

## Socio-Economic Status of Farmers in Vindhyan Region of Uttar Pradesh

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### Abstract

Socio-economic status in rural areas of Vindhyan region is slowly improving over a period of time. The results of socio-economic studies in villages of districts in Vindhyan region revealed that land holding for majority of farmers are under marginal category (55.58%) with small, medium and large in 29.22, 9.78 and 5.42% respectively. The land use pattern in Vindhyan region showed that agriculture was major land use (74.94%) followed by agroforestry (8.68%), horticulture (5.33%) and wasteland (11.05%). Adoption of agroforestry was highest in Prayagraj district (12.55%) followed by Mirzapur (8.23%) and Sonbhadra (5.25%). The wasteland was highest in Sonbhadra (17.15%). In districts of Vindhyan region, the literacy level indicated that 61.5% villagers were educated, around 17.28% highly educated and 21.22% were in illiterate class. The annual income of respondents was classified into four categories. It was found that most of the population (22.16%) belonged to the range of < 1.0 Lakh whereas the percentage of respondents in other income groups viz. 1-3, 3-5 and > 5 Lakh were 30.26%, 37.83% and 9.76% respectively. The occupational status of the villagers was grouped into five classes. It was depicted that villagers mostly adopt agriculture (53.21%) followed by labour work (30.24%) and business (3.91%). It was found in studies that average distance of timber market places from the village area was around 8.04 km and average tree growers in a village panchayat were highest in Prayagraj district (23) followed by Mirzapur (12) and in Sonbhadra (8). The villagers were mostly dependent on local market (51.19%) followed by forest (20.57%) and own trees (15.72%) for fulfilling their day- to- day timber and firewood needs.

**Keywords:** *Vindhyan region, socio-economic status, income, population, educational level.*

### Introduction

The current situation of the society in developing nations is rapidly moving from poor economy to develop economy with the development of social condition. But these changes are not equal to all places. Basically rural areas are very less developed as compared to urban areas in terms of social, cultural and economic aspects. Lifestyle of an individual's are widely depended on their economic status. Hence, social position of the person is dominated by his/her income. No society or region can be developed with the exception of any part remaining lag behind. Proper socio-economic development can control the healthy and balanced growth of a region. Now a day, increasing educational level and perception of education has been changing the socio-economic status among the rural population.

Socio-economic characteristics are the important tools to the measures of human

development. It is a measure of an individual's or family's or group of people's economic and social position based on education, income, health and occupation (Mustaquim and Islam, 2014). Socio-economic is the most important determinant of the livelihoods as it influences levels of knowledge, skill and income conditions which mean for their living. Peoples' way of living is differed from one income group to another as their consumption power is also differ among income groups of population. According to Dutton and Levine (1989), socio-economic status is "a composite measure that typically incorporates economic status, measured by income; social status, measured by education; and work status, measured by occupation". Rathod and Ningshen (2012), noted that Socio-economic status is an economic and sociological combined total measure of a person's work experience and of family's economic and social position relative to others, based on income, education and occupation.

Krieger *et al.*, (1997) define socio-economic position as “an aggregate concept that includes both resource-based and prestige-based measures, as linked to both childhood and adult social class position”. Socio-economic status refers to the position of individuals, families, households, or other aggregates on one or more dimensions of stratification. These dimensions include income, education, prestige, wealth, or other aspects of standing that member of society deem salient (Bollen *et al.*, 2001). Socio-economic status is often considered a personal demographic variable; however, socio-economic status can also reflect aspects of an individual’s broader environment. As a result, it can be measured at the individual level or the area level (Lynch and Kaplan, 2000).

**Material and Methods**

**Study Area**

The Vindhyan region of Uttar Pradesh (U.P.) lies between 22° 45' to 24° 34' North latitude and 82° to 83° 23' East longitude (Fig. 1). The forest of Vindhyan region is tropical dry deciduous type. The rainfall varies from 1200-3720mm in July-August. The Vindhyan region consists of the Vindhyan plateau and hills in the state. The topography consists mainly of plateau lands but has lot of local variations too. The soil of this region has red lateritic soils with often-pronounced nodules locally called “Murrum”. Vindhyan region was with dense forests, but now depletion of this resource is increasing very fast due to developmental activities, agricultural land expansion and, of course, spurt in forest offences, like-illicit felling, encroachment, poaching etc. Factors, like-abiotic and edaphic, have also played a key role in determining and also restraining the growth of plant species in this area.

The districts Mirzapur, Sonbhadra and Prayagraj, located in Vindhyaachal Region (Zone-9) were in study area (Fig. 1). List of villages in respective districts were compiled from population census records of U.P. One percent villages selected in each district- Prayagraj, Mirzapur and Sonbhadra, through purposive random sampling representing each block (with high population and tree growers). A total of 10 households of each selected village following stratified random sampling (Progressive - 04, Medium -03 and Lower -03) were taken. The socio-economic studies were conducted for villages of selected districts in their respective blocks. The data were collected through structured questionnaire for general information of villages and socio-economic status of villagers in selected villages. This work is result of

personal observation, interview and discussions in field with villagers of Vindhyan region. The observations were recorded on socio-economic status of rural people in selected villages of study area. Collected data were grouped on the basis of the development blocks of the districts covering selected villages (Cochrein, 1977; Manhas *et al.*, 2006; Explorable.com, 2009; Kothri, 2012; National Statistical Office (NSO); Anand *et al.*, 2016).

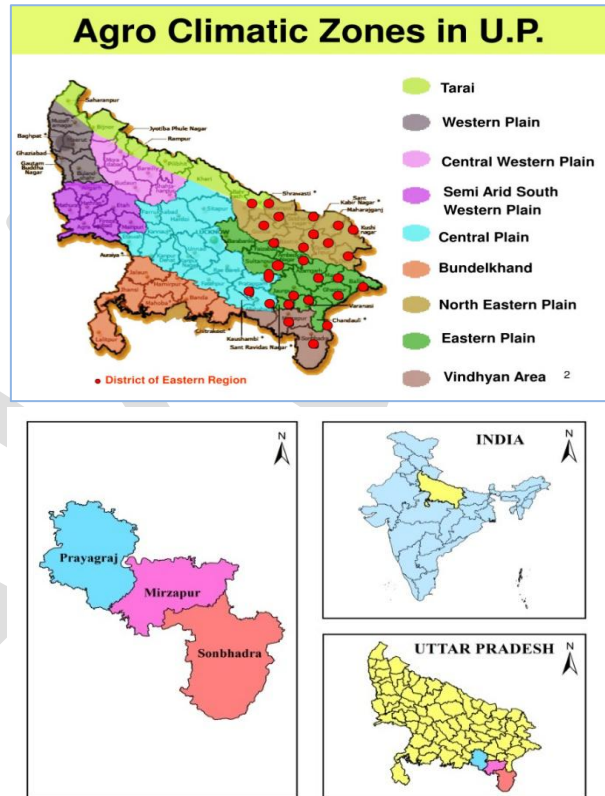


Fig. 1: Map of agro-climatic zones and Vindhyan region of U.P.

**Prayagraj district**

It is located in the southern part of the state, at between 24° 47' to 25° 47' North latitudes and 81° to 82° 21' East longitudes and stands at the confluence of the Ganga (Ganges) and Yamuna Rivers (Fig. 2). Prayagraj division consists of Prayagraj, Kaushambi and Fatehpur districts. Prayagraj District consists of 8 Tehsils and 20 development blocks. It has an area of 5482.10 sq. km and borders the state of Madhya Pradesh. The district falls under the central Ganga alluvial plain. It has 23 blocks namely Kaurihaar, Holagarh, Mauaima, Soran, Shringverpur Dham, Bhagwatpur, Baharia, Phulpur, Bahadurpur, Sahson, Pratappur, Saidabad, Dhanupr, Handia, Jasra, Shankar garh, Chakka, Karchhana, Kaundhiara, Urwa, Meja, Manda and Koraon.



Fig. 2: Map of Prayagraj district

Table 1. Demographic details of the Prayagraj district

Tehsils	Blocks	Area of blocks (sq km)	Population (in Lakh)	Village panchayat (no.)
Soraon	Kaurihaar	414	3.7	131
	Holagarh	148	2.7	66
	Mauaima	150	2.7	72
	Soran	132	2.8	61
	Shringverpur	102	0.8	24
	Bhagwatpur	123	0.7	32
Phulpur	Baharia	248	3.9	106
	Phulpur	222	3.3	90
	Bahadurpur	260	3.4	101
	Sahson	112	0.9	12
Handia	Pratappur	211	3.3	82
	Saidabad	191	3.3	92
	Dhanupr	173	3.2	107
Handia	Handia	160	2.8	81
	Jasra	268	2.3	62
Jasra	Shankar garh	464	2.2	73
	Karchana	Chakka	135	2.3
Karchana	Karchhana	232	3.2	79
	Kaundhiara	200	2.1	56
Meja	Urwa	168	2.8	65
	Meja	442	2.6	54
	Manda	346	2.6	68
Koraon	Koraon	581	3.3	114
Total		5482	60.9	-
Sadar	-	138	21.87	-
<b>Total</b>		<b>5620</b>	<b>82.77</b>	<b>1686</b>

**Mirzapur district**

Mirzapur is located at 23.52° to 25.32° North latitude and 82.7° to 83.33° East longitude. It is a part of Varanasi division (Fig. 3). This District is surrounded by the Varanasi, Sonbhadra, Prayagraj districts. Mirzapur is enriched with natural beauty and is located at a distance of about 60 km both from Varanasi and Prayagraj. It has an average elevation of

265 feet or 80 meters from sea level. South of Mirzapur is Sonbhadra district, on its north-west is Prayagraj district. Sandstone, red sand and ordinary sand are found aplenty in Mirzapur. Trees like mahua, neem, sal, teak, mango and guava are commonly found throughout the district. Just like entire northern India, Mirzapur too experiences extreme summers and winters. The summers witness temperatures as high as 48°C and winters as low as 7°C. The average rainfall in the region is over 1100 m. Rainfall occurs mostly during June to September.

Table 2. Mirzapur district at a glance

Description	Mirzapur
Population (2023) in lakhs	29.40
rural in lakhs	26.08
urban in lakhs	3.32
Sex Ratio	907
Area (Sq. Km)	4521
Population density (per sq. km)	650

Table 3. Demographic details of the Mirzapur district

Tehsils	Blocks	Area of blocks (sq. km)	Population (in Lakh)	Village panchayat (no.)
Sadar	Chhanbey	357.6	2.42	97
	Kon	97.2	1.45	43
	Majhawa	119.1	1.87	39
	Nagar city	251.1	3.6	87
Pahari	Pahari	366.1	1.9	47
	Marihan	Patehara	562.3	1.9
Lalganj	Hallia	562.3	2.87	80
	Lalganj	396.1	1.77	53
Chunar	Jamalpur	261.9	2.45	99
	Narayanpur	230.4	2.7	97
	Rajgarh	881.3	2.15	83
	Shikhar	88.7	1.2	35
	Sadar	24.1	3.12	-
<b>Total</b>		<b>4198</b>	<b>29.4</b>	<b>809</b>



Fig. 3: Map of Mirzapur district

**Sonbhadra district**

Sonbhadra lies between 23° 52' to 25° 32' North latitudes and 82° 72' to 83° 33' East logitudes (Fig. 4). It is surrounded by Mirzapur, Chandauli,

Kaimur and Rohtas District districts. The district headquarters is Robertsganj. Sonbhadra's major part of land is classified as forest land. But, very less no. of trees exists in the forest and in 40 percent of the land, urbanization led for crop cultivation.

**Table 4. Sonbhadra district at a glance**

Description	Sonbhadra
Population (2023) in lakhs	23.79
Rural in lakhs	19.29
Urban in lakhs	4.50
Sex Ratio	918
Area (Sq. Km)	6905
Population Density (per sq. km)	345

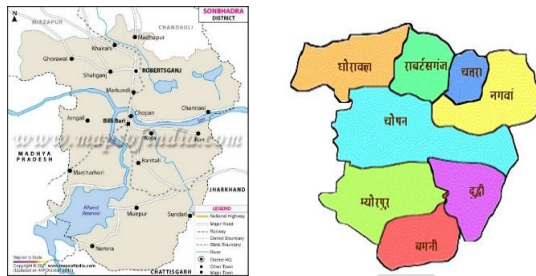


Fig. 4: Map of Sonbhadra district

**Table 5. Demographic details of the Sonbhadra district**

Tehsils	Blocks	Area of blocks (sq km)	Population (in Lakh)	Village panchayat (no.)
Robertsganj	Robertsganj	762.3	3.11	139
	Nagwan	1035.61	1.2	51
	Chatra	277.81	1.21	60
Ghorawal	Chopan	1818.57	4.07	64
	Ghorawal	200.15	4.1	143
Dudhi	Babhni	425.47	1.12	40
	Myorpur	1937.75	3.12	79
	Dudhi	325.34	1.36	61
	Sadar	125	4.5	-
<b>Total</b>		<b>6905</b>	<b>23.79</b>	<b>637</b>

**Results and Discussion**

The results of respondents covering general information about studied villages in districts viz. Prayagraj, Mirzapur and Sonbhadra of Vindhyan region for type of houses, education, caste structure, annual income level and occupation status were analyzed. The results of socio-economic studies in villages of districts in Vindhyan region revealed that land holding (Table 6 & Fig. 5) for majority of farmers

are under marginal category (55.58%) with small, medium and large in 29.22, 9.78 and 5.42% respectively. The land use pattern (Table 7 & Fig. 6) in Vindhyan region showed that agriculture was major land use (74.94%) followed by agroforestry (8.68%), horticulture (5.33%) and wasteland (11.05%). Adoption of agroforestry was highest in Prayagraj district (12.55%) followed by Mirzapur (8.23%) and Sonbhadra (5.25%). The wasteland was highest in Sonbhadra (17.15%).

Most of the villages were favorably located in terms of approachable roads from district headquarters and essential facilities. The connecting roads were metalled and electricity facility was available in the villages. For drinking water, govt. as well as private hand pumps were used by the villagers. The average family size in the villages of Vindhyan region was from 5-7 members. In districts Prayagraj, Mirzapur and Sonbhadra, there are about 22.36%, 30.0% and 62.5% houses are in kutchha (khaprail/sarpat) category whereas 77.63%, 70.0% and 37.5% had pucca, reinforced cement concrete (RCC) houses respectively. In districts of Vindhyan region, the literacy level indicated that 61.5 % villagers were educated, around 17.28% highly educated and 21.22% were in illiterate class (Table 8 & Fig. 7).

The categorization of caste has been done into three classes' viz. SC/ST, OBC and others. The mean data for studied villages in the region indicated that 39.81% in SC/ST, 43.70% in OBC and 16.52% in others category (Table 9 & Fig. 8). The annual income of respondents was classified into four categories. It was found that most of the population (22.16%) belonged to the range of < 1.0 Lakh whereas the percentage of respondents in other income groups viz. 1-3, 3-5 and > 5 Lakh were 30.26%, 37.83% and 9.76% respectively (Table 10 & Fig. 9). The occupational status of the villagers was grouped into five classes. It was depicted that villagers mostly adopt agriculture (53.21%) followed by labour work (30.24%) and business (3.91%) (Table 11 & Fig. 10). It was found in studies that average distance of timber market places from the village area was around 8.04 km and average tree growers in a village panchayat were highest in Prayagraj district (23) followed by Mirzapur (12) and in Sonbhadra (8). The villagers were mostly dependent on local market (51.19%) followed by forest (20.57%) and own trees (15.72%) for fulfilling their day- to- day timber and firewood needs (Table 12 & Fig. 11).

**Table 6. Status of land holding of villagers in Vindhyan region**

Land holding Pattern (%)	Praya graj	Mirza pur	Sonbh adra	Vindhyan region
Marginal	52.63	58.29	55.81	55.58
Small	23.68	32.23	31.75	29.22
Medium	13.78	6.41	9.16	9.78
Large	9.91	3.07	3.28	5.42

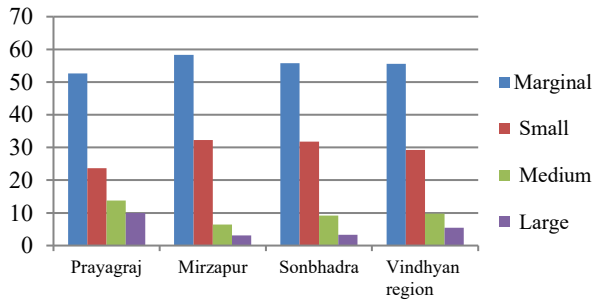


Fig. 5: Status of land holding of villagers in Vindhyan region

The socio-economic status of the Vindhyan region (specifically parts of U.P. like Prayagraj, Mirzapur and Sonbhadra) can be characterized by high poverty, low literacy and heavy reliance on agriculture and labour works. The Vindhyan area is often identified as less developed compared to others in the region of U.P. The other studies confirmed that landholding is dominated by small and medium farmers, reflecting fragmented agricultural structures. Educational attainment is low, with most farmers illiterate or having only primary-level education. Majority of households earn below ₹ 1.0 lakh annually, indicating economic vulnerability. The limited mechanization, low income and education gaps highlight subsistence-oriented farming in Vindhyan region (Kumari et al., 2025).

**Table 7. Land use pattern in Vindhyan region**

Land use Pattern	Praya graj	Mirz apur	Sonbh adra	Vindhyan region
Agriculture	73.51	76.82	74.5	74.94
Agro-forestry/Tree plantation	12.55	8.23	5.25	8.68
Horticulture	7.78	5.11	3.1	5.33
Wasteland	6.16	9.84	17.15	11.05

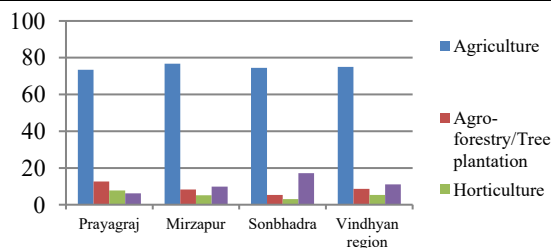


Fig. 6: Land use pattern in Vindhyan region

**Table 8. Literacy level (%) in Vindhyan region**

Particulars	Prayagraj	Mirzapur	Sonbhadra	Vindhyan region
Illiterate	16.85	19.05	27.76	21.22
Educated	61.31	66.82	56.37	61.5
Highly educated	21.84	14.13	15.87	17.28

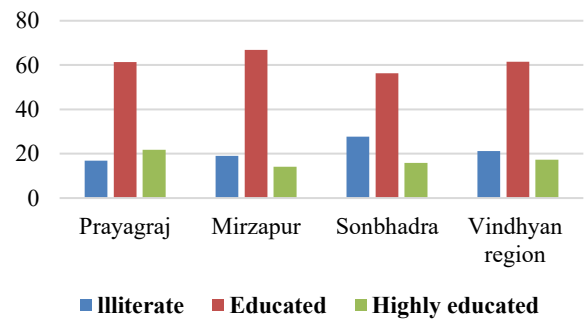


Fig. 7: Literacy level (%) in Vindhyan region

**Table 9. Caste structure (%) in Vindhyan region**

Caste Structure (%)	Praya graj	Mirza pur	Sonbha dra	Vindhyan region
Schedule caste/Tribe Backwards	33.52	37.17	48.75	39.81
Others	43.68	45.58	41.83	43.70
	22.89	17.25	9.42	16.52

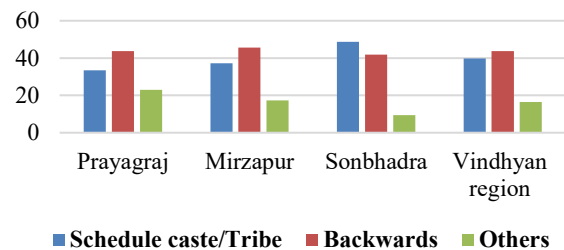


Fig. 8: Caste structure (%) in Vindhyan region

**Table 10. Annual income level (%) of villagers in Vindhyan region**

Income level	Prayag raj	Mirza pur	Sonbha dra	Vindhyan region
< Rs. 1.0 Lakh	14.21	23.52	28.75	22.16
1.0 Lakh-3.0 Lakh	30.78	26.23	33.76	30.26
3.0 Lakh-5.0 Lakh	43.05	38.27	32.16	37.83
> 5.0 Lakh	11.96	11.98	5.33	9.76

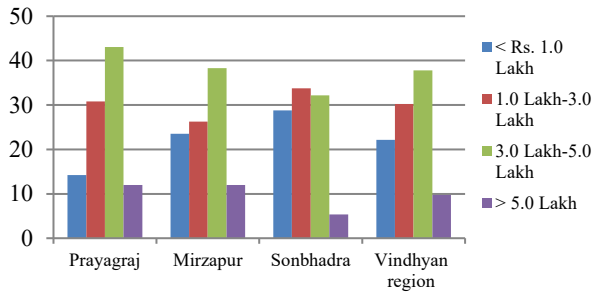


Fig. 9: Annual income level (%) of villagers in Vindhyan region

Table 11. Occupational status (%) of villagers in Vindhyan region

Particulars	Prayagraj	Mirzapur	Sonbhadra	Average
Agriculture	60.78	55.11	43.75	53.21
Business	6.32	3.58	1.82	3.91
Labour work	17.1	32.11	41.5	30.24
Service	7.1	3.85	3.33	4.76
Others	8.7	5.35	9.6	7.88

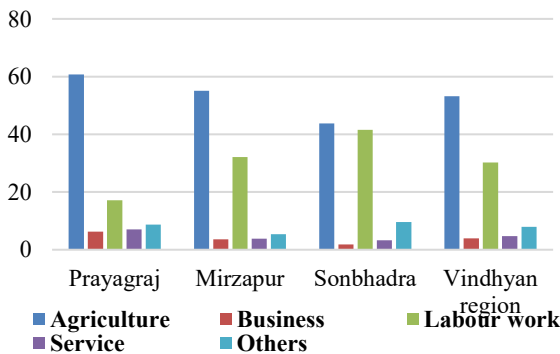


Fig. 10: Occupational status (%) of villagers in Vindhyan region

Table 12. Source of timber/firewood (%) in Vindhyan region

Source of timber/firewood	Prayagraj	Mirzapur	Sonbhadra	Vindhyan region
Local Market	57.21	43.73	52.63	51.19
Private trees	20.52	15.94	10.7	15.72
Forest	5.05	31.41	25.25	20.57
Others (contractor etc.)	17.22	8.92	11.42	12.52

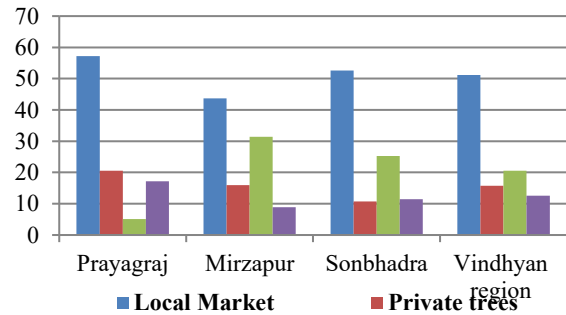


Fig. 11: Source of timber/firewood (%) in Vindhyan region

**Conclusion**

Socio-economic status in rural areas of Vindhyan region is slowly improving over a period of time. The results of socio-economic studies in villages of districts in Vindhyan region revealed that average distance of timber market places from the village area was far away and average tree growers in village panchayat were highest in Prayagraj district followed by Mirzapur and in Sonbhadra. The villagers were mostly dependent on local markets followed by forest and own trees for fulfilling their day-to-day timber and firewood needs. Many programmes and policies have been implemented to improve the socio-economic status of population in rural areas, but in economic sense, people of the rural areas could not develop equally over the region.

**REFERENCES**

Anand, R. K., Khare, N., Dwivedi, S.V., Singh, M. P., & Umrao, R. (2016). Studies on Adoption of Traditional Agroforestry among the Farmers in District Sonbhadra, Uttar Pradesh. *Indian Forester*, 142(2):144-150.

Bollen, A.K., Glanville, L.J. and Stecklov G. (2001). Socio-Economic Status and Class in Studies of Fertility and Health in Developing Countries. *Annu. Rev. Sociol.*, 27:153-185.

Cochrein, W.G. (1977). *Sampling Behaviors*, Wiley Publications for stratified and random sampling.

Dutton, D.B. and Levis, S. (1989). Overview, Methodological Critique, and Reformulation, in J.P. Bunker, D.S. Gomby and B.H. Kehrer (Eds.), *Pathways to Health*. Melno Park, CA: *The Henry J. Kaiser Family Foundation*, 29-69.

Explorable.com (2009). Random Sampling. Retrieved Jan 18, 2026 from Explorable.com:

- <https://explorable.com/simple-random-sampling>
- Kothri, C.R. (2012). Research methodology – methods and techniques, publishing for one world new age international (p) limited, publishers 4835/24, Ansari Road, Daryaganj, New Delhi.
- Krieger, N., Williams, D.R., Moss, H.W. (1997). Measuring Social Class in US Public Health Research: Concepts, Methodologies, and Guidelines. *Annul. Rev. Public Health*, 18:341-378.
- Kumari, A., Tripathi, U.K., Kumar, M., Singh, A., Saraf, K.K. and Karunamay, S. (2025). Socio-economic characteristics, landholding pattern, and dairy practices of farmers in Vindhyan Region of Mirzapur District, Uttar Pradesh. *International Journal of Agriculture Extension and Social Development*, 8(10):307-313.
- Lynch, J., & Kaplan, G. (2000). Socio-Economic Position. in L. F. Berkman and I. Kawachi (Eds.), *Social Epidemiology*, New York: Oxford University Press, 13-35.
- Manhas, R.K., Negi, J.D.S., Kumar, R. and Chauhan, P.S. (2006). Temporal assessment of growing stock, biomass and carbon stock of Indian Forests, *Climate change*, 74:191-221.
- Mustaquim, M. and Islam, M. (2014). Demographic and Socio-Economic Characteristics of Inhabitants of Udaypur Village, Malda District, West Bengal, *Indian Streams Research Journal*, 4(1):1-13.
- National Statistical Office (NSO): Ministry of Statistics & Programme implementation, *Govt. of India, New Delhi*.
- Rathod, G.R., Ningshen, A. (2012). Measuring the Socio-Economic Status of Urban below Poverty Line Families in Imphal City, Manipur: A Livelihoods Study. *International Journal of Marketing, Financial Services & Management Research*, 1(12):62-69.

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