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IDENTIFICATION OF SOCIAL GROUP COMBINATION REGIONS USING WEAVER'S INDEX

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Abstract

The paper is an exercise to objectively ascertain the social composition of each village of Labpur Community Development Block of Birbhum District of West Bengal, India using Weaver's Combination Index. The exercise shows that fifty nine villages are under one social group combination region, eighty eight villages are under two social group combination region, fourteen villages are under three social group combination region. Within one social group combination one village is Scheduled Tribe (ST) dominated, seven villages are Scheduled Caste (SC) dominated and fifty one villages are Non - ST, SC dominated. The method applied here can be adopted for similar exercises on spatial analysis of any other parameter in other areas. It can also be used to identify target of beneficiaries under different policy programmes.

Key Words: Weaver's Combination Index, Dominant Social Group Regions

Introduction

The present article presents a method to objectively ascertain the social composition of each village of Labpur Community Development (C.D.) Block of Birbhum District of West Bengal, India using Weaver's Combination Index (Weaver, 1954:175-200).

Objective

The study aims to find out the dominant social group of each village of the area under study.

Study Area

The study area is an administrative unit i.e. Labpur C. D. Block of Birbhum District, West Bengal, India (Figure 1). All villages of the C. D. Block have been taken into consideration (Table 2). An administrative unit is chosen because of availability and compatibility of census data.

Methods Used

The method used to determine the dominant social group of each of the village is the Weaver's Combination Index. The method as given by Weaver for Crop-Combination Regions his in research paper 'Crop-Combination Regions in the Middle West' in 1954 has been adopted here. However in the present study instead of the parameter of crops, the parameter of social groups has been used.

Theoretically, hundred percent of a particular social group to total population in a village signifies one social group combination, i.e. the village is occupied predominantly by one particular social group; fifty percent of a particular social group to total population of a village signifies two social group combinations (i.e. the population of a village consists of two different social groups); thirty three

percent of a particular social group to total population is three social group combinations.
Methods used to determine the dominant social groups are-

a. The percentage of each of the social group i.e. Scheduled Tribe (ST), Scheduled Caste (SC) & Non - ST, SC to total population of each village has been calculated.

b. Thereafter the percentage of different social groups to total population of each village is arranged in a decreasing order.

c. The deviations (d) positive (+) or negative (-) of actual percentage from any one theoretical value for every set of social groups are squared and summed. Each sum is divided by number of social groups (n) in the set. The square root of this result will give us a measure of social group combination from the theoretical distribution. The formula for standard deviation is as follows: standard deviation = $\sqrt{\sum(d^2)/n}$

d. Deviations of the actual percentage of each social group to total population in a village and the assumed values of one, two and three social group combinations (i.e. hundred percent, fifty percent and thirty three percent) respectively is calculated and arranged in a descending order to facilitate analyses. The minimum deviation is considered to be matching best with the reality and hence, the social composition of the area is identified with it.

Figure 1 and table 1 show the dominant social group of each village in study area (C.D. Block) with their respective location codes (Table 2).

5.0 Discussion and Analysis

From table 1 (Figure 1) it is evident that fifty nine villages are under one social group combination region, eighty eight villages are under two social group combination region, fourteen villages are under three social group combination regions.

Within one social group combination one village is ST dominated, seven villages are SC dominated and fifty one villages are Non ST, SC dominated.

Within eighty eight villages of two social group combination thirty villages may be designated as SC (1^{st}) or Non - ST, SC (2^{nd}) dominated; fifty six villages may be designated as Non - ST, SC (1^{st}) or SC (2^{nd}) dominated; one village may be designated as ST (1^{st}) or Non - ST, SC (2^{nd}) dominated and one village may be designated as SC (1^{st}) or ST (2^{nd}).

Within fourteen villages of three social group combination three villages may be designated as ST (1^{st}) or Non - ST, SC (2^{nd}) or SC (3^{rd}) dominated; three villages may be designated as SC(1^{st}) or Non - ST, SC (2^{nd}) or ST(3^{rd}) dominated; four villages may be designated as Non - ST, SC (1^{st}) or SC(2^{nd}) or ST(3^{rd}) dominated; one village may be designated as ST(1^{st}) or SC(2^{nd}) or Non - ST, SC(3^{rd}) dominated; three villages may be designated as Non - ST, SC(1^{st}) or ST(2^{nd}) or SC(3^{rd}) dominated.

Finally the study area may be designated as two social group combinations with dominance of Non -

ST, SC (1st) or SC (2nd).

Concluding Remarks

The method applied here can be adopted for similar exercises on spatial analysis of any other parameter in other areas. It can also be used to identify target of beneficiaries under different policy programmes.

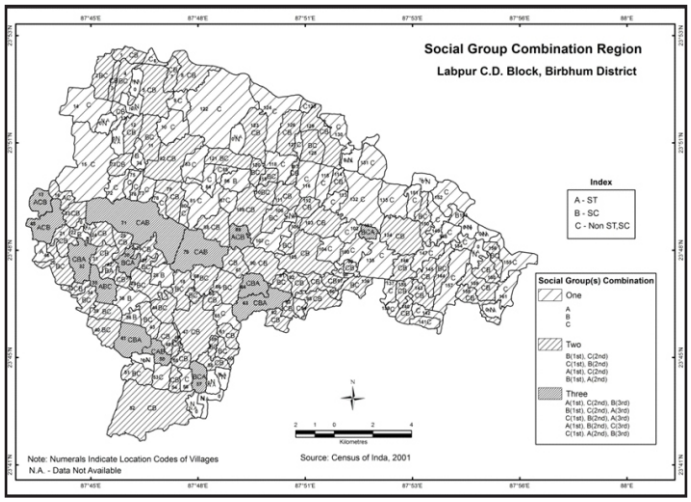

Table 1 Social Group Combination

Combination of Social Groups	Predominant Social Groups	Location Codes of Villages	No. Villages
One	ST	46	1
	SC	22, 28, 36, 38, 74, 86, 153	7
	Non ST, SC	6, 9, 10, 14, 15, 53, 56, 65, 72, 75, 76, 77, 78, 80, 81, 83, 84, 85, 87, 94, 98, 100, 102, 104, 107, 113, 115, 116, 118, 122, 124, 125, 127, 130, 131, 132, 133, 135, 137, 139, 141, 142, 147, 148, 149, 151, 152, 154, 155, 157, 161	51
			59
Two	SC (1st) Non ST, SC (2nd)	2, 4, 11, 18, 19, 20, 27, 29, 34, 39, 40, 43, 44, 51, 59, 60, 66, 69, 91, 106, 108, 110, 119, 120, 121, 128, 136, 144, 150, 156	30
	Non ST, SC (1st) SC (2nd)	1, 3, 5, 7, 8, 12, 13, 21, 23, 24, 25, 26, 31, 33, 37, 47, 48, 49, 52, 54, 55, 58, 61, 62, 67, 68, 73, 79, 82, 88, 90, 92, 93, 95, 96, 97, 99, 103, 105, 109, 111, 112, 114, 117, 123, 126, 129, 134, 138, 140, 143, 145, 146, 158, 159, 160	56
	ST (1st) Non ST, SC (2nd)	16	1
	SC(1st) ST(2nd)	42	1
			88
Three	ST (1st) Non ST, SC (2nd) SC (3rd)	17, 45, 89	3
	SC(1st) Non ST, SC (2nd) ST(3rd)	30, 57, 101	3
	Non ST, SC (1st) SC(2nd) ST(3rd)	32, 41, 63, 64	4
	ST(1st) SC(2nd) Non ST, SC(3rd)	35	1
	Non ST, SC(1st) ST(2nd) SC(3rd)	50, 70, 71	3
			14

Data Source: Figure 1 (Census of India, 2001)

Location Codes	Name of villages	Location Codes	Name of villages	Location Codes	Name of villages
1	Makura	55	Gopta	109	Bakhul
2	Uttar Durgapur	56	Kashiara	110	Manpur
3	Bishaypur	57	Amnahar	111	Kuniara
4	Bhalkuti	58	Khayerbani	112	Shalika
5	Layekpur	59	Radhakrishnapur	113	Nimra
6	Bile	60	Putundi	114	Punasi
7	Tarulia	61	Dengera	115	Kusulia
8	Laghosa	62	Dwaranda	116	Kapsundi
9	Shaspur	63	Maheshpur	117	Sonajuli
10	Kamadpur	64	Purbba Nawapara	118	Shahalampur
11	Punna	65	Chatra	119	Babladanga
12	Murdighi	66	Purbba Kadipur	120	Dhandanga
13	Raypur	67	Donaipur	121	Kamarmath
14	Hatia	68	Kadoa	122	Danrka
15	Chauhata	69	Paschim Kadipur	123	Purbba Mahula
16	Sundipur	70	Mastali	124	Ganutia
17	Faridpur	71	Shekhampur	125	Eguria
18	Milanpur	72	Hirapur	126	Shakpur
19	Sahurapur	73	Gopdighi	127	Tala
20	Dhoadanga	74	Uttar Ishakpur	128	Miapur
21	Babna	75	Chandipur	129	Panchpara
22	Pancha Ganga	76	Dakshin Bamnigram	130	Saugram
23	Ujalpur	77	Kusumgaria	131	Marugram
24	Dakshin Kanaipur	78	Raghabpur	132	Kurnahar
25	Paschim Gobindapur	79	Baragoga	133	Datta Bagtor
26	Gopalpur	80	Chhota Goga	134	Thiba
27	Kendia	81	Madhugram	135	Kandarkula
28	Patharghata	82	Bhalas	136	Mirity
29	Bheria	83	Ghattor	137	Kempur
30	Nautara	84	Puran Mahugram	138	Mahammadpur
31	Dhanghara	85	Phalgram	139	Kustor
32	Ekut	86	Sankhanad	140	Haranandapur
33	Muniara	87	Debipur	141	Gopinathpur
34	Mahodari	88	Labhpur	142	Nandanpur
35	Tatinapara	89	Sarparajpur	143	Fingtor
36	Talbana	90	Lohadda	144	Dhrubabati
37	Uttarpara	91	Surulia	145	Jamna
38	Arar	92	Dula Sahapur	146	Khanpur
39	Langalgram	93	Ranipara	147	Belbuni
40	Rakhareshwar	94	DakshinDurgapur	148	Purbba Haripur
41	Saripa	95	Kotul Ghosha	149	Kazipara
42	Altor	96	Purbba Sahapur	150	Bagha
43	Malitpur	97	Gokulbati	151	Bhatra
44	Mahutar	98	Par Abad	152	Nangalhata

References

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