



**Comprehensive Socio-economic Assessment for the
Development of access controlled Spur to Haridwar from
Delhi-Saharanpur-Dehradun Economic Corridor in
Uttar Pradesh and Uttarakhand States**



**A Project Report Submitted to
National Highways Authority of India**

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**School of Social Sciences
Punjabi University Patiala**

October, 2021



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Chapter - 1

Introduction

The construction of new highways is essential for the economic development of India. The country has the 2nd largest road network in the world with a length of 63.86 lakh km after the United States of America that has a road network of 66.45 lakh km. India's road network carries about 87 per cent of passenger traffic and 60 per cent of freight traffic movement in the country. The National Highways are the economic strength of India. Their length was 1,36,440 km in the country, besides State Highways of 1,76,818 km as on 31 December 2020 (*GoI, 2021*). National Highways constitute only 2.2 per cent of the road network but carry more than 40 per cent of the total road traffic. The daily average length of the Highways construction in India has grown significantly from 12 km in 2014-15 to 36.4 km in 2020-21 (*The Hindu, 2021*).

To improve connectivity across key economic centres, the Indian Government launched 'Bharatmala Pariyojana'. The 'Phase I' of this program was endorsed on 24 October 2017 for the construction of 34,800 km highways at an estimated cost of Rs.5,35,000 Crore during 2017-22 in order to develop Economic Corridor, Inter Corridor, National Corridor Efficiency Improvement, Border Road and International Connectivity, Port Connectivity and Coastal Road, Greenfield Expressway, and Balance Works of the National Highways Development Project (NHDP). The program is funded through Cess collected from Petrol and Diesel, Toll, External Assistance, Private Sector Investment, etc. Around 35 crore man-days of employment shall be generated under Phase-I of the program. The target of the program is to raise National Highways connection from 300 districts to 550 districts out of the total 716 districts of the country. (*Bharatmala Pariyojana, 2021*).

The National Highways Authority of India (NHAI) was set up in 1988 and became operational on 10 February 1995 with the appointment of full time Chairman and Members. It is an autonomous agency of the Government of India under the Ministry of Road Transport and Highway (MoRTH), which was set up for the development, maintenance and management of National Highways. The NHAI is mandated to implement NHDP in a phased manner. It aims to complete the task of implementing 'Bharatmala Pariyojana' in a time bound manner. In addition, National Highways & Infrastructure Development Corporation Ltd (NHIDCL) has also been operational since 13 March 2014 to provide regional connectivity with neighbouring countries. Greenfield Highways Policy was launched in 2015 to promote greening and development eco-friendly National Highway corridors across the country with participation of farmers, private sector and government institutions including Forest Department. The objective was to reduce the impact of air pollution and dust by planting trees and shrubs along the National Highways. Indian Highways Management Company Limited (IHMCL), a company promoted by NHAI, is responsible for empanelment of agencies for plantation on National Highways.

Saharanpur-Haridwar Greenfield Spur:

The Government of India has planned to construct 6-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand States under 'Bhartmala Pariyojana Phase I' program. The task has been assigned to NHAI. The spur will provide direct and very short-term connectivity to Haridwar, the gateway to the sacred and one of India's seven holiest palaces or 'Sapta Puri'. Chardham comprising Yamunotri, Gangotri, Kedarnath temple and Badrinath temple also passes through Haridwar.

The alignment is proposed to start from Halgoya Mustahakam Village in Rampur Maniharan Tehsil of the Saharanpur District in Uttar Pradesh at a distance of 108.45 km of the 212 km Delhi-Saharanpur-Dehradun Economic Corridor, and traverses through northern side of Roorkee Tehsil of Haridwar District. The Greenfield Spur terminates on NH-334 (Old NH No. 58) at Badheri Rajputan Village in Haridwar District of Uttarakhand by covering a length of 43.9 km. The spur covers four Tehsils namely, Rampur Maniharan, and Deoband of Saharanpur district in Uttar Pradesh, and Bhagwanpur, and Roorkee of Haridwar districts in Uttarakhand. The proposed Right of Way (RoW) for this Spur is 60 m with speed of 120 km per hour. The project is proposed to be Greenfield alignment with 6 lanes. The total cost of the proposed project is Rs. 2325 crores. The spur is planned to connect Saharanpur district in Uttar Pradesh to Haridwar district in Uttarakhand with new alignment to shorten the travel time as well as distance.

Project Benefits:

The alignment is advantageous to the hinterland of agriculturally developed, but otherwise not very developed area which lagged behind because of lack of proper connectivity. The project will provide following benefits:

- Presently, the traffic from Delhi to Haridwar follows 4-lanes NH58 passing through Ghaziabad, Modi Nagar, Meerut, Muzaffarnagar and Roorkee. It is packed with pilgrims and tourists during pilgrimage season, Kumbh Mela and other important festivals. The project will make easy movement of pilgrimage or tourists.
- Reduction in travel time, congestion to NH-58, fuel consumption, air pollution, vehicle operating cost and accidents.
- Augmentation of mobility of tourists.

- Strategic military importance to Uttarakhand, an international border State.
- Easy movement of Industrial traffic with more speed.
- Faster access to the nearby major market for perishable products.
- Encouragement to socio-economic growth by creating direct and indirect employment opportunities.
- Provision of road safety with reduced crossings, and to facilitate the development of the influence area.

Land Acquisition:

The total 287-hectare land shall be acquired from 45 villages in Saharanpur and Haridwar districts of Uttar Pradesh and Uttarakhand, respectively, for the Greenfield Spur to Haridwar. The total 120.4-hectare land is to be acquired from 17 villages of Saharanpur district in Uttar Pradesh, and 166.6-hectare land in 28 villages of Haridwar district in Uttarakhand. Out of the total land to be acquired, 92.7 per cent is under the private ownership in both the districts. Hence only 7.3 per cent of the total land to be acquired is under the government ownership. Further, out of total private ownership land, 99.9 per cent is agricultural land and remaining 0.1 per cent only is non-agricultural.

The land acquisition shall be as per The National Highways (NH) Act, 1956 and The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (LARR) Act, 2013. According to the guidelines issued by the Ministry of Road Transport and Highways (MoRTH), Government of India on 28 December 2017, land for National Highway projects can be procured through direct purchase with the consent of the landowners in accordance with the existing Acts/ Rules/ Policies of the concerned State Governments subject to the condition that the total amount of compensation so worked out will be no more than what is payable when the land is

acquired under the NH Act, 1956, which in any case is in conformity with the compensation payable in accordance with the provisions of LARR Act, 2013. The multiplication factor by which the market value is to be multiplied in case of rural areas (from the end-point of the urban limit) shall be the two as notified by the concerned State Governments. The Uttar Pradesh Government notified a new land acquisition policy on 22 October 2014. Similarly, the Government of Uttarakhand also notified the policy of land acquisition on 9 February 2016 (*See Appendix II*). For a land in rural area at a government-notified price, the State Government will have to pay the price multiplied by two with an additional amount of 100 per cent of the notified price. The government will also have to pay an interest of 12 per cent per annum till the time full payment is made and sale deed is executed. Hence the landowners get minimum compensation up to twice the market value in the State. The LARR Act, 2013 requires that a Social Impact Assessment be conducted to identify affected families, and calculate the social impact when land is acquired.

Objectives of the Study

The study is aimed to make comprehensive socio-economic assessment for the Development of 6-lane access controlled Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand. It will have following objectives:

1. To examine the Impact of land acquisition on the local people around the proposed alignment.
2. To assess the people's dependency in the study area.
3. To consider socio-economic spectrum in the area.
4. To analyze the impact of developing Spur at local/regional level.

Research Methodology:

The study aimed to know socio-economic assessment of the proposed project from all 45 villages situated in four Tehsils of the Two Districts in Uttar Pradesh and Uttarakhand, from where land is to be acquired as depicted in Table 1.1. It may be noted that the length-wise large part of the proposed project area would be coming in Haridwar district (57 per cent) followed by Saharanpur (43 per cent). The project is quite significant for Haridwar district of Uttarakhand in terms of highest number of 28 villages out of total 45 villages. However, Tehsil-wise Roorkee (Haridwar), followed by Deoband (Saharanpur) are very important in terms of area of the project.

Table 1.1: District and Tehsil-wise Number of Villages and Distance under the Saharanpur-Haridwar Greenfield Spur

S. No.	District	Tehsil	Number of Villages	Distance (Km.)	% Distance in Total
1	Saharanpur		17	19.06	43
		Rampur Maniharan	2	1.63	3.7
		Deoband	15	17.43	39.7
2	Haridwar		28	24.84	57
		Bhagwanpur	4	5.82	13.3
		Roorkee	24	19.02	43.3
Grand Total			45	43.90	100.0

A perception survey was conducted from various stakeholders such as landowners/users during August-September 2021. It was aimed to know socio-economic assessment of the proposed project from all 45 villages situated in four Tehsils of Saharanpur district of Uttar Pradesh and Haridwar district of Uttarakhand (as depicted in Table 1.1), where land was to be acquired. The questionnaire was finalized as Schedule A for collecting the information from the affected households in the influence zone, and Schedule B for collecting the information

pertaining to the socio-economic dimensions of the villages through which the proposed spur is passing.

The size of sample was 225, which has been taken from 45 villages in the alignment area. The sample has been taken by selecting five respondents from each village as per following criteria:

1. Small & Marginal farmer (less than 5 acres/800 Marla) whose land was acquired - 2 Respondents
2. Medium & Large farmer (more than 5 acres/800 Marla) whose land was acquired - 1 Respondent
3. Tenant/User/Agricultural Labourer who was working On the Acquisition land – 1 Respondent
4. Neighboring landowner/farmer whose land was not acquired – 1 Respondent.

Around ten responses were excluded, as information supplied by the respondents was incomplete. Therefore, balance 215 responses have been taken into account. Out of the total 215 households, 129 were farmer households whose land is to be acquired for the Spur project, and rest 86 were neighbours and labourers.

The study also collected relevant secondary data from Department of Agriculture, Cooperation and Farmers Welfare, Directorate of Economics and Statistics, Government of India; and project related details from National Highways Authority of India. On the basis of collected data, the study analyzes the socio- economic impact assessment of the proposed project. For data analysis, suitable statistical techniques have been used.

Design of Study

The study consists of five chapters.

Chapter 1 is devoted to introduction on the subject.

Chapter 2 pertains to Socio-economic Profile of the Project Districts in Uttar Pradesh and Uttarakhand

Chapter 3 deals with the Socio-economic Assessment Survey of the Project Area. This chapter analyses the results of survey.

Chapter 4 presents the Socio-economic Impact Assessment and Mitigation Plan.

Chapter 5 relates to summary and conclusion of the study.

References

Government of India (GoI). (2021). *Annual Report 2020-21*, Ministry of Road Transport and Highways.

[https://morth.nic.in/sites/default/files/Annual%20Report%20-%202021%20\(English\)_compressed.pdf](https://morth.nic.in/sites/default/files/Annual%20Report%20-%202021%20(English)_compressed.pdf)

Bharatmala Pariyojana - A stepping stone towards new India | National Portal of India. (2021, April 15). National Portal of India.

<https://www.india.gov.in/spotlight/bharatmala-pariyojana-stepping-stone-towards-new-india>

The Hindu. (2021, April 2). Highways construction touches record 37 km per day: Gadkari. <https://www.thehindu.com/news/national/highways-construction-touches-record-37-km-per-day-gadkari/article34221788.ece>

Chapter – 2

Socio-economic Profile of the Project Districts in Uttar Pradesh and Uttarakhand

Uttar Pradesh State is administratively divided into 18 Divisions, 75 Districts, 351 Tehsils, and 825 Development Blocks. Apart from these, there are 59073 Gram Panchayats, and 97814 inhabited Villages in the State. The State has a population of 19.98 crore as per 2011 census. The total geographical area of the state is 2.41 lakh square km. The share of the State in Country's population and area was 16.2 per cent and 7.3 per cent, respectively. The State is divided into four economic regions viz. Western region, Central region, Eastern region and Bundelkhand. The first three regions fall in the Gangetic plains, while Bundelkhand forms part of the southern plateau. The western region of the UP is relatively most developed region than the eastern in terms of economic prosperity. The State contributed 17.4 lakh crore towards nominal GDP in 2020-21. The share of the State in the national real GDP (2011-12 prices) was around 8 per cent during this period. The economic structure of Uttar Pradesh is agrarian. The average size of holding is only 0.73 hectare, while 80.2 percent of the holdings are below one hectare. The rural population of the State was 77.73 per cent as per 2011 census. The State contributed 30.3 per cent in wheat and 13.1 per cent in rice in the country's production during 2019-20 (GoI, 2021). However, the per capita income of the State at current prices was Rs. 66,351 as compared to Rs. 1,28,829 at all India level during 2020-21 (RBI, 2021). The distance of National and State Highways was 3635 km and 8322 km, respectively.

Uttarakhand State was carved out of Uttar Pradesh on 9th Nov 2000. Located at the foothills of the Himalayan Mountain ranges, it is largely a hilly State, having international boundaries with China (Tibet)

in the north and Nepal in the east. On its north-west lies Himachal Pradesh, while on the south is Uttar Pradesh. Uttarakhand State is administratively divided into 2 Divisions, 13 Districts, 110 Tehsils, 18 sub-Tehsils, and 101 urban local bodies. Apart from these, there are 95 Development Blocks, 7791 Gram Panchayats, and 15745 inhabited villages in the State. The total geographical area of the state is 53,483 square km. Around 69.77 per cent of total area is rural. The economic structure of Uttarakhand is depending on tourism industry, agriculture sector, mineral resources and small scale industries. The State is the most prosperous states of the country. The per capita GSDP for Uttarakhand is increasing steadily. Between 2015-16 and 2019-20, the Gross State Domestic Product (GSDP) expanded at a CAGR of 9.39 per cent. During 2020-21, GSDP was Rs. 2.38 lakh crores at current prices. The per capita income of the State at current prices was Rs. 1,86,557 as compared to Rs. 1,28,829 at all India level during this period. The distance of National and State Highways was 2091 km and 4511 km, respectively.

The proposed 6-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor passes mainly through the less developed part of the Uttar Pradesh and Uttarakhand States. It covers four Tehsils namely, Rampur Maniharan, and Deoband of Saharanpur district in Uttar Pradesh, and Bhagwanpur, and Roorkee of Haridwar districts in Uttarakhand. Hence the alignment is likely to open up the vast hinterland of these states for all round socio-economic development by improving the accessibility to outside world.

In the current chapter, discussion is made on the general socio-economic profile of the project districts, namely, Saharanpur in Uttar Pradesh and Haridwar in Uttarakhand from where the proposed greenfield spur is to be traversed.

Social Profile

Population:

The population of the Uttar Pradesh State is estimated to be increased from 1998 lakhs in 2011 to 2315 lakhs in 2021. The State registered decadal population growth of 20.2 per cent during 2001-11. The population of the State contributed 16.5 per cent in the country's total population as per 2011 census. Similarly, the population of the Uttarakhand State is estimated to be increased from 101 lakhs in 2011 to 117 lakhs in 2021. The decadal growth of population in Uttarakhand State was 18.8 per cent during 2001-11. The state accounted only 0.8 per cent of India's population during 2011.

The table 2.1 depicts the population of project affected districts of the Saharanpur and Haridwar, and whole of Uttar Pradesh and Uttarakhand during 2001, 2011 and 2021. While the decadal growth of population during 2001-11 in Saharanpur district was at less than 20 per cent, but Haridwar district witnessed a high growth rate of more than 30 per cent. It can be seen from this table that during 2021, the

Table 2.1: Growth of Population in Project Affected Districts						
						(Lakhs)
S. No.	District	Population 2001	Population 2011	Projected Population 2021	Decadal Growth (%)	
					2001-11	2011-21
1	Saharanpur	29.0	34.7	40.2	19.7	15.9
2	Haridwar	14.5	18.9	21.9	30.6	16.0
	<i>Sub-total</i>	43.4	53.6	62.1	23.3	15.9
	Uttar Pradesh	1662	1998	2315	20.2	15.9
	Uttarakhand	85	101	117	18.8	16.0

Source: Govt of Uttar Pradesh, Statistical Diary 2019-20, Directorate of Economic & Statistics.
<https://www.indiacensus.net/district/saharanpur>

Govt of Uttarakhand, Statistical Diary 2019-20, Directorate of Economic & Statistics.
<https://www.indiacensus.net/district/haridwar>

Saharanpur district has the highest population of 40.2 lakhs as compared to 21.9 lakhs of Haridwar district. It is interesting to note that during 2011-21, the two project affected districts observed around 16 per cent decadal growth of population. lakhs in 2021. The government has been making frantic efforts to limit population in the State at a desirable level.

Density of population:

The density of population is a measurement of population per unit area. It is population divided by total land area. The table 2.2 shows the population density of Uttar Pradesh and Uttarakhand as well as two project affected districts during 2021. The population density of Uttar Pradesh has increased over the period. Agriculture is fairly well developed and spread in almost all parts of the state. Though current population density of Uttar Pradesh is 961 per sq km, but the project affected districts of Saharanpur had higher density of 1089 per sq km.

S. No.	District	Area (Sq Km)	Population 2011 (Lakhs)	Projected Population 2021 (Lakhs)	Density of Projected Population 2021 (Per Sq Km.)
1	Saharanpur	3689	34.7	40.2	1089
2	Haridwar	2360	18.9	21.9	929
	<i>Sub-total</i>	<i>6049</i>	<i>53.6</i>	<i>62.1</i>	1026
	Uttar Pradesh	240928	1998	2315	961
	Uttarakhand	53484	101	117	219

Source: Govt of Uttar Pradesh, Statistical Diary 2019-20, Directorate of Economic & Statistics.
<https://www.indiacensus.net/district/saharanpur>

Govt of Uttarakhand, Statistical Diary 2019-20, Directorate of Economic & Statistics.
<https://www.indiacensus.net/district/haridwar>

On the other hand, Uttarakhand's population density is currently at 219 per sq km, but the project affected district of Haridwar had higher density of 929 per sq km. It is due to its relatively more agriculturally developed region. Overall, current population density of the project affected districts is 1026 per sq km which is more than the density of two states, Uttar Pradesh and Uttarakhand. Since the population in the two project affected districts has been growing very fast, it justifies the demand for the proposed project.

Population by Religion:

The census 2011 provides good perception towards religion demography of Uttar Pradesh and Uttarakhand. The table 2.3 shows the religious composition of population in the project affected districts and whole Uttar Pradesh and Uttarakhand. Hinduism is the most practiced religion in both the States. Around 79.7 per cent of the total population in Uttar Pradesh represented Hindu religion, followed by 19.3 per cent as Muslim, 0.3 per cent as Sikh and 0.2 per cent as Christian religion. Similarly, around 83 per cent of the total population in Uttarakhand represented Hindu religion, followed by 14 per cent as Muslim, 2.3 per cent as Sikh and 0.4 per cent as Christian religion.

Table 2.3: Religion-wise Population of the Project Affected Districts during 2011					
S. No.	District	Hindu	Muslim	Sikh	Christian
					(Per cent)
1	Saharanpur	56.7	42.0	0.5	0.2
2	Haridwar	64.3	34.3	0.9	0.3
Uttar Pradesh		79.7	19.3	0.3	0.2
Uttarakhand		83.0	14.0	2.3	0.4
India		79.8	14.2	1.7	2.3

Source: Government of India, Socio Economic and Caste Census 2011, Ministry of Rural Development.

It can be seen from table 2.3 that the share of Hindu population ranged between 56.7 per cent to 64.3 per cent between the project affected districts during 2011. However, Saharanpur district represented Muslim population proportion of 42 per cent, followed by Haridwar at 34.3 per cent. While Sikh and Christian population was less than one per cent in the project affected districts as well as their respective States. Overall, Hindu population represented majority in the project affected districts of Saharanpur and Haridwar.

Rural Population by Sex and Literacy:

As the proposed project of Saharanpur-Haridwar Spur would mainly affect the rural areas, therefore, it is relevant to know about the structures of rural population in the project affect two States of Uttar Pradesh and Uttarakhand. As per census 2011, the rural population of Uttar Pradesh was 77.7 per cent of the total population. The total rural population of the State was 1553.2 lakhs. Similarly, the rural population of Uttarakhand State was 70.4 lakhs, which represented 69.8 per cent of the total State's population in 2011.

The table 2.4 shows the rural population by sex ratio and literacy rate in the project affected districts of Uttar Pradesh and Uttarakhand during 2011. It may be noted that the proportion of rural population in total population of the project affected Saharanpur district in Uttar Pradesh was 69.2 per cent during 2011. However, Haridwar district in Uttarakhand accounted 63.3 per cent rural population than overall average of 69.8 per cent of Uttarakhand State. Hence both the project affected Saharanpur and Haridwar districts accounted less rural population than overall average of their respective States.

Further, the sex ratio can be measured as the number of females per thousand males. It is regarded as an index on the status of women. The lower ratio implies lower status. Rural sex ratio of Uttar Pradesh

S. No.	District	Rural Population (Lakhs)	Rural Population as % of Total Population	Rural Sex Ratio (Number of Females per thousand Males)	Rural Literacy Rate (%)		
					Male	Female	Total
1	Saharanpur	24.0	69.2	890	77.8	58.4	68.7
2	Haridwar	12.0	63.3	889	77.4	58.1	68.3
	<i>Sub-total</i>	<i>36.0</i>	<i>86.0</i>	<i>890</i>	<i>77.6</i>	<i>58.2</i>	<i>68.5</i>
	Uttar Pradesh	1553.2	77.7	918	76.3	48.5	65.5
	Uttarakhand	70.4	69.8	1000	86.6	66.2	76.3

Source: Government of India, <https://www.census2011.co.in/district.php>

and Uttarakhand was 918 and 1000, respectively, during 2011. However, the project affected Saharanpur and Haridwar districts had the lowest rural sex ratio at 890. Therefore, project affected districts represented less rural sex ratio as compared to their respective States.

Rural literacy rate is an important indicators of social development. The table 2.4 presents that Uttar Pradesh State has been a less performer in the country with its rural literacy rate of 65.5 per cent in comparison to 68.9 per cent of India. Even the rural female literacy rate in Uttar Pradesh (48.5 per cent) was poorest than India (58.7 per cent) during 2011. Conversely, the rural literacy rate of Uttarakhand State was 76.3 per cent, which was more than India. However, the project affected Saharanpur district was average performer in the country in terms of rural literacy during 2011. Its rural literacy rate was 68.7 per cent as compared to 65.5 per cent of its State, Uttar Pradesh. However, Haridwar district has less rural literacy rate (68.3 per cent) as compared to 76.3 per cent of Uttarakhand.

Employment Pattern:

Uttar Pradesh as well as Uttarakhand States are considered as an agriculture-based economy, as around two-third of their total workers were in agricultural activities. The table 2.5 depicts that around 66 per cent of the total workers in Uttar Pradesh were engaged in agricultural activities during 2011. Around 2.2 crore cultivators and 1.3 crore agricultural labourers were involved in the agricultural activities. Further, around 58 per cent of the total workers in Uttarakhand State were engaged in agricultural activities during 2011. Around 15.7 lakh cultivators and 2.6 lakh agricultural labourers were involved in the agricultural activities.

It may be noted that the share of agricultural workers in the project affected districts of Saharanpur and Haridwar was 42.8 per cent. It means around 57 per cent of the total workers in the project affected

(Thousand Numbers)						
S. No.	District	Agricultural Workers			Total Workers	Share of Agricultural Workers in Total Workers (%)
		Cultivators	Agricultural Labourers	Total		
		1	2	3=1+2	4	5=3*100/4
1	Saharanpur	222	273	495	1037	47.7
2	Haridwar	94	103	197	578	34.0
	<i>Sub-total</i>	315	376	691	1616	42.8
	Uttar Pradesh	22168	13401	35568	53984	65.9
	Uttarakhand	1570	260	1830	3134	58.4

Source: Government of India, Census 2011

https://censusindia.gov.in/tables_published/a-series/a-series_links/t_00_009.aspx
https://www.censusindia.gov.in/2011census/dchb/DCHB_A/09/0901_PART_A_DCHB_SAHARANPUR.pdf
https://censusindia.gov.in/2011census/dchb/0513_PART_A_DCHB_HARDWAR.pdf

districts were involved in the non-agricultural activities. It can be seen from table 2.5 that the share of agricultural workers in total workers was highest in Saharanpur district. Overall, non-agricultural activities were utmost in the project affected districts. However, Haridwar district accounted more agricultural workers as compared to Saharanpur district.

Type of Rural Workers

The type of rural workers also discloses important information about the economic status of the marginal workers as more vulnerable and poorer. The table 2.6 shows the types of rural workers in the project influence districts in Uttar Pradesh and Uttarakhand during 2011. The rural workers in Uttar Pradesh and Uttarakhand were 658 lakhs and 38.7 lakhs, respectively during 2011. Out of this, 67.8 per cent and 74.1 per cent, respectively were main workers in these states. It is revealed from this table that project influence Saharanpur and Haridwar districts had 85.2 per cent main workers. Interestingly, marginal workers were higher in Saharanpur as well as Uttar Pradesh, as compared to Haridwar as well as Uttarakhand State. Further, total workers were highest in Saharanpur district. Overall, around 15 per cent workers in the influence zone districts were marginal.

Table 2.6: Type of Rural Workers in the Project Affected Districts						
(Workers in '000 Number & Share in Per cent)						
S. No.	District	Main Workers	Marginal Workers	Total Rural Workers	Share of	
					Main	Marginal
		1	2	3=1+2	4=1*100/3	5=2*100/3
1	Saharanpur	883	155	1037	85.1	14.9
2	Haridwar	495	83	578	85.6	14.4
	<i>Sub-total</i>	1379	240	1618	85.2	14.8
	Uttar Pradesh	44635	21179	65815	67.8	32.2
	Uttarakhand	2871	1002	3872	74.1	25.9

Source: Government of India, Census 2011

https://www.censusindia.gov.in/2011census/dchb/DCHB_A/09/0901_PART_A_DCHB_SAHARANPUR.pdf

https://censusindia.gov.in/2011census/dchb/0513_PART_A_DCHB_HARDWAR.pdf

The Labour Force Participation Rate (LFPR) is an important socio-economic indicator. Higher rate shows that more persons are engaged in economic activities, but if more persons are pursuing higher education, the LFPR may take a reduction. The LFPR of the rural Uttar Pradesh and Uttarakhand States was 34.03 per cent and 30.65 per cent, respectively, during September 2021. However, India's rural LFPR was 42.08 per cent during this period. As such, unemployment in Uttar Pradesh and Uttarakhand has been increasing. During September 2021, monthly unemployment rate for rural Uttar Pradesh and Uttarakhand was 4.1 and 3.75 per cent, respectively (*CMIE, 2021*). Further, unemployment rate for females was considerably higher than males. However, educated and skilled unemployment was more in both Uttar Pradesh and Uttarakhand States.

Economic Profile

Uttar Pradesh and Uttarakhand States have made significant progress in their economic development. The economy of Uttar Pradesh grew at real average rate of 7 per cent during 2015-2020. The Coronavirus Disease (COVID-19) pandemic has delivered a massive shock and sudden recession to the Uttar Pradesh economy during 2020-21. The advance estimates for 2020-21 indicate that real growth in Gross State Domestic Product (GSDP) moderated to minus (-) 5.9 per cent, as compared to minus (-) 7.3 per cent at national level due to COVID-19. During 2020-21, the GSDP of Uttar Pradesh was around Rs. 17.4 lakh crore at current prices and Rs. 10.81 lakh crore at constant (2011-12) prices (*GoUP, 2021*). The State contributed around 8 per cent in the country's Real GDP during this period. The agricultural growth lagged behind the non-agricultural growth in Uttar Pradesh during post reforms period (1991 onwards). During 2015-20, the real growth of agricultural sector was 3.9 per cent, as compared to 7.34 per cent of Service sector and 8.9 per cent of secondary sector. However, during

2020-21 period of COVID-19 pandemic, growth of agriculture sector was estimated to be 2.7 per cent.

Similarly, the economy of Uttarakhand grew at real average rate of 7.13 per cent during 2015-2020. The COVID-19 pandemic caused negative growth to the economy during 2020-21. The first advance estimates for 2020-21 indicate that real growth in GSDP diluted to minus (-) 7.1 per cent, as compared to minus (-) 7.3 per cent at national level. During 2020-21, the GSDP of Uttarakhand was around Rs. 2.38 lakh crore at current prices and Rs. 1.85 lakh crore at constant (2011-12) prices (GoU, 2021). Uttarakhand State contributed 1.37 per cent in the country's Real GDP during 2020-21. The agricultural growth lagged behind the non-agricultural growth in Uttar Pradesh over the period. During 2015-20, the real growth of agricultural sector was 0.8 per cent, as compared to 8.1 per cent of Service sector and 6.75 per cent of secondary sector. However, during 2020-21 period of COVID-19 pandemic, growth of agriculture sector was estimated to be 5.7 per cent.

Structure of Gross State Domestic Product (GSDP):

The Indian Government has introduced the new series 2011-12 with the concept of Gross State Value Added (GSVA) at basic prices, which is calculated as GSDP at factor cost plus taxes on production minus production subsidies. It gives GSDP at market prices. In fact, GSVA is the value of output minus the value of intermediate consumption.

It may be noted that the GSVA of Uttar Pradesh economy was around Rs. 15.62 lakh crore at current prices and Rs. 10.32 lakh crore at constant (2011-12) prices during 2020-21 (*GoUP, 2021*). The real growth of the GSVA was minus (-) 5.2 per cent during this period. The pace of structural transformation in the Uttar Pradesh economy has been continued since 2011-12. The share of tertiary sector in the nominal GSVA increased from 45.5 per cent in 2011-12 to 49.3 per cent

in 2020-21, following its high growth. However, share of primary sector in GSVA went down marginally from 27.8 per cent to 27.4 per cent during the same period. The share of secondary sector in GSVA reduced from 26.7 per cent to 23.3 per cent during this period.

Similarly, the GSVA of Uttarakhand economy was around Rs. 2.2 lakh crore at current prices and Rs. 1.7 lakh crore at constant (2011-12) prices during 2020-21 (GoU, 2021). The real growth of the GSVA was minus (-) 6.37 per cent during this period. The structure of Uttarakhand' GSVA is more unbalanced as compared to national economy. The share of tertiary sector in the real GSVA increased from 33.9 per cent in 2011-12 to 39.1 per cent in 2020-21, following its high growth. However, share of primary sector in GSVA went down from 14 per cent to 10 per cent during the same period. The share of secondary sector in GSVA reduced marginally from 52.1 per cent to 50.8 per cent during this period.

The table 2.7 shows the sectoral composition of GSVA in the influenced districts of the proposed greenfield spur in Uttar Pradesh and Uttarakhand States during 2017-18. It can be seen that the relative share of primary sector in Gross District Domestic Product (GDDP) of Saharanpur district was 37.2 per cent as compared to 26.1 per cent of overall Uttar Pradesh during 2017-18. However, in Haridwar district of the proposed project, the share of primary sector was 5.3 per cent as compared to 10.2 per cent of Uttarakhand. Hence it was less than the whole Uttarakhand state. It may be noted that Saharanpur district had very high agricultural activities as compared to Haridwar district during 2017-18. Further, the share of secondary/industrial sector in GDDP was very high in Haridwar district as compared to Saharanpur district. While Haridwar district had accounted 71.9 per cent in industrial activity, Saharanpur district accounted only 16.8 per cent for the same

Table 2.7: Sectoral Share in Gross State Domestic Product (GSDP) at Constant Prices (2011-12) of the Influence Districts during 2017-18

(GDDP in Rs. Crores and Share in Per cent)						
S. No.	District	Gross District Domestic Product (GDDP)	Share in GDDP/GSDP			
			Primary Sector	Secondary Sector	Service Sector	Total GSDP
1	Saharanpur	24724	37.2	16.8	46.1	1.8
2	Haridwar	55767	5.3	71.9	22.8	30.8
<i>Sub-total</i>		<i>80491</i>	<i>15.8</i>	<i>33.6</i>	<i>50.6</i>	5.3
Uttar Pradesh		1339121	26.1	27.4	46.5	100.0
Uttarakhand		180844	10.2	52.3	37.5	100.0

Source: Govt of Uttar Pradesh, Estimates of District Domestic Product 2019-20, Directorate of Economic & Statistics.

Govt of Uttarakhand, Estimates of District Domestic Product of Uttarakhand, Directorate of Economic & Statistics.

during 2017-18. However, Saharanpur district had healthy share of service sector in its GDDP, which was 46.1 per cent as compared to 22.8 per cent of Haridwar district during this period. It is important from the last column of this table 2.7 that both the two project influenced districts contributed only 5.3 per cent in the total GSDP of Uttar Pradesh and Uttarakhand States during 2017-18. Nevertheless, the share of Haridwar district was 30.8 per cent in the GSDP of Uttarakhand State, whereas Saharanpur district had very less share of 1.8 per cent in the GSDP of Uttar Pradesh State.

Overall, the role of agriculture and allied sector in the project influenced Saharanpur district was quite significant. However, Haridwar district was industrially strong. Nonetheless, the importance of the service sector was substantial, as its share was 50.8 per cent in the total GDDP of these two districts. During 2020-21, service sector in the Uttar Pradesh economy contributed around 49 per cent, followed by 39.1 per cent in Uttarakhand economy.

Per Capita Income:

Per capita income is a measure to determine the average per-person income for a country/State in order to know the standard of living and quality of life of the population. It is calculated by dividing the country's or State's total income by its population. Uttarakhand State has become economically progressive after its separation from Uttar Pradesh on 9 November 2000. The State occupied 2nd rank among the major States in India after Haryana in terms of per capita income during 2011-18. However, this rank fell to 3rd after Haryana and Gujarat during 2018-20. The State's real per capita income at 2011-12 prices was around Rs. 1,58,000 during 2019-20 (*GoP, 2021*). However, during 2020-21, the real per capita income of the state at 2011-12 prices as per advance estimates was Rs. 1,44,124 as compared to Rs. 86,659 of the whole India (*GoI, 2021*). However, per capita income of the State at current prices was Rs. 1,86,557 as compared to Rs. 1,28,829 at national level during this period.

On the other hand, Uttar Pradesh occupied 20th rank among the 21 major States in India before Bihar in terms of per capita income during 2011-21. The State's real per capita income at 2011-12 prices increased from Rs. 32,002 in 2011-12 to 44,618 during 2019-20 (*GoP, 2021*). However, during 2020-21, the real per capita income of the state at 2011-12 prices as per advance estimates was reduced to Rs. 40,092, as compared to Rs. 86,659 at national level (*GoI, 2021*). However, per capita income of the State at current prices was Rs. 66,351 as compared to Rs. 1,28,829 at national level during this period. Overall, Uttar Pradesh is the backward state of India in terms of per capital income.

The table 2.8 shows per capita income/Net District Domestic Product (NDDP) at 2011-12 prices of the two influenced zone districts of the Saharanpur and Haridwar as well as their respective states during

Table 2.8: Per Capita Income at Constant (2011-12) Prices in the Influence Zone Districts during 2017-18

S. No.	District/ State	Net District Domestic Product (NDDP) (Rs. Crore)	Population (Lakh)	Per Capita Income/ NDDP (Rs)	Per Capita Income Relative to the whole of State (%)
1	Saharanpur	17208	38	45824	109.5
	Uttar Pradesh	923806	2208	41832	100.0
2	Haridwar	55767	23	241871	163.4
	Uttarakhand	162254	110	148056	100.0

Source: Govt of Uttar Pradesh, Statistical Diary Product 2019-20, Directorate of Economic & Statistics.

Govt of Uttarakhand, Estimates of District Domestic Product of Uttarakhand, Directorate of Economic & Statistics.

2017-18. Interestingly, Haridwar in Uttarakhand State was the leading district in terms of real per capita income. It can be seen from the table that the real size of Haridwar economy was Rs. 55767 crores, which was around 34 per cent of the whole Uttarakhand State. Hence the real per capita income of Haridwar district (Rs. 2,41,871) was more than Uttarakhand State (Rs. 1,48,056) during 2017-18. Thus, this project influenced district was much above than the average per capita income of the State. On the other hand, the real size of Saharanpur district economy was only Rs. 17,208 crores, which was less than 2 per cent of the whole Uttar Pradesh. Further, it was less than 3.2 times of the Haridwar district economy. However, the real per capita income of Saharanpur district (Rs. 45,824) was slightly more than Uttar Pradesh State (Rs. 41,832) during 2017-18. Thus, this project influenced district had around 5.3 times less real per capita income as compared to Haridwar district. A look at the last column of the table 2.8 reveals the relative value of per capita income of these two project influenced districts in comparison to their respective States, if the per capita income of these States is set at 100. The relative per capita income of Haridwar, followed by Saharanpur district was more than the average

per capita income of Uttarakhand and Uttar Pradesh, respectively, during 2017-18. Moreover, the real per capita income of Haridwar district was 63.4 times more than the average per capita income of Uttarakhand, whereas the real per capita income of Saharanpur district had only 9.5 times more the average income of Uttar Pradesh. It is interesting to note the Haridwar is an industrially developed district of Uttarakhand with around 72 per cent of its GDVA coming from the secondary sector, whereas Saharanpur is predominately agricultural one. Overall, the proposed highway project would usher an era of speedy development of the industries.

It is relevant to discuss the monthly income and employment of rural households in the influenced Tehsils/Districts of the proposed project. There are currently four Tehsils influenced by proposed spur in the two districts of Uttar Pradesh and Uttarakhand. The table 2.9 depicts this picture the then three Tehsils during 2011. It can be seen from this table that rural households of Influenced Tehsils were less than one per cent of the total rural households of Uttar Pradesh and Uttarakhand as per census 2011. Around 72 per cent of the rural households in these Tehsils had monthly income less than Rs. 5000 only. Further, 20 per cent of the rural households had monthly income between Rs. 5000 and Rs. 10000 only. Rest 8 per cent of the rural households had their monthly income more than Rs.10000.

It may be noted from Table 2.9 that the rural households of the influenced Rampur Maniharan Tehsil in Saharanpur district were so poor that their share in the monthly income bracket of below Rs. 5000 was less than the average share of all three Tehsils in Uttar Pradesh and Uttarakhand. Moreover, the rural households with salaried jobs in Deoband Tehsil in Saharanpur district were only 1.6 per cent as compared to 9.7 per cent in India and 4 per cent in Uttar Pradesh. Only

Table 2.9: Monthly Income and Employment of Rural Households in the Influenced Tehsils/Districts during 2011

S. No.	Tehsil	District	Number of Rural Households (Lakhs)	Households with Salaried Jobs	(Per cent)		
					Per cent of Monthly Income		
					Below Rs. 5,000	Between Rs. 5,000 to 10,000	Above Rs. 10,000
1	Rampur Maniharan	Saharanpur	0.55	2.4	64.3	26.2	9.5
2	Deoband	Saharanpur	0.71	1.6	58.3	31.5	10.2
3	Roorkee	Haridwar	1.31	6.1	59.0	29.0	12.0
Total Influenced Tehsils			2.57	4.1	59.9	29.1	11.0
Uttar Pradesh			260	4.0	71.6	20.1	8.2
Uttarakhand			14.8	12.4	63.4	21.9	14.7
India			1798	9.7	74.5	17.2	8.3

NB: Bhagwanpur was not given the status of Tehsil in Haridwar district during 2011.

Source: Government of India, Socio Economic and Caste Census 2011, Ministry of Rural Development.

4.1 per cent of the rural households in the influenced three Tehsils had salaried jobs. Further, around 89 per cent of the total rural households in these Tehsils had monthly income less than Rs. 10000 only. If we assume the average size of rural households as 5, then per capita monthly income of 89 per cent of the rural households was Rs. 2000. However, rural households in the Roorkee Tehsil in Uttarakhand were marginally better as compared to other project influenced Tehsils in Uttar Pradesh, as their salaried jobs were 6.1 per cent. Overall, rural households of Saharanpur district were poor as compared to the others in the proposed project area.

It is worthy to know the main sources of income of the rural households in the influenced Tehsils/Districts of the proposed highway project. The table 2.10 depicts this picture for the year 2011 as per census data. It can be seen from this table that main sources of income

Table 2.10: Main Sources of Income of the Rural Households in the Influence Zone Tehsils/Districts during 2011

					(Per cent)
S. No.	Tehsil	District	Cultivation	Manual Casual Labour	Sub-total
			1	2	3=1+2
1	Rampur Maniharan	Saharanpur	29.4	57.5	86.9
2	Deoband	Saharanpur	26.0	57.3	83.3
3	Roorkee	Haridwar	17.3	56.9	74.3
Total Influenced Tehsils			22.3	57.2	79.4
Uttar Pradesh			40.2	45.6	85.9
Uttarakhand			36.3	28.0	64.2
India			30.1	51.2	81.3

NB: Bhagwanpur was not given the status of Tehsil in Haridwar district during 2011.

Source: Government of India, Socio Economic and Caste Census 2011, Ministry of Rural Development.

of the rural households in the influenced zone Tehsils were manual casual labour as well as cultivation. Around 79 per cent of the income source of rural households in three project influenced Tehsils (Rampur Maniharan, Deoband and Roorkee) was from these two sources. Around 57 per cent of the rural households were doing manual casual labour in these Tehsils during 2011, whereas in Uttarakhand this ratio was 28 per cent only. Moreover, due to industrial structure of Uttarakhand, income source of the State was around 64 per cent from cultivation and manual casual labour as compared to around 86 per cent of Uttar Pradesh and 81 per cent at national level.

Overall, it can be said that the major source of income of the rural households in the influenced Tehsils was from cultivation and manual casual labour. However, their dependence on cultivation was relatively less in comparison to their respective States as well as India on an average.

Agriculture Sector:

The role of agriculture sector in the Uttar Pradesh economy has been predominant over the period. The State has fairly developed its agriculture sector since its creation on 26th January 1950. Around 82 per cent of the total 240,928 square km geographical area of Uttar Pradesh is under cultivation. Further, net area sown is 68.4 per cent of cultivable area. The area under wheat, rice and sugarcane was 58.7 per cent of the gross sown area during 2019-20 (*GoUP, 2020*). The share of irrigated area to net sown area in the State was 86.7 per cent. The cropping intensity (ratio of the gross cropped area to the net sown area) was 162.7 per cent during 2015-16. Further, the Livestock population of the State was around 680 lakhs during 2019. The real growth of livestock under the agriculture and allied sector of the state was -3.5 per cent as compared to 2.7 per cent overall growth of the agricultural and allied sector during 2020-21. Uttar Pradesh State enjoys the status of being 'India's granary'. It contributed 30.3 per cent of wheat, 13.1 per cent of rice, and 50.2 per cent of sugarcane in India's production during 2019-20 (*GoI, 2021*). The State was the largest producer of food-grains in the country. The wheat, paddy, sugarcane, tur, and rapeseed & mustard crops have played a major role in pushing up agricultural production in the State. The total production of food-grains in the State was 58.3 million tonnes in 2020-21 (*RBI, 2021*). The yield of Lentil (Masur) was highest in Uttar Pradesh was highest in the country during 2019-20. Further, the yield of sugarcane in the State was 2nd highest after Tamil Nadu in the country during this period.

Likewise, Uttarakhand State also played an important role in agriculture sector. Around 63.5 per cent of the total 53,483 square km geographical area of the State is under forest. The share of irrigated area to net sown area in the State was 52.4 per cent. The cropping intensity was 158.8 per cent during 2018-19. The real growth of livestock under

the agriculture and allied sector of the state was 11.4 per cent as compared to 5.7 per cent overall growth of the agricultural and allied sector during 2020-21. The total production of food-grains and sugarcane in the Uttarakhand State was 2 million tonnes and 7 million tonnes, respectively during this period (RBI, 2021).

It is worthy to know the area, production, and yield of agriculture in the proposed project districts. The table 2.11 depicts area, production and yield of Wheat, Rice, and Sugarcane in the influenced districts of Uttar Pradesh and Uttarakhand during 2018-19. It can be seen from the table that wheat, rice, and sugarcane were the major crops in both the influenced zone districts under the proposed project. Area under these crops was 72.9 per cent of the gross area sown or total cropped area in these districts as compared to 67 per cent in Uttar Pradesh, and

Table 2.11: Area, Production and Yield of Wheat, Rice and Sugarcane in the Project Affected Districts during 2018-19

(Area in thousand hectare, Production in thousand metric ton & Yield per hectare in Qtl.)												
S. No.	District	Area				% Share of Wheat, Rice and Sugarcane in Gross Area Sown	Production			Yield		
		Wheat	Rice	Sugar cane	Gross Area Sown		Wheat	Rice	Sugar cane	Wheat	Rice	Sugar cane
1	Saharanpur	116	65	125	438	69.9	315	72	7672	27	22	613
2	Haridwar	42	13	75	160	81.0	109	29	4666	26	23	619
Sub-total		158	78	201	598	72.9	424	101	12338	27	13	615
Uttar Pradesh		9856	5924	2224	26864	67.0	38040	16020	179638	39	27	808
Uttarakhand		307	259	93	1029	64.1	928	626	6459	30	24	696
% Share of Influence Districts		1.6	1.3	8.7	2.1	72.9	1.1	0.6	6.6	39.0	25.4	40.9

Source: Govt of Uttar Pradesh, Statistical Diarv 2020, Economic & Statistics Divisio. Planning Department.

<https://saharanpur.kvk4.in/district-profile.html>

Govt of Uttarakhand, Statistical Diary 2019-20, Directorate of Economic & Statistics.

<https://haridwar.kvk4.in/district-profile.html>

64.1 per cent in Uttarakhand State. Area under sugarcane in the project influenced districts accounted 8.7 per cent of the total cropped area in both the States. Haridwar district accounted more area (81 per cent) for these three crops in proportion to Saharanpur (69.9 per cent) during 2018-19. In terms of production, the influenced districts contributed 6.6 per cent of the sugarcane in both the States. Saharanpur, of course, was the major contributor. Further, it may be noted that the per hectare yield of wheat, rice and sugarcane was almost equal in both the project influenced districts during 2018-19. However, this yield was less than the average yield of both the States. Overall, Saharanpur district was at top in terms of the area, production and yield of wheat, rice and sugarcane as compared to Haridwar district.

Operational holdings:

It is interesting to know the distribution of the number of operational holdings in agriculture in Uttar Pradesh as well as Uttarakhand, particularly in the project influenced districts. During 2015-16, the number of operational holdings in the Uttar Pradesh and Uttarakhand was 238.21 lakhs and 8.81 lakhs, respectively. During 2005-16, the average holding size in Uttar Pradesh and Uttarakhand was only 0.73 ha and 0.85 ha, respectively. However, though India's average size of holding was 1.08 ha only during 2015-16 (GoI, 2019).

The table 2.12 depicts the percentage distribution of the number of operational holdings in the project influenced districts of Uttar Pradesh and Uttarakhand during 2015-16. It can be seen from this table that out of the total number of operational holdings in Uttar Pradesh (238.21 lakhs) and Uttarakhand (8.81 lakhs), only 1.6 per cent holding were in the project affected districts. The share of Saharanpur was highest, followed by Haridwar. While the proportion of the number of marginal and small holdings (below 2 hectare) was highest in both

Table 2.12: Percentage Distribution of Number of Operational Holdings in the Project Affected Districts during 2015-16

(Distribution in Per cent & Number in '000)								
S. No.	District	Marginal (Below 1 hectare)	Small (1-2 hectare)	Semi-Medium (2-4 hectare)	Medium (4-10 hectare)	Large (10 hectare & above)	Share in Total Operational Holdings in the State	Total Number of All Holdings
1	Saharanpur	65.3	18.5	13.1	3.1	0.0	1.1	259
2	Haridwar	74.5	15.2	8.3	2.1	0.0	16.5	145
	<i>Sub-total</i>	22.9	21.1	27.4	24.0	4.6	1.6	404
Uttar Pradesh		80.2	12.6	5.5	1.6	0.1	100.0	100
Total Number of Holdings in Uttar Pradesh		19099	3008	1313	376	22	23821	23821
Uttarakhand		74.8	16.9	6.6	1.6	0.1	100.0	100
Total Number of Holdings in Uttarakhand		659	148	58	14	1	881	881
Source: Government of India, http://agcensus.dacnet.nic.in/stateholdingsizeclass.aspx								

the project influenced districts; the same in case of the number of semi-medium and medium holdings (2-10 hectare) was large in the Saharanpur district. Overall, the proportion of marginal and small holdings in the project affected districts and their respective State was utmost during 2015-16.

Industrial Profile:

The industrial sector is also playing important role for the development of Uttar Pradesh economy. There has been a structural transformation of all economic activities in Uttar Pradesh. With population of 16.5 per cent and an area of 7.3 per cent of the country, Uttar Pradesh State contributed nearly 8 per cent to India's real GDP during 2020-21. Earlier its economy was primarily an agrarian. Today, Uttar Pradesh is fairly ahead in industries. The manufacturing sector accounted 14.2 per cent in real GSVA during 2020-21. The major industries of Uttar Pradesh are cement, textiles, sugar, Vanaspati oil,

etc. During 2019-20, the number of registered industrial units in the State were 1,62,300 with capital investment of Rs. 20,674 crores.

The proposed project influenced Saharanpur district had manufacturing output, worth Rs. 1959.45 crores during 2019-20. However, manufacturing sector contributed 6.8 per cent in its Gross District Domestic Product during this period in comparison to 12.1 per cent of Uttar Pradesh State and 14.7 per cent at national level. The Government of Uttar Pradesh launched One District One Product (ODOP) scheme to benefit the artisans, workers, entrepreneurs, etc. through financial incentives of 25 percent of the project cost or maximum Rs 6.25 lakh, whichever is less, for units of total project cost up to Rs.25.00 lakh. Under the scheme, only the unit of ODOP product identified for the respective district will get the facility of funding assistance. The general 10 days - technical training related to the identified product for the district is also provided free of cost through various institutions. For Saharanpur district, the identified/selected product is *Wood Carving*. Wood work of Saharanpur district is world famous and is exported in many Western countries including USA, UK, Singapore, Sweden, and Kuwait. However, many agro based cottage industries including sugar, paper and cigarette, etc. have been developing across the Saharanpur district.

Likewise, the role of industrial sector in economic activities of Uttarakhand State is quite significant. With population of 0.8 per cent and an area of 1.6 per cent of the country, the State contributed nearly 1.4 per cent to India's real GDP during 2020-21. The economic structure of Uttarakhand is basically industrial one. During 20-2021, the share of secondary sector in real GSVA was 50.8 per cent. However, the share of tertiary and primary sector in real GSVA was 39.1 per cent and 10 per cent, respectively, during this period. The manufacturing sector of the State accounted 39.6 per cent in real GSVA during 2020-21. The

major industries of Uttarakhand State are tourism, cement, pharmaceuticals, textiles, food processing, electrical engineering, etc. During 2019-20, investment worth Rs. 873.2 crore was made in 4153 Micro, Small and Medium Enterprises (MSMEs) with employment of 25,510 people. Hence the total registered MSMEs in the State increased to 64610 with capital investment of Rs. 13616.7 crore and providing employment to 3.2 lakhs people (GoU, 2021). Further, there were 2996 registered factories with 3.4 lakh workers producing worth Rs. 2.36 lakh crores during this period.

The proposed project influenced Haridwar district had total 10824 MSMEs with employment of 95241 and investment of Rs. 4922.2 crore during 2019-20. There were 25 Export Oriented Units with investment of Rs. 1473 crores in the district. The major exports of the district are electrical turbines, sprinklers, synt. textile (velvete), inverter, pen, pharma products, scaffolding, personal care products, etc.

It is clear that the proposed project could further develop the influenced region by providing gainful employment to rural people and increasing industrial production.

Road Network:

The Uttar Pradesh State is surrounded by Bihar in the East, Madhya Pradesh in the South, Rajasthan, Delhi, Himachal Pradesh and Haryana in the West and Uttarakhand in the North. It has international border with Nepal on the northern side. The State covers an area of 2.41 lakh square km. The State is the 4th largest Indian state in terms of area after Rajasthan, Madhya Pradesh and Maharashtra. It has largest road network in India after Maharashtra with a share of 8.2 per cent in the total road length of the country. The State has a network of 83 National Highways with length 11,831 km. The length of State highways is 8322 km. The state is well-connected with neighbouring states through National Highways (NH) 307, 9, 509, 709A, 19, 219, 519, 719, 21, 123,

24, 27, 227A, 727, 727A, 927, 28, 128, 30, 230, 330, 330B, 530, 330A, 730, 730A, 31, 731, 731A, 931, 931A, 34, 334, 334A, 334B, 334C, 534, 734, 234, 35, 135, 135B, 335, 39, 339, 539, 44, 344, 552, 709B, 135BB, 730H, 321, 731AG, 709AD, 319D, 124C, 727B, 727H, 727G, 128B, 128C, 328, 328A, 330D, 530B, 730B, 731K, 727BB, 730S, 730C, 334D, 128A, 135C, 135A, 124D, 321G, 334DD, 727AA, 731B, NE2, NE3, and NE6 (GoI, MORTH, 2021).

Likewise, Uttarakhand State is known as 'Dev Bhumi' (Land of God), and is located at the foothills of the Himalayan mountain ranges. It is largely a hilly State and is surrounded by Uttar Pradesh in the South and Himachal Pradesh in the North-West. It has international border with China (Tibet) on the northern side, and Nepal on the eastern side. The State covers an area of 53,483 square km. The State is the 18th largest Indian State in terms of area. It has a network of 22 National Highways with length 3106 km. The length of State Highways is 4387 km. The state is well-connected with neighbouring states through National Highways (NH) 7, 107, 107A, 307, 507, 707, 707A, 9, 109, 109D, 309, 309A, 309B, 30, 34, 134, 334, 334A, 534, 734, 344, and 731K (GoI, MORTH, 2021). The proposed Saharanpur-Haridwar Spur would add further in the road network of Uttar Pradesh and Uttarakhand.

It is relevant to know the road length per unit of area and population of the project influenced districts in Uttar Pradesh and Uttarakhand. The table 2.13 shows this picture during the period, 2019-20. It can be seen from this table that there were total 97814 inhabited villages in Uttar Pradesh, and 15745 inhabited villages in Uttarakhand. The project affected districts covered only 1.2 per cent of the total inhabited villages in these States, but their share in the total roads networked was 0.6 per cent only.

Table 2.13: Road Length Per Unit of Area and Population in the Project Influenced Districts during 2019-20

S. No.	District/State	Inhabited Villages (Number)	Total Road Length (Km)	Roads per lakh of Population (Km)	Roads per 1000 square km of Area
1	Saharanpur	887	1352	61	474
2	Haridwar	518	1469	144	1064
Project Districts		1405	2821	103	769
Uttar Pradesh		97814	436333	194	1777
Uttarakhand		15745	52848	657	1305
% Share of Project Districts in U.P. & Uttarakhand		1.2	0.6	12.0	24.9

Source: Govt of Uttar Pradesh, Statistical Diary 2020, Economic & Statistics Division, Planning

Govt of Uttarakhand, Statistical Diary 2019-20, Directorate of Economic & Statistics.

<https://saharanpur.nic.in/about-district/>

<https://haridwar.nic.in/about-district/>

The roads per lakh of population is considered to be the best index of road availability. As depicted in the table 2.13, the road availability in Uttar Pradesh was 194 km. in contrast to 657 km. in Uttarakhand. However, the project influenced districts of Saharanpur and Haridwar had less roads availability as compared to their respective States. It is interesting to see the Road Density, which is measured as the ratio of road length per thousand square kilometre of the land area. It can be seen from this table that road density in Uttar Pradesh was 1777 in contrast to 1305 in Uttarakhand. In the project influenced districts, Saharanpur and Haridwar; it was less than their respective State. Overall, it can be said that the project affected, Saharanpur and Haridwar districts have less road network connectivity available as compared to their respective State of Uttar Pradesh and Uttarakhand. Therefore, the proposed spur project can fulfil the demand for more roads by increasing road availability as well as density in the project affected districts.

Conclusion:

The socio-economic profile of proposed 6-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in project districts Saharanpur (Uttar Pradesh) and Haridwar (Uttarakhand) shows that the locality of the project is in the less developed area in the Uttar Pradesh and Uttarakhand States. The spur passes through four Tehsil namely, Rampur Maniharan, and Deoband of Saharanpur district, and Bhagwanpur, and Roorkee of Haridwar district, where the socio-economic conditions of the rural people are not good enough. The population of the project influenced districts constituted 2.6 per cent (62.1 lakhs) of the current estimated population of Uttar Pradesh and Uttarakhand (24.32 crores). However, the geographical area of the project influenced districts was 2.1 per cent of the total area of Uttar Pradesh and Uttarakhand. Further, the decadal growth (2001-11) of their population was 23.3 per cent as compared to 20.2 per cent of whole Uttar Pradesh and Uttarakhand. Moreover, population density of the project affected districts was estimated to be 1026 as compared to 826 of whole Uttar Pradesh and Uttarakhand during 2021. Religion-wise population of these districts represented Hindu majority, followed by Muslims with marginal population of Sikhs and Christians. Saharanpur district accounted more rural population than Haridwar district. The sex ratio of rural population for these districts was 890, which was less than their respective States. Further, rural literacy rate of the project influenced Saharanpur district was marginally more than overall Uttar Pradesh, which demonstrates that the proposed spur project is very much beneficial to the people of this district with growing literate population. The alignment is likely to open up the vast hinterland of the Saharanpur and Haridwar districts for all round socio-economic development by improving the accessibility to outside world.

Non-agricultural activities in the project affected districts is growing up. Only around 43 per cent of the total workers in these districts were involved in agricultural activities, that particularly in Saharanpur district. The major source of income of the rural households in the influenced Tehsils was from cultivation and manual casual labour. Around 15 per cent workers in the influenced zone districts were marginal. However, educated and skilled unemployment was more in both Uttar Pradesh and Uttarakhand States as compared to overall India.

Uttar Pradesh economy has made significant progress over the period. It grew at real average rate of 7 per cent during 2015-2020. However, the COVID-19 pandemic has delivered a massive shock and sudden recession to the Uttar Pradesh economy during 2020-21 with its negative growth of minus (-) 5.9 per cent. The share of the State in the national real GDP (2011-12 prices) was 8 per cent during this period. Similarly, Uttarakhand economy grew at real average rate of 7.13 per cent during 2015-2020. However, during 2020-21 in the COVID-19 pandemic, there was negative growth of minus (-) 7.1 per cent. The share of the State in the national real GDP (2011-12 prices) was 1.37 per cent during this period. The relative share of agriculture sector in GDVA of project influenced Saharanpur district was 37.2 per cent which was more than the whole Uttar Pradesh. However, Haridwar district was industrially forward with its share of secondary sector as 71.9 per cent in the GDVA during 2017-18. The average real per capita income of the project influenced districts was more than their respective States. However, Haridwar was the leading district in terms of highest real per capita income in Uttarakhand. Its real per capita income was more than five times of Saharanpur district. Overall, the role of agriculture and allied sector in the project influenced districts has been shrinking and the relevance of service as well as industrial sector is

going up. Hence the proposed alignment could speed up industrialization and services in these districts.

Uttar Pradesh State is the “India’s granary” as it contributed 30.3 per cent of wheat, 13.1 per cent of rice, and 50.2 per cent of sugarcane in country’s production during 2019-20. The State was the largest producer of food-grains in the country. The wheat, paddy, sugarcane, tur, and rapeseed & mustard crops have played a major role in pushing up agricultural production in the State. Area under Wheat, rice and sugarcane crops was 72.9 per cent of the total cropped area in the project affected districts during 2018-19. These districts contributed more than 6 per cent of sugarcane in the total production of their respective States, Uttar Pradesh and Uttarkhand. However, the per hectare yield of wheat, rice and sugarcane in the project influenced districts was less than the average yield of their respective States. The average holding size in Uttar Pradesh and Uttarkhand went down to less than one hectare as compared to around one-hectare average size of India. Project affected districts contributed only 1.6 per cent in the total holdings of their respective States. The proportion of marginal and small holdings (below 2 hectare) was more than 83 per cent in these districts.

The role of industrialization in Uttarakhand and Uttar Pradesh is growing up with the diminishing trend in the agricultural sector. The manufacturing sector in the project influenced Saharanpur district contributed only 6.8 per cent in its GDDP in comparison to 12.1 per cent of Uttar Pradesh during 2019-20. Wood Carving of Saharanpur district is world famous, and is selected under the One District One Product Scheme of the Uttar Pradesh government. Many agro based cottage industries including sugar, paper and cigarette, etc. have been developing across the Saharanpur district. On the other hand, the economic structure of Uttarakhand is basically industrial one. The proposed project influenced Haridwar district had total 10824 MSMEs

during 2019-20. There were more than 25 export units in the district. The major exports of the district are electrical turbines, sprinklers, syntex textile (velvete), inverter, pen, pharma products, scaffolding, personal care products, etc. Therefore, the proposed project could flourish the industrial activity by providing gainful self-employment to rural youth.

Uttar Pradesh has a largest road network in India after Maharashtra. It has a network of 83 National Highways with length 11,831 km, and total road network length of 4.3 lakh km. Similarly, Uttarakhand has a road network of 22 National Highways with length 3106 km, and total road network length of 0.5 lakh km. The project affected districts covered only 1.6 per cent of the total inhabited villages of the Uttar Pradesh and Uttarakhand. However, roads per lakh of population in the project affected Saharanpur district was less than three times of the entire Uttar Pradesh. Similarly, the availability of roads in Haridwar district was less than four times of the entire Uttarakhand State. Moreover, the road density of the project influenced districts was less than their respective States. Therefore, the proposed Saharanpur-Haridwar spur project can fulfil the demand for more roads by increasing road availability as well as density in the project affected districts.

Overall, the proposed Saharanpur-Haridwar Greenfield Spur project can be very much gainful to the less developed areas of Saharanpur and Haridwar districts in Uttar Pradesh and Uttarkhand States for their all-round socio-economic development by improving the accessibility to outside world. The project can create more self-employment opportunities for rural literate-skilled youths by providing them good compensation on the acquired land. It could increase the availability of roads and other infrastructure for the speedy development of industrial and services activities.

References

Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE). (2021). <https://unemploymentinindia.cmie.com/kommon/bin/sr.php?kall=wtabnav&tab=4020&type=dump>

Government of India (GoI). (2021). Economic survey 2020-2. Oxford University Press. Ministry of Finance. <https://www.indiabudget.gov.in/economicsurvey/doc/Statistical-Appendix-in-English.pdf>

Government of India (GoI). (2020). Agricultural statistics at a glance. Department of Agriculture, Cooperation and Farmers Welfare, Directorate of Economics and Statistics.

Government of India (GoI). (2019). Agriculture census 2015-16 (Phase-I), All India Report on Number and Area of Operational Holdings, Agriculture Census Division, Department of Agriculture, Cooperation & Family Welfare, New Delhi.

Government of India (GoI). (2021). Census of India Website: Office of the Registrar General & Census Commissioner, India. <https://censusindia.gov.in/>

Government of India (GoI). (2021). Provisional estimates of annual national income 2020-21, Ministry of Statistics and Programme Implementation, <https://pib.gov.in/PressReleasePage.aspx?PRID=1723153>

Government of India (GoI). (2021). *Annual Report 2020-21*, Ministry of Road Transport and Highways. [https://morth.nic.in/sites/default/files/Annual%20Report%20-%202021%20\(English\)_compressed.pdf](https://morth.nic.in/sites/default/files/Annual%20Report%20-%202021%20(English)_compressed.pdf)

Government of Punjab (GoP). (2021). State Wise Data, <https://www.esopb.gov.in/Static/PDF/GSDP/Statewise-Data/StateWiseData.pdf>

Government of Uttarakhand (GoU). (2021). First advance estimates of state domestic product of Uttarakhand, Directorate of Economic & Statistics, Department of Planning. [https://des.uk.gov.in/files/GSDP_Estimates_2011-12_to_2020-2021\(Base_Year_2011-12\).pdf](https://des.uk.gov.in/files/GSDP_Estimates_2011-12_to_2020-2021(Base_Year_2011-12).pdf)

Government of Uttarakhand (GoU). (2021). Uttarakhand economic survey 2020-21, vol. II, [https://des.uk.gov.in/files/UK_ES_2020-21_\(Volume_II\)_Final_120821.pdf](https://des.uk.gov.in/files/UK_ES_2020-21_(Volume_II)_Final_120821.pdf)

Government of Uttar Pradesh (GoUP). (2021, 16 September). Revised state income estimates of 2018-19 (Revised provisional), 2019-20 (Revised quick) & 2020-21 (Revised advance). http://updes.up.nic.in/esd/Press_release/REVISED%20STATE%20INCOME%20ESTIMATES%20.pdf

Government of Uttar Pradesh (*GoUP*). (2021). Advance Estimates of State Domestic Product of Uttar Pradesh, Economic & Statistics Division.
http://updes.up.nic.in/esd/Press_release/press_note_state_income_2020-2021_adv.pdf

Government of Uttar Pradesh (*GoUP*). (2020). Statistical Diary 2020, Economic & Statistics Division, State Planning Institute, Planning Department.

Reserve Bank of India (*RBI*). (2021, 15 September). Handbook of statistics of Indian economy.
<https://www.rbi.org.in/Scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy>
<https://www.rbi.org.in/scripts/PublicationsView.aspx?id=20414>

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Chapter – 3

Socio-economic Assessment Survey of the Project Area

The proposed 6-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Greenfield spur crosses Uttar Pradesh and Uttarakhand State through Saharanpur and Haridwar districts respectively, covering 45 villages and length of 43.9 km. Thus, the survey was carried out in the month of August-September 2021 by selecting five respondents (three farmer households whose land was to be acquired, one neighbourer landowner and one labourer) from each village where land was planned to be acquired for the proposed project. The size of sample was 225 households from 45 villages in the alignment area. Around ten responses were excluded, as information supplied by the respondents was incomplete. Therefore, balance 215 responses have been taken into account. Out of the total 215 households, 129 were farmer households whose land is to be acquired for the proposed spur project, and rest 86 were neighbourers and labourers. Therefore, the responses of 215 households have been tabulated, analyzed and interpreted for the report.

The data were collected from 215 households on various socio-economic indicators such as religion, caste, occupation, economic category, land holding pattern, household assets and livestock, income and indebtedness status, etc, through Schedule A. Similarly, the information was gathered from villages about their socio-economic dimensions as per Schedule B. In this chapter, Part - I discuss the salient features of the villages through which the proposed 6-lane access controlled Greenfield Spur to Haridwar would be passing in Uttar Pradesh and Uttarakhand States. The Section - II focuses on responses of the households with regard to the Greenfield Spur project.

Part - I

This part deals with the salient features of the influenced villages from where land is to be acquired for the proposed Greenfield Spur to Haridwar. The information concerning distance from major centers, demographics, availability of facilities and services, etc. are discussed to contextualize the socio-economic impact of the proposed greenfield spur on its surrounding area.

Demography of the Influenced Villages

The analysis of demography plays a vital role in order to know the socio-economic status of the people. The demographic profile of the influenced villages is presented in the table 3.1. The total area of all 45 villages was 11326 hectare (ha). The maximum villages area under greenfield spur project was from Haridwar district of Uttarakhand, followed by Saharanpur district of Uttar Pradesh. In fact, Haridwar district covered around 57 per cent (28 villages) of the total 45 influenced villages of both the States. However, Saharanpur district covered only around 43 per cent (17 villages) of total influenced villages. The average size of the project influenced villages is 252 hectares, and ranged between 24 to 821 hectares. The area wise largest village is Manakpur Adampur in the Roorkee Tehsil of Haridwar district.

In terms of number of households, Haridwar district accounted 11,772 households (63.1 per cent) of the total 18,572 households, followed by Saharanpur (37.9 per cent). The average number of households in the project influenced villages was 413 and ranged between 2 to 366 households. The total population of the 45 project influenced villages was 1,11,400. Out of this, Haridwar district accounted 64.6 per cent, followed by Saharanpur (35.4 per cent), as depicted in table 3.1. The average size of the population in the project influenced villages was 2476 with male population of 52.9 per cent. However, variation in population was 2369. Further, the population in

Table 3.1: Demography of the Influenced Villages under Saharanpur-Haridwar Greenfield Spur Project

S. No.	District	Number of Affected Villages	Area of Villages (Hectares)	Number of Households	Population			Percentage of SC in Total Population
					Total Persons	Male	Female	
1	Saharanpur	17 (43)	4843 (42.8)	6850 (36.9)	39440 (35.4)	20915	18525	26.7
2	Haridwar	28 (57)	6483 (57.2)	11722 (63.1)	71960 (64.6)	37914	34046	24.1
	Total	45	11326	18572	111400	58829	52571	24.6
	Mean/ Average	-	252	413	2476	1307	1168	24.6
	Standard Deviation/ Variation	-	168	366	2369	1199	1090	27.7
	Minimum	-	24	2	15	6	9	0
	Maximum	-	821	1580	10684	5502	5182	2508

Note: Figures in brackets are percentage of Total.

Source: Government of India, 2011: Office of the Registrar General & Census Commissioner, India, <https://censusindia.gov.in/2011census/dchb/DCHB.htm>

these villages ranged between 15 to 10684. Among the project influenced villages, the largest populated village is Badheri Rajputan in Roorkee Tehsil of Haridwar district.

The number of Scheduled Caste (SC) among the project influenced villages was the highest from Saharanpur district, followed by Haridwar district. On an average, 24.6 per cent of the total population of project influenced villages was SC. Maximum SC population was 2508 from Belada in Roorkee Tehsil of Haridwar district.

Overall, the demographic profile of the project influenced villages shows that Haridwar district would be mostly pretentious under the greenfield spur project in terms of area and population. Further, weaker SC population was marginally higher in Saharanpur district. It means the standard of living of the influenced villages was lower. Hence the population of the influenced villages might get some good opportunities for raising their standard of living under the proposed greenfield spur project.

Distance of Villages from Major Urban Centers:

The distance and accessibility to major urban administrative and business centers is a critical component of socio-economic development of a location. A central (nodal) location with easy accessibility has higher chances of catching up with the developed world. In simple terms, more the distance from urban center/highway, more backward an area is.

The table 3.2 depicts the distance of influenced villages from the important places in the districts.

Table 3.2: Distance of the Influenced Villages from Important Places in the Districts

(Kilometre)					
S.No	Place/Measure	Mean/ Average Distance	Standard Deviation/ Variation	Minimum Distance	Maximum Distance
1	District Headquarter	31.1	10.4	14.0	48.0
2	Sub-Division Headquarter	12.4	6.0	3.0	29.0
3	Statutory Town	11.9	9.2	0.0	45.0
4	National Highway	7.1	6.0	1.0	12.5
5	State Highway	6.3	4.5	1.0	10.0
6	Railway Station	7.2	4.4	0.5	18.0
7	Gram Panchayat	0.7	0.8	0.0	4.0

It can be seen from the table that an average or mean distance of influenced villages from District Headquarters is 31.1 km, while maximum distance is 48 km. Similarly, Sub-Division Headquarters is situated at an average distance of 12.4 km from these villages with a maximum distance of 29 km. Likewise, an average distance of influenced villages from National Highway is 7.1 km with a maximum distance of 12.5 km. Further, an average distance of villages from Railway Station is 7.2 km with maximum distance of 18 km.

It may be noted from the table 3.2 that a low standard deviation or variation indicates that the values tend to be close to the mean or average. On the other hand, the more spreadout a data distribution is, the greater its standard deviation. According to this, the standard deviation was close to mean in case of the distance of these villages to Gram Panchayat, followed by Railway Station, State as well as National Highway, Statutory town, Sub-Division Headquarters and District Headquarters.

The foregoing analysis clears that the area through which the greenfield spur is proposed to run is far away from the main administrative/urban centers, and also from National Highways and Railway Stations. It means the accessibility to these villages is not easy. Therefore, it can be deduced that the area of influenced villages is less developed or backward in view of its geographical location. Consequently, it is expected that with the development of the greenfield spur, the area will open up for all round rapid development.

Distance of Educational, Health and Other Facilities:

It is relevant to analyze an average distance of educational, health and other facilities from the project influenced villages under Saharanpur-Haridwar greenfield spur. The table 3.3 shows this picture. It can be seen from this table that the average distance of primary, high and senior secondary schools is between 0.3 to 3.7 km with a

Table 3.3: Distance of Educational, Health and Other Facilities from the Project Influenced Villages					
S. No	Facility	Mean/Average Distance	Standard Deviation/Variation	Minimum Distance	Maximum Distance
Educational Facility					
1	Primary School	0.3	0.2	0.1	0.6
2	High School	2.1	2.0	0.1	8.0
3	Higher Secondary School	3.7	2.6	0.2	13.0
4	Degree College	5.2	3.8	0.4	22.0
5	Vocational Training Centre	6.1	3.6	1.0	20.0
6	ITI	6.2	6.3	1.0	32.0
7	Polytechnic	8.6	4.9	1.5	22.0
8	Engineering College	9.7	6.8	2.0	32.0
9	Nursing School	9.9	6.8	1.0	25.0
Health Facility					
1	Health Sub-Centre	4.3	4.1	0.4	13.0
2	Primary Health Centre	4.7	4.3	0.1	20.0
3	Gramin Hospital/ Sub-divisional Hospital	5.9	5.4	0.2	25.0
4	Homeopathic/ Ayurvedic/Allopathic Dispensary	6.1	6.2	0.2	25.0
5	Private Medical Practitioners Allopathic	4.1	4.7	0.1	20.0
6	Private Practitioners Ayurvedic\ Homeopathic	1.1	1.7	0.0	6.0
7	Veterinary Dispensary	3.8	3.4	0.1	13.0
8	Pharmacy	1.5	2.2	0.1	13.0
9	Diagnostic Center	6.8	3.3	0.4	14.0
Food Processing facilities					
1	Rice Hauler	3.4	3.2	0.2	13.0
2	Atta Chakki (Flour Mill)	0.6	0.9	0.1	4.0
3	Oil Crushers	3.1	2.7	0.1	10.0
4	Sugarcane Crusher	6.1	7.4	0.1	12.0

maximum distance of 0.6 to 13 km. Further, the average distance of a Degree College, Vocational Training Centre, Industrial Training Institute (ITI), Nursing School, Polytechnic, and Engineering College from the influenced villages is between 5.2 to 9.9 km with a maximum distance of 20 to 32 km. Similarly, health facilities like Primary Health Centre, Maternity and child health care center, Pharmacy, Community Health Center, Private Medical Practitioner, and Diagnostic Center are located on an average distance of 1.1 to 6.8 km with maximum distance ranging between 6 to 25 km. Hence the condition of the influenced villages cannot be regarded as good for basic health services. Moreover, the position of these villages is also the poorest in terms of their distance for economic services such as Flour Mill, Rice haulers, oilcrushers and Sugarcane crushers. The average distance for these economic services is between 0.6 to 8.2 km with maximum distance of 4 to 12 km.

Hence it can be inferred that the villages falling under the proposed spur project are located far away from the basic educational, health and other facilities. Therefore, the new greenfield spur project would usher in an era of prosperity for the influenced villages in the Saharanpur and Haridwar districts.

Availability of Educational and Health Facilities in the Villages:

It is important to know the educational and health facilities in the project influenced villages. The table 3.4 shows this picture. It is clear from the table that Allopathic Hospital, and T.B. Clinic were not available in these 45 villages. Even Management Institutes, Polytechnics and Public Libraries were not available in more than 89 per cent of the project influenced villages. Engineering College and Community Health Centre were available in only six villages. Further, Vocational Training Centre and Degree College were available only in seven villages. Senior Secondary Schools and Primary Health Centres

Table 3.4: Educational and Health Facilities Available in the Project Influenced Villages

(Number)				
S.	Institution	Available	Not Available	
No.		No. of Villages	No. of Villages	Per cent share
1	Allopathic Hospital	0	45	100
2	T.B. Clinic	0	45	100
3	Management Institute	5	40	89
4	Poly-technique	5	40	89
5	Public Library	5	40	89
6	Engineering College	6	39	87
7	Community Health Centre	6	39	87
8	Vocational Training Centre	7	38	84
9	Degree College	7	38	84
10	Higher Secondary School	8	37	82
11	Primary Health Centre	10	35	78
12	High School	20	25	56
13	Primary School	39	6	13

were not available in 84 per cent of the project influenced villages. However, primary schools were spread in 87 per cent of the project influenced villages, whereas high schools were spread in 44 per cent of the total influenced villages. Roorkee is major hub for education facilities, and is near between 5 km to 60 km from the influenced villages.

Hence it can be fairly concluded that the availability of basic educational and health facilities is very poor in the project influenced villages. However, with the construction of Saharanpur-Haridwar Greenfield Spur project, these facilities could be improved in the project influenced villages.

Availability of Basic Services within the Villages:

An attempt has been made to find out the extent of diversification into non-agricultural activities within the influenced villages under the proposed greenfield spur project. In this context, the availability of services within the influenced villages is very important.

The table 3.5 depicts the availability of basic services within the influenced villages of Saharanpur and Haridwar districts. It can be seen from this table that the average number of the availability of services like Cobbler, Blacksmith, Newspaper Vendor, Aaya/Dai/Traditional Birth Attendant, and Washerman was less than 2 with variation

(Number)				
S. No.	Service Provider	Mean/Average	Standard Deviation/Variation	Maximum Number
1	Cobbler	0.5	1.2	5
2	Blacksmith	1.1	1.7	6
3	Newspaper Vendor	1.1	0.9	4
4	Aaya/Dai/Traditional Birth Attendant	1.6	2.4	15
5	Washerman	1.7	3.1	15
6	General/Auxiliary Nursing and Midwifery (GNM/ANM)	2.4	2.8	15
7	Lawyer	2.4	2.5	10
8	Potter	2.8	5.3	30
9	Doctor	3.4	2.9	10
10	Tailor	4.0	4.0	20
11	Barbar	5.6	5.6	20
12	Carpenter	5.7	11.2	50
13	Electrician/Helper	5.9	5.3	20
14	Milkman	8.6	7.7	30
15	Engineer	10.8	18.1	100
16	Mason	32.3	63.3	300

between 0.9 to 3.1 per cent only, and maximum 15 Aayas/Washer men in some villages. However, the average number of General/Auxiliary Nursing and Midwifery (GNM/ANM), Lawyer, Potter, Doctor, and Tailor were between 2 to 4 in these villages with variation of 2.5 to 4 per cent. It is interesting to note that some people of these villages have qualified as Doctor and Lawyer and live there. Maximum Lawyers/Doctors in some villages were 10. The average number of the available Barber, Carpenter, Electrician/Helper, Milkman, and Engineer were between 5.6 to 10.8 in these villages with variation of 5.3 to 18.1 per cent. Further, average available Masons were 32.8 with maximum 300 in some villages.

Overall, villagers were not hopeless to the accessibility of their area from the outside world. They have been joining other professions in a significant way. Moreover, these villages had the availability of doctors, engineers, lawyers, etc.

Retail and Repair Shops:

The influenced villages under the proposed greenfield spur project have a lot of socio-economic activity in terms of the number of Retail and Repair shops. The table 3.6 shows this picture. According to this table, the different types of retail and repair shops were available in good number under these villages. The average number of retail grocery shops was quite high, followed by vegetable, textile fair price shops. The maximum number of retail shops was around 150 in some of these villages. Similarly, the average number of repair shops of cycles was 1.7 in these villages. Further, repair shop of automobile, electronic goods and tractor/pump & spare parts was between 0.5 and 1.7 on an average with maximum number between 4 and 10.

It can be interpreted from this analysis that project influenced villages are transforming substantially. The fruits of economic

Table 3.6: Shops in the Influenced Villages				
(Number)				
S. No.	Particulars	Mean/ Average	Standard Deviation/ Variation	Maximum Number
Retail Shops				
1	Retail Grocery	15.4	25.2	150
2	Vegetable	6.2	9.0	50
3	Textile	1.2	2.0	7
4	Fair Price	1	0.7	4
Repair Shops				
1	Cycle	1.7	1.3	4
2	Automobile	1.1	1.7	7
3	Electronic Goods	1.5	1.7	6
4	Tractor/Pump/ Spare parts	0.5	1.7	10

development have reached the interior parts. Rural households have sufficient purchasing power to buy the goods and services. Similarly, the rural persons in the study areas are enterprising and diversifying from agriculture to non-agricultural activities rapidly. This shows their good potential in future.

Post Office and Banks:

It has been found that the influenced villages under greenfield spur project have the banking and post offices facilities. The table 3.7 demonstrates the number of banks and post offices in these villages. It is clear from this table that on an average, all the villages have at least 0.5 bank on an average. The maximum limit of the banks is 3 in some

Table 3.7: Banks and Post offices in the Influenced Villages			
(Number)			
S. No	Particulars	Post Offices	Banks
1	Mean/ Average	0.3	0.5
2	Standard Deviation/ Variation	0.5	0.9
3	Minimum Number	0	0
4	Maximum Number	1	3

of these villages. Moreover, Post office was also available in around one-third of the influenced villages. Therefore, it is really impressive that the financial institutions were available in these villages, and hence they could take loan from these institutions for their non-agricultural activities.

Status of Migration:

Migration is an important activity having wide social and economic implications for the region and its people. In the influenced villages, an attempt has been made to examine the status of in-migration to villages from outside and also out-migration from villages.

The table 3.8 depicts the extent of migration in the influenced villages in Uttar Pradesh & Uttarakhand. It is clear from this table that the average number of in-migration was 15.8 and out-migration was 39.1. However, the average number of female migration was negligible. Hence males dominate in the migration process of these villages. Further, out-migration was more prominent than in-migration, thereby suggesting that sufficient employment opportunities were not available for unskilled workers within the influenced villages of the greenfield spur project.

Table 3.8: Migrants in the Project Influenced Villages					
(Number)					
S. No	Particulars	Mean/Average	Standard Deviation/Variation	Minimum Number	Maximum Number
In-migration					
1	Male	15.8	52.8	0	300
2	Female	0	0	0	0
3	Total Persons	15.8	52.8	0	300
Out-migration					
1	Male	39.1	101.4	0	500
2	Female	0	0	0	0
3	Total Persons	39.1	101.4	0	500

Overall, it is clear from the above-cited analysis for the proposed project of Saharanpur-Haridwar spur that the influenced villages are situated in the less developed area with poor infrastructure. The accessibility to these villages is not so easy. The people have very poor facilities of education and health. An industrial activity in these villages is also negligible. It is expected that proposed spur will be beneficial to these villages for their all-round development.

Part II

In this part of the chapter, we discuss the information based on Schedule A, through which information about individual influenced rural households was collected. Hence the data of 215 households in 45 villages situated in the project area of Saharanpur-Haridwar Greenfield Spur has been analyzed. The discussion has been broadly divided into four sections. The first section presents the personal profile of the respondents. Section 2 analyses the land ownership. Section 3 examines the income of respondents, and Section 4 is focused on loans and liabilities.

Section 1: Personal Profile of the Households

Size and Type of Family

It is important to know the details about the family in the influenced villages. The table 3.9 depicts the details about family of the households in the influenced villages of Saharanpur and Haridwar districts. The average size of the family in the influenced villages of Saharanpur district in Uttar Pradesh is 9.4 with variation of 5.8. There are families reporting up to maximum 28 persons. Further, the average size of the male family members is 5.1 as compared to 4.3 of the female family members. It shows the number of males is more than that of the females in a family. The maximum number of male and female family

(Number)						
S.No.	District	Particulars	Mean/ Average	Standard Deviation/ Variation	Minimum Number	Maximum Number
1	Saharanpur (U.P.)	Total Members of Family	9.4	5.8	2	28
		a) Male	5.1	3.1	1	15
		b) Female	4.3	3.0	1	16
		Family members with Bank Account	3.3	2.4	1	12
2	Haridwar (Uttarakhand)	Total Members of Family	9.1	6.9	3	70
		a) Male	4.8	4.0	2	40
		b) Female	4.3	3.1	1	30
		Family members with Bank Account	3.5	2.7	1	17
3	Total	Total Members of Family	9.2	6.5	2	70
		a) Male	4.9	3.7	1	40
		b) Female	4.3	3.1	1	30
		Family members with Bank Account	3.4	2.6	1	17

members are 15 and 16, respectively. The average family members having bank account in the influenced villages of Saharanpur district is 3.3. However, the maximum number of bank accounts in the family is reported as 12. Hence around 35 per cent of the people in the influenced villages of this district are using banking facilities.

On the other hand, the average size of the family in the influenced villages of Haridwar district in Uttarakhand is 9.1 with variation of 6.9. The maximum number of members in family is up to 70. Further, the average size of the male family members is 4.9 as compared to 4.3 of the female family members. Hence the number of males is more than that of the females in a family. The maximum number of males and females in a family reaches up-to 40 and 30, respectively. The average family members having bank account in the influenced villages of Haridwar

district is 3.5. However, the maximum number of bank accounts in the family is reported as 17. Thus, around 39 per cent of the people in the influenced villages of Haridwar district are using banking facilities.

Overall, the average size of the family in the influenced villages of the greenfield spur project is 9.2 with variation of 6.5. There are families reporting up to maximum 70 persons. Further, the average size of the male family members is 4.8 as compared to 4.3 of the female family members. Thus, the number of males is more than that of the females in a family. The maximum number of males and females in a family reaches up-to 40 and 30, respectively. The average family members having bank account in the influenced villages of Saharanpur-Haridwar spur project is 3.4. However, the maximum number of bank accounts in the family is reported as 17. Hence around 37 per cent of the people in the influenced villages of greenfield spur project are using banking facilities.

Type of Family:

An attempt was made to find out the type of family of the households in the influenced villages of Saharanpur-Haridwar spur project. The table 3.10 shows this picture. It can be seen from this table that there are around 73 per cent families living together as joint family in both the districts, as reported by the respondents. However, the number of nuclear family is also around 27 per cent, which is quite less. However, it reveals a changing trend in rural Uttar Pradesh and Uttarakhand regarding type of family.

Table 3.10: Type of Family of the Households					
S. No.	Family Type	Saharanpur	Haridwar	Total	Per cent
1	Joint	59	97	156	72.6
2	Nuclear	20	39	59	27.4
Total Number		79	136	215	100
Total Per cent		36.7	63.3	100	100

Land Details:

The table 3.11 shows the pattern of land holding by the households in the influenced villages of Saharanpur and Haridwar districts. It can be seen that the average size of land is 4.83 acres. However, it went up to 17 acres in few cases. On the other hand, minimum size of land is around one acre. Therefore, it can be said that the influenced villages are agriculturally sound.

Particulars	Mean/ Average	Standard Deviation/ Variation	Minimum Acre	Maximum Acre
Total Land	4.83	2.6	0.99	17.3

Religion:

In the influenced villages of greenfield spur project, 70.7 per cent of the household's population are Hindu, and rest 29.3 per cent are Muslims as per table 3.12. However, in the Uttar Pradesh and Uttarakhand States, Hindu population was 79.7 per cent and 83 per cent, respectively as per census 2011. Hence Hindu population in the influenced villages is less in comparison to their respective States. On the other hand, Muslim population in the Uttar Pradesh and

S. No	Religion	Saharanpur	Haridwar	Total	Per cent
1	Hindu	68	84	152	70.7
2	Muslim	11	52	63	29.3
Total		79	136	215	100
Per cent		36.7	63.3	100	100

Uttarakhand State was 19.6 per cent and 14 per cent, respectively during 2011. But in the project influenced villages, it is 29.3 per cent. Therefore, project influenced villages have considerable Muslim households.

Social Category:

It is meaningful to know the social category of the households in the project influenced villages. Table 3.13 shows this picture. Around 70.2 per cent of the surveyed 215 households are under Other Backward Class (OBC) category in both the districts of Saharanpur and Haridwar. Further, only 18.6 per cent households are Scheduled Caste (SC), and remaining 11.1 per cent are in general category. In fact, the OBC population in Uttar Pradesh and Uttarakhand was 40 per cent and 18.3 per cent, respectively during 2011 as per census report. However, the SC population in these project influenced States was 20.8 per cent and 18.7 per cent, respectively during this period. But surveyed households or landowners in the influenced villages are mostly in the OBC category.

Table: 3.13 Social Stratification of the Households in the Influenced Villages					
					(Number)
S. No	Social Category	Saharanpur	Haridwar	Total	Per cent
1	Other Backward Class (OBC)	41	110	151	70.2
2	Schedule Caste	26	14	40	18.6
3	General	12	12	24	11.2
Total		79	136	215	100
Per cent (%)		36.7	63.3	100	100

Economic Category:

It is worthy to know about the economic category of the households in the influenced villages of the greenfield spur project. The economic category can be divided into three parts i.e. Above Poverty Line (APL), Below Poverty Line (BPL), and Antyodaya Ann Yojana (AAY). The income limit for households the APL category has been pegged at more than Rs. 27000 per annum, while those who have less than Rs. 27,000 as annual incomes as under the BPL category. However, impoverished families identified by the state governments with unstable income are under AAY category. The table 3.14 shows the economic category of the surveyed households. It can be seen from this table that around two-third of the households are in the APL category. Only 15.4 per cent of households in the influenced villages of the greenfield spur project are under BPL category. Further, 18.6 per cent of the households are under AAY category. It may be noted that during 2011-12, the rural poverty in Uttar Pradesh and Uttarakhand was 29 per cent and 11 per cent, respectively. Therefore, it can be said that the majority of land owners/households of the influenced villages are economically well-off.

Table: 3.14 Economic Category of the Households in the Influenced Villages					
(Number)					
S. No	Social Category	Saharanpur	Haridwar	Total	Per cent
1	Above Poverty Line (APL)	50	92	142	66.0
2	Below Poverty Line (BPL)	9	24	33	15.4
3	Antyodaya Ann Yojana (AAY)	20	20	40	18.6
Total		79	136	215	100
Per cent (%)		36.74	63.26	100	100

Section 2: Land Ownership

Land Area Ownership:

In the influenced villages, 12.5 per cent of the households are marginal farmers with less than 2 acres of land, as depicted in table 3.15. Further, 49.8 per cent of the households are small with land ranging between 2 acres and 5 acres. On the other hand, persons with more than 10 acres but less than 20 acres of land are around 2.8 per cent. However, no household is found with more than 20 acres' land. Further, all land is irrigated one.

S. No	Area of Land (Acres)	Saharanpur	Haridwar	Total	Per cent
1	0-2	15	12	27	12.5
2	2-5	42	65	107	49.8
3	5-10	20	55	75	34.9
4	10-20	2	4	6	2.8
5	> 20	0	0	0	0
Total		79	136	215	100
Per cent (%)		36.7	63.3	100	

Mode of Land Ownership:

A lot of changes are taking place in rural land market with economic development. A number of land owners are giving land on contract and joining non-agricultural activities. Similarly, enterprising farmers are taking land on lease to supplement their income as well as operational holdings. The table 3.16 has attempted to capture this phenomenon. It can be seen from this table that 77.7 per cent households have their own land, around 15.8 per cent of the total households have registered lease for their land, and 6.0 per cent are sharecroppers. Rest around 0.5 per cent households have tenants/sub-

Table 3.16: Mode of Land Ownership in the Influenced Villages of Spur Project					
(Number)					
S. No	Mode of Ownership	Saharanpur	Haridwar	Total	Per cent
1	Own Land	62	105	167	77.7
2	Lease	9	25	34	15.8
3	Sharecropper	7	6	13	6.0
4	Tenants/ Sub-tenants	1	0	1	0.5
Total		79	136	215	100
Per cent (%)		36.7	63.3	100	

tenants. Hence the ownership of land for self-cultivation is large in the influenced villages for the spur project.

Housing Ownership:

In the influenced villages of Saharanpur-Haridwar Spur project, there is only one household out of 215, who reported that he did not own a house or a plot for house. Table 3.17 depicts that 99.5 per cent of the households own house in the influenced villages in both the States. In this way, the situation is good for the villages.

Table 3.17: Ownership of House/Residential Plot in the Influenced Villages of Spur Project					
(Number)					
S. No	Ownership of House/ Residential Plot	Saharanpur	Haridwar	Total	Per cent
1	Own House/Plot	79	135	214	99.5
2	Do not own House/Plot	0	1	1	0.5
Total		79	136	215	100
Per cent (%)		36.74	63.26	100	100

Section 3: Income of the Land Owners

Non-agricultural-sector is flourishing the in India with the diversification and economic development. In rural areas, a lot of non-agricultural jobs and professions have been prospering. However, earnings from agriculture including dairying and livestock still constitute the major share. Hence it is pertinent to discuss the income of land owners/households in the influenced villages of the greenfield spur project. In these villages, the major cropping season of Kharif corps is between May/June to November. Major crops are Paddy/Rice, Sugarcane and Maize. Rice is popular due to availability of irrigation facilities. Further, Maize is primarily rainfed crops. Rabi crops are sown between November/December to April/May. Major Rabi crops are wheat, barley, groundnut, black gram, lentil, mustard etc. Therefore, it is relevant to know the annual income of the sampled 129 land owners/households from the influenced villages. There were 48 land owners from Saharanpur and remaining 81 were from Haridwar district.

The table 3.18 shows the annual income of the sampled landowners/households from different sources in the influenced villages of Saharanpur and Haridwar districts.

		(Per cent)		
S. No.	Annual Income	Per cent of Land Owners		
		Saharanpur	Haridwar	Total
1	Below 1,00,000	33.3	33.3	33.3
2	Between 1,00,000 to 2,00,000	12.5	27.2	21.7
3	Between 2,00,000 to 5,00,000	45.8	30.9	36.4
4	Above 5,00,000	8.3	8.6	8.5
Total		100.0	100.0	100.0

It can be seen from table 3.18 that around one-third (33.3 per cent) of the project sampled landowners are reporting annual income below Rs. one lakh. Their share is almost same in both the Saharanpur and Haridwar districts. Further, 21.7 per cent of the landowners have annual income between Rs. 1 lakh to Rs. 2 lakhs. However, in this category, the share of Haridwar district was 27.2 per cent as compared to 12.5 per cent of Saharanpur district. Further, 36.4 per cent of the sampled landowners have annual income between Rs. 2 lakhs to 5 lakhs. In this category, the share of sampled land owner in Saharanpur district was 45.8 per cent as compared to 30.9 per cent of Haridwar district. Only 8.5 per cent of the sampled landowners have annual income more than Rs. 5 lakhs.

It is clear that farmers are supplementing their agricultural income from other activities like dairying, salary/pension, business, money lending, etc. in the project influenced villages of Saharanpur and Haridwar districts. Sale of milk, land lease, and money lending are the more popular methods to increase earnings by the middle-income farmers in these villages.

Section 4: Loans and Liabilities

Farming is not a profitable activity. In India, during 2019-20, 44 per cent of the total labour force was employed in agriculture sector, but they generated only 17.4 per cent of the total real Gross Value Added. Therefore, the income from agriculture sector is reducing continuously. As a result, Indian farmers suffer from non-repayment of loans from bank and other institutions including from the Ahratias/Commission Agents. In the project influenced Saharanpur and Haridwar districts, most of the small and marginal farmers are taking bank loans. Hence it is important to know the outstanding loans and other liabilities of land owners in the influenced villages of the proposed Saharanpur-Haridwar Spur Project.

Outstanding Loans:

During primary survey in the influenced villages for the proposed Saharanpur-Haridwar Greenfield Spur Project, the total 61 land owners reported outstanding loans out of 129 surveyed land owners. The loaned land owners were 35 from the Saharanpur district and remaining 26 from Haridwar district. The circumstantial facts suggest that farmers of both the districts were hard-working and progressive.

The table 3.19 demonstrates the outstanding loan of the sampled landowners/households in the influenced villages of Saharanpur and Haridwar districts.

S. No.	Annual Income	Per cent of Land Owners		
		Saharanpur	Haridwar	Total
1	Below 1,00,000	17.1	23.1	19.7
2	Between 1,00,000 to 2,00,000	14.3	19.2	16.4
3	Between 2,00,000 to 5,00,000	48.6	38.5	44.3
4	Between 5,00,000 to 10,00,000	14.3	15.4	14.8
5	Between 10,00,000 to 20,00,000	2.9	3.8	3.3
6	Above 20,00,000	2.9	0.0	1.6
Total		100.0	100.0	100.0

It is clear from table 3.19 that around one-fifth (19.7 per cent) of the project sampled landowners reported outstanding loan below Rs. one lakh. Their share was more in case of Haridwar district. Further, 16.4 per cent of the landowners reported loan between Rs. 1 lakh to Rs. 2 lakhs. However, in this category also, the share of project land owners from Haridwar district was 19.2 per cent as compared to 14.3 per cent

of Saharanpur district. Further, 44.3 per cent of the sampled landowners reported loan amounting between Rs. 2 lakhs to 5 lakhs. In this category, the share of Saharanpur district was 48.6 per cent as compared to 38.5 per cent of Haridwar district. The largest share of loan was in this category. However, 14.8 per cent of the landowners reported loan amounting between Rs. 5 lakhs to 10 lakhs. Only 3.3 per cent of the sampled landowners reported loan amount between Rs. 10 lakhs to 20 lakhs. Merely 1.6 per cent of the sampled landowners reported loan amount above Rs. 20 lakhs.

The foregoing discussion reveals that less than half of the total sampled land owners stated their indebtedness under the Saharanpur-Haridwar greenfield spur project. Hence in the influenced villages, the problem of farmer's indebtedness is quite large. They were taking loans from the banks. Non- institutional source of funds is very meagre. Further, around 80 per cent of the land owners took loan below Rs. 5 lakhs.

More than two-third of the farmers from influenced villages are marginal and small in both Saharanpur and Haridwar districts under the proposed spur project. Their average land holding size is 4.8 acres. However, almost all farmers have semi-pucca and pucca houses. Further, around 55 per cent of the land-owners have annual income less than Rs. 2 lakhs. However, around 36.4 per cent of the land owners have annual income between Rs. 2 to 5 lakhs. Therefore, farming is not able to provide a decent level of earnings to the farmers in the study area. Around 47 per cent of the farmer households have outstanding loans. Further, around 60 per cent of the loaned households have outstanding loan amount between Rs. 2 lakhs to 10 lakhs.

Chapter - 4

Socio-economic Impact Assessment and Mitigation Plan

In this chapter, an attempt has been made to assess the socio-economic impact of the proposed 6-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand States. In some way or the other, the proposed new project shall bring about the opportunities for the rural inhabitants of the area by way of enhancement in means of income and business opportunities. However, the development of the project may have negative impact on the income of project-affected population, and the socio-cultural systems of affected communities. Reinstatement of pre-project levels of income for the project affected villagers is an important task for the government. Consequently, in order to deal with the negative impact of the proposed project, a mitigation plan is also suggested in this section.

Socio-economic impact assessment can be made in terms of size and type of land to be acquired, affected landowners/farmers as well as population including vulnerable section of people. Further, the acquisition of land is likely to bring socio-economic changes in the project area. Meanwhile, income restoration measures need to be more comprehensive to take care of the occupational diversity and future aspirations of the affected population.

Size and Type of Land to be Acquired:

As per the Land acquisition plan of the NHAI, an overall 287-hectare land shall be acquired from 45 villages in Saharanpur and Haridwar districts of Uttar Pradesh and Uttarakhand, respectively, for the Greenfield Spur to Haridwar. The total 120.4-hectare land is to be

acquired from 17 villages of Saharanpur district in Uttar Pradesh, and 166.6-hectare land in 28 villages of Haridwar district in Uttarakhand. The total length of the proposed spur project is 43.9 km, out of which 19.06 km is to be covered in Uttar Pradesh, and rest 24.84 km in Uttarakhand State.

The table 4.1 reveals the district-wise details of land to be acquired in both Saharanpur (Uttar Pradesh) and Haridwar (Uttarakhand) districts. Out of the total land to be acquired, 92.7 per cent is under the private ownership in both the districts. Remaining 7.3 per cent only of the total land to be acquired is under the government ownership. Further, out of total private ownership land, 99.9 per cent is agricultural land and remaining 0.1 per cent only is non-agricultural. The major part (57.2 per cent) of the total land to be acquired is situated in Haridwar district of Uttarakhand State, followed by 42.8 per cent in Saharanpur district of Uttar Pradesh.

Table 4.1: Details of Land to be Acquired for the Project							(Hectare)
S. No.	District	Number of Affected Villages	Govt.	Private	Total	Private Agricultural Land	Per cent share of Private Land in Total
1	Saharanpur	17	6.4	114.0	120.4	114.0	42.8
2	Haridwar	28	14.6	152.0	166.6	151.8	57.2
Total		45	21.0	266.0	287.0	265.8	100.0
Per cent Share in Total			7.3	92.7	100.0	99.9	
Source: NHAI, Land Acquisition Plan							

Project Affected Land Farmers:

The proposed Spur Project shall impact a total of 1662 land owners and share croppers in Saharanpur and Haridwar districts. The table 4.2 reveals the district-wise details of land owners and share croppers for the project in the States of Uttar Pradesh and Uttarakhand. Out of the total affected farmers, 54 per cent are males (897), and rest 46 per cent are females (765). The share of title holder/land owners in the total affected farmers is 80.4 per cent (1336 farmers). Rest 19.6 per cent farmers are non-title holders or sharecroppers. The major part (61.3 per cent) of the total affected land farmers is from Haridwar district.

Table 4.2: Details of Project Affected Land Farmers					
					(Number)
S.No.	Particulars	Saharanpur	Haridwar	Total	Per cent Share (%)
1	Title Holder				
a)	Male	279	438	717	79.9
b)	Female	232	387	619	80.9
	Total	511	825	1336	80.4
2	Share Cropper/Dependent				
a)	Male	74	106	180	20.1
b)	Female	59	87	146	19.1
	Total	133	193	326	19.6
3	Total Project Affected Farmers				
a)	Male	353	544	897	54.0
b)	Female	291	474	765	46.0
	Total	644	1018	1662	100.0
	Per cent Share (%)	38.7	61.3	100	

Source: NHAI, Primary Survey

It may be noted that there are 270 households whose private structures are affected due to the proposed spur project. Around 52 per cent of these households are males (140) and rest 48 per cent are females (130). Around two-third of these households is working population.

Results of the Survey on Project Affected Households:

A field survey was conducted to assess the various issues pertaining to the land acquisition and its impact on the livelihood of different segments of society. The whole 215 households were surveyed, out of which 129 were farmer households whose land is to be acquired for the Spur project, and rest 86 were neighbours and labourers. Major findings are discussed as under.

Impact of Land Acquisition:

The size of the land holding of the affected farmers is between 0.5 to 10 acres. The table 4.3 shows the size of land to be acquired from affected farmer households for Saharanpur-Haridwar spur project. Around 50 per cent of the affected households reported that their land to be acquired for the proposed project is just half acre. In this category, the share of affected farmers from Haridwar district is around one-third. Further, around 42 per cent of the affected households stated their land to be acquired is between 0.5 to 2. However, less than 8 per cent of the sampled farmer households informed that the size of their land to be acquired is between 2 to 5 acres.

S. No	Size of land to be Acquired (Acre)	Saharanpur		Haridwar		Total	
		Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent
1	<0.5	22	17.1	43	33.3	65	50.4
2	0.5-1	11	8.5	12	9.3	23	17.8
3	1-2	13	10.1	18	14.0	31	24.0
4	2-5	2	1.6	7	5.4	9	7.0
5	5-10	0	0.0	1	0.8	1	0.8
Total		48	37.2	81	62.8	129	100.0

Size of Remaining Land after Acquisition:

The table 4.4 depicts the remaining land of affected farmer households after acquisition for the proposed Project. Around 4 per cent of the total affected sampled farmer households will be left with no land after their land is to be acquired by the NHAI for the proposed project. Further, 44 per cent of the total affected sampled farmer households stated that their remaining land after acquisition will be around one acre or less. In this category, more than two-third of the farmers were from Haridwar district. Nevertheless, 36.4 per cent of the farmer households will continue to have more than 2 acres of land.

S. No	Remaining Land (Acres)	Saharanpur		Haridwar		Total	
		Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent
1	0	2	1.6	3	2.3	5	3.9
2	<0.5	10	7.8	24	18.6	34	26.4
3	0.5-1	8	6.2	14	10.9	22	17.1
4	1-2	9	7.0	12	9.3	21	16.3
5	2-5	11	8.5	20	15.5	31	24.0
6	5-10	5	3.9	6	4.7	11	8.5
7	> 10	3	2.3	2	1.6	5	3.9
Total		48	37.2	81	62.8	129	100.0

Fragmentation of Land

After the process of land acquisition by NHAI, the part of the remaining land will leave a number of holdings fragmented. The table 4.5 shows that around 35 per cent land holdings shall be fragmented as a result of land acquisition. Further, farmers with fragmented land will be higher in the Haridwar district.

S. No	Fragmentation of Land	Saharanpur		Haridwar		Total	
		Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent
1	Yes	20	15.5	25	19.4	45	34.9
2	No	28	21.7	56	43.4	84	65.1
Total		48	37.2	81	62.8	129	100.0

Distance between the Fragmented Pieces of Land after Acquisition

It is relevant to know the distance between the two or more pieces of fragmented land after acquisition. The table 4.6 shows that around 44 per cent of the total 20 affected farmer households of Saharanpur district and 56 per cent of the total 25 affected farmer households of Haridwar district reported that the distance between two plots of remaining land will be up to 60 meters after the acquisition of land by NHAI. This is sensible as only limited land is being taken over by the NHAI for the greenfield spur project.

Distance (M)	Saharanpur		Haridwar		Total	
	Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent
Up to 60 M	20	44.4	25	55.6	45	100

Willing that Remaining land should also be acquired

It is interesting to know the willingness of farmers to give remaining land to the NHAI/government at the prevailing rate of compensation. Out of the total 124 affected farmer households, around one-third households have shown their willingness to give also the part with their remaining land to NHAI. However, around 28 per cent of

Table 4.7: Willingness of Farmers for the Acquisition of Remaining Land

S. No	Particulars	Saharanpur		Haridwar		Total	
		Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent	Number of Sampled farmers	Per cent
1	Ready to give remaining land for acquisition	7	5.6	35	28.2	42	33.9
2	Not ready to give remaining land for acquisition	39	31.5	43	34.7	82	66.1
Total		46	37.1	78	62.9	124	100.0

these farmers are from Haridwar district only. This is logical as the size of their remaining land is so small that it is almost unviable for gainful farming, and affected farmers may not get the buyer for their plot in near future.

Likely Positive Impacts of Land Acquisition:

It is interesting to know the positive impacts of the proposed Saharanpur-Haridwar Greenfield Spur Project from the point of view of the affected farmers. The table 4.8 divulges this image. Around 89 per cent of the affected sampled farmers, whose land is to be acquired for the spur project, were expecting that the proposed project would lead to comfortable commuting to local as well as far off places. Further, around 84 per cent of the affected farmers were expecting that the proposed project would lead to creation of employment opportunities in construction activity of the project. Around 80 per cent of the affected farmers were expecting that the proposed project would lead to a lot of business opportunities for the local people, like transportation of building material, supply of JCB machines, supply of labour, setting up of tea stall, dhabas etc. Similarly, 60 per cent of the affected sampled farmers were expecting that the proposed project would lead to improvement in land prices. However, around 5 per cent of the

Table 4.8: Positive Impacts of Land Acquisition for the Proposed Saharanpur-Haridwar Spur Project

(Per cent)					
S. No.	Spur to Haridwar Project will lead to ..	Yes	No	Don't Know	Total
1	Comfortable commuting to far off places	89.1	6.2	4.7	100.0 (129)
2	Comfortable local commuting	88.4	7.0	4.7	100.0 (129)
3	Creation of employment opportunities in construction activity of the project	83.7	15.5	0.8	100.0 (129)
4	More business opportunities i.e. transportation of building material, supply of JCB machines, supply of labour, setting of tea stall, dhabas, etc.	79.8	17.1	3.1	100.0 (129)
5	Increase in local land prices	60.5	33.3	6.2	100.0 (129)

affected farmers did not have any knowledge about these expected benefits. Overall, majority farmers were delighted with the project.

Likely Negative Impacts of Land Acquisition:

Though Greenfield Spur Project would lead to the development of the catchment region, yet it is also true that those affected by land acquisition are made to pay in terms of acquisition of their land and property, and probable displacement. Therefore, an attempt was made to ascertain the sense of those directly affected farmers by the land acquisition.

The table 4.9 shows the negative impacts of the proposed Saharanpur-Haridwar Greenfield Spur Project from the point of view of sampled farmers whose land is to be acquired. Around one-third of the affected sampled farmers for the spur project, were expecting that the proposed project would cause reduction in land prices. Further, around

Table 4.9: Negative Impacts of Land Acquisition for the Proposed Saharanpur-Haridwar Spur Project

					(Per cent)
S. No.	Spur to Haridwar Project will cause	Yes	No	Don't Know	Total
1	Reduction in local land prices	33.3	60.5	6.2	100.0 (129)
2	Loss in livelihood	71.3	26.4	2.3	100.0 (129)
3	Reduction in agricultural income	80.6	13.2	6.2	100.0 (129)

Note: Figure in parenthesis is total number of sampled farmers.

71 per cent of the affected sampled farmers for the spur project were expecting their loss of livelihood. Further, around 81 per cent of the affected sampled farmers were expecting their reduction in their agricultural income. However, it is justified due to their land acquisition, the loss of agricultural income is probable. But the farmers were expecting employment in the construction activity of the spur project. The farmers also argued that after land acquisition, construction of proposed project will take time, and thereafter developmental activities might open up at certain pockets along the spur project.

Compensation and Future Planning:

Shifting from the agriculture sector to the new activities is difficult task, and requires resources and careful coordination. A lot of displaced person because of land acquisition do not have the resources to finance their transition due to existing inadequacies in obtaining formal finance. Further, learning new skills under forced circumstances is a difficult task. Therefore, assessment of the specific needs and related support system is an important activity, and therefore must be performed with great skill and sensitivity.

Expected Compensation:

The sampled farmers for the proposed spur project were asked about their expectations for compensation amount on their land acquisition during field survey. The expectations depend on location of land and size of acquired land. In fact, in both the districts of Saharanpur (Uttar Pradesh) and Haridwar (Uttarakhand), the land prices have been on the higher side in general, and government has also been rather liberal in awarding handsome prices to farmers. Therefore, land acquisition in these States has been a relatively easy affair.

The table 4.10 reveals that the affected sampled farmers from the project influenced districts of Saharanpur (Uttar Pradesh) and Haridwar (Uttarakhand) were expecting compensation amount ranging between Rs 5 lakh to 13 crores. Maximum number of farmers (57.4 per cent) expected to get compensation ranging between Rs. 10 lakhs to Rs. 50 lakhs. However, around 19.4 per cent of the total farmer households expected the compensation amount between Rs. 1 crore to Rs. 13 crores.

Table 4.10: Expected Compensation on Land Acquisition

S. No.	Compensation Amount (Rs. Lakh)	Number of Sampled Farmers	Per cent Share (%)
1	5-10	15	11.6
2	10-50	74	57.4
3	50-100	9	7.0
4	100-1300	25	19.4
5	Mutual Agreement	3	2.3
6	No Response	3	2.3
Total		129	100.0

Future Plans of the Ousted Farmers:

The affected farmers from the influenced villages of Saharanpur and Haridwar district have a sense of maturity to use the compensation amount for productive purposes after their land acquisition. The table 4.11 reflects the utilization of compensation amount by the affected farmer households. Around 92 per cent of the affected farmer households have plan to buy agricultural land after their land acquisition. However, around 5 per cent of the farmer households wish to buy new car/motorcycle. Further, only less than 3 per cent farmer households wish to construct a new house or to set up a new business with the compensation amount. Regrettably, the farmers were not eager to spend their compensation amount on the education of their children, settling in urban areas, or fixed deposit in the bank.

Table 4.11: Utilization of Compensation Amount by Affected Farmers

S. No	Plan for use of Compensation Money	Number of Sampled Farmers	Per cent Share
1	Purchase of Agriculture Land	119	92.2
2	Purchase Car/Motorcycle	7	5.4
3	Construction of a New House	2	1.6
4	Set-up a New Business	1	0.8
Total		129	100

Place of Utilization of compensation Amount:

It is interesting to know the place of utilization of compensation amount by the affected farmer households after their land acquisition. The table 4.12 reflects place of utilization of the compensation amount

by farmer households from project influence villages. Around 57 per cent of the affected farmer households have plan to utilize the compensation amount within the village, followed by 13.2 per cent affected households wished to utilize at outside the village or within the districts, 12.4 per cent affected households planned to utilize within the Block, and rest 4.6 per cent of the affected farmer households have no plan with regard to location of usage of their compensation. Interestingly, no affected farmer household plans to utilize compensation amount within their respective State.

Table 4.12: Place of Utilization of Compensation Amount

S. No	Place of Utilization	Number of Sampled Farmers	Per cent Share
1	Within Village	73	56.6
2	Outside the Village	17	13.2
3	Within District	17	13.2
4	Within Block	16	12.4
5	No Plan	6	4.6
Total		129	100

Future Occupation:

The affected farmers of greenfield spur project were also asked about their future occupation after the acquisition of land by NHAI. The details are presented in table 4.13. Around 87 per cent of the affected farmer households of the project influenced villages did not want to leave agriculture profession. Further, only 13 per cent affected households wished to join non-agricultural occupation.

Table 4.13: Potential Occupation of Affected Farmers

S. No	Occupation	Number of Sampled Farmers	Per cent Share
1	Non-Agricultural	17	13.2
2	Agriculture	112	86.8
Total		129	100

Need for Training

In order to join any agricultural or non-agricultural profession, the affected farmer households needed training in requisite skills. During the survey, it was found that the affected farmers have realized the importance of necessary skills, and were willing to learn for their better future. The table 4.14 shows the willingness of farmers to get training for new skills. Around 63 per cent of the affected sampled farmers were willing to get training for acquiring new skills. However, around 37 per cent of the affected farmers were not willing to get training for new skills.

Table 4.14: Willingness of Farmers to get Training for New Skills

S. No	Particular	Number of Sampled Farmers	Per cent Share
1	Willing to get trained	81	62.8
2	Not willing for training	48	37.2
Total		129	100

Willingness to Move Out for Job

The project affected farmer households were ready to move outside village, if they would be provided lucrative work opportunities. This shows eagerness of the affected farmers for alternate livelihood options

and their positive attitude in this regard. The table 4.15 shows that around 72 per cent of the affected farmer households were willing to work outside their villages.

Table 4.15: Willingness of Farmers to Accept Job Opportunities Outside the Village

S. No	Particular	Number of Sampled Farmers	Per cent Share
1	Ready to work outside village	93	72.1
2	Not ready to work outside village	36	27.9
Total		129	100

Assistance/Training Required for Future Livelihood:

It is remarkable to know that the affected farmer households were willing to get training in the profession of auto repairing/servicing, repair of refrigeration & air conditioning, fabrication and welding, repairing of electronic equipment, electrician, printing press, hospitality, etc. The aspirations reflected by the affected farmer households with regard to requirements for training shows their deep desire to acquire useful marketable skills.

The table 4.16 shows the assistance/training required by the affected farmers for their future livelihood. Interestingly, around 42 per cent of the affected farmer households under the spur project were willing to get training for auto repairing and servicing as revealed in the table. Further, around 21 per cent of the affected farmer households were interested to get assistance for the repair of refrigeration & air conditioning profession. Around 13 per cent affected farmers were willing to get training for fabrication and welding work. Further, 11 per cent of the farmers were interested to get training to repair electronic

equipment's. Rest other farmers were willing to get assistance for the profession of electrician, printing and hospitality.

Table 4.16: Assistance/Training Required by Affected Farmers for Future Livelihood

S. No	Training	Number of Sampled Farmers	Per cent Share
1	Auto repairing/servicing	54	41.9
2	Refrigeration & Air-conditioning	27	20.9
3	Fabrication & Welding	17	13.2
4	Repairing Electronic equipment	14	10.8
5	Electrician	9	7.0
6	Printing	5	3.9
7	Hospitality	3	2.3
Total		129	100

Facilities Required in Villages:

The affected farmer households or landowners under the Saharanpur-Haridwar spur project also wished to have some extra facilities in their respective villages. The table 4.17 shows this picture. It can be seen from this table that around 46 per cent of the affected farmers wanted link road to their villages. Further, around 21 per cent of the affected farmers wished to have school in their villages. The demand for schools in the villages is quite realistic. Further, around 13 per cent of the affected farmers wanted availability of Electricity. Around 14 per cent also wanted pharmacy and Primary Health Centre (PHC) in their villages. However, only around 6 per cent desired community center and drinking water in their villages.

Table 4.17: Facilities Required by Affected Landowners in their Villages

S. No	Facility Required	Number of Sampled Farmers	Per cent Share
1	Link Road	59	45.7
2	School	27	20.9
3	Electricity	17	13.2
4	Pharmacy	12	9.3
5	Sub Centre \ PHC	6	4.7
6	Drinking Water	4	3.1
7	Community Centre	4	3.1
	Total	129	100

Mitigation Plan

The six-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand States would likely to benefit farmers in terms of improvement in land prices, more employment opportunities, comfortable commuting to local as well as far off areas and also a lot of business opportunities for the local people. However, construction of Spur Project may take time. The process is long and rewards are uncertain. Similarly, land acquisition may deprive some farmers from their existing livelihood and drop in their income. Moving from the agriculture sectors to the new activities is difficult and requires resources and careful coordination. Further, learning new skills under forced circumstances is a difficult task. However, initiatives are required to mitigate the negative impact of the acquisition of land for the proposed Spur project in Uttar Pradesh and Uttarakhand States. In fact, income compensation measures need to be more comprehensive to take care of the occupational diversity and future aspirations of the

affected farmers. There is a combination of affected farmers of different size, share croppers, and small economic establishments. The emphasis of income regeneration plan should be to help affected population not only to recoup their past earning levels but also to aspire and improve their economic conditions in a sustainable manner.

Legal framework:

The land acquisition shall be as per The National Highways (NH) Act, 1956 and The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (LARR) Act, 2013. According to the guidelines issued by the Ministry of Road Transport and Highways (MoRTH), Government of India on 28 December 2017, land for National Highway projects can be procured through direct purchase with the consent of the landowners in accordance with the existing Acts/ Rules/ Policies of the concerned State Governments subject to the condition that the total amount of compensation so worked out will be no more than what is payable when the land is acquired under the NH Act, 1956, which in any case is in conformity with the compensation payable in accordance with the provisions of LARR Act, 2013. The multiplication factor by which the market value is to be multiplied in case of rural areas (from the end-point of the urban limit) shall be the two as notified by the concerned State Governments.

The Uttar Pradesh Government notified a new land acquisition policy on 22 October 2014. Similarly, the Government of Uttarakhand also notified the policy of land acquisition on 9 February 2016 (See Appendix II). For a land in rural area at a government-notified price, the State Government will have to pay the price multiplied by two with an additional amount of 100 per cent of the notified price. The government will also have to pay an interest of 12 per cent per annum till the time full payment is made and sale deed is executed. Hence the landowners

get minimum compensation up to twice the market value in the State. The LARR Act, 2013 requires that a Social Impact Assessment be conducted to identify affected families, and calculate the social impact when land is acquired.

Resettlement and Rehabilitation (R & R) Guidelines –LARR Act 2013

R & R Provisions (in addition to LA Compensation) - S.31 & 32, Schedule II and III

- First legislated relief for non-title holders
- Covers all land acquisition projects irrespective of sector/number of persons affected
- Extends to land purchases by private entities beyond fixed limits.

Resettlement and Rehabilitation benefits to all affected families (in addition to compensation) – Schedule II

- R & R Package - Choice of employment/5 lakhs/Rs. 2000 per month for 20 years
- One-time Resettlement Allowance: Rs. 50,000/
- Cattle shed/petty shops - Rs. 25,000/
- One time grant to artisan/traders/self-employed - Rs. 25,000/
- Fishing rights in reservoir
- Land for land – Irrigation projects (as far as possible) 1 acre of land (2.5 acres for SCs/STs in command area)
- Land for Urbanization Purposes-20% of the developed land will be reserved and offered to the land losers.

Displaced Families

- Housing in case of displacement (those without homestead land and staying for 3 years) – Rural
- Areas (IAY specifications/costs); Urban areas (constructed house not less than 50 sq. mts in plinth area/min Rs. 1,50,000)
- Subsistence grant for all displaced families – Rs. 3000 per month for one year (additional Rs. 50,000/ for SCs/STs).
- Transportation grant for all displaced families - Rs. 50,000/
- All monetary rehabilitation grants and benefits are adjusted based on the Consumer Price Index.

Infrastructural Entitlements to Displaced families in Resettlement Colonies – Schedule III

- Third Schedule lists amenities/facilities to be developed in the rural areas.
- These include 25 amenities including roads, drainage, sources of safe drinking water for affected families, drinking water for cattle, grazing land, fair price shops, Panchayat Ghars, village level post office, Burial or Crimination Ground, Aanganwadi, community centres, sub health centres, playground etc.

Recommendations:

The proposed six-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand States is very significant for the easy movement of pilgrimage or tourists, and socio-economic growth of the project area. The positive impacts of the proposed project were shared by the farmers from the influenced villages during the field survey. They were expecting that the proposed project would lead to comfortable commuting to local as well as far off places, creation of employment opportunities in construction activity of the project, a lot of business opportunities for the local people, and increase in local land prices. Therefore, it is recommended that an adequate and satisfactory monetary arrangement is essential to compensate the farmers in lieu of their loss of land and emotional attachment. Most of the farming households are small and marginal. The compensation should be quick and reasonable in order to mitigate such loss. It is suggested that a liberal interpretation of the provisions of LARR Act 2013 in favor of farmers be adopted for smooth progress of the Saharanpur-Haridwar Spur Project. The compensation package should also include the reward for other assets like structures, tube well, etc. The execution of the compensation package should be very much transparent to mitigate the

oppositions of the land owners. The government should make provision to purchase the remaining bare minimum area of land of the farmers. The farmers should be provided proper path for ploughing their balance land.

It has been observed during field survey that around one-third of the affected farmers were willing to give their remaining land. Therefore, the government should make provision to purchase the remaining bare minimum area of land. Further, proper path for tilling their remaining land should be given for those farmers whose distance between two pieces of the remaining land will be more than one km. The development of the affected villages should be done by providing link road, schools, availability of electricity, primary health centers and other medical etc. as desired by the affected farmers.

In order to mitigate the displacement of project affected persons in an effective way, suitable compensation should be given to non-title land holders or Share Croppers. It has been observed that around 87 per cent of the affected farmers did not want to leave agriculture profession. Therefore, support should be given to those farmers who want to buy agricultural land after acquisition of their present land. Assistance should be provided to those Villagers who want to leave agriculture profession and desire to join non-agricultural activities. In this way, a wide-ranging plan should be developed for training to villagers in coordination with the vocational, technical and engineering institutes to improve their employability. The government should also provide proper training to project affected farmers with the help of NGOs for establishing new businesses. Preference to the displaced farmers should be given in providing employment in the construction phase of the proposed Saharanpur-Haridwar Spur project. Moreover, development of the affected project area should be made by providing educational, health, training and other facilities.

The project affected vulnerable category and daily wage labourers should be provided help in all kind. In fact, the affected persons face a lot of difficulty in arranging funds for the new establishments. Therefore, financial facilitation should be encouraged for the potential entrepreneurs with the help of NGOs. In fact, governments and other agencies have been offering a number of schemes for self-employment by providing training in marketing, finance, technical support and many other methods. Therefore, awareness of the government schemes should be made to project affected population. Overall, NHAI should make all efforts in coordination with Uttar Pradesh and Uttarakhand government for the settlement of the displaced villagers.

It is imperative to assess the extent of loss to farmers and their future plans for successful execution of the income mitigation plan. The proposed Haridwar-Saharanpur Greenfield Spur Project can be very much gainful to the less developed areas of Saharanpur and Haridwar districts for their all- round socio-economic development by improving their accessibility to the outside world. The project can create self-employment opportunities for rural literate-skilled youths by providing them good compensation on the acquired land. Therefore, the process for land acquisition and construction of the proposed Saharanpur-Haridwar Spur project should be begun by NHAI at the earliest.

Chapter - 5

Summary and Conclusion

National Highways Authority of India has to construct six-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand States under 'Bhartmala Pariyojana Phase I' program. The spur will provide direct and very short-term connectivity to Haridwar, the gateway to the sacred holiest place. The alignment is proposed to start from Halgoya Mustahakam Village in Rampur Maniharan Tehsil of the Saharanpur District in Uttar Pradesh at a distance of 108.45 km of the 212 km Delhi-Saharanpur-Dehradun Economic Corridor, and traverses through northern side of Roorkee Tehsil of Haridwar District. The Greenfield Spur terminates on NH-334 (Old NH No. 58) at Badheri Rajputan Village in Haridwar District of Uttarakhand by covering a length of 43.9 km. The spur covers four Tehsils namely, Rampur Maniharan, and Deoband of Saharanpur district in Uttar Pradesh, and Bhagwanpur, and Roorkee of Haridwar districts in Uttarakhand. The proposed Right of Way (RoW) for this Spur is 60 m with speed of 120 km per hour. The total cost of the proposed project is Rs. 2325 crores. The spur is planned to connect Saharanpur district in Uttar Pradesh to Haridwar district in Uttarakhand with new alignment to shorten the travel time as well as distance.

The total 287-hectare land shall be acquired from 45 villages in Saharanpur and Haridwar districts of Uttar Pradesh and Uttarakhand, respectively, for the Greenfield Spur to Haridwar. The total 120.4-hectare land is to be acquired from 17 villages of Saharanpur district in Uttar Pradesh, and 166.6-hectare land in 28 villages of Haridwar district in Uttarakhand. Out of the total land to be acquired, 92.7 per cent is under the private ownership in both the districts. Hence only 7.3

per cent of the total land to be acquired is under the government ownership. Further, out of total private ownership land, 99.9 per cent is agricultural land. The land shall be acquired as per The National Highways Act, 1956 and the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (LARR) Act, 2013. The LARR Act, 2013 requires that a Social Impact Assessment be conducted to identify affected families, and calculate the social impact when land is acquired.

The study is aimed to make comprehensive socio-economic assessment for the Development of 6-lane access controlled Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand. The objective was to know socio-economic assessment of the proposed project from all 45 villages situated in four Tehsils of the Two Districts in Uttar Pradesh and Uttarakhand, from where land is to be acquired. The length-wise large part of the proposed project area is in Haridwar district (57 per cent) followed by Saharanpur (43 per cent). The project is quite significant for Haridwar district of Uttarakhand in terms of highest number of 28 villages out of total 45 villages. However, Tehsil-wise Roorkee (Haridwar), followed by Deoband (Saharanpur) are very important in terms of area of the project. A perception survey was conducted from various stakeholders such as landowners/users during August-September 2021. The size of sample was 215, which has been taken from 45 villages in the alignment area by selecting 5 respondents from each village. Out of the total 215 households, 129 were farmer households whose land is to be acquired for the Spur project, and rest 86 were neighbourers and labourers. The study also collected relevant secondary data.

The Uttar Pradesh and Uttarakhand States play very significant role in the socio-economic development of India. The share of the Uttar

Pradesh State in Country's population and area was 16.2 per cent and 7.3 per cent, respectively. The share of the State in the national real GDP (2011-12 prices) was around 8 per cent during 2020-21. The State grew at real average rate of 7 per cent during 2015-2020. It is the "India's granary" with its contribution of 30.3 per cent in wheat and 13.1 per cent in rice in the country's production during 2019-20. On the other hand, Uttarakhand State was carved out of Uttar Pradesh on 9th Nov 2000, and is largely a hilly State, having international boundaries with China (Tibet) in the north and Nepal in the east. The State is the most prosperous states of the country with per capita income of Rs. 1,86,557 as compared to Rs. 1,28,829 at all India level during 2020-21. The economy of the State grew at real average rate of 7.13 per cent during 2015-2020.

The proposed alignment in Uttar Pradesh and Uttarakhand passes through the less developed part, where the socio-economic conditions of the people are not so good. The population of the project influenced districts constituted 2.6 per cent (62.1 lakhs) of the current estimated population of Uttar Pradesh and Uttarakhand (24.32 crores). However, the geographical area of the project influenced districts was 2.1 per cent of the total area of Uttar Pradesh and Uttarakhand. The population density of the project affected districts was estimated to be 1026 as compared to 826 of whole Uttar Pradesh and Uttarakhand during 2021. Religion-wise population of these districts represented Hindu majority, followed by Muslims with marginal population of Sikhs and Christians. Non-agricultural activities in the project affected districts is growing up. Only around 43 per cent of the total workers in these districts were involved in agricultural activities, that particularly in Saharanpur district. The major source of income of the rural households in the influenced Tehsils was from cultivation and manual casual labour.

The relative share of agriculture sector in GDVA of project influenced Saharanpur district was 37.2 per cent which was more than the whole Uttar Pradesh. However, Haridwar district was industrially forward with its share of secondary sector as 71.9 per cent in the GDVA during 2017-18. The area under wheat, rice and sugarcane crops was 72.9 per cent of the total cropped area in the project affected districts during 2018-19. These districts contributed more than 6 per cent of sugarcane in the total production of their respective States. The proportion of marginal and small holdings (below 2 hectare) was more than 83 per cent in these districts. The average real per capita income of the project influenced districts was more than their respective States. However, Haridwar was the leading district in terms of highest real per capita income in Uttarakhand. Its real per capita income was more than five times of Saharanpur district.

The role of industrialization in Uttarakhand and Uttar Pradesh is growing up with the diminishing trend in the agricultural sector. The manufacturing sector in the project influenced Saharanpur district contributed only 6.8 per cent in its GDDP in comparison to 12.1 per cent of Uttar Pradesh during 2019-20. Wood Carving of Saharanpur district is world famous, and is selected under the One District One Product Scheme of the Uttar Pradesh government. On the other hand, the economic structure of Uttarakhand is basically industrial one. The proposed project influenced Haridwar district had total 10824 MSMEs during 2019-20. Therefore, the proposed project could flourish the industrial activity by providing gainful self-employment to rural youth.

The roads per lakh of population in the project affected Saharanpur district was less than three times of the entire Uttar Pradesh. Similarly, the availability of roads in Haridwar district was less than four times of the entire Uttarakhand State. Further, the road density of the project influenced districts was less than their States.

The demographic profile of the project affected villages shows that the total area of all 45 villages was 11326 hectares. The average size of the project influenced villages is 252 hectares. In terms of number of households, Haridwar district accounted 11,772 households (63.1 per cent) of the total 18,572 households, followed by Saharanpur (37.9 per cent). The average number of households in the project influenced villages was 413. However, the total population of the 45 project influenced villages was 1,11,400. Haridwar district accounted 64.6 per cent. The average size of the population in the project influenced villages was 2476 with male population of 52.9 per cent. On an average, 24.6 per cent of the total population of project influenced villages was SC.

The average or mean distance of influenced villages from District Headquarters is 31.1 km, while maximum distance is 48 km. Similarly, Sub-Division Headquarters is situated at an average distance of 12.4 km and National Highway at 7.1 km. Further, an average distance of villages from Railway Station is 7.2 km with maximum distance of 18 km. It means the accessibility to these villages is not easy. The average distance of a Degree College, Vocational Training Centre, Industrial Training Institute, Nursing School, Polytechnic, and Engineering College from the influenced villages is between 5.2 to 9.9 km with a maximum distance of 20 to 32 km. Similarly, health facilities like Primary Health Centre, Maternity and child health care center, Pharmacy, Community Health Center, Private Medical Practitioner, and Diagnostic Center are located on an average distance of 1.1 to 6.8 km with maximum distance ranging between 6 to 25 km. It is clear that the approachability to these villages is not easy. Even the availability of basic educational and health facilities is very poor in these villages. Out-migration was more prominent than in-migration, thereby suggesting that sufficient employment opportunities were not available for unskilled workers within the influenced villages of the spur project.

The average size of the family in the influenced villages of the greenfield spur project is 9.2. The number of males was more than that of the females in a family. Around 37 per cent of the people in the influenced villages were using banking facilities. There were around 73 per cent families living together as joint family. Hinduism is a predominant religion. The average size of their land holding is 4.8 acres. Around 70 per cent of the affected households were under OBC category, followed by 19 per cent as SC, and remaining 11 per cent as general category. Only around 15 per cent of sampled households were under BPL category, followed by 19 per cent under AAY category. Around 62 per cent of the households were marginal or small farmers with less than 5 acres of land. Further, around 78 per cent households have their own land. More than 99 per cent of the households own house in the influenced villages. Around 55 per cent of the affected farmer households have annual income less than Rs. 2 lakhs. Further, around 36 per cent of the households have annual income between Rs. 2 to 5 lakhs. Therefore, farming is not able to provide a decent level of earnings to the farmers in our study area. The farmers were supplementing their agricultural income from other activities like dairying, salary/pension, business, money lending, etc. Around 47 per cent of the farmer households have outstanding loans. Further, around 60 per cent of the loaned households have outstanding loan amount between Rs. 2 lakhs to 10 lakhs.

The proposed Spur Project shall impact a total of 1662 land owners and share croppers in Saharanpur and Haridwar districts. Out of the total affected farmers, 54 per cent are males (897), and rest 46 per cent are females (765). The share of title holder/land owners in the total affected farmers is 80.4 per cent (1336 farmers). Rest 19.6 per cent farmers are non-title holders or sharecroppers. The major part (61.3 per cent) of the total affected land farmers is from Haridwar district.

The greenfield alignment project would likely to benefit farmers in terms of comfortable commuting to local as well as far off areas more employment opportunities, improvement in land prices, and also a lot of business opportunities for the local people. The land acquisition may deprive some farmers from their existing livelihood and drop in their income. Around 35 per cent land holdings shall be fragmented as a result of land acquisition. Further, around 44 per cent of the total affected farmer households stated that their remaining land after acquisition will be around one acre or less. Hence around one-third households have shown their willingness to give also the part with their remaining land to NHAI. The affected farmers were expecting compensation amount ranging between Rs 5 lakh to 13 crores. Around 92 per cent of the affected farmer households have plan to buy agricultural land after their land acquisition. Around 57 per cent of the affected farmer households have plan to utilize the compensation amount within the village, followed by 13.2 per cent affected households wished to utilize at outside the village. Around 87 per cent of the affected farmer households of the project influenced villages did not want to leave agriculture profession. However, around 63 per cent of the affected sampled farmers were willing to get training for acquiring new skills. Around 72 per cent of the affected farmer households were willing to work outside their villages. The affected farmer households were willing to get training in the profession of auto repairing/servicing, repair of refrigeration & air conditioning, fabrication and welding, repairing of electronic equipment, electrician, printing press, hospitality, etc. They wanted link road, school, and availability of electricity in their villages.

Moving from the agriculture sectors to the new activities is difficult and requires resources and careful coordination. Further, learning new skills under forced circumstances is a difficult task. However, initiatives are required to mitigate the negative impact of the acquisition of land

for the proposed Spur project in Uttar Pradesh and Uttarakhand States. In fact, income compensation measures need to be more comprehensive to take care of the occupational diversity and future aspirations of the affected farmers. There is a combination of affected farmers of different size, share croppers, and small economic establishments. The emphasis of income regeneration plan should be to help affected population not only to recoup their past earning levels but also to aspire and improve their economic conditions in a sustainable manner.

Policy Suggestions:

The proposed six-lane access controlled Greenfield Spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor in Uttar Pradesh and Uttarakhand States is very significant for the easy movement of pilgrimage or tourists, and socio-economic growth of the project area. The positive impacts of the proposed project were shared by the farmers from the influenced villages during the field survey. They were expecting that the proposed project would lead to comfortable commuting to local as well as far off places, creation of employment opportunities in construction activity of the project, a lot of business opportunities for the local people, and increase in local land prices. Therefore, it is recommended that an adequate and satisfactory monetary arrangement is essential to compensate the farmers in lieu of their loss of land and emotional attachment. Most of the farming households are small and marginal. The compensation should be quick and reasonable in order to mitigate such loss. It is suggested that a liberal interpretation of the provisions of LARR Act 2013 in favor of farmers be adopted for smooth progress of the Saharanpur-Haridwar Spur Project. The compensation package should also include the reward for other assets like structures, tube well, etc. The execution of the compensation package should be very much transparent to mitigate the

oppositions of the land owners. The government should make provision to purchase the remaining bare minimum area of land of the farmers. The farmers should be provided proper path for ploughing their remaining land after land acquisition.

In order to mitigate the displacement of project affected persons in an effective way, suitable compensation should be given to non-title land holders or Share Croppers. It has been observed that around 87 per cent of the affected farmers did not want to leave agriculture profession. Therefore, support should be given to those farmers who want to buy agricultural land after acquisition of their present land. Assistance should be provided to those villagers who want to leave agriculture profession and desire to join non-agricultural activities. In this way, a wide-ranging plan should be developed for training to villagers in coordination with the vocational, technical and engineering institutes to improve their employability. The government should also provide proper training to project affected farmers with the help of NGOs for establishing new businesses. Preference to the displaced farmers should be given in providing employment in the construction phase of the proposed Saharanpur-Haridwar Spur project. Moreover, development of the affected project area should be made by providing educational, health, training and other facilities.

The project affected vulnerable category and daily wage labourers should be provided help in all kind. In fact, the affected persons face a lot of difficulty in arranging funds for the new establishments. Therefore, financial facilitation should be encouraged for the potential entrepreneurs with the help of NGOs. In fact, governments and other agencies have been offering a number of schemes for self-employment by providing training in marketing, finance, technical support and many other methods. Therefore, awareness of the government schemes should be made to project affected population. Overall, NHAI should

make all efforts in coordination with Uttar Pradesh and Uttarakhand government for the settlement of the displaced villagers.

The proposed Haridwar-Saharanpur Greenfield Spur Project can be very much gainful to the less developed areas of Saharanpur and Haridwar districts for their all-round socio-economic development by improving their accessibility to the outside world. The project can create self-employment opportunities for rural literate-skilled youths by providing them good compensation on the acquired land. Therefore, the process for land acquisition and construction of the proposed Saharanpur-Haridwar Spur project should be begun by NHAI at the earliest.

APPENDICES to Chapter I

Appendix I

**List of Villages under Saharanpur-Haridwar Greenfield Spur in
Uttar Pradesh and Uttarakhand States**

S. No.	District	Tehsil	Name of Village	Chainage		Distance (Km.)
				From	To	
1	Saharanpur	<i>Rampur</i>	Halgoya Mustahakam	0.000	1.040	1.040
2		<i>Maniharan</i>	Halgoya Ahatmaal	1.040	1.630	0.590
3		<i>Deoband</i>	Nainsob Ahatmaal	1.630	2.140	0.510
4			Shitala Khera Ahatmaal	2.140	2.290	0.150
5			Shitala Khera Mustahakam	2.290	4.090	1.800
6			Gangnauli	4.090	4.790	0.700
7			Dagrauli	4.790	5.950	1.160
8			Paharpur	5.950	7.200	1.250
9			Baseda	7.200	8.640	1.440
10			Sadharan Sir	8.640	10.200	1.560
11			Paniyali Kasimpur	10.200	10.900	0.700
12			Tajpur	10.900	13.360	2.460
13			Nafepur	13.360	14.490	1.130
14			Kheda Mugal	14.490	15.370	0.880
15			Bilaspur Sheikhpur	15.370	16.930	1.560
16			Sherpur	16.930	17.740	0.810
					17.820	19.060
17	Akbarpur urf Bharapur	17.740	17.820	0.080		
18	Haridwar	<i>Bhagwanpur</i>	Manakpur Adampur	19.060	21.300	2.240
19			Khajoori	21.300	22.770	1.470
20			Harchand Pur Majara	22.770	23.710	0.940
21			Behedeki saidabad	23.710	24.880	1.170

Contd.

S. No.	District	Tehsil	Name of Village	Chainage		Distance (Km.)
				From	To	
22	Haridwar	Roorkee	Naubatpur Mulewala	24.880	25.500	0.620
23			Makanpur Devpur	25.500	26.210	0.710
24			Khata Kheri	26.210	26.670	0.460
25			Dharampur	26.670	26.770	0.100
26			Padli Ganda	26.770	27.800	1.030
27			Iqbalpur Kamelpur	27.800	28.640	0.840
28			Sohalpur Gada	28.640	29.720	1.080
29			Madhopur Hazratpur	29.720	31.750	2.030
30			Saliyer Salhapur Mustahakam	31.750	33.160	1.410
31			Saliyer Salhapur Jadid Mustahakam	33.160	33.780	0.620
32			Ibrahimpurdeh	33.780	34.200	0.420
33			Mohamadpur Panda	34.200	37.100	2.900
34			Mehwarkhurd urf Nagal	37.100	37.870	0.770
35			Gopalpur	37.870	38.660	0.790
36			Saidpura	38.660	38.860	0.200
37			Mehwarkalan	38.860	39.500	0.640
38			Bajuheri	39.500	40.180	0.680
39			Piraan Kaliyar	40.180	40.600	0.420
40			Belada Mustahakam	40.600	40.950	0.350
41			Rahmatpur Mustahakam	40.950	41.120	0.170
				41.180	41.780	0.600
42			Kot Kaliyar Chak-I	41.120	41.180	0.060
43			Rahmatpur Ahatmaal	41.780	42.970	1.190
44			Mooldaspur urf Mazra	42.970	43.660	0.690
45	Badheri Rajputan	43.660	43.900	0.240		
Total Distance of Saharanpur-Haridwar Spur (Km.)						43.9

Land Acquisition Policy of the Uttar Pradesh Government

Uttar Pradesh Shasan
Rajaswa Anubhag-13

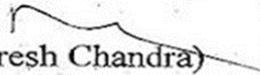
In pursuance of the provisions of clause(3) of Article 348 of the Constitution, the Governor is pleased to order the publication of the following English translation of notification no.797/1-13-2014-5ka(25)/2013T.C., dated October 22, 2014

NOTIFICATION

Miscellaneous
NO 797 /1-13-2014-5ka(25) /2013 T.C.
Dated Lucknow October 22, 2014

In exercise of the powers under Column (3) appearing against serial no.2 of the First Schedule to the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Act no. 30 of 2013), read with sub section (2) of section 30 of the said Act, the Governor is pleased to notify the 2.00 (Two) as the factor by which the market value is to be multiplied in the case of any land to be acquired in rural areas of Uttar Pradesh, not with standing any distance of project from urban area.

By order,


(Suresh Chandra)
Pramukh Sachiv

Land Acquisition Policy of the Uttarakhand Government

राजस्व अनुभाग-3

अधिसूचना

09 फरवरी, 2016 ई०

संख्या 87/XVIII(3)/2016-20(01)/2014—श्री राज्यपाल महोदय, भूमि अर्जन, पुनर्वासन और पुनर्ध्वंसस्थापन में उचित प्रतिकर और पारदर्शिता का अधिकार अधिनियम, 2013 (केन्द्रीय अधिनियम संख्या 30, वर्ष 2013) की धारा 3 के खण्ड (इ) V के परन्तुक के द्वारा प्रदत्त शक्तियों का प्रयोग करके किसी लोक प्रयोजन के संबंध में एतद्द्वारा अधिसूचित करते हैं कि राज्य के किसी जिले के भीतर अवस्थित एक हजार एकड़ तक के क्षेत्र के लिए भूमि के अधिग्रहण हेतु ऐसे जिले का कलेक्टर समुचित सरकार समझा जायेगा।

आज्ञा से,

डी० एस० गर्ब्याल,
सचिव।

In pursuance of the provisions of clause (3) of Article 348 of "the Constitution of India", the Governor is pleased to order the publication of the following English translation of Notification No. 87/XVIII(III)/2016-20(01)/2014, dated February 09, 2016 for general information :

NOTIFICATION

February 09, 2016

No. 87/XVIII(III)/2016-20(01)/2014--In exercise of the powers conferred by the proviso to clause (e) of section 3 of the Right to Fair Compensation and transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Central Act No. 30 of 2013), the Governor is pleased to hereby notify that in relation to acquisition of land in respect of a public purpose situated within a District of the State for an area not exceeding one thousand acres, the Collector of such District shall be deemed to be the appropriate Government.

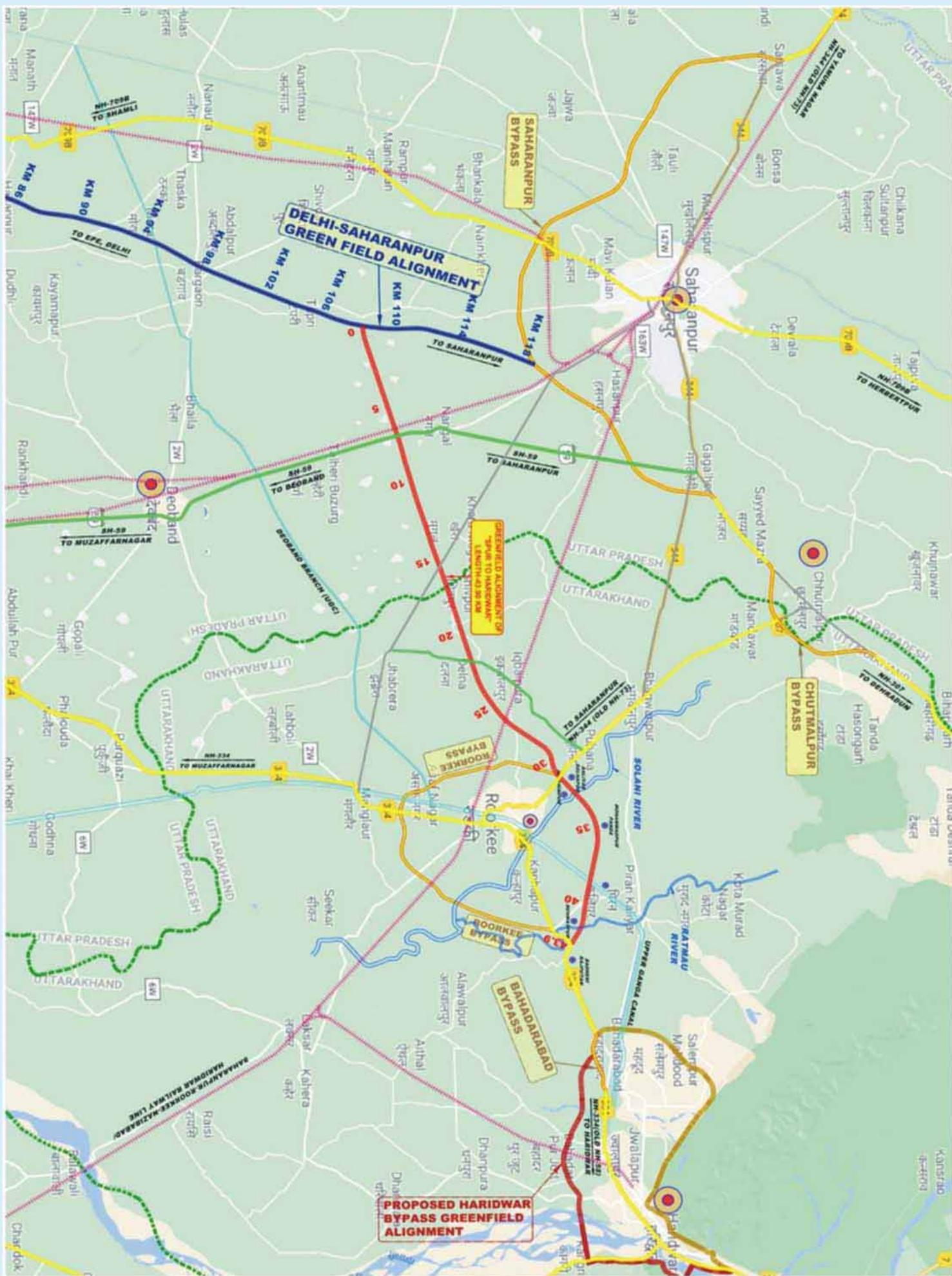
By Order,

D. S. GARBYAL,
Secretary.

टिप्पणी—राजपत्र, दिनांक 27-02-2016, भाग-1 में प्रकाशित।

[प्रतिलिपि सूचनार्थ प्रेषित—]

पी०एस०यू० (आ०ई०) 8 राजस्व/140-14-03-2016-500 (कम्प्यूटर/रीजियो)।



Key Map – Saharanpur-Haridwar Spur