

2.1 INTRODUCTION

A comprehensive review of literature always considered as an integral component of any research endeavour. It assists the researcher to set out the objectives of research problem and to follow the potential methodology to attain objectives. The review of literature includes the methodical identification, location and analysis of documents including the information related to the research problems. This chapter presents the relevant review of literature on the research problems.

The first section of the chapter deals with the various socio- economic theories based on rural transformation. The second section deals with literature review in international context, on the other hand third and fourth sections are dedicated to the literature review on nation and regional context respectively. In the last section conclusion of the same chapter has been discussed.

In the end of the chapter a complete summary of the review of literature has also been given which includes author & year, form of data & data period, method used and findings of the study. All the reviews have been arranged in proper chronological order.

2.2 LITERATURE REVIEW BASED ON THE THEORIES OF RURAL TRANSFORMATION

Von Thunen Model of Agricultural Land Use (1826)

This is a model for analyzing agricultural crop location patterns based on crop theory and crop intensity theory. Von has constructed a model of land use pattern based on the arrangement of towns and villages. The theory shows that how and why distance from market affects the agricultural land use. He said that the crop intensity will decline and the type of land use will also vary with the distance from the market. In an isolated state, Von Thunen hypothesized that a pattern of zones around the city would develop and the products would be produced accordingly in the different zones around a market town. The agriculture would be arranged in a series of concentric circles around the town, as

per to the cost of transportation of the commodity and the ratio in which its value stood to its bulk and weight. In the ring closest to the city, those items that could bear transportation least of all, or on which transportation charges would be out of proportion to the market price, items perishable in nature, dairy farming, horticulture crops, vegetables etc. More distant belts would specialize in products, which were more in weight and volume, but fetched higher prices in the market. In this way, urbanization leads to the development of areas which are closer to it by establishing specific pattern of agricultural production. The core idea of the theory says that the most productive activities take place near to city and less far from the city.

Weber Theory of Industrial Location (1909)

Alferd Weber a German economist has given a theory of industrial location based on least cost principle and depends on the factors those are responsible for the location of an industry in any region and these factors can be regional factors, agglomerating factors and de-agglomerating factors. The theory states that firms will chose a location in view to minimize their total costs. Agglomerating factors are referred as the lesser cost of production and uniform production policies whereas de-agglomerating factors are related to unhealthy competition, housing problems and rising local taxes etc. The theory argues that these regional factors attract the industries and an industry will be located at the place where the regional cost is lowest under the influence of raw material, transportation and agglomerating factors. Transportation cost and labour costs are two main factors for industrial location. So it can be concluded that the industries will be located at the regional place near to industrial areas or urban areas where the transportation and raw material cost is less and by this method regional places near to urban areas can be developed with industrial production.

Walter Christaller's Central Place Theory (1933)

Christaller has revealed that there are some ordering principles governing the distribution of towns and cities. He explained that central place is the source of goods and services to the surroundings in relation to its own area. Central place is a settlement which provides services to the population of its hinter land/ complementary region, supplies central

goods and services (leisure, educational and cultural facilities) as well as trade in retail and wholesale area. Thus this theory focuses on the importance of urban area (central place) in the development of rural area (complementary region) by providing better employment opportunities and better market and prices for the product produced by backward area. This theory also explains how urbanization helps in the development of backward area through forward and backward linkages.

Modernization Theory (1950)

Modernization theory explains the process of modernization of a society from traditional to modern. According to the modernization theory, a society must invest in urbanization and industrialization to achieve development. The theory has established many directions for rural development which shows that rural society can also be influenced with the modernization and urbanization. The theory envisages that the industrialization and urbanization will bring new technology and innovation which will help traditional economies to convert in modern ones. It foresees that development can be attained only in the course of industrialization and urbanization along with technological transformation of agriculture in the economy. However, the theory has been criticized as it did not consider the adverse environmental shock of the capitalist or free market model of development.

Lewis model (1954)

Lewis model is based on two sector model of an economy where economy is divided into two sectors i.e. agriculture sector and industrial sector. The model is based on the unlimited supply of labour in developing economies. Lewis says that the growth can be achieved if we use the labour of traditional sector to the industrial sector, so both productivity and output will increase.

Growth Pole Theory (1955)

The concept of growth pole was developed by Francis Perroux and further extended by bouleville in 1966. The basic concept of the growth pole is that development doesn't appear uniformly but with the different points and finally trickle down to the whole

economy. According to the model Government programmes can have utmost effect on the regional growth if these programmes are being concentrated in a small number of favorable locations in regional development policy. Perroux and his followers believed that growth poles are capable of rapid economic growth and helps in the reduction of regional inequalities because of having the capacity of diffusing the process of industrialization in the neighboring areas. They establish the backward and forward linkages and help in overall development of the region.

Unbalanced Growth Theory (1958)

The doctrine of unbalanced growth theory given by Albert O. Hirschman is based on the assumption that there are not sufficient endowments of resources in the less developed countries for simultaneous investment in all the sectors to achieve balanced growth. The theory maintains that “investments only in main sectors of the economy or in strategically selected industries will lead to new investment opportunities and so open up the way to further economic development” and this imbalance will create opportunities to invest because of external economies and complimentaries. According to the theory growth can be attained either by investing in large amount of social overhead capital or by investing in the direct productive activities and favors more investment in SOCs. Although investment in SOC doesn't advocate direct effect but it helps in the growth of industries, services and trade sectors. In the theory, SOC is related to investment in infrastructure in form of transport, communication, power, irrigation and railways which are the primary factors of urban areas and the investment in these sectors can lead to regional development by linkages effects discussed by the Hirschman.

Export Base Theory of Regional Development (1964)

The 'export base' idea of rural economic development is about favoring large agriculture, mining, or manufacturing sectors which sells its product to urban and foreign marketplaces. This model can be highly significant to rural areas because of their low population densities and relatively abundance of land and natural resources, which are used intensively by traditional export sectors. It finds that rural areas have huge comparative advantages in agriculture, mining and manufacturing and to get prosperity,

we need to sell more to urban/foreign than to purchase from them. The theory finds that urbanization can also be a vehicle for rural development either to sell the production of rural area or to import the material for the production in rural areas.

Friedman's Core Periphery Model (1966)

According to the theory, for any region we need to study development in two perspectives i.e. within the region and outside the region. The first is known as the core region whereas the second is known as the periphery region. Such core regions are responsible for innovative changes and the other periphery regions are dependent on core regions for the growth and development. The theory suggests that innovations and ideas diffuses from core centres to the areas of lower potentials. These interactions are found because the economy of rural areas are primitive whereas in the core regions or urban areas are fully developed due to leadership in business, innovations, industrial production, concentration of transportation and political power. Periphery areas send labours, raw material, consumers and food to the core region of urban areas whereas core supply industrial product, employment, finished goods and income to the rural areas of periphery regions.

Myrdal Theory of Circular Cumulative Causation (1968)

Gunnar Myrdal theory of economic development revolves around the idea of regional inequalities by using 'backwash' and 'spread' effects at the national and international level. In theory, backwash effect refers to all significant unfavorable changes of economic expansion in a locality caused by outside the locality while spread effects are centrifugal forces of expansionary momentum from the centres of economic expansion to other regions. According to Myrdal strong backwash effects and the weak spread effects in underdeveloped countries are the main cause of regional inequalities. Myrdal has favored the locational advantages and found increasing internal and external advantages would allow advantaged regions to continue to remain ahead of others. While due to "backwash effects" some regions can grow but other can experience relative stagnation.

Dependency Theory (1970)

Dependency theory was popularized in 1970s as it provided a possible explanation of the problem of poverty and stagnation in the developing countries. The theory explains that core and periphery are dependent to each other in many ways. The theory further explains that for recognizing the determinants of rural development we need to critically examine various inter-sectoral linkages i.e. both backward and forward and their benefits to rural people.

Provision of Urban Amenities in Rural Areas (PURA) Model (2004)

PURA model is a concept for a holistic and accelerated development of rural areas. Its idea is based on making rural areas as attractive as cities are by providing them facilities of urban area like electricity, roads, communication network and knowledge connectivity. It also favors the establishment of professional and Technical institutions in rural areas. It deals with the investment in rural industries such as agro-processing, development of rural craftsmanship, dairy, fishing, and silk production. In this regard, role of rural towns and towns become important for rural development. The model becomes important as it can reduce the problem of migration to cities by providing them all opportunities for development within villages.

2.3 LITERATURE REVIEW BASED ON INTERNATIONAL CONTEXT

Ibrahim (1970) discussed how occupational and expenditure pattern have been changed due to urbanization. He examined occupational situation of Hasanoglan (Turkish village) approx. 30 km. north to Ankara. He has studied about non-agricultural earnings, types of occupation in village, family expenditure on food & clothing, household furnishing, heating and lighting. The results on these basic indicators showed that Hasanoglan has diversified itself due to work in various occupations inside and outside the village. The farmer-cattle raising families exceed one third of total expenditure but it has decreased from 46 percent to 34 percent during 25 years. On the other hand, skilled laborers, civil servants and small traders have increased from 6.3 percent to 18.5 percent and 11.2 to 11.5 % respectively of the total population. These data indicated that the population of

Hasannoglan is divided into certain strata having no primary occupation because the community has become more urbanized.

Mason (1989) discussed urbanization in developing countries and its importance for national economic growth and development which can reduce rural urban gap. He has discussed urbanization in two ways i.e. urbanization with development and urbanization with limited development and showed that in some cases urbanization can stimulate the development process, while in some other cases it can be a cause of underdevelopment with the example of different countries of the world. The paper focused on community's attention towards urbanization and rural-urban linkages which is the key concept of the paper for the national development.

Guo (1991) tried to find out the relationship between rural modernization, agriculture modernization, rural industrialization and rural urbanization in china. He suggested that efforts should be made to increase agricultural productivity, grain production and effective use of resources because agricultural modernization is a base of rural modernization. He also suggested that policy makers should consider the rural industrial location, industrial areas, industrial structure, company reforms, burden of rural firms, pollution issues, burdens of rural firm, rural firm's human resources as rural industrialization is a base for rural modernization and rural urbanization is a condition for rural modernization and to accelerate the same the issues of encouraging farmers migration into rural towns, labour movement from less developed areas to more developed areas, strengthening rural towns and seeking help from big cities should be considered as important policy matter.

Ray (1994) emphasized that growth of labor intensive nonfarm sector can be used to solve the problem of unemployment in rural areas. He found that linkages between farm and nonfarm sector can increase the growth and employment and different theories of the same have been used to make the argument strong.

Li & Yuan (1995) studied that rural urbanization has changed the economy of rural areas. He found that the industrial set up in urban areas hold up the development of agriculture development and also support establishment of rural towns. He found that

coordination is required for the development of rural urban areas and economy policy should also be based on rural urbanization which can be feasible by a rational programme.

Khan (1996) examined the influence of urban economic development on surrounding rural areas. He has focused on Peshawar, North West Frontier of Pakistan and revealed that urban centres generate public and social services, trade services, regional marketing, agro processing, supplies services, commercial and personnel services, regional transport and communication services for rural areas.

Cecilia (1998) has studied about the backward and forward linkages between agricultural production, industry and services and found a positive rural urban connection for rural development. Study found that a large population depends on income diversification in combination with agricultural and non-agricultural income sources in rural as well as urban areas. She further found that the interactions of goods between urban and rural areas are a crucial ingredient for rural-urban linkages. She also pointed out the need of strong economic linkages and physical infrastructure connections between farmers and other rural producers in both domestic as well as external markets for creating 'virtuous circle' model for the development of rural and urban areas.

Lindert & Verkoren (1998) focused on urbanization and development in Latin America outside the large metropolis. The book contains nine chapters which focused on the role and functions of smaller urban centres for the development of their hinterland. The results have been found out on the bases of theoretical evidences, empirical and case study. It studied about the rural diversification, absorption of migrants, linkages between rural-urban, consumer behaviors and found that smaller town plays a very important role in supplying of services and in processing the primary produce in rural areas.

Fay & Opal (1999) tried to find out the relationship between urbanization and development in special context of African countries. They have used cross country macro data of over the last 40 years to investigate the determinants of urbanization. Taking the urban population share to total population and GDP per capita as indicators of sustainable development, the study found that the urbanization is not responding to economic

development in Africa. They claimed that Africa's urbanization is different as even if there is negative growth, people are continued to move to urban areas instead of returning to rural areas.

Wang & Hu (1999) examined the rural urbanization in china where surplus labour has been transferred from agriculture to industrial and service sector without leaving the rural areas. He found out that the high population pressure and post Mao reforms in china have improved the strategic development of small towns in rural areas. The development of township and village enterprises has been engine of rural urbanization in china. He also suggested that the rural urbanization in china can be significant for many developing countries and its instructional constraints can be moved, reduced and utilized for the conductive social development of china.

Epstien & Jezeph (2001) discussed about the rural urban cooperation and rural urban imbalances. They investigated the rural-urban migration and its impact on urban areas and found that income opportunities forces them to come in urban areas and emphasized on both i.e. to increase agricultural productivity, agro-based industries and domestic industrial units in rural areas which will positively affect the rural areas. They suggested the measures for reducing heavy migration in cities and policies for rural development which are urgently required to deal with the problem of heavy urbanization. They discussed that rural and urban development should be considered as complimentary process rather than competing for limited resources.

Khan (2001) studied role of agro-based rural industrialization to target the issues of unemployment, poverty and malnutrition in Pakistan. He has described its importance in three ways as agro-processing industry generates value addition and is labour intensive industry. Secondly, due to urbanization the demand of safe and processed food has increased and thirdly, global trading system provides new opportunities to farms in terms of price and quality. He concluded that agro based industrialization in Pakistan can lead to optimal use of resources and policies should be based on scientific planning and accurate assessment of the agriculture and allied sector instead of political.

Bhattacharya (2002) discussed some major issues related to the urbanization in development countries. According to the paper, the number of large cities has increased with the time and many of these have experienced the rural urban migration. He projected that urbanization can also be increased up to 57 percent if china and India changes the definition of urbanization because rate of urban growth has been higher in developing countries as compared to developed. Further, he discussed that the some reasons for growth in urban population are reclassification of rural population centers and natural growth rate of urban population. He has given different reasons of growth in sub-Saharan Africa and Latin America and India, whereas for migration, main determinants are economic opportunities and jobs. Later he discussed on issues of over urbanization and formation and size distribution of cities. The author concludes that the policies and the management of urban area should be made to meet the importance indices of the quality of urban life. There is a need for adopting relisting housing regulation and policies and with the same attitude is the need to change the informal sector as it provides goods, services and employment.

Raagmaa (2003) has analyzed the pattern of regional development in Estonia of Northern Europe by using a centre periphery model (CPM) of Friedmann, Gibbs and Hautamäki as analytical framework. He has used labour market survey, enterprise development data and census data of the transition period 1990s. He discussed the industrialization and urbanization phase in Estonia. He has studied the economic-political factors of development in Estonia and compared different stages of urban development in Estonia, UK and Finland.

Cecilia (2004) found different rural-urban linkages which include backward and forward linkages in different regions but their level and strength are resolute by the nature of socio-economic and cultural changes at local, national and global level. At international level, linkages linked with access to international market for small and medium scale industries; at national level, access of land, infrastructure, credit and basic services are linked with linkages; and at local level, backward and forward linkages between agriculture and industry, regulated natural resource management and integrated national planning are responsible for strong linkages.

Henderson & Wang (2005) discussed about the model of rural-urban spatial transformation due to urbanization which has been determined by population growth and economic growth. The paper is based on the factors that force this transformation. They have also examined the relationship of urbanization and spatial inequality.

Fan et al. (2005) discussed about the urban bias in India and China with various strategies to reduce it. Panel data have been used to measure the contribution of rural and urban growth in reduction of both rural and urban poverty for China and India. The data for china has been taken from 1985-1998 and for India data has been taken from 1970-1997. They resulted that agricultural growth has largely helped in reduction of poverty in both rural and urban areas in china. On the other hand in case of India, growth in rural sector has reduced rural poverty only and growth in urban sector has contributed in only urban poverty reduction. They suggested that for poverty reduction and for rural urban linkages in both nations, government investment should be in rural areas in terms of infrastructure, employment, services and market.

Fan & Kang (2005) estimated the impact of public infrastructure on growth and poverty reduction in china with special reference to road data from 1982–99. They studied the effect of rural and urban road development on rural and urban growth along poverty reduction in both sectors. The study found that benefits/cost ratios for rural roads are found to be four times bigger than for urban road, if the benefits are calculated in terms of national GDP. This ratio is much higher for rural roads than for urban roads in terms of urban GDP. The study also found that for every Yuan invested, rural roads reduce more rural and urban poverty than to urban roads.

Cohen (2006) researched about the recent trend and pattern of urban growth in developing countries. The author highlighted that in developing world almost 60 percent of the population will be living in urban areas by 2030. He further described the broad pattern of spatial changes and highlighted some of their implication for sustainable development. He found urban growth and urban governance as one of the main confront of 21st century.

Madu (2007) examined the patterns and basic aspects of rural development in the Nsukka region which is situated in southeastern Nigeria. To determine the factors of rural development, 35 rural communities on the basis of infrastructure facilities have been selected. The results indicated a discrepancy in the distribution of facilities rural development across places, with communities on the central plateau faring better. Factor analysis showed that 71.3 per cent of total variance was explained by only four factors.

Braun (2007) focused on introducing various types of flows that exist between rural and urban with the view of new attention towards special dimensions. He argued that there exist various kinds of flows and interactions between these two spaces where market, non-market and infrastructure institutions are important for efficiency and effectiveness of the same. The paper highlighted the need for new attention to the spatial dimensions of development and to rural-urban linkages for inclusive growth.

Henderson & Wang (2007) identified the key forces driving urbanization outcomes with the help of worldwide data set over 100,000 on all metro areas from 1960 to 2000. They have discussed about three interrelated dimensions of urbanization such as growth in city number, growth in individual city population sizes and changes in size distribution of cities. They examined that how urbanization is contained by size of cities and increase in numbers with the active role of political institutions and found out that high level of urbanization is accommodated in medium and smaller size cities with reasons behind the same concentration. They examined that technological advances and degree of democratization is strongly affecting the growth in individual city sizes and city numbers.

Jonasson & Halfand (2010) discussed about the factors that influences rural non-agricultural employment and rural income. The practical examination of the paper is based on demographic census of Brazil. According to the paper urbanization, distance to population centers and market size are linked with greater RNFE opportunities, even geographical conditions/locations have a relationship with employment outcome and earnings potential of rural households. They claimed that the rural non-agricultural employment depend jointly on supply side factors, individual characteristics, demand side factor and magnitude of transaction cost. They have also discussed about the poverty

alleviation potential of the rural non agriculture sectors and resulted that the poverty is lower among people who participate in rural non agriculture sector. The results also suggest that local economic context and personal characteristics both form employment and earnings in the rural economy. So as a suggestion, policies should be designed on the basis of location.

Woldehanna (2010) stated that urbanization is important for improving agriculture production, boosting productivity and reducing rural population pressure in Ethiopia. Less demand problem for the agricultural products has been seen in case of farmers near to urban centre. He found that urbanization can help rural people in investing in micro and small enterprises by providing them farm inputs and can purchase their farm output from farmers. He further argued that increases in urbanization helps in increasing agriculture and non- agriculture sector by economies of scale. He also concluded that urbanization helps in increasing productivity and flourishing industrial sector.

Xie (2010) studied about correlation between farmer's income and urbanization in Guizhou province of china. The time period of the study is from 1978-2009 and co-integration test, error correction model and granger causality test has been used. He found a long term significant correlation between urbanization level and net annual income, increase rural per capita and household operation income. But the study did not find any significant correlation between urbanization level and increase of rural per capita wage income, transitivity income and property.

Yilmaz et al. (2010) discussed important factors affecting Turkey's rural development through multi-dimensional approaches. They selected 96 villages of Bartın province from Western Black Sea Region of Turkey. This selection is based on lowest PCI and the highest village population. They developed 36 variables which characterize the level of development in villages which measures economic, socio-cultural and environmental dimensions. They found 12 characters which affect the development of the villages by principle component and regression analysis. They envisaged that geographical location, active population, size of a village, type of land use, proximity to a river, and productivity of land, housing comfort, social infrastructure investments, productive fruit areas, popular

production areas, drinking water and different cooperatives are responsible for the rural development. They also found that the PCI is affected by the elevation of the settlement place and its distance from the market i.e. higher the distance, lesser the development of the village.

Lu et al. (2011) discussed about the effect of rapid industrialization and urbanization on land use/land cover on big cities of eastern china with special reference to Shandong Peninsula region of china which has faced rapid urbanization and industrialization. The paper tried to develop a method to extract single cropping land, double cropping land and other cropping land for 1978, 1999 and 2006 from seasonal variations in Normalized Vegetation index during a crop calendar year. The results pointed out the significant changes in arable land and other land use and land cover due to urbanization and industrialization in china. The reasons behind the same transformation have been shift of farmer's economic interests and adjustments of government policies.

Long et al. (2011) examined about China's rural transformation development based on three indicators, namely, rural transformation level, rural development level and rural urban coordination level. The socio-economic data of the analysis has been taken from various government departments from 2000 to 2008. The study resulted that the rural urban coordination programme has declined in the same period and the results also suggests that extra importance is required to be given to the important factors that encourages rural transformation, mainly in coastal China, required to organize urbane rural development under speedy industrialization and urbanization. They have suggested that to turn around the movement of agricultural deficiency there is a need to strengthen the technological and financial support from urban and industry areas to rural and agriculture area.

Lemos (2011) highlighted two tangled phenomenon about urbanization of emerging economies with the experience of Brazil. The first phenomenon is related to late industrialization, whereas the second is rural-urban linkages which undertake structural transformation along industrialization. In this paper, the author has taken Thailand as comparative case with Brazil. He mainly found that there exists a difference between

Brazil and Thailand in case of working of the substance agriculture to the industrialization process.

Nguyen (2012) explained the result of urbanization on income and consumption expenditure of rural households in Vietnam. He argued that urbanization is an important feature of economic development. He also found that poverty and urbanization have a two way relationship. The study found a positive effect on PCI of rural household due to urbanization. He found a 0.39 percent increase in per capita expenditure and 0.54 percent increase in PCI of rural people with one percent increase in urbanization. In addition to this, poverty rate has also been declined by 0.17 percent point in Vietnam with one percent point increase in urbanization, Urbanization has also increased the wages of rural labour as firms not only attract urban workers but rural workers also. The author explained that urbanization generally involves migration from rural to urban and expects increase in income of migrants. Overall, urban areas tend to reduce poverty therefore poverty has a tendency to decrease as the share of urban population increases.

Tong (2012) conducted a study on rural urbanization and urban modernization in Jiangsu province for the period of 2000-2005 by using principle component analysis and factor analysis. He found three common factors which influenced the rural urbanization and urban modernization, viz., economic urbanization, social urbanization and environmental and quality life urbanization. In this, economic urbanization is still the main influencing factor of rural urbanization and urban modernization. On the other hand, social urbanization and urbanization of life quality and environment have also affected the rural urbanization and urban modernization. He concluded that the difference between rural urbanization and urban modernization will be reduced positively in context of rural development.

Sharfinia (2013) found that many rural villages have undergone changes from rural regions to cities as a policy decision of Iran government. The present paper is based on the study of a town named, Mohammadabad in zabol city, which has been transformed into town in 1999. The paper analysed the role and function of Mohammadabad town as a local center in the progress of rural region. Author has taken six functions in the form of

thirty five variables and examined with the help of network analysis method before and after effect of town Mohammadabad has been analyzed. The result shows that Mohammadabad town has a significant role in providing the services to rural regions of its surrounding.

Christiaensen et al. (2013) examined the linkages between urbanization and poverty reduction based on data of more than 3300 individuals of rural Kagera of Tanzania from 1991/1994-2010. The study showed that by moving out from agriculture to rural non-agriculture sector, one out of two individuals is coming out of poverty. On the other side 1 out of 7 came out from poverty after migrating to big cities. The further analysis of cross country panel data of 51 developing countries showed that secondary town development and rural diversification leads to further inclusive growth than metropolitan cities.

Ilesanmi (2013) used the core-periphery model to investigate the regional development of Adamawa state of Nigeria as a case study as it is one of the least developed area of Nigeria. The data in this study has been collected from the state documents on different development indicators. The paper investigated the weakness of the State to the Core–Periphery Model. He focused uneven and low regional development in the State and found that to attract nominal development peripheral settlements are spatially and demographically fragmented. The Case study also revealed the significance of government intervention to check the present imbalance in Adamawa state.

Abbey & Rutten (2015) has discussed the role of urban centers for rural development. They have tried to analyze the consequence of spatial proximity of small towns on income of the people of the surrounding hinterland. The paper also discussed the strategy adopt by the rural people for the livelihood by using the urban services. The propensity score matching technique has been used to estimate the effect. The study resulted that the spatial proximity to small towns has the constructive effect on the income of the people of the surrounding rural areas.

Akkoyunlu (2015) talked about importance of rural urban linkages. The present paper discussed about the institutional constraints, trade barriers and infrastructure problems

that prevent linkages between rural and urban. These linkages lead to inefficiencies, poverty and inequality. According to the study rural people are engaged in urban activities like manufacturing. However, many urban people are engaged in rural activities like agriculture. He concluded that urbanization is important for regional development and promoting national and global boundaries.

2.4 LITERATURE REVIEW BASED ON NATIONAL CONTEXT

Dev (1986) has discussed the labour productivity in agriculture for period 1962-65 and 1975-78 in India. He pointed out that a large number of poor are either landless or dependent on too little land for their basic food needs. As a result they generally work as labor to other farms or to non-farm enterprises for the earnings. He concluded that for the establishment of their own business and non-farm jobs in the rural non-farm sector; public investment in health, education and physical infrastructure is very much necessary.

Mishra (1992) conducted study on “Growing vegetables in village Tigipur: an Indian case study” is based on a case study on growing vegetables on rural urban fringe in Tigipur village. The village has succeeded in increasing farmer’s income, using group approach to agricultural development in an urbanized economy. The case study revealed that extension service rendered professional service to its clients which helped in adopting the group approach,; the proximity of metropolitan areas has helped farmers in selling their products and the farmers has used all the economic opportunities offered to them. In total he found that the cumulative effect of factors discussed above are accountable for increase in the income of farmers.

Wanmali & Islam (1995) described the spatial distribution of rural services in three regions of different district in states of India i.e. Andhra Pradesh, Tamil Nadu and Maharashtra from 1970 -1990. The analysis is based on three regions i.e. Miryalguda Taluka (A.P), Nagpur Metropolitan Region (Maharashtra), and North Arcot Region (Tamil Nadu). They have discussed the Chirstaller’s central place theory which examined the spatial, functional and demographic characteristics of settlement in these reasons. The paper tried to find that investment in infrastructure is a key of development

and hard infrastructure plays an important role in agricultural development but we can't ignore the soft infrastructure as well.

Islam (1997) emphasized importance of rural non- agricultural sector and rural urban linkages. He argued that growth of large scale industries in urban sector can absorb large scale labour force where rural industry not only intermingles with agriculture but also has strong bind with urban sector because they produce components for the product of urban industries or finalize their products. The urban area also helps in providing a market for the products of rural industries. The author also highlighted the role of infrastructure, education and training as a driver of non-farm growth.

Ranjan (1999) analyzed the determinants of rural non-farm employment at regional and district level in eastern and western regions of Utter Pradesh, India. He has used population census data to check the extent of non-farm activities from period 1971-91. He found that endogenous factors like growth in agricultural output, degree of commercialization, land-man ratio, marginal holding and irrigated area and exogenous factors like infrastructure in rural areas, literacy and urbanization are determinants of RNFE in western and eastern Utter Pradesh. He also specified that agriculture and urbanization have been the main determinants of RNFE in region.

Kundu et al. (2003) analyzed the impact of NFE on employment, unemployment and poverty in rural areas during 1980-2000 with the correlation analysis. They have examined the impact of proximity to urban centers on higher levels of wages, income, and access to basic facilities which resulted in higher economic and social well-being of rural population. They have examined the pattern of state level interdependencies of non-farm employment and socio-economic development with selected indicators. They argued that for strengthening the rural-urban linkages, farm and non-farm employment, provision of basic amenities and for creation of economic infrastructure should be increased in anti-poverty programmes with special care of backward and drought-prone areas.

Rani & Unni (2004) examined the effect of economic reforms on unorganized and organized manufacturing sector and growth trend with respect to trade and industrial

policies. They have discussed the growth in the organized and unorganized manufacturing sector during the partial liberalization and liberalization periods. They have checked the employment, value addition and productivity in two digit organized and unorganized industries from 1984 to 2001. They found that the growth in the infrastructure sector and automobile industry has helped in growing the manufacturing industry in the unorganized sector.

Bhalla (2005) based on the NSSO data from 1960-1991 on small scale enterprise survey studied four important rural unorganized sectors, i.e. manufacturing, trade, services, and transport, storage and communications. She found that improvement in rural infrastructure, asset holdings of rural households and rapid increase in income generated in the secondary sector are the determinants of rural workforce diversification in the country. She identified three distinct regional rural workforce development routes. She also noted decline in relative importance of very small family operated business i.e. own account enterprises (OAEs) and rise in the share of larger enterprises (directory and non-directory enterprises). She also noted that this change is most significant in the unorganized manufacturing sector.

Kundu et al. (2005) analyzed changes in sectoral distribution in the workforce in urban as well as rural areas at the national and state levels using NSSO data from 1977-2000. They observed the slow process of sectoral diversification in rural as compared to urban areas. The slowing down has negatively affected the more weak sections of populations like poor women. The state level analysis of various factors associated with employment and poverty suggests that rapid growth of employment in rural non-farm sector (RNFS) during the nineties not necessarily imply healthy economic development as the analysis indicates an increase in the element of distress employment. They have also found promotion in non-agricultural activities in the rural hinterland of small and medium towns.

Datta (2006) studied about the process of urbanization, level of urbanization, rate of urbanization and urban morphology using with the help of Census data during 1901-2001. She has also discussed the policy issues and problem of urbanization. She found

India as a country with low level of urbanization but at the same time India's urbanization is commonly termed as over-urbanization and pseudo-urbanization in case of big cities because they accomplished extremely large population size and this leads to practical problems in the urban areas like problems of housing , quality of life, slum, infrastructure, water etc. She found that urbanization in India is due to rural push not due to urban pull. She also found that liberalization, privatization, globalization are addressing negative process for urbanization in Indian economy. She suggested that suitable urban planning and shift of investment is required for well-built economic base for small cities and for operational and restorative planning.

Cali & Carlo (2009) have examined the effect of urbanization on rural areas. They have taken large samples of Indian states from 1983-1999 and found that urbanization has reduced the poverty significantly in the neighbouring rural areas, which is due to increased demand for local agricultural products, rural nonfarm employment, rural urban population ratio and rural urban remittances. The results have been attained by instrumental variable estimation and suggested that instead of migration, the effect of urbanization is causal in nature and positive for the rural areas.

Jha (2010) found evidences of weakening of agriculture-induced rural transformation in the country. He found increasing share of non- farm sector in rural workforce between 1999-00 and 2004-05. He further found that an increase in off-farm income for farm household requires growth of productive employment in rural non-farm sector. This growth of non-agriculture sector in rural sector may also help agriculture because in India more than 50 percent of housing income of a usual farmer originates from off farm activities which vary across states. The study argued for productive employment there is a need of good investment in agriculture, manufacturing and tourism sector.

Kaul and Ram (2010) discussed the impact of rural urban migration on agriculture sector of India with respect to different states in 2001 and revealed that the migration and urbanization have positive impact on agriculture production and development.

2.5 LITERATURE REVIEW BASED ON REGIONAL CONTEXT

Khan & Shekhar (2000) made an attempt to analyze the economic, demographic, social, settlement and infrastructural changes in a fast growing city of Gurgaon, India and its hinterland. He found that the fast rate of urbanization, decentralization of major industries from Delhi and agro based industries have changed the face of this areas and its surrounded areas. The provision of social services has increased due to proximity of urban area. The study found that the good transportation has increased the process of industrialization led urbanization and due to this large scale of fertile land has been turned into non-agricultural use land but at the same time no effects were found on the barren and waste land of the southern part of the same district. He also found that urbanization has improved the income status of farmers and labours.

Lintelo et al. (2001) studied how urban and peri-urban agriculture can contribute as local supplier of food to cities and income, employment and fresh food to poor households. To check the same contribution, he has tried to check the nature, extent and importance of urban peri-urban agriculture in Delhi, India. They found that, urban and peri-urban agriculture is a significant and dynamic land use for landless and small farmers living in urban and peri-urban. It is equally significant for livelihood, employment, food and income to the people. He also suggested that the urban and peri-urban have not been recognized by policy communities and researchers in India.

Pundir & Singh (2001) focused on rural urban linkages and socio-economic development by a case study of two villages in Gujarat. They have selected one developed village from Anand district and another relatively under developed village from Kheda district. They have randomly selected 50 sample from each of the two selected villages for study. They found that average income of farmers is higher in developed village as compared to under-developed village. They also found that in terms of expenditure people in developed village spent more on non-food items than in underdeveloped village. Total employment in farm and non- farm employment is also higher in developed village than under developed. They also explored that farmers in developed villages were dependent on urban areas for seed as compared to under

developed and income is higher in developed area due to higher agricultural income which finalize the fact that strong rural-urban linkages facilities through good infrastructure promotes overall rural development.

Shah (2001) examined the impact of industrialization on the periphery of an industrial estate named as Ankleshwar industrial estate of Bharuch district in Gujarat state, India. The study area is one of the largest industrial estates in the region and primary data from 114 households of two villages has been taken to find the effect of industrialization. First village in the study is in fringe of the estate and another is 10 Km away from study area. The findings indicated positive impact on workforce diversification, literacy rate, level of urbanization and employment of landless houses in the fringe_but its impact on rural agriculture economy has been limited because it is not attractive for the landed households due to its non-permanent and informal nature. As a suggestion, local linkages need to be strengthened for employment and investment.

Rao & Joshi (2009) examined the effect of urbanization on the composition of the agriculture sector in Andhra Pradesh. The study indicated that the production of high value food commodities exists in the urban and peri-urban areas than the rural areas which are beneficial for both the sectors.

Biradar (2010) studied about the shift of workers from agriculture to non-agriculture sector across gender, activities and zones in Karnataka. Correlation matrix has been used to determine the responsible factors of this shift. The result shows that distress induced factors, agriculture growth induced factors, urbanization and human capital formation are the main factors for this shift and found that agricultural growth induced factors are responsible of increase in male RNFE and poverty induce factors are responsible for increase in female RNFE although expansion of RNFE due to distress induced factors has not been in residual sector and importantly literacy has come out as an significant factor for the growth of RNFE in state.

Nathan et al. (2011) explained the important challenges before rural transformation of Indian economy. They discussed the regions of major transformation in India which are North-West India, Delhi and National Capital Region, Rajasthan and Gujarat and

Bangalore- Chennai belt. They further explained that positive changes in technology, cultivators, dalits, women, market, urbanization, communication and industrialization are the drivers of rural transformations. They also found that the migration of surplus and low- productive agricultural labour to manufacturing and service sector can lead to rural transformation.

Kamal (2012) highlighted the rural income generation through industrial linkages with the help of primary data in Punjab. The author found that the share of agricultural output in GDP has declined without any corresponding decline in the share of workforce in agriculture. He further emphasized the importance of rural non-farm sector for the promotion of rural employment and income opportunities. He argued that linkages between agriculture and industry can improve rural livelihood and the same improvement can be seen under rural-urban linkages too. The study found that 32 percent of workers are employed in farming and more than 68 percent of rural workers are employed in non-farm activities in Punjab. The study reported that non-farm income reports for about one third of total household income.

Khatun & Roy (2012) tried to identify the constraints of livelihood diversification and determinants among different livelihood groups from year 2008-2010 in two districts of West Bengal i.e. Burdwan (more diversified) and Purulia (less diversified) based on diversification indices. The study explored that the main drivers of livelihood diversification in the state are rural infrastructure, access to credit, asset position, educational level, age of household-head experience, training, agro climatic condition and social status. They have also discussed the different restraints experienced by the households like lack of opportunities in non-farm sector , lack of credit facilities, lack of rural infrastructure, fear of taking risk, lack of awareness and training facilities, and poor asset base. On the other hand the main constraints in less diversified area are lack of basic infrastructure, unfavorable agro-climate, poor asset base lack of credit facilities, poor transport facilities, lack of awareness and training and lack of basic infrastructure. As a suggestion, for the backward region there should be increase in non-farm activities.

Raisul & Abdul (2014) carried out a study on rural urban linkages in Basti district on the basis of primary data. They resulted that rural and urban areas are complementary which have benefited to each other; even urban market is key in rural urban linkages where rural areas depend on urban region for marketing, education and jobs and urban areas are benefited by agricultural products and other food items. They revealed that labour and other activities are also supplied by rural area to urban. They found that quality of roads and distance of villages from city are important indicators for rural urban linkages. As a suggestion they said that local and national government should recognize the importance of rural urban linkages to remove regional imbalances and to achieve faster development.

Reddy et al. (2014) discussed the varying structure of rural employment and production in the last two decades in India. They have tried to find out the determinants of rural transformation and structural changes through rural non-farm employment in this liberalized and globalized economy of India. According to them, non-farm sector has emerged as the new driver for rural development and transformation due to improved infrastructure, construction, transportation & communication, and improved wage rate and literacy rate among labour. They have discussed about different diversification strategies which are known as demand pull and distress pull diversification where distress pull is associated with poorer region and lower income while demand pull is associated with better market linkages. In conclusion, involvements are recommended to develop productivity in farm as well as non-farm activities.

2.6 CONCLUSION

The primary objective of this chapter is to study the various researches conducted on factors of rural transformation, rural urban linkages/relations and its impact on rural livelihood. To achieve the objective of the thesis, various literatures of international, national and regional studies have been reviewed. Globally rural urban linkages have been analyzed by Mason (1984), Li & Yuan (1995), Cicilia (1998), Fay & Opal (1999) and cililia (2004). Many authors have examined the effect of urbanization on rural livelihood such as Ibrahim (1970), Khan (1996), Khan (2001), Woldehanna (2010). Ray (1994), Jonasson & Halfand (2010), Xie (2010) have examined the effect of rural

nonfarm employment on rural sector. Nationally Dev (1986), Islam (1997), Ranjan (1999) and Kundu (2003) have studied the different indicators of rural transformation in India. On the other hand Cali & Carlo (2009), Kaul & Ram (2010), Jha (2011) and Reddy et al. have examined the linkages between rural and urban areas.

At state level, Khan & Shekhar (2000), Rao & Joshi (2009) and Kahtun & Roy (2012) have found out the effect of urban areas on rural transformation. Some of the researchers like Pundhir & Singh (2001) and Lintelo et al. (2001) have also examined the rural urban relation by primary survey. So the above literature fulfills the purpose of studying the previous research for getting the research gap and examining the all objective of the thesis.

The articles reviewed above have also been summarized in the table 2.1 given below.

Table 2.1: Summary of Review of Literature

Sl. No.	Author & Year	Form of data & Period	Method	Finding/Conclusion
1	Ibrahim (1970)	Primary survey based	Descriptive analysis	Revealed positive effect of urbanization on occupational and expenditure pattern in village.
2	Dev (1986)	Secondary 1962-65 & 1975-78	Regression, growth rate	Found that non-farm employment increases the earnings of small households.
3	Mason (1989)	Secondary	Descriptive analysis	Indicated that better understanding of urbanization can lead to rural urban linkages and national development.

4	Guo (1991)		Descriptive Analysis	Studied the relationship between rural modernization, agriculture modernization, rural industrialization and rural urbanization in china.
5	Mishra (1992)	-	-	Reported that proximity of metropolitan areas has helped farmers in selling their products and the farmers have used all the economic opportunities offered to them.
6	Ray (1994)	2004	N.A.	Explained that Inter-sector linkages between farm and non-farm sectors can generate economic growth, but the unequal structure of the agricultural economy acts as a constraint.
7	Li and Yuan (1995)		CAB	Found that the industrial set up in urban areas hold up the development of agriculture and also support establishment of rural towns.
8	Wanmali and Islam (1995)	Descriptive study based on census and location data, 1970-1980	Chiristaller's central place theory	Found that urbanization and innovation have increased the rural service and infrastructure
9	Khan (1996)	Secondary data	Descriptive Analysis and simple	Concluded that urban centre generates agro processing and supplies services, commercial and personnel services, regional transport and communication services public and social services and regional marketing and trade services for rural areas.

10	Islam (1997)	1970-1990	Push and pull factors	Explained relationship of infrastructure, education & training with rural development.
11	Cecilia (1998)		Linkages (Descriptive)	Found linkages between agriculture, manufacturing and services sector.
12	Lindert and Verkoren (1998)		Review paper	Explained that smaller town plays a major role in processing the primary produce and in providing the basic services.
13	Fay & Opal (1999)	1965-1995	Regression	Found that the most important factors that help forecast differences in levels of urbanization across countries are education, ethnic tensions, income structure, rural-urban wage differentials, civil disturbances and economic incentives.
14	Ranjan (1999)	1971-91	Regression analysis	Found that endogenous factors like growth in agricultural output, degree of commercialization, land-man ratio, marginal holding and irrigated area and exogenous factors like infrastructure in rural areas, literacy and urbanization are determinants of RNFE in western and eastern Uttar Pradesh.
15	Wang & Hu (1999)	Secondary Data	Time-series analysis	Reported that the development of village enterprises and township has been an engine of rural urbanization in china.

16	Khan and Shekhar (2000)	-	-	Found that the fast rate of urbanization, decentralization of major industries from Delhi and agro based industries have changed the face of this areas and its surrounding areas.
17	Epstie and Jezeph (2001)	-	Descriptive analysis	They investigated the rural-urban migration and its consequence on urban centers and found that income opportunities forces them to come in urban areas
18	Khan (2001)	-	-	Studied role of agro-based rural industrialization to target the issues of unemployment, poverty and malnutrition in Pakistan.
19	Shah (2001)	1981 and 1991, secondary data, 2001, Primary data	Descriptive analysis.	He reported that industrial growth has triggered the diversification of workforce, literacy and level of urbanization etc.
20	Pundir and Singh (2001)	Primary survey based and secondary	Multiple regression	Found proximity to urban areas, increase the development in rural villages
21	Lintelo et al. (2001)	1998-99, Primary data; 1990-91 and 1996-97, Secondary data	Descriptive analysis.	The researcher reported that urban and peri-urban agriculture is an important and dynamic source of land use for landless and small farmers living in urban and peri urban. It is also important for livelihood, employment, food and income to the people.
22	Bhattachrya (2002)	Data by various world organizations	-	Found positive effect of urbanization on rural development.

23	Kundu et al. (2003)	1980-2000	Correlation	Studied the impact of rural non-farm employment on rural areas.
24	Raagmaa 2003	Census data, labour market survey and enterprise development data, 1990	Centre periphery model	Analyzed the pattern of regional development in Estonia of Northern Europe by using a centre periphery model (CPM) of Friedmann, Gibbs and Hautamäki as analytical framework.
25	Wandschneider (2004)	2003, primary data	Descriptive analysis	He found that small rural towns and close by villages are strongly connected through consumption, financial linkages, production, employment, and various types of economic and social services.
26	Cecilia (2004)	Secondary data, 2004.	Regression analysis	Reported that small and medium scale industries were linked with international market, at national level access of land, infrastructure, credit and basic services are linked and at local level backward and forward linkages between agriculture and industry,.
27	Rani and Unni (2004)	1984 to 2001, NSSO & ASI data	Descriptive analysis	Reported that the growth in the infrastructure sector and automobile industry has helped the growth of the manufacturing sector, mainly in the unorganized sector.
28	Bhalla, (2005)	NSSO	Growth rate	Study concluded that rural infrastructure, asset holdings

		1960-1991		of rural households, rapid increase in income generated in the secondary sector are drivers of workforce diversification.
29	Kundu et al. (2005)	1977-2000, NSSO Data	Growth Rate	Found that workforce diversification in rural and urban area, existence of rural nonfarm enterprises in hinterland.
30	Fan et al. (2005)	1985-1998; 1970-1997	Regression analysis	Discussed about the urban bias in India and China with various strategies to reduce it.
31	Fan and Kang (2005)	1982-1999	Econometric model	Showed that benefit/cost ratios for rural roads are about four times larger than for urban roads. The study also found that for every Yuan invested in rural roads helps in reducing the poverty in rural areas as compared to urban areas.
32	Cohen (2006)	World population data, 1950-2030(P)	Descriptive	Studied pattern and implications of world urbanization.
33	Datta (2006)	1901 to 2001, Census data	Descriptive analysis	Revealed that urbanization is a product of demographic explosion and rural-urban migration. Urbanization is taking place not due to urban pull factors but due to rural push factors.
34	Madu (2007)	Primary data	Descriptive & factor analysis	Analyzed the patterns and basic aspects of rural development in the Nsukka region of southeastern Nigeria. They found a discrepancy in the distribution of rural development facilities across places
35	Braun (2007)	2007	Share	The paper highlighted the need for rural-urban linkages for inclusive growth.

36	Henderson and Wang (2007)	1960-2000	Regression	Examined how urbanization is contained by size of cities and increase in numbers with the active role of political institutions
37	Cali and Carlo (2009)	1983-1999	OLS regression	Found that urbanization has major role on rural poverty reduction.
38	Rao and Joshi (2009)	1980 – 2003, Secondary data, 2000-01, Primary data	Multivariate analysis, OLS, Tobit, and SURE	Study indicated a larger concentration of high value food commodities in the urban and peri-urban areas than in hinterlands/rural areas.
39	Jha (2010)	NSSO and CSO data	Regression analysis	Revealed that weakening of agriculture-induced rural transformation in the country increases share of non- farm sector in rural workforce.
40	Jonasson and Halfand (2010)	Census 2000	Share & binomial probit model	Found the factor that influences rural income and rural non-agricultural employment in Brazil. They found that prediction for RNFE depend on demand-side factors, supply-side factors, and the magnitude of transactions costs.
41	Kaul and Ram (2010)	2001	Regression Analysis	Revealed that the migration and urbanization have positive impact on agriculture production and development.
42	Woldehanna (2010)	-	Descriptive analysis	Reported positive linkages between rural and urban area.

43	Xie (2010)	1978-2009 (CAB)	Co-integration test, ECM and granger causality test	Found that there is a long term significant correlation between urbanization level and net annual income, increase rural per capita and household operation income.
44	Yılmaz et al. (2010)	2010	Principal component and regression analyses	They reported that type of land use, geographical location, housing comfort, active population, proximity to a river, productivity of land, popular production areas, size of a village, productive fruit areas, drinking water, cooperatives and social infrastructure investments are responsible for the rural development.
45	Lu et al. (2011)	1978, 1999 and 2006, Secondary data	Spatial analysis	The results pointed out the major changes in arable land and new land use and land cover due to urbanization and industrialization in china.
46	Reddy et al. (2011)	-	Descriptive Analysis	Found regions of transformation and drivers of transformation in India
47	Long et al. (2011)	2000-2008	Analytic hierarchy process (AHP) methods	Found that rural industrialization and urbanization have increased rural transformation development in china.
48	Lemos (2011)	1950-2006	Ginni Index	Revealed that urbanization is connected with rural development
49	Nguyen (2012)	Panel data from the 2002, 2004, 2006, and 2008	Fixed effect regression	Reported that urbanization has a positive consequence on PCI of rural households.

50	Kamal (2012)	Primary survey	Descriptive analysis	Study highlighted that linkages between agriculture and industry can play significant role in enhancing rural livelihood.
51	Khatun and Roy (2012)	2008-2010	Regression and livelihood diversification index	The study identified rural infrastructure, access to credit, asset position, educational level, age of household-head experience, training, agro climatic condition and social status as the main drivers of livelihood diversification in the state.
52	Tong (2012)	2000-2005 (CAB)	Principle component analysis	Found positive relation between urbanization and rural development.
53	Sharifinia (2013)	2013, Primary data	Network analysis	The study reported that Mohammadabad town has played a main role in providing services to its surrounding and reduced the dependence of rural regions to city center.
54	Christiaensen et al. (2013)	1991/4-2010, Panel data	Descriptive analysis	The study showed that rural non- farm economy and town played an important role in reducing poverty in rural area.
55	Ilesanmi (2013)	Descriptive analysis	Core Periphery model	Found that road, infrastructure and agriculture in cores will develop the periphery.

56	Raisul & Abdul (2014)	2014, Primary data	Descriptive analysis	They found that rural and urban areas are complementary and benefited to each other and urban market is key in rural urban linkages. They found that quality of roads and distance of villages from city are important indicators for rural urban linkages.
57	Abbey and Rutten (2015)	Primary data	Regression analysis	Found that proximity of urban areas has positive effect on income of rural people
58	Akkoyunlu (2015)	2015	Review paper	Have researched about rural urban linkages and found that urbanization is important for regional development
59	Biradar (2010)		Correlation and matrix analysis	Result showed that urbanization, distress induced factors, agriculture growth induced factors and human capital formation are the main factors for increase in rural nonfarm employment.

60	Reddy et al.(2014)		Time series analysis	Reported that non-farm sector is the new driver for rural development and transformation due to improved infrastructure, construction, transportation & communication, and improved wage rate and literacy rate among labour.
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