead to increased inequality and subdues growth. Hundsalz²⁴ states that factors like management of production patterns, efficiency of infrastructure provision, growth of trade and commerce, access to education facilities and health services, protection of the environment, and response to population growth and management, has a great influence on orienting the growth of both urban and rural area, and the

linkages. In India, rural areas, have been facing isolation and in some cases impoverishment, due to increased focus on urban area's growth. Additionally, it can also be attributed to disorderly and scattered rural settlements which makes the provision of infrastructure and services costly and inutile. The urban area can play a vital role in provision of basic infrastructure and services such as roads, telecommunication, health care, education, credit, markets and information, to which a rural area has poor access.

4.1. Urban-rural Divide

In India, the consideration of the two areas as contradistinctive entities has resulted in widening the gap and has rendered various poverty reducing inter-linkages ineffective. The rural urban divide can be ascertained by comparison of selected socio economic indicators. What alienates a rural area from urban area is its backwardness in terms of education, nutrition, health care, sanitation, and land and other assets. This transcends such areas into a poverty trap.²⁵ India has a rural population of 68.84% dispersed in 0.64 million villages, against the 31.14 % urban population in 6166 urban agglomerations, which is approximately 2.5% of the total geographical area in India.¹⁶ Migration of male workforce from rural to urban area, in search of better housing, educational and economic opportunities, has further skewed the already disarranged sex ratio at both the urban centers and the rural areas. Urban per capita income is thrice that in rural areas²⁶ and that becomes the pull factor for rural population to move to urban areas in search of better employment. Socio-cultural factors such as kinship, caste and regional networks of communities also facilitate the migration of rural poor.

There exist disparities at various levels which impact the linkages between the two areas. Work force participation rate in rural areas is higher with 41.97 (52.36% males, 30.98% females) whereas it is 32.23 (50.85% males, 11.55% females) in urban areas.²⁷ Literacy is an effective tool for empowerment. The rural literacy at 68.91% stands much below the urban literacy at 84.98%.¹⁶ The lower socio economic sections of the society which exist majorly in rural areas suffer from malnutrition, incidence of low weight for age, anemia, disability and hunger, which limit the full potential of children to grow into productive adults. The variance in availability of services and facilities in urban and rural areas becomes the driving factor for migration and changing urban rural interactions. For example, in the year 2002, 736 urban households per thousand households have access to drinking water while only 275 rural households have access to drinking water.²⁸ Other comparison also denote towards backwardness of Indian villages, such as household with electricity; 59.8% rural and 92.2% urban, access to toilet facility; 34.1% rural and 80.8% urban.²⁹

4.2. Urban-Rural Divide and Incidence of Poverty

Approximately 21 percent of urban India lives below national poverty line.³⁰ Poverty limits the physical, mental and social development of an individual. At the same time it can limit the growth of a family or a community, region or for that matter of the whole country. The poverty of the masses in India is a social product which is generated, reinforced and perpetuated by the existing social systems. It is a resultant of differential distribution of various castes, classes, groups in economic, political, social and religious domains of the society.³¹ Demographic, natural and psychological factors are secondary factors in influencing the poverty. In India, rural poor primarily consists of agricultural laborers, artisans, craftsmen, and marginal landholders, while the urban poor are engaged in unorganized sector, or low paid jobs in organized sector. The urban poor also include self-employed population such as rickshaw pullers, shoe repairers, vendors, owners of small shops, beggars and other semi-skilled, unskilled and low-income skilled jobs. In the absence of adequate housing this part of the population is bound to live in slums or squat on pavements.

Urban-rural linkage has an important role to play in determining the economic level of the population residing both in urban and rural areas. The phenomena of urban and rural poverty need to be understood to comprehend the relation between them. In both the cases, the poor is identified by similar characteristics – negligible productive assets, low and irregular wages; sometimes unemployment, low rate of literacy, poor housing, inadequate nutrition and poor access to social infrastructure. 65.4% of the rural population relies on less than \$40 per year, while in urban areas only 36.7% rely on less than \$40 per year. Additionally, the Human Development Index in rural area is 0.340, while in urban area it is much better at 0.511.³²

There is not much evidence of the impact of high rate of urbanization on the rural poverty. However, Cali and Menon³³ recognizes six mechanisms through which urbanization may affect rural poverty. Firstly, the backward linkages would have positive effect on diminishing poverty. The urban area with expanding population and income would have increased demand for rural goods and would increase the share of higher value added products in total agricultural demand. Secondly, the expansion would allow the diversification of non-farm economic activity in rural areas, thereby giving more opportunities to landless laborers, and low earning population. Remittance is another mechanism which augments rural income by reduction of resource constraints for rural livelihoods, and provision of insurance against adverse shocks. Fourth mechanism is agricultural productivity which may improve the agricultural labor productivity due to reduction of labor supply. The increase in rural land prices might have a positive impact on rural poverty if land ownership is not concentrated within a part of the population. The sixth linkage is the access of surrounding rural consumers to urban markets which

have lower consumer prices due to competition within the producers in the urban area. However, these mechanisms are subjected to a high degree of uncertainty since these are "second-round effects"³⁴ and are dependent on diverse factors.

5. Urban-Rural Framework for Growth and Poverty Reduction

Urban rural interrelationships and the related issues present themselves in different manners across the diverse regions of the world and therefore it requires a set of generic principles to understand them. However, these principles must have the flexibility to be adapted to the needs of specific circumstances. The relationships between the urban and rural in a developing country are quite unlike the one in a developed country. With the unexampled growth in the urban areas, the developing countries have the challenge to address the urban and rural issues with comprehensive growth. Hoggart¹¹ reinforces that there has been sparse research on establishing similarities in causal processes across the rural-urban divide.

Preston⁷ set out the main categories of interaction between town and country namely; movement of people, movement of goods, movement of capitals, social transactions, and administrative and service position. Different authors attribute importance to different linkage elements. Tacoli²⁰ opines that there are two categories of interactions between urban and rural areas: spatial (flow of people, goods, money, information and wastes across space) and sectoral (across various sectors such as agricultural, manufacturing and services). However there is also need to include the intangible social interactions and the role of governance in influencing these elements.

Having discussed the various divides that exist between urban and rural area in the last section, it becomes important to devise a framework in the present context and focusing on Indian urban-rural scenario. There exists a plethora of linkages between the urban, peri-urban and rural areas within a region. These linkages can be strong, weak, uni-directional or bi-directional across sectors and spaces.¹⁵ Nevertheless, the complex social, economic, political and environmental interdependence between the urban and rural area can be defined as a framework which includes eight elements (see Fig. 2). There has been a lack of framework for analysis in most of the case studies conducted earlier. Such case studies serve their purpose of bringing the core issues pertaining to the context in relationship to urban-rural linkages, however, do not provide a framework that can be adopted and modified for future research elsewhere. The first seven elements are included in the framework based on previous literature with a nomenclature that best describes the inherent content. The flow of people, products, information and financial elements is a majorly bi-directional flow between urban and peri urban area. There is a one-way flow of waste from urban area towards rural area, and natural resources from rural to urban area. The intangible element of social interactions also needs to be considered as it causes a great deal of influence over other

elements without an actual flow of material. The eighth element of governance has been included to account for the influence of governance in determining the other linkages. Since these elements flow between the spatial zones these are easily quantifiable. Also, these elements have the potential to be categorized into sub-elements for further detailed analysis. The flow of the elements is described in detail below.

(Here the bold arrows signify strong relationship while broken arrows signify weaker relationship. Two way arrow signifies two-way relationship while one way arrow signifies one-way relationship)

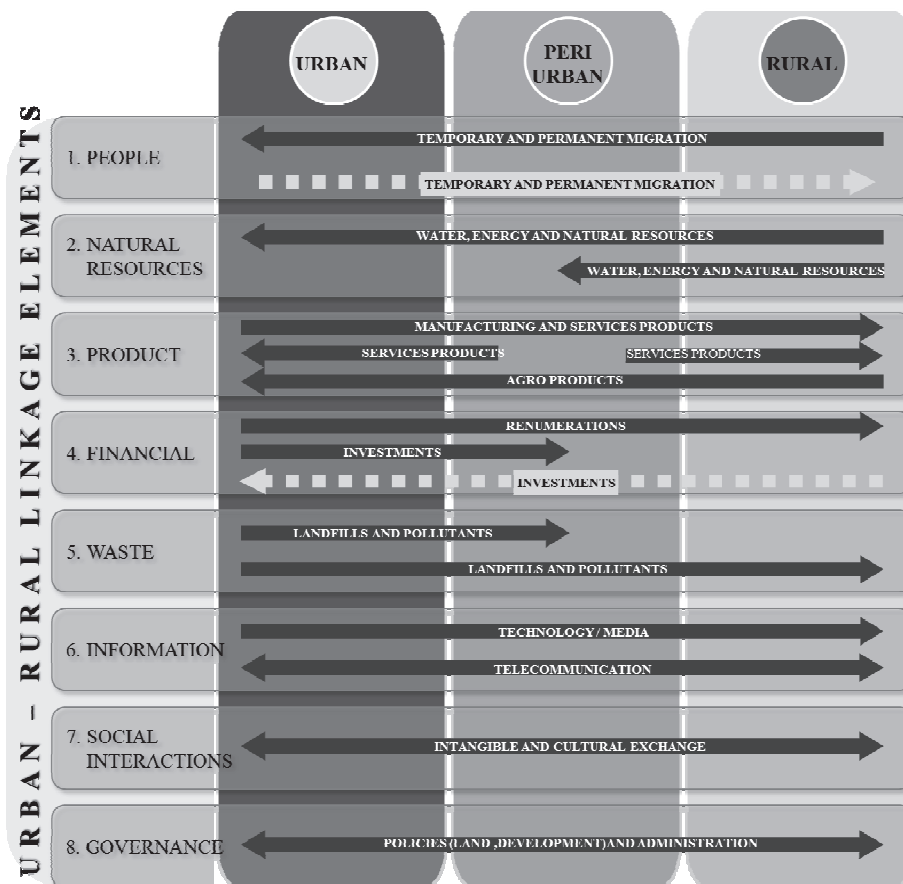


Figure 2 Urban-Rural Linkage Elements for Growth and Poverty Reduction.

5.1. People

The flow of people is the most widely considered element in the interaction theories as it is the most evident flow between the urban and rural areas. Zewdu and Malek³⁵ refer to it as the “key component in rural transformation” leading to industrial development. This movement can be temporary or permanent. People migrate from rural areas in search of employment, better employment opportunities, education, and health services. The rural to urban movement is dominant over that from urban to rural, where urban population may move, temporarily or daily, to rural areas for their “rural” jobs. Since the urban economy is not able to sustain the influx of population, it gives rise to dual economy with the addition of informal sector activities, leading to environmental problems.³⁶ The detailed information on destination, duration and composition of the migrants at the regional level is a pre-cursor to formulation of any policy to support or curtail migration.

5.2. Natural Resources

It primarily includes sharing of natural resources like water, land and energy (an output of natural resources). Zeleke and Trutmann³⁷ highlights that there are negative effects on the environment between urban and rural sphere, and can be minimized through harnessing of urban and rural linkages. Rural incomes are predominantly agriculture based in a developing country relying on natural resources; therefore the impact on natural resources consequently hurts the earning capacity of the rural population.

5.3. Products

This includes a bi-directional flow of products. The rural to urban flow, includes food for urban populations, raw and processed materials for urban manufacturing units, and labor flow for non-farm sector. In the other direction, manufactured and processed goods, input for agricultural sector find market in the rural areas. Another dimension is that the peri-urban area may furnish parts or preliminary products for factories in urban areas, causing product linkages to be established.

5.4. Financial

This linkage element includes flow of money in forms of remittances from urban to rural areas, rural savings channeled through urban institutions, and rent acquired by urban landlords. The initial money flow is from rural to urban area for establishing the rural migrant in the urban setting; thereafter there is a considerable reverse flow.³⁸ Another important component is investment from urban areas into peri-urban and rural areas. “The impact of greater investment in evidence based, low cost interventions” at the rural level in developing countries, is well

established by Buse *et al.*³⁹ through Millennium Village Projects in achieving the Millennium Development Goals (MDGs) especially the poverty reduction targets.

5.5. Waste

Although this is more of a physical linkage between the urban and peri-urban areas, yet it has spatial, sectoral and natural implications. With less investment in waste disposal in major cities in developing countries, they rely on waste disposal in the form of landfills on the periphery of the urban boundaries. Another component is the various forms of pollution affecting the water resources and air, both in urban and rural areas. This causes the polluting of the land and water sources in the vicinity, and in the process affecting the agricultural output of the neighboring areas, thereby having indirect effects on the economy of the area.

5.6. Information

It includes the flow of information regarding the resources or raw materials from rural to urban areas, markets and prices for the commodities and employment opportunities from urban to rural areas. It also includes the sharing of knowledge and technology within the two spheres, which is an important component of the same. The usual case with developing country villages is that they are undersupplied and under developed. This can be rectified with an improvement in roads, rail and other vital communication linkages.

With the advent of technology in the developing countries in the form of television, computer and mobile phones, there has been a greater flow of information. This has made a marked difference to the lives of the rural population. This aspect of modern technology needs to be kept in mind to connect distant and remote locations to the markets, as envisaged in Srivastava and Sen,⁴⁰ where up gradation of a post office to a development center through modern means can bring distant communities within the growth scope of the major urban centers.

5.7. Social Interactions

Social linkages need to be considered under a separate category as it includes the intangible interactions between the city dweller and the villagers. It also involves the cultural exchange which plays a vital role in strengthening the ties. Preston⁷ puts it as including "promises of favor, the provision of protection or the establishment of a formal relation" and these intangible elements may have better value than the tangible goods in establishing the linkages. These social interactions improve the confidence of the rural migrants entering into the urban society, and the consequent improved income causes better social standing.

5.8. Governance

Governance forms the medium for the implementation of all policies and therefore it has an indispensable role to play in determining the flow of the above mentioned elements. Surprisingly, it was not adequately represented in interaction theories after Preston's⁷ dilute reference to the administrative provision. The government has the role of a facilitator in positive linkages while a constrictive role in negative exchanges. This element not only includes the formal set up of governance but also includes civil society organizations and non-government organizations who are sharing the responsibilities of governance in administering the policies of the government.

India has adopted the path of decentralized governance as more effective and accountable local government systems, for empowerment of rural areas. In this regard, changing the pattern of governance also has an influence over changing urban rural linkages, with the rural areas drafting their own policies. The governments and their policies might be biased in favor of one, and therefore requires coherence. To give appropriate significance to peri-urban and rural areas, the growing cities in India have resorted to regional statutory authorities like Mumbai Metropolitan Regional Development Authority (MMRDA) in Mumbai, and Ahmedabad Urban Development Authority (AUDA) in Ahmedabad, India. This governance factor is all the more important as its intervention is not limited to the local governments working in the region. The macro-economic and sectoral policies drafted by national government must integrate the urban and rural areas in their policies to achieve the sustainable economic and social development, while local governments must go for overall development taking care that the national policies are adequately altered for local conditions.

6. Interrelationships Between Employment, Poverty Reduction and Urban Rural Linkage Elements

Since many decades, policy makers and other professionals have been perturbed to find out what vital infrastructure needs to be included and which institutional confines need to be overcome, to optimize the effects of links between urban and rural areas. To improve the wellbeing of the population an increase in human development facilities is required in the villages, along with the development of infrastructure, and generation of employment. Urban Rural Framework can help achieve these through proper initiative at appropriate degree. Urban rural linkages can help in determining the investment priorities and entry points for change, with the help of better policy attention.

Similarly, all the linkage elements need to be explored to see their impact on the poverty eradication and achieving growth for the entire region. There are three aspects to the outcome on application of the framework –employment generation,

poverty reduction, and the regional growth. Poverty and employment are two parameters which are directly related to each other under economics. Poverty causes occupations to be vulnerable while employment can help eradicate poverty. Now, the research needs to be expanded to analyze the interrelationship of all the eight elements identified in this study.

6.1. Employment Generation

Diversification of economic base would result in increased job creations in non-farm sector, thereby arresting the rural to urban migration. The importance of non-farm income has been recognized and emphasized in the past in improving the household income by income diversification.^{41,42,43} Bates⁴⁴ propositions that the increase in overall income level would weaken the conflicts between producer and consumer thereby lessening urban-rural disputes. Provision of access to markets would help improve the market linkages for the benefit of both urban and rural poor. Provision of assistance to small scale enterprises, which have the capability to sustain on their own once they get a start would allow the rural population to be involved in the mainstream economy. Also, the informal sector is playing an important role in rapidly growing cities in developing and transition countries. This role is a consequence of growth in the labor force without a matching response in the level of formal employment opportunities. The informal sector has great freedom of action, being by definition free of government interference, and will tend to deliver labor resources to productive areas of the economy.

6.2. Poverty Reduction

It is argued by many scholars that reduction of rural poverty would allow sustainable urban growth. Often urban and rural domain faces market failures and stagnation due to one or more of labor market, services market or goods market failures. Eradication of rural poverty would require access to social facilities like education and health, but mere social welfare schemes would not help to eradicate chronic poverty. It needs fundamental transformations of the society, through a mix of capitalist and social path of development, thereby requiring private-public partnership. The government needs to focus on labor intensive programmes of development in a country like India and China where there is abundance of labor force and underemployment. The minimum wages needs to be regularly revised as per the economic growth of the country and should be properly implemented. Poverty has a two way relationship with the linkages – it contributes to the flow of people, while urban rural linkages can contribute to the poverty by biased policies. The Urban Rural framework can therefore help in alleviating poverty.

6.3. Regional Growth

Most developing countries like India are experiencing an unprecedented growth. However it needs to be debated whether this growth is inclusive, or urban biased. An inclusive growth is possible only when the effects of socio economic growth are shared by all segments of a region. Both, sustainable rural development and urbanization can only be achieved by integrating poverty alleviation efforts with urban-rural dimensions.

Urban-rural linkages drive the growth of a region in more than one ways as discussed in Section 4. This is influenced by the structure of the settlement system which has an immense potential to be a positive force in the process of economic development.¹⁰ Conversely, growth can regulate the linkages between the urban, peri urban and rural areas. Therefore, the linkages should be linked with the wider government vision of regional growth. Authorities often fail to distinguish the differentiated needs of urban and rural areas and aim for overall growth, assuming that the effects of such economic growth would trickle down to the poor with more employment opportunities and higher wages. The growth oriented approach has to be replaced with 'growth with social justice' approach (see Fig. 3).

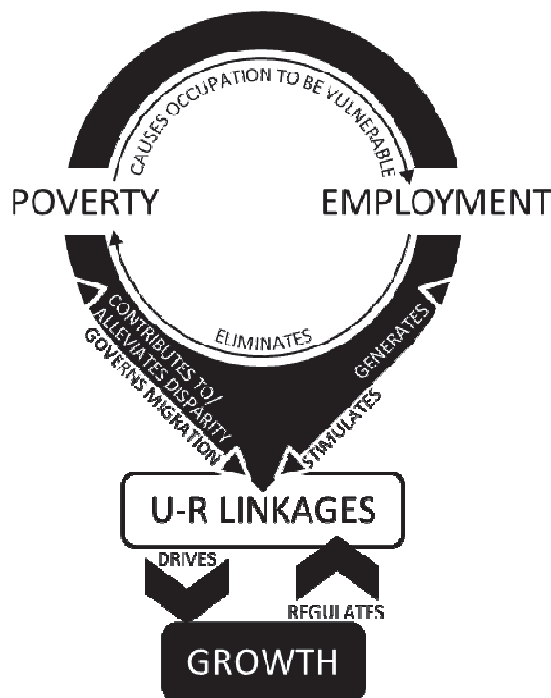


Figure 3 Role of urban rural linkages in eradicating poverty and overall growth (Source: Author's interpretation).

6.4. Implementation Strategies for regional growth

Regional growth can be achieved through integration of poverty reduction measures with employment generating policies. To realize this objective many approaches can be adopted and applied. This section deals with four such approaches, which can accelerate the process of growth. These are simple well known approaches, nevertheless, these needs to be employed as strategies for bridging urban-rural gap and synchronizing the growth pattern. These may not necessarily be employed simultaneously and only provide the options that have worked in the past. Additionally, such strategies and approaches influence the livelihoods, in particular of the more vulnerable groups, through interlinked processes.

Augmenting infrastructure: This has two aspects: connecting economic centers to the backward areas and providing physical and social infrastructure within the backward regions. The peripheral urban population might find easy to commute to the city for work, which may generate growth of sub-urban non-farm jobs in services, such as consumer services and retail trade, required by the urban population. This will of course not reap the same results for distant rural areas.

Increased flow of resources would cater to the demand and supply chain in the region. Efficient infrastructure and bettered services would improve the markets as there would be better exchange of goods, both agricultural and non-agricultural. Equal access to social services can also be improved by improved physical linkages. Better transportation also allows better flow of labor and provides livelihood opportunities during the non-agricultural days, to the landless laborers who rely on seasonal farm sector. Hence transportation helps in provision of diverse jobs to help in survival.

Strengthening production structure in peri-urban and rural areas: Better economic opportunities can be offered to both urban and rural poor through strengthening of production structure of peri-urban area and distant rural areas. The labor intensive and low-value added production activities can be transferred from urban areas to better interlink peri-urban or rural areas. This would reduce manufacturing cost of the products and also benefit the rural population in getting employment close to their residential locations. With better opportunities for employment, it would improve the household income by increased number of employed members within a family or community.

Public-private partnerships: The encouragement to locally embedded business systems by the local governments through provision of common institutions and common infrastructure enables competition within the local economy thereby contributing to local economic development. This comparatively new approach is known as cluster approach. The private sector can act as an interface between the

government and the local population through provision of skills training, finding ties with external private support and as information and support installation. In most developing countries, the agro-industries can also be encouraged through incentives from the government to spearhead rural economic growth, which can find markets in urban areas. The self-reliance in food sector would only help the overall growth of the region.

Multi sectoral approach: Emphasizing on only one sector would not solve all the problems. It has to be a combination of all three-regional, economic and spatial strategies. In addition, all sectors need to be given priority simultaneously such as infrastructure, land, agriculture, health and education to deal with the underlying reasons of poverty such as urban and rural landlessness, unemployment and underemployment.

7. Conclusion

In the approaching decades, the quality, magnitude, nature and frequency of urban rural linkages would determine the future distribution of population, their growth and well-being. Therefore the future of the human settlements in developing countries would depend on urban rural positive interactions, where majority of the demographic change is concentrated in the next four decades. Funnell¹⁰ stresses upon the fact that there is a need for theoretical classification set within specific historical circumstances of a particular region. The same holds true in the present. This allows case by case evaluation of mechanism of exchange between the urban and rural. The framework needs to be adapted considering appropriate categories of interactions as per the critical matters for the case. The framework provided in this paper has the potential to be extended into sub-elements for quantitative assessment. Based on an empirical analysis, the observed relations between settlements can be identified over a period of time. Such analytical results would help to identify the loopholes and bottlenecks for positive urban rural interactions. Furthermore, the urban and rural area can be interlinked to achieve growth through the 'medium of governance', a parameter which takes into account all the other parameters.

The traditional definitions of urban and rural have been challenged with growing complexity of urban systems. Conventional urban activities like manufacturing are sometimes found in rural settings, while urban agriculture has become a worldwide phenomenon to tackle the urban heat islands. Modern technologies and globalization is causing unprecedented linkages between geographical spheres. These overlaps of boundaries and exchange of inherent activities, demands precise diagnosis of linkages.

The decision makers, however, need to be careful to consider the rural settlements which are overlooked, when a strong network is established between

certain urban, peri-urban and rural settlements. In this age of globalization, there is increased need to stop the marginalization of the rural area from the region's growth. The endeavor should be to include these neglected rural communities and new linkages be suggested to mainstream the lagging areas. Nonetheless, the overall development has to be 'urban-centric', careful enough not be 'urban biased' as was the case with development post World War-II in the developed countries.⁴⁵

It may be argued that complex social relations cannot be converted into a simple categorization of explanatory variables. However these variables provide an understanding of continuum of relationship rather than divide the two geographic areas as per their characteristics. The aim of such a framework is to provide an insight into the social transformation associated with the urban and rural areas, which would enable the decision makers to mould, if not control, the future growth benefitting both the domains.

Acknowledgement

The first author acknowledges support from the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) of Japan; and the Global Center of Excellence (GCOE) Program entitled "Global Center for Education and Research on Human Security Engineering (HSE) for Asian Megacities" of Kyoto University.

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