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INDUSTRY LED REGIONAL TRANSFORMATION: A CASE OF NEEMRANA BLOCK, ALWAR DISTRICT

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ABSTRACT

Neemrana block a part of National Capital Region Delhi, once famous for Neemrana Fort and artistic wells is witnessing industrial activities today. The influences of new economic reforms are being clearly seen in Neemrana in the form of transformation of agrarian economy to an industrial one. Although, process of industrialization started in the block way back in 1982 when the area under industry was about 1 % of the total area; but afterwards vigorous efforts of RIICO it increased to around 13 % of the total area showing a rapid industrial development in the region. Besides, up gradation of supporting facilities like housing, market, banks, colleges & university, hotels and other infrastructure services have made their presence been along with industry in the area. But the effect of this development is more discernible only in those villages which are located up to 4 kms. on both side of NH 8 while beyond 4 kms. the transformation seems indistinct in terms of percentage of built up area, percentage of work participation, land values availability of amenities and so on. In the light of the above this paper seeks to draw major issues and strategies for a dynamic and balanced development of the region.

Key Words: Globalization, Industrialization, Transformation, Infrastructure services, Regional Development

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1. Introduction:

Rajasthan sub region of NCR, especially Bhiwadi and Neemrana at present is growing rapidly with major automotive hub proposed over 100 auto parts manufacturing companies. Broad comparative analysis of net state domestic product, location linkages and industrial output, provision for SEZ, and growth rate of population vis - a - vis its role in the newly revised NCR plan, 2031 lay emphasis on its importance in the development momentum of the region (Refer figure 1).

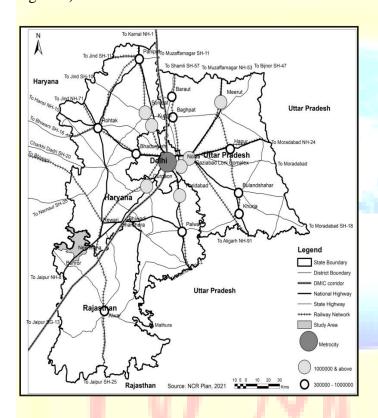


Figure 1: Location of Neemrana in National Capital Region

The aim of the study was to assess the overall status of industries in the Neemrana block and analyze undergoing transformation due to industrial development so as to suggest strategies for the socio-economic development of the region and in order to achieve aim and objectives were defined, first got the overview of current industrial profile, proposal for future expansion and the government incentives and then analyzing transformation in spatio, socio economic and facilities & services so as to identify issues and potentials and then suggest strategies for the balanced socio-economic development of the block. The present study seeks to answer the following questions in particular:

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1. How industries play a significant role in the transformation of a region and how industrial development affects different aspect of human life?

2. What and how the policies and regulations enacted by government are affecting the processes of industrial development?

3. What are the changes occurred in land use pattern, land conversion and land values due to industrial development?

4. What is the pattern of population growth, occupation structure and availability of infrastructure services?

5. To what extent characteristics of settlements transform due to industrial development?

6. What are the opportunities, potential and constraints in the process of industrial development leading to regional/ spatial development?

While introducing the subject with aim, objectives and setting question for seeking possible answers and chapterization of the study in the beginning, the review of literature and research methodology have been attempted in section two. The case study of Neemrana block in terms of its broad spatial, and socio- economic characteristics and status of industrial development Vis- a-Vis other supporting facilities and services have been analyzed in section 3. Besides, this section also deals overall village transformation taken place on the ground. While section 4 summarizes the discussion and findings, section 5 dwell on the conclusion with key points and their implications. In the last, limitation of the study has been described along with possibilities of future research on industrial development of the study area.

2. Literature Review:

With the new economic reforms in the form of liberalization, privatization & globalization, industrial sector during nineties brought into practice for persuding the economic growth of the country by government. These new economic reforms were carried out especially in three important sectors of trade and commerce, finance and industry. The reforms thus initiated



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removed certain restrictions on the Indian trade and commerce by carrying out certain changes regarding promotion of Foreign Direct Investment (FDI), permission on the entry of Multi National Companies (MNCs) in Indian market and allowing Indian companies to enter into foreign collaboration. The Government of India announced a new Industrial Policy, 1991 with the main objectives to maintain the sustainable growth in the productivity, gainful employment and to attain global competitiveness. Similarly, the main focus of policies that came after independence were only on to encourage small and medium industry for employment generation and adopted industrial clusters approach with a purpose of widely dispersion of production, standardization and quality of products, technology up-gradation & Infrastructure development and encourage export oriented production. Structure transformation as the process where predominantly agrarian economy is transformed into a diversified and productive economy dominates throughs manufacturing and service sector (Mehta, 2010). Basically it itself manipulated by several factors but in response, it affects its surrounding and become the cause of transformation through generating the demand for supporting services namely: communication, restaurant, legal advisors, infrastructure such as medical, educational which change the spatial structure and socio economic development of a region.

3. Research methodology-

The present study is based on information, data and interviews from primary as well as secondary surveys. While in primary survey includes interviews conducted with different stakeholders, secondary data were collected from RIICO office Neemrana, Bhuvan website, Town and Country Planning Department, Village directory and the District Statistical and Census Office, Alwar. Collections of data were analyzed in the framework of broadly three parameters such as spatial, socio- economic and industrial growsth. The indicators for industries were size, type and area of industries, employment generation, investment, proposal and other supporting services. Spatial and socio economic indicators included built up area, land values, population growth & density, settlement hierarchy, work participation and the availability of amenities and services. The major tools used for the analysis were statistical and graphic presentation including line and bar graph, pie diagram, GIS Overlays, choropleth techniques, weightage and scoring methods.

4. Case Study:

Neemrana Block, which has been taken for case study is part of Alwar District of Rajasthan. It has an important strategic location in terms of its connectivity and proposed investment zone envisaged by central and state governments. It is situated in the middle of Delhi and Jaipur city on National Highway No. 8. Neemrana is one of the seven smart cities proposed along prestigeous DMIC project under which Neemrana-Bhiwadi-Khushkhera has been proposed as an investment region. Due to global interface (Japanese Zone and upcoming Korean Zone), this area will be known for the biggest auto hub in the country in the near future with an opportunity to get benefit of the National capital city of Delhi which is already enjoying the status of largest automobile market in the country (Refer Fig. no. 2).

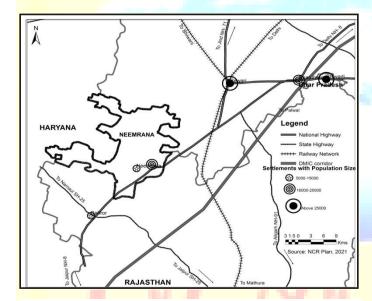


Figure 2: Major Industrial Areas and Global City Project along DMIC Corridor in Haryana and Rajasthan Sub-region of NCR.

The main reason for the attraction of industrial development in the block is the role of state government which has identified and designated the land for developing the Shajhanpur-Neemrana-Behror Urban Complex. The availability of huge parcels of land at comparatively lower prices in the proximity to the Golden Quadrilateral, NH-8 and the Dedicated Freight Corridor would provide benefits to the investors in the region Other factors responsible for the industrial performance are nearby industrial areas, number of industrial workers in industrial

cluster and number of units under production etc. The analysis of above variables revealed that Neemrana industrial area has maximum area under industry as compare to Bhiwadi, Dharuhera, Bawal and Behror industrial areas. Figure-3 shows that Neemrana industrial area is larger in area and second to Bhiwadi in terms of number of workers employed in industries (See Figure no. 3 & 4)

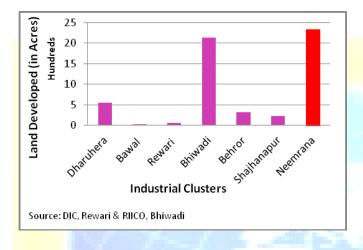


Figure 3: Land Developed (in acres) under Industry, (2005-06)

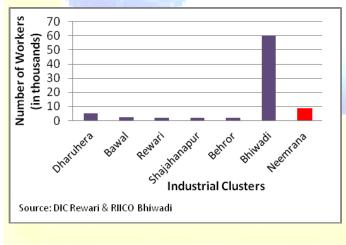


Figure 4: Number of Workers among Industrial clusters, 2005-06

4.1 Industrial Development:

Though, the first and the earliest Industrial area developed by RIICO in 1982 was Shajhanpur, Neemrana Block has experienced massive transformation in spatio and socio economic conditions since the past decades due to rapid industrial growth in the area. The stretch of

industrial zones in the block lies along the National Highway. Indian Zone is located on the north of NH 8 while Japanese Zone in the south.

Before 1994, the area under industries was only 3.36 square kms of the total area (371 square kilometres) of the block but later on with the investment of Indian and overseas companies its spread reached to 10sq. km. Suitable policies and incentives provided by the State government and its strategic location on NH-8 are responsible for its sudden expansion in areal extent (Refer figure no. 5, 6 & 7).

Out of 642 industrial units 268 units are under production; major among them are textile, automobile, Handicrafts and electronic are the major industries.

Many well-known companies from India and abroad have set up their units in these industrial areas and many more new industries are arriving which are adding a new dimension to the industrial progress of the Block.

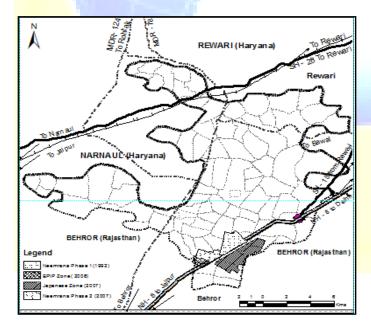


Figure 5: Industrial Areas in Neemrana Block



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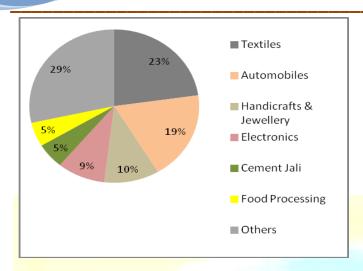


Figure 6: Types of Industries

The numbers of Industrial plots in the industrial areas have increased over a passage of time and it varies from one zone to another and it giving a rising trend in the value of land in all the phases accordingly. It means due to the impact of industrial development the prices of land have increased many folds.

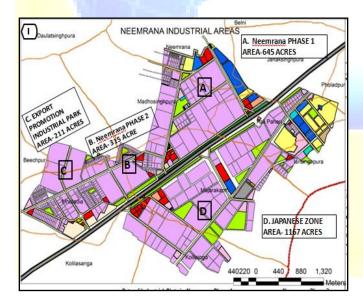


Figure 7: Neemrana Industrial Area, EPIP & Japanese Zone

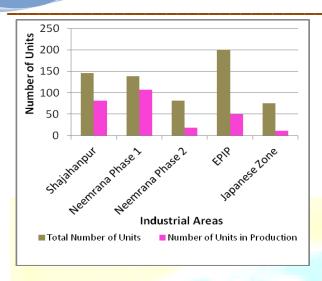


Figure 8: Functional and Non Functional units

The size of capital investment in the industrial zones has increased over the past few decades in the block. In Neemrana Phase 1 RIICO has encouraged the investment of Rs. 1100 crores but Japanese Zone which mainly comprises of the Japanese companies has provided maximum investment of Rs. 2099 crores for the development of automotive industry. However, it is observed that Industrialist hailing from Rajasthan is comparatively very less in number in this area. (Refer figure no. 8 & 9).

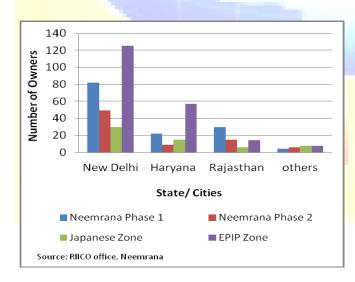


Figure 9: Number of Industrial Owners

Out of the total industrialists, 65 industrialists are from Rajasthan and among them 18 are from Neemrana block.



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The size of capital investment in the industrial zones has increased over the past few decades in the block. In the meanwhile Neemrana Industrial Association (NIA) has been registered under the society act 1960 and it came into existence in 2003. NIA comprising of 47 members including Japanese Zone, certain initiatives have been undertaken by the association to organize certain programs such as eye camp, distribution of woollen clothes in villages, workshop on Sustainable Ground Water Management etc. and also provide an opportunity for internship of engineering students. Besides, association arranged meetings to resolve the problems that hampered the business such as high rate of electricity and shortages, water availability, conditions of road etc. from time to time. Association has also given emphasis on environment friendly technology like use of natural gas (at present only two industries Parle Biscuits Limited and HNG are using the natural gas which is supplied by Natural Gas station situated in Japanese Zone), Zero water discharge plant and arranged various programme on water conservation and energy efficient lightning.

4.2 Other Supporting Services:

Furthermore, a noticeable speedy transformation has occurred in the social and physical infrastructure in the block.

a) Institutional-

Neemrana is becoming an important educational destination, with nearly 38 universities receiving sanction to open their institute here. Presently some of the major educational institutes functioning here are NIIT, Raffles, Rai University, School of Aeronautical Engineering College, St. Margret School Education (Engineering College), Rath International School, a school promoted by Parle Biscuits Limited situated in Neemrana Phase 1 industrial area and other private school have come up. There is one government Polytechnic college located in the Neemrana Village.

b) Residential -

The main reason of becoming Neemranaa realty hotspot is the strategic location of the block and the presence of MNCs has created massive demand for housing, institutional and retail facility etc. Currently, the major private realty players providing residential facilities to the workers are Ashiana Housing, V. B Builders, Eldeco, Anantraj, Ashadeep, etc. These developers are

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presuming rapid transformation with future residential demand in the area and try to establish their group housing projects by acquiring large chunk of land in the vicinity of the industrial areas.

c) Commercial -

The number of unregistered shops has increased from 80 to 280 shops in Neemrana village which is close to industrial area. These shops are located on both sides of the road leading to Neemrana Fort. Apart from these shops there are many vendors and rehriwalas who operate in front of these shops and keep the town alive. There are 22 shops situated in Neemrana industrial area developed by RIICO mainly including electronic, booking offices and hardware run by the local people. Increased industrial activities have given rise to commercial establishment in the block. One big commercial complex is also under construction at Neemrana.

4.3 Government Proposal and incentives for Industrial Development in the block-

As the government of Rajasthan is now going to develop a 'Global City' on 40,000 acres in the Shahjahanpur-Neemrana-Behror area (SBN), this city will have a capacity to house one million people and will also have a cyber city, a medi city, a knowledge city, an entertainment city, SEZ city, a world trade city, and a bio-diversity park. For this Global city Town and Country Planning department has prepared a draft Master plan 2041 for the SBN complex with the objective to integrate the industrial development of Bhiwadi and Khushkhera with Shajhanpur, Neemrana, and Behror along the NH- 8 and provide the infrastructure facilities in a planned manner. After the Japanese zone, an industrial zone dedicated to the Koreans too will come up at Ghilot in Neemrana. The total area of the project site is 7.49 sq. kms. A total of 613 industrial plots will be developed along with commercial, residential and institutional plots. Single window clearance with online application renders transparency to the system thereby facilitating investors with expeditious and time-bound clearances and approvals.

4.4 Unorganized Industrial Activities in the block-

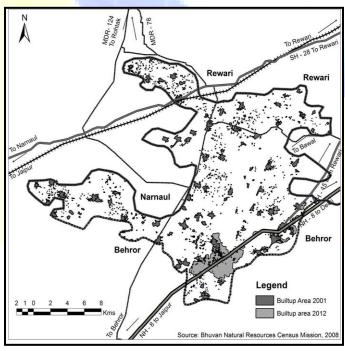
On the one hand organised industrial area is bringing continuously transformation in the block and establishing infrastructure for the future development. While on the other side certain other unorganized activities are functioning in the block like mining and brick making units that are providing raw material for the construction of organised industry and also employment to the local people. In the organised sector share of local employees is near about 5% while in the unorganized it is more around 80% but the proportion of investment is maximum in the organised sector rather than unorganised and becoming the basis of new rapid changes emerging in the block.

4.5 Spatial Transformation:

The continuous expansion of industries led the spatial transformation in the block. Presently, Villages which are located along NH are transforming very fast in comparision with rest of the villages. The land values of these villages have gone very high and the land market is on the rise as many property dealers opened up their offices. Major players of real estate are developing their group housing projects that are concentrated along the National Highway.

4.5.1 Changes in Builtup Area-

A significant change has been noticed in the built up area of the block since 1994. In 2012 rapid changes have ocurred in the built up area due to which share of agricultural land has decreased from 82 % to 68% raising the built up area from 4% to 18% (Refer fig. no.- 10).





4.5.2 Land Values-

The value of land depends on the use of the land. Drastic variation has emerged in the land prices since the last decades. In 2002, land prices above Rs. 3 lakhs per bigha in the villages located along National Highway were considered to be high as compared to villages away from NH in the block. But in 2012 the land prices shot up to Rs. 10 Lakh per bigha in those villages positioned along National Highway while in rest of the villages the range of land prices were Rs 4 lakh to 8 Lakh per bigha (Refer fig. no.11).

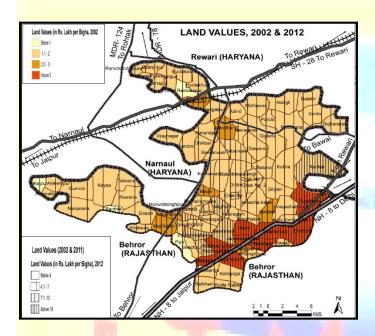


Figure 11: Land Values (2002 & 2012)

Land values pose both negative and positive impact in the block. Positive impact in terms of increment in their assets like better houses with at least one storey, vehicle ownership, education etc have been noticed in the block. However, due to sale of land farmers have been rendered occupationless and have increased their spending on social functions such as marriages and other functions.

4.6 Socio-economic Transformation:

Structural changes generally bring transformation in the socio economic conditions of the people and also help in improving already existing infrastructure facilities. Neemrana block has geographical spread of 371 square kilometres having total population of 17726 inhabited in 84 villages. Shajhanpur is the biggest settlement with a population of 10652 persons where RIICO

established its first Industrial Area in the block in 1982 due to which population of the surrounding area attracted towards it in search of employment In the year 2011, there were 23 settlements falling in the range of 1000 - 1999, 34 in the 2000 - 4999 while in 1991 it was concentrated in three ranges 500 -999 (19) 1000 - 1999(31) and 2000 - 4999 (18) (Refer fig. no.12).

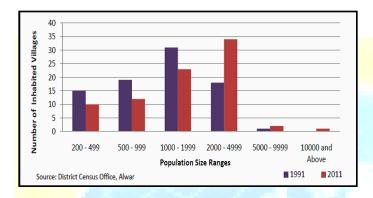


Figure 12: Distribution of Population (Range wise), 1991& 2011

Significant positive changes discerned in the percentage share of working population since 1991 and consequently the percentage share of non workers has reduced from 47% to 31% (Refer Figure 13).

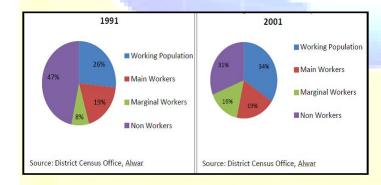


Figure 13: Work Participation (1991 & 2001)

4.6.1 Infrastructure services:

Five amenities have been taken to analyze the status of villages in terms of services. These five amenities were education (Total Number of schools included primary, middle and high), Bank (Commercial as well as cooperative bank), Communication (Bus and Rail Services), Road (Pucca, Kutcha and Foot path), Power Supply (Agricultural and Domestic use, for all Uses).

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In order to get final status of each village in terms of industrial development and spatial & socio-economic transformation, combination of these amenities with industrial, spatial, socio -economic variables in to one i.e. overall development matrix and weightage has given to each variable on the basis of good, average and poor. Their level have been decided according to the average value of the variables and found those village's performance are above average falls in the category of good, those villages are on average then considered them village having average performance while those villages are below average are attributed by poor performance villages.

5. Findings and Discussion-

On the basis of overall development matrix four major zones have been identified. First zone depicts villages having very high growth whereas second zone pertain to characteristics of high growth area while third zone attributed by medium growth and finally the fourth zone reflects the features of low growth area.

Very High Growth Area: comprised of twenty villages attributed by their location advantage (Closeness to Highway) and the land of some of these villages are under industries consequently built up area has increased and conversion of agriculture land into non agriculture use has occurred. Land values registered very high trend as compared to other zones. Growth of population and increase in infrastructure facilities also saw upward increase in the proximity of these villages.

High Growth Area- This Zone consists of seventeen villages pertaining to high growth in the region. Here the impact of industrial development is high especially in those villages that are adjoining to the villages within industrial area.

Medium Growth Area- This area is attributed by medium growth and it comprised of thirty seven villages that are highest among all zones. These villages are positioned in the north and south west of the block and no important activity is functioning over there, population density is below average, number of schools and other amenities registered average growth.

Low Growth Area – This zone lie beyond the influence of the industrial development and no changes have been observed in this area over a period of time (Refer figure 14).

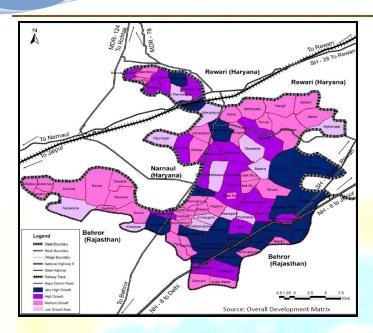


Figure 14: Identified Growth Areas

6. Conclusion-

Keeping the above analysis in view, it can be concluded that a few decades ago Neemrana, famous for Neemrana Fort and its agrarian economy now is known for automotive hub. In 1990s new economic reforms brought upheaval in the Indian economy and made this industrial sector more prominent. As Neemrana is the part of NCR the impact of these reforms have been clearly seen in Neemrana in the form of transformation of agrarian economy in to industrial one. Even though the process of industrialization started in the region in 1982 in Shajhanpur which constituted about 1 % of the total area but afterwards with vigorous efforts of RIICO it spread over a large extent and became 13 % of the total area showing a rapid industrial development over a period of time. In addition, up gradation of other supporting facilities like housing, market, banks, schools, colleges and universities, hotels and other infrastructure services have been noticed in the area. But the effect of this development is more discernible only in villages which are located in the vicinity of the industrial area in terms of percentage of built up area, land values, work participation and the availability of amenities, Consequently transformation in villages is apparent up to 4 km on both side of NH and beyond 4 kms the effect of development seems indistinct. The major issues drawn from the study are share of local employment in industries, lack of local people's ownership on industrialist plot, excessive concentration of industries along NH leading unbalanced growth and expensive educational facilities. In the light



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of identified issues it is important to suggest strategies for its dynamism and balanced development.

7. Recommendations:

On the issue of share of local employment in industries the approach would be to develop new forms of networking and interface between economic, social and political system. In order to encourage the participation of local people in industrial development, regulations policies should be formed in such a manner so that first preference should be given to local people in allotment of plots and encourage the partnership of local people in the development activities. For the balanced development, existing road and rail linkages need to be widened and strengthened so that the burden on resources and infrastructure along highway can be reduced. In addition to this RIICO should adopt villages which are lagging behind in the development as compared to other villages and take initiatives for further development of these villages by providing economic opportunities to them. Local people don't have enough skill to get qualified jobs. In order to improve their skills; government should establish Industrial Training Centres and community college with some percentage of seat reservation for local people.

7.1 Limitations:

The Scope of the present study is only confined to Neemrana Block although it is said that the influence of industrial development can't be restricted with a specific area its impact spread over a large extent. There are several other industrial towns in the surrounding of the area but by the help of certain variables justification of the study has done. Due to time constraints limited primary survey has been conducted including interviews. Due to the absence of database, production data of the industries did not analyzed. The poor and inadequate database such as demographic, investment and production compelled to restrict the study in its dimensions.

7.3 Further research:

Further research in the industrial development of this area as a region can be taken up local issues such as involvement of local communities, impact of industrialization on the surrounding environment, loss of agricultural land and possible alternatives opportunities for farmers and rural – urban linkages/ relationships etc.

The central government has proposed seven smart cities along Delhi- Mumbai Rail Corridor (DMRC) which could be undertaken for further studies in an overall spatial-temporal framework.

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