Chapter–6

Social Entropy and Technology Socialization: The Empirical Analysis

Research Locale - Village: Ghoragachha

Table 6.1: Distribution of Variables in terms of Range, Standard deviation and Coefficient of variation of village, Ghoragachha, West Bengal

N = 75					
Independent variables	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**CV (%)**
Age (x1)	20	80	36.31	11.99	33.03
Education (x2)	1	15	6.37	3.89	60.97
Family education status (x3)	1	17	10.15	3.76	37.08
Educational aspiration (x4)	1	20	13.09	2.99	22.81
Family size (x5)	3	17	5.31	2.59	48.88
Gender (x6)	0.3	6	1.53	0.91	59.20
Urbanization index (x7)	0.5	42	5.46	7.50	137.23
Occupation (x8)	3	6	5.43	1.08	19.91
Cropping intensity (x9)	100	300	207.95	71.40	34.33
Farm size (x10)	0.15	4	0.94	0.74	78.57
Expenditure allotment (x11)	6.5	79.4	28.02	15.58	55.60
Credit load (x12)	125	45000	9622.50	9838.02	102.24
Annual income (x13)	204.8	137200	22737.05	21403.06	94.13
Electricity consumption (x14)	5.83	150	45.76	29.41	64.26
Fuel consumption (x15)	4.8	8963	2131.11	2037.01	95.58
Irrigation index (x16)	75	100	99.33	3.52	3.54
Adoption leadership (x17)	1.5	8.12	6.07	1.17	19.25
Scientific orientation (x18)	4.6	10	7.71	1.07	13.84
Independency (x19)	4.2	9.6	7.81	1.15	14.76
Innovation proneness (x20)	3.3	9	6.58	0.98	14.95
Risk orientation (x21)	6.16	9.66	7.84	0.77	9.76
Economic motivation (x22)	2.25	8.25	6.28	1.02	16.21
Orientation towards competition (x23)	3.83	8.66	6.01	1.08	17.94
Management orientation (x24)	4.16	8.83	6.01	0.91	15.09
Production orientation (x25)	4.83	8.5	6.71	0.81	12.06
Market orientation (x26)	5	9.16	7.41	0.97	13.10
Social participation (x27)	0.5	2.83	1.63	0.56	34.54
Utilization of cosmopolite source of information (x28)	1	2.43	1.86	0.32	17.23
Information seeking behavior (x29)	1	9.57	7.74	1.13	14.58
Training received (x30)	1	2160	102.93	311.74	302.85
Distance matrix (x31)	3	15.75	6.23	2.20	35.25
Drudgeries (x32)	0.5	8.5	4.01	1.47	36.60
Perception on discontinuance (y1)	1.85	9.14	6.75	1.21	17.96
Perception on rejection (y2)	1.87	8.6	6.65	1.25	18.84
Disagreement (y3)	3.25	8.87	6.61	1.08	16.31
Conflict (y4)	3.37	8.5	6.83	0.83	12.16
Reasons for dissonance (y5)	2	9.14	7.25	1.13	15.64
Reasons for reinvention (y6)	2.66	8.16	6.11	1.23	20.22
Confusion index (y7)	3	8.42	6.28	1.21	19.28
Social entropy (Y)	139.55	298575.1	96492.49	64527.75	66.87

Table 6.1 presents the distribution of variables in terms of range, standard deviation, and coefficient of variation of the village, Ghoragachha.

It has been found from the study that for the independent variable, **Age (x_1)**, the maximum is of 80 years, and the minimum is of 20 years. The mean age group was found, 36 years with the standard deviation, 11.99 for the total

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distribution taken for the study. Coefficient of variation of this variable is 33.03 per cent, which shows that the level of consistency in the distribution of age is high.

The independent variable, **Education (x_2)** of farmer has been found to be the minimum score 1 (primary school) and the maximum score 15 (graduation). The mean education has been found, 6.37 with the standard deviation, 3.89 for the total distribution taken for the study. This independent variable has shown coefficient of variation 60.97 per cent which infers that the medium level of consistency in its distribution.

The independent variable, **Family education status (x_3)** has been found to be the minimum score 1 (primary school) and the maximum score 17 (post graduation level). The mean of this variable is 10.15 with the standard deviation 3.89 for the total distribution taken for the study. The coefficient of variation of this variable is 37.08 per cent which shows the high level of consistency in its distribution.

The independent variable, **Education aspiration (x_4)** of the respondents has been found to be the minimum score 1, and the maximum score 20. The mean and the standard deviation are 13.09, and 2.99 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 22.81 per cent which shows the high level of consistency in its distribution.

The independent variable, **Family size (x_5)** has been found to be the minimum score 3, and the maximum score 17. The mean and the standard deviation of this independent variable are 5.31, and 2.59 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 48.88 per cent which shows the high level of consistency in its distribution.

The independent variable, **Gender (x_6)** has been found to be the minimum 0.3 and the maximum 6. The mean and the standard deviation of this independent variable are 1.53, and 0.91 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 59.20 per cent showing the medium level of consistency in its distribution.

The independent variable, **Urbanization index (x_7)** has been found to be the minimum 0.5 and the maximum 5.46. The mean and the standard deviation of this independent variable are 5.46, and 7.50 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 137.23 per cent showing the low level of consistency in its distribution.

The independent variable, **Occupation (x_8)** has been found to be the minimum score 3 showing priority for the business, and the maximum score 6 showing priority for the service. The mean score of this independent variable is 1.53, and the standard deviation is 1.08 for the total distribution taken for the study. The coefficient of variation is 19.91 per cent which shows the high level of consistency in its distribution.

The independent variable, **Cropping intensity (x_9)** has been found to be the minimum 100 per cent and the maximum 300 per cent. The mean score of this variable is 207.95, and the standard deviation is 71.40 for the total distribution taken for the study. The coefficient of variation is 34.33 per cent which shows the high level of consistency in its distribution.

The independent variable, **Farm size (x_{10})** has been found to be the minimum 0.15 and the maximum 4. The mean and the standard deviation of this independent variable are 0.94, and 0.74 respectively for the total distribution taken for the study. The coefficient of variation is 78.57 per cent which shows the medium level of consistency in its distribution.

The independent variable, **Expenditure allotment (x_{11})** has been found to be the minimum 6.5 per cent and, the maximum 79.4 per cent. The mean and the standard deviation of this independent variable are 28.02, and 15.58 respectively for the total distribution taken for the study. The coefficient of variation is 55.60 per cent which shows the medium level of consistency in its distribution.

The independent variable, **Credit load (x_{12})** has been found to be the minimum 125 rupees per annum in agriculture, and the maximum 45000 rupees per annum in agriculture. This independent variable has the mean score 9622.50, and the standard deviation is 9838.02 for the total distribution taken for the study. The coefficient of variation is 102.24 per cent which shows the low level of consistency in its distribution.

The independent variable, **Annual income (x_{13})** has been found to be the minimum 204.8, and the maximum 137200. This variable has the mean value 22737.05 and the standard deviation has 21403.06 for the total distribution taken for the study. The coefficient of variation is 94.13 per cent which shows medium level of consistency in its distribution.

The independent variable **Electricity consumption (x_{14})** has been found to be the minimum 5.83, and maximum 150. This variable has mean value 45.76 and the standard deviation has 29.41 for the total distribution taken for the study. The coefficient of variation is 64.26 per cent which shows the medium level of consistency in its distribution.

The independent variable, **Fuel consumption (x_{15})** has been found to be the minimum 4.8 and the maximum 8963 in terms of rupees. This variable has mean value 2131.11 and the standard deviation 2037.01 for the total distribution taken for the study. The coefficient of variation is 95.58 per cent which shows the variable has got the medium level of consistency in its distribution.

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The independent variable, **Irrigation index (x_{16})** has been found to be the minimum 75 per cent and the maximum 100 per cent. The mean value of this variable is 99.33 and the standard deviation is 3.52 for the total distribution taken for the study. The coefficient of variation of this variable is 3.54, showing that this variable has got the very high level of consistency.

The independent variable, **Adoption leadership (x_{17})** has been found to be the minimum 1.5 and the maximum 8.12. The mean value of this variable is 6.07 and the standard deviation 19.25 for the total distribution taken for the study. The coefficient of variation of this variable is 19.25 per cent which indicate that this variable has got the very high level of consistency.

The independent variable, **Scientific orientation (x_{18})** has been found to be the minimum 4.6 and the maximum 10. The mean value of this variable is 7.71 and the standard deviation is 1.07 for the total distribution taken for the study. The coefficient of variation of this variable is 13.84 per cent which shows that this variable has got the very high level of consistency.

The independent variable, **Independency (x_{19})** has been found to be the minimum 4.2 and the maximum 9.6. The mean value of this variable is 7.81 and the standard deviation is 1.15 for the total distribution taken for the study. The coefficient of variation of this variable is 14.76 per cent showing the variable has got the very high level of consistency.

The independent variable, **Innovation proneness (x_{20})** has been found to be the minimum 3.3 and the maximum 9. The mean value of this variable is 7.81 and the standard deviation is 0.98 for the total distribution taken for the study. The coefficient of variation of this variable is 14.95 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Risk orientation (x_{21})** has been found to be the minimum 6.16 and the maximum 9.66. The mean variable of this variable is 7.84 and the standard deviation is 0.77 for the total distribution taken for the study. The coefficient of variation of this variable is 9.76 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Economic motivation (x_{22})** has been found to be the minimum 2.25 and the maximum 8.25. The mean value of this variable is 6.28 and the standard deviation is 1.02 for the total distribution taken for the study. The coefficient of variation of this variable is 16.21 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Orientation towards competition (x_{23})** has been found to be the minimum 3.83 and the maximum 8.66. The mean value of this variable is 6.01 and the standard deviation is 1.08 for the total distribution taken for the study. The coefficient of variation of this variable is 17.94 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Planning orientation (x_{24})** has been found to be the minimum 4.16 and the maximum 8.83. The mean value of this variable is 6.71 and the standard deviation is 0.91 for the total distribution taken for the study. The coefficient of variation of this variable is 15.09 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Production orientation (x_{25})** has been found to be the minimum 4.83 and the maximum 8.5. The mean value of this variable is 6.71 and the standard deviation of this variable is 0.81 for the total distribution taken for the study. The coefficient of variation of this variable is 12.06 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Market orientation (x_{26})** has been found to be the minimum 5 and the maximum 9.16. The mean value of this variable is 7.41 and the standard deviation of this variable is 0.97 for the total distribution taken for the study. The coefficient of variation of this variable is 13.01 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Social participation (x_{27})** has been found to be the minimum 0.5 and the maximum 2.83. The mean value of this variable is 0.56 and the standard deviation 34.54 for the total distribution taken for the study. The coefficient of variation of this variable is 34.54 per cent which shows that the variable has got the high level of consistency.

The independent variable, **Utilization of cosmopolite source of information (x_{28})** has been found to be the minimum 1 and the maximum 2.43. The mean value of this variable is 1.86 and the standard deviation 0.32 for the total distribution taken for the study. The coefficient of variation of this variable is 17.23 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Information seeking behavior (x_{29})** has been found to be the minimum 1 and the maximum 9.57. The mean value of this variable is 7.74 and the standard deviation 1.13 for the total distribution taken for the study. The coefficient of variation of this variable is 14.58 per cent which indicates that the variable has got the very high level of consistency.

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The independent variable, **Training received (x_{30})** has been found to be the minimum 1 and the maximum 2160. The mean value of this variable is 102.93 and the standard deviation is 311.74 for the total distribution taken for the study. The coefficient of variation of this variable is 302.85 per cent which shows that the variable has got the very low level of consistency.

The independent variable, **Distance matrix (x_{31})** has been found to be the minimum 3 and the maximum 15.75. The mean value of this variable is 6.23 and the standard deviation is 2.20 for the total distribution taken for the study. The coefficient of variation of this variable is 35.25 per cent which shows that the variable has got the high level of consistency.

The independent variable, **Drudgeries (x_{32})** has been found to be the minimum 0.5 and the maximum 8.5. The mean value of this variable is 4.01 and the standard deviation is 1.47 for the total distribution taken for the study. The coefficient of variation of this variable is 36.60, showing that the variable has got the high level of consistency.

The dependent variable, **Perception on discontinuance (y_1)** has been found to be the minimum 1.85 and the maximum 9.14. The mean value of this variable is 6.75 and the standard deviation 1.21 for the total distribution taken for the study. The coefficient of variation of this variable is 17.96 per cent which show that the variable has got the very high level of consistency.

The dependent variable, **Perception on rejection (y_2)** has been found to be the minimum 1.87 and the maximum 8.6. The mean value of this variable is 6.65 and the standard deviation 1.25 for the total distribution taken for the study. The coefficient of variation of this variable is 18.84 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Disagreement (y_3)** has been found to be the minimum 3.25 and the maximum 8.87. The mean value of this variable is 6.61 and the standard deviation is 1.08 for the total distribution taken for the study. The coefficient of variation of this variable is 16.31 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Conflict (y_4)** has been found to be the minimum 3.37 and the maximum 8.5. The mean value of this variable is 6.83 and the standard deviation is 0.83 for the total distribution taken for the study. The coefficient of variation of this variable is 12.16 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Reasons for dissonance (y_5)** has been found to the minimum 2 and the maximum 9.1. The mean value of this variable is 7.25 and the standard deviation is 1.13 for the total distribution taken for the study. The coefficient of variation of this variable is 15.64 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Reasons for reinvention (y_6)** has been found to be the minimum 2.66 and the maximum 8.16. The mean value of this variable is 6.11 and the standard deviation is 1.23 for the total distribution taken for the study. The coefficient of variation of this variable is 20.22 per cent which shows the variable has got the very high level of consistency.

The dependent variable, **Confusion index (x_7)** has been found to be the minimum 3 and the maximum 8.42. The mean value of this variable is 6.28 and the standard deviation of this variable is 1.21 for the total distribution taken for the study. The coefficient of variation of this variable is 19.28 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Social entropy (Y)** has been found to be the minimum 139.55 and the maximum 298575.1. The mean value of this variable is 96492.49 and the standard deviation is 64527.75 for the total distribution taken for the study. The coefficient of variation of this variable is 66.87 per cent which shows that the variable has got the medium level of consistency.

Table 6.2: Distribution of variables in terms of Range, Standard deviation and Coefficient of variation of village, Chiroura, Bihar

N = 75					
Independent variables	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**CV (%)**
Age (x1)	15	83	47.76	15.63	15
Education (x2)	3	17	10.72	3.25	30.31
Family education status (x3)	3	17	12.77	3.04	23.82
Educational aspiration (x4)	10	20	15.52	2.39	15.40
Family size (x5)	3	25	7.81	3.85	49.24
Gender (x6)	0.2	5	1.52	1.06	69.65
Urbanization index (x7)	1.2	70.6	16.08	18.52	115.19
Occupation (x8)	1	6	5.64	1	17.64
Cropping intensity (x9)	100	166.66	207.76	244.27	117.57
Farm size (x10)	0.75	20	5.40	3.96	73.28
Expenditure allotment (x11)	5.85	44.32	20.86	8.72	41.78
Credit load (x12)	150	64500	8773.62	11263.65	128.38
Annual income (x13)	2500	66714.28	19343.83	13314.36	68.83
Electricity consumption (x14)	7.53	83.33	32.69	15.32	46.85
Fuel consumption (x15)	150	11310	1345.91	1876.26	138.67

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Irrigation index (x16)	53.84	100	97.49	7.67	7.87
Adoption leadership (x17)	2.12	7.25	5.49	0.91	16.54
Scientific orientation (x18)	1.8	10	8.03	1.31	16.26
Independency (x19)	3.2	9.6	7.51	1.38	18.33
Innovation proneness (x20)	3.88	9	6.10	0.77	12.68
Risk orientation (x21)	6	9.5	7.58	0.70	9.22
Economic motivation (x22)	4.87	8.25	6.55	0.79	12.05
Orientation towards competition (x23)	3.83	8.16	5.55	0.93	16.70
Management orientation (x24)	4.16	7.83	5.73	0.69	12.10
Production orientation (x25)	3.83	9	6.63	0.95	14.41
Market orientation (x26)	4	8	5.98	0.89	14.81
Social participation (x27)	0.33	6.5	1.72	0.98	56.78
Utilization of cosmopolite source of information (x28)	1.3	2.43	1.78	0.18	10.36
Information seeking behavior (x29)	1.85	9.28	7.43	1.21	16.22
Training received (x30)	1	1080	76.20	173.59	227.81
Distance matrix (x31)	2.25	7.5	3.86	1.19	30.79
Drudgeries (x32)	1.8	10	4.04	1.58	39.12
Perception on discontinuance (y1)	1.42	7.42	4.96	1.28	25.79
Perception on rejection (y2)	2.25	8.25	5.89	1.44	24.52
Disagreement (y3)	2.87	8.62	6.23	1.23	19.68
Conflict (y4)	2.25	7.75	6.11	1.14	18.70
Reasons for dissonance (y5)	2.71	8.57	5.56	1.42	25.51
Reasons for reinvention (y6)	2.16	8.83	6.13	1.32	21.60
Confusion index (y7)	3.85	7.71	5.78	0.82	14.20
Social entropy (Y)	183.42	159641.8	44317.06	38193.02	86.18

Table 6.2 presents the distribution of variables in terms of Range, Standard deviation, and coefficient of variation of village, Chiroura.

It has been found from the study that the maximum **Age (x_1)** of the study group is 83 years and the minimum age is 15 years. The mean age group is found to be 47.76 years with the standard deviation is 15.63 for the total distribution taken for the study. Coefficient of variation denotes that CV of 'age' is 15 per cent, which shows that the very high level of consistency in the distribution of age.

The independent variable, **Education (x_2)** of farmer has been found to be the minimum1 (primary school) and the maximum 17 (up to post graduation). The mean education is found to be 10.72 with the standard deviation is 3.25 for the total distribution taken for the study. This independent variable showed coefficient of variation 30.31 per cent, which infers that the consistency in the distribution of education is high.

The independent variable, **Family education status (x_3)** has been found to be the minimum primary level and the maximum up to post graduation level. The mean of this variable is 12.77 with the standard deviation 3.04 for the total distribution taken for the study. The coefficient of variation of this variable is 23.82 per cent which shows the high level of consistency.

The independent variable, **Education aspiration (x_4)** of the respondents has been found to be the minimum 10 in years and the maximum 20 in years. The mean and the standard deviation are 15.52 and 2.39 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 15.40 per cent which shows the very high level of consistency.

The independent variable, **Family size (x_5)** has been found to be the minimum 3 and the maximum 25. The mean and the standard deviation of this independent variable are 7.81 and 3.85 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 49.24 per cent which shows the high level of consistency.

The independent variable, **Gender (x_6)** has been found to be the minimum 0.2 and the maximum 5. The mean and the standard deviation of this independent variable are 1.52 and 1.06 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 69.65 per cent showing the medium level of consistency in its distribution.

The independent variable, **Urbanization index (x_7)** has been found to be the minimum 1.2 and the maximum 70.6. The mean and the standard deviation of this independent variable are 16.08 and 18.52 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 115.19 per cent showing the low level of consistency.

The independent variable, **Occupation (x_8)** has been found to be the minimum score 1 showing priority for labor and the maximum 6 showing priority for service. The mean score of this independent variable is 5.64 and the standard deviation is 1 for the total distribution taken for the study. The coefficient of variation is 17.64 per cent which shows the high level of consistency in its distribution.

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The independent variable, **Cropping intensity (x_9)** has been found to be the minimum 100 and the maximum 166.66. The mean score of this variable is 207.76 and the standard deviation is 244.27 for the total distribution taken for the study. The coefficient of variation is 117.57 per cent which shows the low level of consistency in nature.

The independent variable, **Farm size (x_{10})** has been found to be the minimum score 0.75 and the maximum score 20. The mean and the standard deviation of this independent variable are 5.40 and 3.96 respectively for the total distribution taken for the study. The coefficient of variation is 73.28 per cent which shows the medium level of consistency.

The independent variable, **Expenditure allotment (x_{11})** has been found to be the minimum 5.85 per cent and the maximum 44.32 per cent in agriculture annually. The mean and the standard deviation of this variable are 20.86 and 8.72 respectively for the total distribution taken for the study. The coefficient of variation is 41.78 per cent which show the high level of consistency.

The independent variable, **Credit load (x_{12})** has been found to be the minimum 150 rupees per annum in agriculture and the maximum 64500 rupees per annum in agriculture. This variable has the mean value 11263.65 and the standard deviation is 128.38 for the total distribution taken for the study. The coefficient of variation is 128.38 per cent which shows the low level of consistency.

The independent variable, **Annual income (x_{13})** has been found to be the minimum 2500 and the maximum 66714.28. This variable has the mean value 19343.83 and the standard deviation has 13314.36 for the total distribution taken for the study. The coefficient of variation is 68.83 per cent which shows the medium level of consistency.

The independent variable, **Electricity consumption (x_{14})** has been found to be the minimum 7.53 and the maximum 83.33. This variable has the mean value 32.69 and the standard deviation has 15.32 for the total distribution taken for the study. The coefficient of variation is 46.85 per cent which shows the high level of consistency.

The independent variable, **Fuel consumption (x_{15})** has been found to be the minimum 150 and the maximum 11310 in terms of rupees. This variable has the mean value 1345.91 and the standard deviation 1876.26 for the total distribution taken for the study. The coefficient of variation is 138.67 per cent which shows the variable has got the low level of consistency.

The independent variable, **Irrigation index (x_{16})** has been found to be the minimum 53.84 per cent and the maximum 100 per cent. The mean value of this variable is 97.49 and the standard deviation is 7.62 for the total distribution taken for the study. The coefficient of variation of this variable is 7.87, showing that this variable has got the very high level of consistency.

The independent variable, **Adoption leadership (x_{17})** has been found to be the minimum 2.12 and the maximum 7.25. The mean value of this variable is 5.49 and the standard deviation 0.91 for the total distribution taken for the study. The coefficient of variation of this variable is 16.54 per cent which indicates that this variable has got the very high level of consistency.

The independent variable, **Scientific orientation (x_{18})** has been found to be the minimum 1.8 and the maximum 10. The mean value of this variable is 8.03 and the standard deviation is 1.31 for the total distribution taken for the study. The coefficient of variation of this variable is 12.26 per cent which shows that this variable has got the very high level of consistency.

The independent variable, **Independency (x_{19})** has been found to be the minimum 3.2 and the maximum 9.6. The mean value of this variable is 7.51 and the standard deviation is 1.38 for the total distribution taken for the study. The coefficient of variation of this variable is 18.33 per cent showing the variable has got the very high level of consistency.

The independent variable, **Innovation proneness (x_{20})** has been found to be the minimum 3.88 and the maximum 9. The mean value of this variable is 6.10 and the standard deviation is 0.77 for the total distribution taken for the study. The coefficient of variation of this variable is 12.68 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Risk orientation (x_{21})** has been found to be the minimum 6 and the maximum 9.5. The mean variable of this variable is 7.58 and the standard deviation is 0.70 for the total distribution taken for the study. The coefficient of variation of this variable is 9.22 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Economic motivation (x_{22})** has been found to be the minimum 4.87 and the maximum 8.25. The mean value of this variable is 6.55 and the standard deviation is 0.79 for the total distribution taken for the study. The coefficient of variation of this variable is 12.05 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Orientation towards competition (x_{23})** has been found to be the minimum 3.83 and the maximum 8.16. The mean value of this variable is 5.55 and the standard deviation is 0.93 for the total distribution taken for the study. The coefficient of variation of this variable is

16.70 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Planning orientation (x_{24})** has been found to be the minimum 4.16 and the maximum 7.83. The mean value of this variable is 5.73 and the standard deviation is 0.69 for the total distribution taken for the study. The coefficient of variation of this variable is 12.10 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Production orientation (x_{25})** has been found to be the minimum 3.83 and the maximum 9. The mean value of this variable is 6.63 and the standard deviation of this variable is 0.95 for the total distribution taken for the study. The coefficient of variation of this variable is 14.41 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Market orientation (x_{26})** has been found to be the minimum 4 and the maximum 8. The mean value of this variable is 5.98 and the standard deviation of this variable is 0.89 for the total distribution taken for the study. The coefficient of variation of this variable is 14.81 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Social participation (x_{27})** has been found to be the minimum 0.33, and the maximum 6.5. The mean value of this variable is 1.72, and the standard deviation is 0.98 for the total distribution taken for the study. The coefficient of variation of this variable is 56.78 per cent which shows that the variable has got the medium level of consistency.

The independent variable, **Utilization of cosmopolite source of information (x_{28})** has been found to be the minimum 1.3, and the maximum 2.43. The mean value of this variable is 1.78, and the standard deviation is 0.18 for the total distribution taken for the study. The coefficient of variation of this variable is 10.36 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Information seeking behavior (x_{29})** has been found to be the minimum 1.85, and the maximum 9.28. The mean value of this variable is 7.43 and the standard deviation is 1.21 for the total distribution taken for the study. The coefficient of variation of this variable is 16.22 per cent which indicates that the variable has got the very high level of consistency.

The independent variable, **Training received (x_{30})** has been found to be the minimum 1, and the maximum 1080. The mean value of this variable is 76.20, and the standard deviation is 173.59 for the total distribution taken for the study. The coefficient of variation of this variable is 227.81 per cent which shows that the variable has got the very high level of inconsistency.

The independent variable, **Distance matrix (x_{31})** has been found to be the minimum 2.25, and the maximum 7.5. The mean value of this variable is 3.86, and the standard deviation is 1.19 for the total distribution taken for the study. The coefficient of variation of this variable is 30.79 per cent which shows that the variable has got the high level of consistency.

The independent variable, **Drudgeries (x_{32})** has been found to be the minimum 1.8, and the maximum 10. The mean value of this variable is 4.04, and the standard deviation is 1.58 for the total distribution taken for the study. The coefficient of variation of this variable is 39.12 showing that the variable has got the high level of consistency.

The dependent variable, **Perception on discontinuance (y_1)** has been found to be the minimum 1.42 and the maximum 7.42. The mean value of this variable is 4.96, and the standard deviation is 1.28 for the total distribution taken for the study. The coefficient of variation of this variable is 25.79 per cent showing that the variable has got the very high level of consistency.

The dependent variable, **Perception on rejection (y_2)** has been found to be the minimum 2.25, and the maximum 8.25. The mean value of this variable is 5.89, and the standard deviation is 1.44 for the total distribution taken for the study. The coefficient of variation of this variable is 24.52per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Disagreement (y_3)** has been found to be the minimum 2.87, and the maximum 8.62. The mean value of this variable is 6.23, and the standard deviation is 1.23 for the total distribution taken for the study. The coefficient of variation of this variable is 19.68 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Conflict (y_4)** has been found to be the minimum 2.25, and the maximum 7.75. The mean value of this variable is 6.11, and the standard deviation is 1.14 for the total distribution taken for the study. The coefficient of variation of this variable is 18.70 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Reasons for dissonance (y_5)** has been found to the minimum 2.71, and the maximum 8.57. The mean value of this variable is 5.56, and the standard deviation is 1.42 for the total distribution taken for the study. The coefficient of variation of this variable is 25.51 per cent which shows that the variable has got the very high level of consistency.

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The dependent variable, **Reasons for reinvention (y_6)** has been found to be the minimum 2.16, and the maximum 8.83. The mean value of this variable is 6.13, and the standard deviation is 1.32 for the total distribution taken for the study. The coefficient of variation of this variable is 21.60 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Confusion index (x_7)** has been found to be the minimum 3.85, and the maximum 7.71. The mean value of this variable is 5.78, and the standard deviation of this variable is 0.82 for the total distribution taken for the study. The coefficient of variation of this variable is 14.20 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Social entropy (Y)** has been found to be the minimum 183.42, and the maximum 159641.8. The mean value of this variable is 44317.06, and the standard deviation is 38193.02 for the total distribution taken for the study. The coefficient of variation of this variable is 86.18 per cent which shows that the variable has got the medium level of consistency.

Table 6.3: Distribution of variables in terms of Range, Standard deviation and Coefficient of variation of Pooled village, (Ghoragachha and Chiroura)

N = 150					
Independent variables	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**CV (%)**
Age (x1)	15	83	42.03	15.03	35.75
Education (x2)	1	17	8.55	4.18	48.94
Family education status (x3)	1	17	11.46	3.66	31.90
Educational aspiration (x4)	1	20	14.31	2.96	20.68
Family size (x5)	3	25	6.56	3.50	53.41
Gender (x6)	0.2	6	1.53	0.98	64.39
Urbanization index (x7)	0.5	70.6	10.77	15.06	139.77
Occupation (x8)	1	6	5.53	1.04	18.81
Cropping intensity (x9)	100	300	207.85	179.34	86.28
Farm size (x10)	0.15	20	3.17	3.62	114.04
Expenditure allotment (x11)	5.85	79.4	24.44	13.08	53.52
Credit load (x12)	125	64500	9198.06	10547.94	114.68
Annual income (x13)	204.8	137200	21040.44	17845.09	84.81
Electricity consumption (x14)	5.83	150	39.22	24.27	61.87
Fuel consumption (x15)	4.8	11310	1738.51	1991.06	114.32
Irrigation index (x16)	53.84	100	98.41	6.02	6.12
Adoption leadership (x17)	1.5	8.12	5.78	1.08	18.74
Scientific orientation (x18)	1.8	10	7.87	1.20	15.24
Independency (x19)	3.2	9.6	7.66	1.27	16.64
Innovation proneness (x20)	3.33	9	6.34	0.91	14.41
Risk orientation (x21)	6	9.66	7.71	0.74	9.62
Economic motivation (x22)	2.25	8.25	6.41	0.92	14.31
Orientation towards competition (x23)	3.83	8.66	5.78	1.03	17.79
Management orientation (x24)	4.16	8.83	5.87	0.82	13.92
Production orientation (x25)	3.83	9	6.67	0.88	13.24
Market orientation (x26)	4	9.16	6.69	1.17	17.48
Social participation (x27)	0.33	6.5	1.67	0.79	47.53
Utilization of cosmopolite source of information (x28)	1	2.43	1.82	0.26	14.48
Information seeking behavior (x29)	1	9.57	7.59	1.17	15.48
Training received (x30)	1	2160	89.57	251.81	281.15
Distance matrix (x31)	2.25	15.75	5.05	2.12	42.09
Drudgeries (x32)	0.5	10	4.02	1.52	37.76
Perception on discontinuance (y1)	1.42	9.14	5.86	1.53	26.19
Perception on rejection (y2)	1.87	8.6	6.27	1.40	22.32
Disagreement (y3)	2.87	8.87	6.42	1.17	18.17
Conflict (y4)	2.25	8.5	6.47	1.06	16.36
Reasons for dissonance (y5)	2	9.14	6.40	1.54	23.98
Reasons for reinvention (y6)	2.16	8.83	6.12	1.28	20.85
Confusion index (y7)	3	8.42	6.03	1.06	17.59
Social entropy (Y)	139.55	298575	70404.77	58970.65	83.76

Table 6.3 presents the distribution of variables in terms of range, SD, and CV% of Pooled village.

It has been found from the study that the maximum **Age (x_1)** of the study group is 83 years, and the minimum age is 15 years. The mean age group has been found 42.03 years with the standard deviation, 15.03 for the total distribution taken for the study. Coefficient of variation denotes that coefficient of variation of **Age (x_1)** is 35.75 per cent, which shows that the high level of consistency in the distribution of age.

The independent variable, **Education (x_2)** of farmer has been found to be minimum 1 (primary school) and the maximum 17 (up to post graduation). The mean education is found to be 8.55 with the standard deviation is 4.18 for the total distribution taken for the study. The coefficient of variation of

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this variable is 48.94 per cent which shows that the high level consistency in its distribution.

The independent variable, **Family education status (x_3)** has been found to be the minimum score 1 (primary level) and the maximum score 17 (up to post graduation level). The mean of this variable is 11.46 and the standard deviation is 3.66 for the total distribution taken for the study. The coefficient of variation of this variable is 31.90 per cent which shows the high level of consistency.

The independent variable, **Education aspiration (x_4)** of the respondents has been found to be the minimum 1 in years, and maximum 20 in years. The mean and the standard deviation are 14.31 and 2.96 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 20.68 per cent which shows the very high level of consistency.

The independent variable, **Family size (x_5)** has been found to be the minimum 3 and the maximum 25. The mean and the standard deviation of this independent variable are 6.56, and 3.50 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 53.41 per cent which shows the medium level of consistency.

The independent variable, **Gender (x_6)** has been found to be the minimum 0.2 and the maximum 6. The mean and the standard deviation of this independent variable are 1.53, and 0.98 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 64.39 per cent which shows the medium level of consistency in nature.

The independent, **Urbanization index (x_7)** has been found to be the minimum 0.5 and the maximum 70.6. The mean and the standard deviation of this independent variable are 10.77, and 15.06 respectively for the total distribution taken for the study. The coefficient of variation of this variable is 139.77 per cent which shows the low level of consistency.

The independent variable, **Occupation (x_8)** has been found to be the minimum score 1 showing priority for labor, and the maximum 6 showing priority for service. The mean score of this independent variable is 5.53 and the standard deviation is 1.04 for the total distribution taken for the study. The coefficient of variation is 18.81 per cent which shows the high level of consistency in nature.

The independent variable, **Cropping intensity (x_9)** has been found to be the minimum 100 and the maximum 300. The mean score of this variable is 207.85, and the standard deviation is 179.34 for the total distribution taken for the study. The coefficient of variation is 86.28 per cent which shows the medium level of consistency in nature.

The independent variable, **Farm size (x_{10})** has been found to be the minimum score 0.15 and the maximum score 20. The mean and the standard deviation of this independent variable are 3.17 and 3.62 respectively for the total distribution taken for the study. The coefficient of variation is 114.04 per cent which shows the medium level of consistency.

The independent variable, **Expenditure allotment (x_{11})** has been found to be the minimum 5.85 per cent, and the maximum 79.4 per cent in agriculture annually. The mean and the standard deviation of this variable are 24.44 and 13.08 respectively for the total distribution taken for the study. The coefficient of variation is 53.52 per cent which shows the medium level of consistency.

The independent variable, **Credit load (x_{12})** has been found to be the minimum 125 rupees per annum in agriculture and the maximum 64500 rupees per annum in agriculture. This variable has the mean value 9198.06 and the standard deviation is 10547.94 for the total distribution taken for the study. The coefficient of variation is 114.68 per cent which shows low level of consistency.

The independent variable, **Annual income (x_{13})** has been found to be the minimum 204.8 and the maximum 137200. This variable has the mean value 21040.44 and the standard deviation has 17845.09 for the total distribution taken for the study. The coefficient of variation is 84.81 per cent which shows the medium level of consistency.

The independent variable, **Electricity consumption (x_{14})** has been found to be the minimum 5.83 and the maximum 150. This variable has mean value 39.22 and the standard deviation has 24.27 for the total distribution taken for the study. The coefficient of variation is 61.87 per cent which shows the medium level of consistency.

The independent variable, **Fuel consumption (x_{15})** has been found to be the minimum 4.8 and the maximum 11310 in terms of rupees. This variable has mean value 1738.51 and the standard deviation 1991.06 for the total distribution taken for the study. The coefficient of variation is 114.32 per cent which shows the variable has got the low level of consistency.

The independent variable, **Irrigation index (x_{16})** has been found to be the minimum 53.84 per cent and the maximum 100 per cent. The mean value of this variable is 98.41 and the standard deviation is 6.02 for the total distribution taken for the study. The coefficient of variation of this variable is 6.12 showing that this variable has got the very high level of consistency.

The independent variable, **Adoption leadership (x_{17})** has been found to be the minimum 1.5 and the maximum 8.12. The mean value of this variable is 5.78 and the standard deviation 1.08 for the total distribution taken for the study. The coefficient of variation of this variable is 18.74 per cent which

indicates that this variable has got the very high level of consistency.

The independent variable, **Scientific orientation (x_{18})** has been found to be the minimum 1.8 and the maximum 10. The mean value of this variable is 7.87 and the standard deviation is 1.20 for the total distribution taken for the study. The coefficient of variation of this variable is 15.24 per cent which shows that this variable has got the very high level of consistency.

The independent variable, **Independency (x_{19})** has been found to be the minimum 3.2 and the maximum 9.6. The mean value of this variable is 7.66 and the standard deviation is 1.27 for the total distribution taken for the study. The coefficient of variation of this variable is 16.64 per cent showing the variable has got the very high level of consistency.

The independent variable, **Innovation proneness (x_{20})** has been found to be the minimum 3.33 and the maximum 9. The mean value of this variable is 6.34 and the standard deviation is 0.91 for the total distribution taken for the study. The coefficient of variation of this variable is 14.41 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Risk orientation (x_{21})** has been found to be the minimum 6 and the maximum 9.66. The mean variable of this variable is 7.71 and the standard deviation is 0.74 for the total distribution taken for the study. The coefficient of variation of this variable is 9.62 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Economic motivation (x_{22})** has been found to be the minimum 2.25 and the maximum 8.25. The mean value of this variable is 6.41 and the standard deviation is 0.92 for the total distribution taken for the study. The coefficient of variation of this variable is 14.31 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Orientation towards competition (x_{23})** has been found to be the minimum 3.83 and the maximum 8.66. The mean value of this variable is 5.78 and the standard deviation is 1.03 for the total distribution taken for the study. The coefficient of variation of this variable is 17.79 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Planning orientation (x_{24})** has been found to be the minimum 4.16 and the maximum 8.83. The mean value of this variable is 5.87 and the standard deviation is 0.82 for the total distribution taken for the study. The coefficient of variation of this variable is 13.92 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Production orientation (x_{25})** has been found to be the minimum 3.83 and the maximum 9. The mean value of this variable is 6.67 and the standard deviation of this variable is 0.88 for the total distribution taken for the study. The coefficient of variation of this variable is 13.24 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Marketing orientation (x_{26})** has been found to be the minimum 4 and the maximum 9.16. The mean value of this variable is 6.69 and the standard deviation of this variable is 1.17 for the total distribution taken for the study. The coefficient of variation of this variable is 17.48 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Social participation (x_{27})** has been found to be the minimum 0.33 and the maximum 6.5. The mean value of this variable is 1.67 and the standard deviation 0.79 for the total distribution taken for the study. The coefficient of variation of this variable is 47.53 per cent which shows that the variable has got the high level of consistency.

The independent variable, **Utilization of cosmopolite source of information (x_{28})** has been found to be the minimum 1 and the maximum 2.43. The mean value of this variable is 1.82 and the standard deviation 0.26 for the total distribution taken for the study. The coefficient of variation of this variable is 14.48 per cent which shows that the variable has got the very high level of consistency.

The independent variable, **Information seeking behavior (x_{29})** has been found to be the minimum 1 and the maximum 9.57. The mean value of this variable is 7.59 and the standard deviation 1.17 for the total distribution taken for the study. The coefficient of variation of this variable is 15.48 per cent which indicates that the variable has got the very high level of consistency.

The independent variable, **Training received (x_{30})** has been found to be the minimum 1 and the maximum 2160. The mean value of this variable is 89.57 and the standard deviation is 251.81 for the total distribution taken for the study. The coefficient of variation of this variable is 281.15 per cent which shows that the variable has got the very high level of inconsistency.

The independent variable, **Distance matrix (x_{31})** has been found to be the minimum 2.25 and the maximum 15.75. The mean value of this variable is 5.05 and the standard deviation is 2.12 for the total distribution taken for the study. The coefficient of variation of this variable is 42.09 per cent which shows that the variable has got the high level of consistency.

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The independent variable, **Drudgeries (x_{32})** has been found to be the minimum 0.5 and the maximum 10. The mean value of this variable is 4.02 and the standard deviation is 1.52 for the total distribution taken for the study. The coefficient of variation of this variable is 37.76 showing that the variable has got the high level of consistency.

The dependent variable, **Perception on discontinuance (y_1)** has been found to be the minimum 1.42 and the maximum 9.14. The mean value of this variable is 5.86 and the standard deviation 1.53 for the total distribution taken for the study. The coefficient of variation of this variable is 26.19 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Perception on rejection (y_2)** has been found to be the minimum 1.87 and the maximum 8.6. The mean value of this variable is 6.27 and the standard deviation 1.40 for the total distribution taken for the study. The coefficient of variation of this variable is 22.32per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Disagreement (y_3)** has been found to be the minimum 2.87 and the maximum 8.87. The mean value of this variable is 6.42 and the standard deviation is 1.17 for the total distribution taken for the study. The coefficient of variation of this variable is 18.17 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Conflict (y_4)** has been found to be the minimum 2.25 and the maximum 8.5. The mean value of this variable is 6.47 and the standard deviation is 1.06 for the total distribution taken for the study. The coefficient of variation of this variable is 16.36 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Reasons for dissonance (y_5)** has been found to be the minimum 2 and the maximum 9.14. The mean value of this variable is 6.40 and the standard deviation is 1.54 for the total distribution taken for the study. The coefficient of variation of this variable is 23.98 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Reasons for reinvention (y_6)** has been found to be the minimum 2.16 and the maximum 8.83. The mean value of this variable is 6.12 and the standard deviation is 1.28 for the total distribution taken for the study. The coefficient of variation of this variable is 20.85 per cent which shows the variable has got the very high level of consistency.

The dependent variable, **Confusion index (x_7)** has been found to be the minimum 3 and the maximum 8.42. The mean value of this variable is 6.03 and the standard deviation of this variable is 1.06 for the total distribution taken for the study. The coefficient of variation of this variable is 17.59 per cent which shows that the variable has got the very high level of consistency.

The dependent variable, **Social entropy (Y)** has been found to be the minimum 139.55 and the maximum 298575. The mean value of this variable is 70404.77 and the standard deviation is 58970.65 for the total distribution taken for the study. The coefficient of variation of this variable is 83.76 per cent which shows that the variable has got the medium level of consistency.

Table 6.4: Correlation coefficient of Perception on discontinuance (y1) with 32 independent variables of village, Ghoragachha, West Bengal

	N = 75
Independent Variables	**Coefficient of Correlation (r)**
Age (x_1)	0.260*
Education (x_2)	-0.089
Family Education Status (x_3)	0.026
Educational Aspiration (x_4)	0.018
Family Size (x_5)	0.287*
Gender (x_6)	-0.059
Urbanization Index (x_7)	0.097
Occupation (x_8)	0.020
Cropping Intensity (x_9)	-0.023
Farm size (x_{10})	0.109
Expenditure Allotment (x_{11})	0.124
Credit Load (x_{12})	0.101
Annual Income (x_{13})	0.068
Electricity Consumption (x_{14})	-0.108
Fuel Consumption (x_{15})	0.031
Irrigation Index (x_{16})	0.000
Adoption Leadership (x_{17})	0.427**
Scientific Orientation (x_{18})	0.234*
Independency (x_{19})	0.106
Innovation Proneness (x_{20})	0.248*
Risk Orientation (x_{21})	0.378**
Economic Motivation (x_{22})	0.063
Orientation Towards Competition (x_{23})	0.272*
Management Orientation (x_{24})	0.211
Production Orientation (x_{25})	0.060
Market Orientation (x_{26})	0.356**
Social Participation (x_{27})	0.246*
Utilization of Cosmopolite Source of Information (x_{28})	0.298**
Information Seeking Behavior (x_{29})	0.468**
Training Received (x_{30})	-0.011
Drudgeries (x_{31})	-0.014
Distance Matrix (x_{32})	-0.010
*Significant at 0.05% **Significant at 0.01%	

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Revelation

It has been found that the following independent variables *viz.* Age (x_1), Family size (x_5), Adoption leadership (x_{17}), Scientific orientation (x_{18}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Orientation towards competition (x_{23}), Market orientation (x_{26}), Social participation (x_{27}), Utilization of cosmopolite source of information (x_{28}) and Information seeking behavior (x_{29}), have recorded significant and positive correlation with the dependent variable Perception on discontinuance (y_1).

Implication

Discontinuance is the logical or inducted culmination of a technology in practice in favor of accessing better alternatives or saving the continuity of present technology from possible or deemed losses as well as damages. This is a post facto consequence subsequent to an adoption of an innovation.

The table 6.4 suggests that the variable, **Age (x_1)** has a positive contribution on the incidence of discontinuance. This implies that respondents of higher age group are gradually disillusioned of continuing technology, reluctant to continue the technology further because of its non remunerative performance either.

The higher **Family size (x_5)** has also the propensity towards discontinuance has also gone up. This kind of discontinuance relegated to a higher family size may be due to poor economic return accrued to the family through its continuation.

The variable, **Adoption leadership (x_{17})** has been unique leadership behavior that promotes adoption of innovation that makes farm economy more productive and remunerative. Thus adoption leadership has recorded a positive and significant relationship with innovation and invention by favoring a logical discontinuance of the non remunerative agricultural practices.

The variable, **Innovation proneness (x_{20})** also has recorded positive and significant correlation with discontinuance. Market orientations have moved isochronously to foster the process of discontinuance to welcome the innovations.

The other side of the story is that every discontinuity has got a jerk and jeopardy that are enrooted into our complex social and market behavior.

Social participation (x_{27}) and Utilization of cosmopolite source of information (x_{28}), and Information seeking behavior (x_{29}) all of them, have amounted to discontinuance because all the process availed developed us of information for inventory *vis-a-vis* a plethora of innovation that might have influenced the farmers to go for discontinuance of the conventional technology.

Table 6.5: Stepwise regression analysis of Perception on discontinuance (y1) versus 32 independent variables of village Ghoragachha: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R square Adjusted**	**SE Estimated**
Information seeking behavior (x29)	0.373	0.017	0.347	3.469**	0.599	0.36	0.33	0.99
Risk orientation (x21)	0.510	0.157	0.322	3.250**				
Family size (x5)	0.121	0.046	0.260	2.661**				

Revelation

The table 6.5 reveals that the following independent variables viz. **Information seeking behavior (x_{29}), Risk orientation (x_{21}) and Family size (x_5)** have been retained at the last step of screening. The R^2 being 0.36, it is to infer that all the above predictors have explained 36 per cent variance embedded in the predicted variable **Perception on discontinuance (y_1)**.

Implication

Regression analysis helps estimate the causal effect of a predictor variables and the respective consequent variable. The step wise regression analysis helps drifts out the variables having less impact on the consequent variable in different step and at the last step it would retained the variable having the higher possible substantive impact on the consequent variable, **Perception on discontinuance (y_1)**.

The table 6.5 has elicited that the step wise regression analysis, three causal variables *viz.* **Information seeking behavior (x29), Risk orientation (x21), Family size (x5)** have causal strategic implications in handling discontinuance behavior among the respondent of village Ghoragachha.

Table 6.6: Path analysis of Perception on discontinuance (y1) versus 32 exogenous variables of village Ghoragachha, West Bengal

N = 75						
Independent variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.260*	0.132	0.128	0.082(x21)	0.071(x27)	-0.038(x3)
Education (x2)	-0.089	0.153	-0.242	-0.099(x3)	-0.085(x21)	0.069(x10)

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Family Education Status (x3)	0.026	-0.211	0.237	-0.111(x4)	0.075(x5)	0.072(x2)
Educational Aspiration (x4)	0.018	-0.141	0.159	-0.168(x3)	0.078(x5)	0.066(x2)
Family Size (x5)	0.287*	0.306	-0.019	-0.052(x2)	0.043(x26)	-0.037(x21)
Gender (x6)	-0.059	-0.005	-0.054	0.061(x13)	-0.042(x26)	-0.038(x5)
Urbanization Index (x7)	0.097	0.171	-0.074	-0.115(x13)	0.058(x12)	-0.058(x21)
Occupation (x8)	0.020	0.039	-0.019	0.049(x21)	-0.043(x29)	-0.031(x5)
Cropping Intensity (x9)	-0.023	0.03	-0.053	0.081(x21)	-0.052(x10)	0.051(x17)
Farm size (x10)	0.109	0.366	-0.257	0.296(x13)	0.101(x11)	-0.061(x26)
Expenditure Allotment (x11)	0.124	0.141	-0.017	0.263(x10)	-0.26(x13)	0.088(x17)
Credit Load (x12)	0.101	0.126	-0.025	-0.156(x13)	0.079(x7)	0.078(x10)
Annual Income (x13)	0.068	-0.397	0.465	0.273(x10)	0.093(x11)	0.09(x17)
Electricity Consumption (x14)	-0.108	-0.079	-0.029	-0.08(x5)	0.063(x10)	-0.062(x13)
Fuel Consumption (x15)	0.031	-0.022	0.053	0.211(x10)	0.055(x11)	-0.046(x3)
Irrigation Index (x16)	0.000	0.102	-0.102	0.064(x22)	-0.039(x19)	0.037(x29)
Adoption Leadership (x17)	0.427**	0.378	0.049	0.128(x21)	-0.098(x22)	-0.095(x13)
Scientific Orientation (x18)	0.234*	-0.104	0.338	0.137(x21)	0.097(x17)	0.091(x26)
Independency (x19)	0.106	-0.152	0.258	0.117(x21)	0.101(x17)	0.071(x26)
Innovation Proneness (x20)	0.248*	0.003	0.245	0.117(x26)	-0.117(x22)	0.092(x17)
Risk Orientation (x21)	0.378**	0.37	0.008	0.131(x17)	0.105(x26)	-0.048(x19)
Economic Motivation (x22)	0.063	-0.262	0.325	0.142(x17)	-0.077(x13)	0.065(x29)
Orientation Towards Competition (x23)	0.272*	0.058	0.214	0.105(x17)	0.068(x21)	0.061(x29)
Management Orientation (x24)	0.211	0.112	0.323	0.128(x21)	0.099(x17)	0.07(x26)
Production Orientation (x25)	0.060	0.003	0.057	0.083(x21)	-0.068(x3)	0.051(x10)
Market Orientation (x26)	0.356**	0.276	0.080	0.141(x21)	0.085(x17)	-0.082(x10)
Social Participation (x27)	0.246*	-0.02	0.266	0.112(x10)	0.099(x5)	-0.092(x13)
Utilization of Cosmopolite Source of Information (x28)	0.298**	-0.034	0.332	0.144(x17)	0.104(x29)	0.095(x10)
Information Seeking Behavior (x29)	0.468**	0.17	0.298	0.203(x17)	0.092(x26)	0.092(x10)
Training Received (x30)	-0.011	-0.073	-0.084	-0.05(x3)	0.041(x26)	-0.039(x13)
Drudgeries (x31)	-0.014	0.001	-0.015	-0.069(22x)	0.051(x5)	-0.037(x10)
Distance Matrix (x32)	-0.010	0.099	-0.109	0.028(x17)	0.02(x29)	-0.02(x24)
Residual Effect	0.66					
Highest count	Innovation proneness (x21): 13 times					

Revelation

The variable, **Annual Income (x_{13})** has exerted highest both direct effect and indirect effect on **Perception on discontinuance (y_1).** The variable, **Innovation proneness (x_{21})** has routed the highest indirect effect of as many as thirteen variables through the variable Innovation proneness. The residual effect being 0.66, it is to infer that even with the combination of all these thirty two exogenous variables, 34 per cent variance embedded with **Perception on discontinuance (y_1)**, has been explained so far.

Implication

So, it is discernible that the variable, **Annual Income (x_{13})** has acted as an inhibitor to continuity of technology. The discontinuity of any technology has been resulted not only to its economic incompatibility but also may be due to innovation proneness of respondent driving in for a better choice, called innovation, in order to upgrade his livelihood and farm ecology.

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Table 6.7: Correlation coefficient of Perception on rejection (y2) with 32 independent variables of village Ghoragachha, West Bengal

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	-0.068
Education (x2)	-0.0112
Family Education Status (x3)	0.012
Educational Aspiration (x4)	0.051
Family Size (x5)	0.084
Gender (x6)	0.159
Urbanization Index (x7)	-0.059
Occupation (x8)	-0.018
Cropping Intensity (x9)	0.067
Farm size (x10)	0.025
Expenditure Allotment (x11)	0.191
Credit Load (x12)	0.082
Annual Income (x13)	0.067
Electricity Consumption (x14)	0.029
Fuel Consumption (x15)	0.075
Irrigation Index (x16)	0.197
Adoption Leadership (x17)	0.278*
Scientific Orientation (x18)	0.110
Independency (x19)	0.036
Innovation Proneness (x20)	0.285*
Risk Orientation (x21)	0.234*
Economic Motivation (x22)	0.146
Orientation Towards Competition (x23)	0.001
Management Orientation (x24)	0.000
Production Orientation (x25)	-0.174
Market Orientation (x26)	0.214
Social Participation (x27)	0.148
Utilization of Cosmopolite Source of Information (x28)	0.221
Information Seeking Behavior (x29)	0.288*
Training Received (x30)	-0.015
Drudgeries (x31)	0.032
Distance Matrix (x32)	-0.195
*Significant at 0.05%	

Revelation

The following variables *viz.* Adoption leadership (x_{17}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Information seeking behavior (x_{29}) have been recorded significant and positive correlation with the Perception on rejection (y_2)

Implication

The table 6.7 suggests that the variable, **Adoption leadership (x_{17})** has a positive contribution on rejection of technology. It also suggests that when any crop field experiences a transformation from its rain-fed agro-ecosystem to irrigation based farm ecosystem choices go open for the entry of the basket of crop enterprises. So, rejection of any technology wide opens the prospect of alternative innovation seeking for higher elasticity of input-output ratio.

The variable, **Independency (x_{20})** is also positively and significantly correlated with the **Perception on rejection (y_2).** It shows that rejection is the building block for generating independency. A person having a sense of independency, a mental framework for free thoughts and always seeking alternatives has the tendency to reject mundane idea and welcome other innovations.

Table 6.8: Stepwise regression analysis of Perception on rejection (y_2) versus 32 independent variables of village Ghoragachha, West Bengal: Predominating variables retained at the last Step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R square Adjusted**	**SE Estimated**
Information seeking behavior (x29)	0.349	0.122	0.315	2.851**	0.368	0.136	0.112	1.18
Drudgeries (x32)	-0.197	0.094	-0.231	-2.095*				

Revelation

It has been found that the two variables *viz.* **Information seeking behavior (x_{29}) and Distance Matrix (x_{32})** have been retained at the last step. R^2 being 0.136, it is to infer that all the retained variables have explained 13.6 per cent of the variance embedded in **Perception on rejection (y_2).**

Implication

Information seeking behavior pumps in a capsule of stimuli rushing for better choices and at the same time strategies location of market, proximity and resourcefulness, have triggered the process of logical rejection in favor of utilizing adoption.

Table 6.9: Path Analysis of Perception on rejection (y_2) versus 32 exogenous variables of village Ghoragachha, West Bengal

N = 75						
Independent variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.068	-0.175	0.107	0.042(x21)	0.034(x29)	-0.031(x25)
Education (x2)	-0.112	-0.072	-0.040	0.121(x4)	0.071(x11)	-0.053(x3)

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Family Education Status (x3)	0.012	-0.113	0.125	0.222(x4)	-0.103(x25)	0.101(x11)
Educational Aspiration (x4)	0.051	0.280	-0.229	0.089(x3)	0.080(x11)	-0.075(x25)
Family Size (x5)	0.084	-0.081	0.165	0.071(x4)	0.052(x29)	0.035(x14)
Gender (x6)	-0.159	-0.027	-0.132	0.054(x13)	0.050(x11)	-0.036(x25)
Urbanization Index (x7)	-0.059	0.068	-0.127	-0.102(x13)	0.072(x12)	0.063(x29)
Occupation (x8)	-0.018	0.000	-0.018	0.084(x23)	-0.076(x29)	0.042(x24)
Cropping Intensity (x9)	0.067	0.193	-0.126	0.075(x25)	-0.072(x11)	0.041(x21)
Farm size (x10)	0.025	0.183	0.208	0.405(x11)	-0.261(x13)	0.075(x29)
Expenditure Allotment (x11)	0.191	0.564	-0.373	-0.230(x13)	-0.132(x10)	0.056(x29)
Credit Load (x12)	0.082	0.156	-0.074	-0.138(x13)	0.055(x29)	-0.039(x10)
Annual Income (x13)	0.067	-0.351	0.418	0.370(x11)	-0.137(x10)	0.068(x29)
Electricity Consumption (x14)	0.029	-0.132	0.161	0.090(x11)	-0.054(x13)	0.039(x23)
Fuel Consumption (x15)	0.075	0.008	0.067	0.220(x11)	-0.133(x13)	-0.106(x10)
Irrigation Index (x16)	0.197	0.210	-0.013	0.065(x29)	0.057(x20)	-0.054(x22)
Adoption Leadership (x17)	0.278*	0.059	0.219	0.131(x11)	0.088(x20)	-0.084(x13)
Scientific Orientation (x18)	0.110	0.110	0.000	0.135(x29)	-0.111(x25)	-0.076(x24)
Independency (x19)	0.036	-0.018	0.054	0.060(x21)	-0.060(x23)	-0.060(x24)
Innovation Proneness (x20)	0.285*	0.363	-0.078	-0.098(x22)	0.095(x29)	-0.078(x24)
Risk Orientation (x21)	0.234*	0.190	0.044	0.086(x20)	-0.078(x24)	-0.072(x25)
Economic Motivation (x22)	0.146	-0.219	0.365	0.162(x20)	0.139(x11)	0.114(x29)
Orientation Towards Competition (x23)	-0.001	-0.179	0.178	0.107(x29)	-0.096(x24)	0.037(x25)
Management Orientation (x24)	0.000	-0.226	0.226	0.126(x20)	0.091(x29)	-0.076(x23)
Production Orientation (x25)	-0.174	-0.321	0.147	0.052(x20)	-0.048(x24)	0.045(x9)
Market Orientation (x26)	0.214	-0.066	0.280	0.154(x20)	0.099(x29)	0.072(x21)
Social Participation (x27)	0.148	0.088	0.060	0.145(x11)	0.093(x4)	0.092(x29)
Utilization of Cosmopolite Source of Information (x28)	0.221	0.035	0.186	0.183(x29)	0.165(x11)	0.104(x20)
Information Seeking Behavior (x29)	0.288*	0.298	-0.010	0.115(x20)	0.106(x11)	-0.083(x22)
Training Received (x30)	-0.015	-0.107	0.092	0.064(x11)	0.055(x29)	0.038(x4)
Drudgeries (x31)	0.032	-0.140	0.172	0.140(x31)	0.067(x20)	-0.057(x22)
Distance Matrix (x32)	-0.195	-0.086	-0.109	0.049(x4)	-0.046(x21)	-0.041(x24)
Residual effect	0.724					
Highest count	Information Seeking Behavior (x29): 18					

Revelation

It has been evinced that the variable, **Expenditure allotment (x_{11})** has exerted the highest direct effect on **Perception of rejection (y_2)**, whereas the variable, **Annual Income (x_{13})** has exerted the highest indirect effect on the same. Residual effect being 0.724, it is to infer that even with the combination of 32 exogenous variable 27.6 per cent of the variance embedded in the dependent variable, **Perception on rejection (y_2)** has been explained so far.

Implication

In farming system dynamics, both adoption and rejection decision are being characterize with the resource capability of farmers *per se.* The variable, **Annual income (x_{13})** on the other hand has shown the companionship of interaction with the rejection decision while getting network in a complex variable interaction, ultimately adding to a state of social entropy.

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The variable, **Information seeking behavior (x_{29})** has routed highest indirect effect as many as eighteen variables to justify that rejection has been a predominant behavior that has been influenced by the exposure of the respondent to Cosmopolite source of information.

Table: 6.10: Correlation coefficient of Disagreement (y_3) with 32 independent variables of village Ghoragachha, West Bengal

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.110
Education (x2)	-0.216
Family Education Status (x3)	-0.134
Educational Aspiration (x4)	-0.088
Family Size (x5)	-0.220
Gender (x6)	0.038
Urbanization Index (x7)	0.110
Occupation (x8)	0.231*
Cropping Intensity (x9)	-0.173
Farm size (x10)	-0.117
Expenditure Allotment (x11)	-0.203
Credit Load (x12)	0.003
Annual Income (x13)	-0.089
Electricity Consumption (x14)	0.106
Fuel Consumption (x15)	0.011
Irrigation Index (x16)	0.121
Adoption Leadership (x17)	0.101
Scientific Orientation (x18)	0.105
Independency (x19)	-0.180
Innovation Proneness (x20)	0.097
Risk Orientation (x21)	0.050
Economic Motivation (x22)	-0.037
Orientation Towards Competition (x23)	-0.245*
Management Orientation (x24)	-0.010
Production Orientation (x25)	-0.132
Market Orientation (x26)	0.164
Social Participation (x27)	-0.182
Utilization of Cosmopolite Source of Information (x28)	0.064
Information Seeking Behavior (x29)	0.000
Training Received (x30)	-0.094
Drudgeries (x31)	-0.109
Distance Matrix (x32)	0.104
*Significant at 0.05%	

Revelation

Table 6.10 suggests that the variable, **Occupation (x_8)** have recorded positive and significant correlation with the dependent variable, **Disagreement (y_3).** It has also been found that the variable, **Orientation towards competition (x_{22})** is significantly but negatively correlated with the dependent variable, **Disagreement (y_3)**.

Implication

Disagreement is the disposition of non-compliance with a given proposal or a kind of discord to any traditional view. In the present study it has been evinced that variable occupation has recorded positive and significant correlation with **Disagreement (y_3)**. The variable, **Occupation (x_8)** while keeps earning new status and higher acquisition in a social system, here in the rural system has started showing gradual non-compliance with the recommended package of practice, deemed to have lost their technological and economic efficacy.

The other variable, **Orientation towards competition (x_{23})** has recorded a significant but negative correlation with the dependent variable, **Disagreement (y_3).** This has led to an inference that disagreement has been associated with competition ability of the farmers *i.e*. higher will be the competition lower will be disagreement.

Table 6.11: Stepwise regression analysis Disagreement (y_3) versus 32 independent variables of village Ghoragachha, West Bengal: Predominating variables retained at the last Step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R square Adjusted**	**SE Estimated**
Orientation towards competition (x23)	-0.256	0.111	-0.255	-2.296*	0.334	0.112	0.087	1.03
Education (x2)	-0.063	0.31	-0.228	-2.048*				

Revelation

It has been found that the two variables *viz.* **Orientation towards Competition (x_{23})** and **Education(x_2)** have been retained at the last step of screening. R^2 being 0.112, it is to infer that both the predicted variable have explained 11.2 per cent of the variance embedded in the dependent variable, **Disagreement (y_3)**.

Implication

The variable, **Orientation towards Competition (x_{23})** has got a subtle impact on the decision process towards adoption or disposing of disagreement of any perceived innovation and motivation based decision are being organized by the respondents' educational pursuits.

Table 6.12: Path Analysis of Disagreement (y_3) versus 32 exogenous variables of village, Ghoragachha, West Bengal

N = 75						
Independent variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.110	0.003	0.107	0.106(x26)	-0.039(x29)	-0.028(x19)

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Education (x2)	-0.216	-0.003	-0.213	-0.062(x26)	-0.062(x16)	0.056(x3)
Family Education Status (x3)	-0.134	-0.119	-0.015	0.104(x26)	-0.061(x4)	-0.054(x29)
Educational Aspiration (x4)	-0.088	-0.078	-0.010	-0.095(x3)	0.079(x26)	0.049(x17)
Family Size (x5)	-0.220	-0.139	-0.081	0.064(x26)	-0.060(x29)	-0.051(x11)
Gender (x6)	0.038	-0.087	0.125	-0.063(x26)	0.044(x32)	-0.039(x19)
Urbanization Index (x7)	0.110	0.244	-0.134	-0.106(x12)	0.073(x29)	-0.065(x13)
Occupation (x8)	0.231*	0.004	0.227	0.088(x29)	0.084(x23)	0.061(x19)
Cropping Intensity (x9)	-0.173	-0.115	-0.058	0.058(x17)	-0.040(x10)	-0.039(x7)
Farm size (x10)	-0.117	0.280	-0.397	-0.175(x11)	-0.168(x13)	-0.093(x26)
Expenditure Allotment (x11)	-0.203	-0.244	0.041	0.202(x10)	-0.147(x13)	0.101(x17)
Credit Load (x12)	0.003	-0.229	0.232	0.112(x7)	-0.089(x13)	-0.064(x29)
Annual Income (x13)	-0.089	-0.225	0.136	0.209(x10)	-0.160(x11)	0.104(x17)
Electricity Consumption (x14)	0.106	0.003	0.103	0.057(x17)	0.048(x10)	-0.041(x12)
Fuel Consumption (x15)	0.011	0.079	-0.068	0.162(x10)	-0.095(x11)	-0.085(x13)
Irrigation Index (x16)	0.121	0.412	-0.291	-0.092(x19)	-0.075(x29)	-0.037(x26)
Adoption Leadership (x17)	0.101	0.434	-0.333	-0.186(x29)	-0.095(x19)	0.094(x26)
Scientific Orientation (x18)	0.105	0.121	-0.016	-0.157(x29)	0.137(x26)	0.112(x17)
Independency (x19)	-0.180	-0.356	0.176	0.116(x17)	0.107(x16)	0.107(x26)
Innovation Proneness (x20)	0.097	0.024	0.073	0.177(x26)	-0.110(x29)	0.106(x17)
Risk Orientation (x21)	0.050	0.035	0.015	0.158(x26)	0.151(x17)	-0.113(x19)
Economic Motivation (x22)	-0.037	-0.117	0.080	0.163(x17)	-0.132(x29)	0.101(x16)
Orientation Towards Competition (x23)	-0.245*	-0.179	-0.066	-0.124(x29)	0.121(x17)	-0.119(x19)
Management Orientation (x24)	-0.010	-0.131	0.121	0.114(x17)	0.105(x26)	-0.105(x29)
Production Orientation (x25)	-0.132	-0.047	-0.085	0.042(x18)	0.041(x16)	-0.040(x29)
Market Orientation (x26)	0.164	0.416	-0.252	-0.115(x29)	0.098(x17)	-0.092(x19)
Social Participation (x27)	-0.182	0.001	-0.183	-0.107(x29)	0.097(x26)	-0.092(x16)
Utilization of Cosmopolite Source of Information (x28)	0.064	0.107	-0.043	-0.213(x29)	0.166(x17)	0.093(x26)
Information Seeking Behavior (x29)	0.000	-0.346	0.346	0.233(x17)	0.138(x26)	0.090(x16)
Training Received (x30)	-0.094	-0.012	-0.082	-0.064(x29)	0.062(x26)	0.045(x7)
Drudgeries (x31)	-0.109	-0.126	0.017	0.049(x16)	0.049(x26)	0.037(x23)
Distance Matrix (x32)	0.104	0.222	-0.118	-0.062(x16)	-0.040(x29)	0.032(x17)
Residual Effect	0.7219					
Highest count	Information seeking behavior (x29): 19					

Revelation

It has been found that the variable, **Adoption leadership (x_{17})** has steered the highest direct effect on the **Disagreement (y_3).** The variable, **Farm size (x_{10})** has exerted total highest indirect effect on Disagreement. Information seeking behavior has exerted highest individual dominating effect as many as 29 other exogenous variables. Residual effect being 0.7219 it is to infer that the entire exogenous variable has explained 28 per cent variance embedded in the dependent variable, **Disagreement (y_3).**

Implication

The variable, **Adoption leadership (x_{17})** has opened up the 'Pandoras Box' of so many choices for so many adoption or disposition of disagreement. The manager of a farming system having high Adoption leadership behavior can go for clinical testing of innovations having possibilities of higher economic performance of technological efficacy. Disagreement here has been a natural outgrowth of pressures confidence that a farmer can earn by possessing a more manipulative agriculture over those having traditional farming, a speculative farming *per se.* The variable, **Farm size (x_{10})** a logical extension of adoption based agro-ecosystem has rightly impacted on the

disagreement phenomenon in the socialization process. The variable, **Information seeking behavior (x_{29})** has routed highest indirect effect as many as nineteen variables to characterize the Disagreement consequences of technology socialization process and ultimately frame up the domain of social entropy.

Table 6.13: Correlation coefficient of Conflict (y_4) with 32 independent variables of village Ghoragachha, West Bengal

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.082
Education (x2)	-0.029
Family Education Status (x3)	-0.154
Educational Aspiration (x4)	0.101
Family Size (x5)	-0.054
Gender (x6)	0.020
Urbanization Index (x7)	-0.025
Occupation (x8)	0.218
Cropping Intensity (x9)	0.015
Farm size (x10)	0.140
Expenditure Allotment (x11)	0.074
Credit Load (x12)	0.046
Annual Income (x13)	0.064
Electricity Consumption (x14)	-0.060
Fuel Consumption (x15)	0.210
Irrigation Index (x16)	0.248*
Adoption Leadership (x17)	0.301**
Scientific Orientation (x18)	0.100
Independency (x19)	-0.007
Innovation Proneness (x20)	0.299**
Risk Orientation (x21)	0.199
Economic Motivation (x22)	0.239*
Orientation Towards Competition (x23)	0.064
Management Orientation (x24)	0.157
Production Orientation (x25)	-0.106
Market Orientation (x26)	0.051
Social Participation (x27)	0.098
Utilization of Cosmopolite Source of Information (x28)	0.349**
Information Seeking Behavior (x29)	0.344**
Training Received (x30)	-0.125
Drudgeries (x31)	0.068
Distance Matrix (x32)	-0.031
*Significant at 0.05% **Significant at 0.01%	

Revelation:

Table 6.13 presents the Correlation coefficient of **Conflict (y_4)** with 32 independent variables.

It has been found that the following variables *viz.* Irrigation index (x_{16}), Adoption leadership (x_{17}), Innovation proneness (x_{20}), Economic motivation (x_{22}), Utilization of cosmopolite source of information (x28), and Information seeking behavior (x_{29}), have recorded positive and significant association with the dependent variable, Conflict (y_4).

Implication

Higher level of Irrigation Index indicates that a higher level of modernization too and every process of modernization involves a conflict between modernity and traditionalism. **Adoption leadership (x_{17})** also implies a complex but polyhedral interaction in a social value in terms of changing life styles and the cognate social institution. With the higher **Adoption leadership (x_{17})** conflict increases in areas of social status, accessing higher position with respect in society and also it invites, sometimes, indiscriminate use of agricultural chemicals and its polluted effect on the natural resources base. On the other hand **Innovation proneness (x_{20})** here also plays positively so far as community integration is in concern. Higher **Economic motivation (x_{22}), Utilization of cosmopolite source of information (x_{28})** and **Information seeking behavior (x_{29}),** all have together added to a pseudo-urbanite orientation based on modernizing agricultural and enterprising social lives.

Table 6.14: Stepwise regression analysis of Conflict (y_4) versus 32 independent variables of village, Ghoragachha, West Bengal: Predominating variables retained at the last Step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R square Adjusted**	**SE Estimated**
Utilization of Cosmopolite Source of Information (x28)	-1.077	0.270	0.415	3.991**	0.554	0.296	0.256	0.71661
Family Education Status (x3)	-0.051	0.023	-0.230	-2.205*				
Irrigation Index (x16)	0.061	0.024	0.258	2.558**				
Occupation (x8)	0.184	0.078	0.239	2.355*				

Revelation

The table 6.14 elicited that the following variables *viz.* **Utilization of cosmopolite source of information (x_{28}), Family education status(x_3), Irrigation index (x_{16}) and Occupation (x_8)** have been retained at the last step of regression analysis to justify the variables having attitudinal and psychological properties along with the element of modernization like **Irrigation Index (x_{16}),** and **Occupation(x_8)** have been the predominant factor so far in

characterizing **conflict (y_4).** R^2 being 0.296 it is to conclude that all the retained variables have explained 29.6 per cent variance embedded in the predicted variable, **Conflict (y_4).**

Implication

Already in advanced villages of West Bengal have started taking rates of faster urbanization to create a rurarbanite social system, wherein Conflict, Disagreement, oral conflict or alienation are decreasing to defy the community integration as well as cultural osmosis amongst and between different groups of clans. When Enterprise and investment in agriculture especially in 'controlled agriculture' , having connected to assured water and power sources, marketable surpluses are generating from piece of farm to put a signature on modernization amidst rurality or rurality amidst modernizations a reality or a post modern eventuality.

Table 6.15: Path Analysis of Conflict (y_4) versus 32 exogenous variables of village Ghoragachha, West Bengal

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.082	0.063	0.019	-0.077(x3)	0.042(x8)	0.025(x15)
Education (x2)	-0.029	0.129	-0.158	-0.201(x3)	0.090(x4)	0.077(x28)
Family Education Status (x3)	-0.154	-0.429	0.275	0.166(x4)	0.064(x28)	-0.064(x25)
Educational Aspiration (x4)	-0.101	0.209	-0.310	-0.340(x3)	0.056(x2)	0.049(x28)
Family Size (x5)	-0.054	-0.105	0.051	-0.106(x3)	0.070(x28)	0.053(x4)
Gender (x6)	0.020	-0.005	0.025	0.067(x13)	-0.029(x9)	-0.022(x25)
Urbanization Index (x7)	-0.025	0.016	-0.041	-0.128(x13)	0.055(x12)	0.029(x28)
Occupation (x8)	0.218	0.302	-0.084	-0.065(x23)	0.051(x3)	-0.032(x16)
Cropping Intensity (x9)	0.015	0.171	-0.156	-0.047(x25)	-0.046(x28)	0.035(x13)
Farm size (x10)	0.140	0.194	-0.054	0.115(x15)	0.064(x28)	0.052(x11)
Expenditure Allotment (x11)	0.074	0.072	0.002	-0.289(x13)	0.140(x10)	0.078(x15)
Credit Load (x12)	0.046	0.120	-0.074	-0.174(x13)	-0.064(x8)	0.046(x16)
Annual Income (x13)	0.064	-0.441	0.505	0.145(x10)	0.076(x15)	0.057(x28)
Electricity Consumption (x14)	-0.060	-0.111	0.051	-0.068(x13)	-0.067(x3)	0.038(x15)
Fuel Consumption (x15)	0.210	0.200	0.010	-0.167(x13)	0.112(x10)	-0.093(x3)
Irrigation Index (x16)	0.248*	0.316	-0.068	-0.036(x19)	-0.035(x13)	-0.031(x8)
Adoption Leadership (x17)	0.301**	0.205	0.096	-0.105(x13)	0.093(x28)	-0.045(x3)
Scientific Orientation (x18)	0.100	0.033	0.067	0.094(x28)	-0.081(x3)	-0.069(x25)
Independency (x19)	-0.007	-0.139	0.132	0.082(x16)	-0.063(x3)	0.056(x13)
Innovation Proneness (x20)	0.299**	0.142	0.157	0.070(x28)	0.050(x17)	0.050(x16)
Risk Orientation (x21)	0.199	0.018	0.181	0.071(x17)	-0.054(x3)	-0.045(x25)
Economic Motivation (x22)	0.239*	-0.049	0.288	-0.086(x13)	0.078(x16)	0.077(x17)
Orientation Towards Competition (x23)	0.064	0.138	-0.074	-0.142(x8)	-0.063(x3)	0.057(x17)
Management Orientation (x24)	0.157	-0.013	0.170	0.059(x22)	-0.059(x3)	-0.056(x8)
Production Orientation (x25)	-0.106	-0.200	0.094	-0.137(x3)	0.049(x4)	0.040(x9)
Market Orientation (x26)	0.051	-0.017	0.068	-0.107(x3)	0.069(x13)	0.060(x20)
Social Participation (x27)	0.098	0.115	-0.017	-0.133(x3)	0.089(x28)	-0.071(x16)
Utilization of Cosmopolite Source of Information (x28)	0.349**	0.245	0.104	-0.112(x3)	-0.103(x13)	0.078(x17)
Information Seeking Behavior (x29)	0.344**	0.075	0.269	0.150(x28)	-0.110(x17)	-0.101(x13)
Training Received (x30)	-0.125	-0.119	-0.006	-0.101(x3)	0.076(x28)	-0.046(x8)
Drudgeries (x31)	0.068	0.025	0.043	0.048(x28)	0.038(x16)	0.035(x8)
Distance Matrix (x32)	-0.031	-0.025	-0.006	-0.052(x3)	-0.047(x16)	0.037(x4)
Residual Effect	0.6901					
Highest count	Family Education Status (x3): 19					

Revelation

Table 6.15 presents the path analysis of **Conflict (y_4)** versus thirty two exogenous variables of Ghoragachha, wherein it has been found that variable, **Annual income (x_{13})** has exerted both highest direct as well as indirect effect on predicted variable, **conflict (y_4)**. **Family education status (x_3)** has highest individual indirect effect on as many as 19 other exogenous variables. Residual effect being 0.691, it is to conclude that the entire exogenous variable has explained 31

per cent variance embedded in the predicted variable, **Conflict (y_4)**.

Implication

The variable, **Annual Income (x_{13})** has recorded both highest direct effect and highest indirect effect on conflict status and this is to imply that Income does not ensure only access to resources but also an access to conflict as well. The variable, **Family education status (x_3)** has routed the highest indirect effect of as many as nineteen variables to infer that education in the indomitable reasons both for **Conflict (y_4)** and modernization, since it has got an incredible property to imbibe and steer effect of companionship for characterizing the flow of influence of other variable too.

Table 6.16: Correlation coefficient of Reasons for dissonance (y_5) with 32 independent variables of village Ghoragachha, West Bengal

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.249*
Education (x2)	-0.178
Family Education Status (x3)	-0.110
Educational Aspiration (x4)	-0.022
Family Size (x5)	0.058
Gender (x6)	-0.078
Urbanization Index (x7)	-0.221
Occupation (x8)	0.198
Cropping Intensity (x9)	0.134
Farm size (x10)	0.166
Expenditure Allotment (x11)	0.198
Credit Load (x12)	-0.062
Annual Income (x13)	0.106
Electricity Consumption (x14)	-0.028
Fuel Consumption (x15)	0.098
Irrigation Index (x16)	0.050
Adoption Leadership (x17)	0.490**
Scientific Orientation (x18)	0.319**
Independency (x19)	0.167
Innovation Proneness (x20)	0.363**
Risk Orientation (x21)	0.357**
Economic Motivation (x22)	0.279*
Orientation Towards Competition (x23)	0.180
Management Orientation (x24)	0.224
Production Orientation (x25)	-0.059
Market Orientation (x26)	0.390**
Social Participation (x27)	0.125
Utilization of Cosmopolite Source of Information (x28)	0.293*
Information Seeking Behavior (x29)	0.455**
Training Received (x30)	-0.137
Drudgeries (x31)	0.114
Distance Matrix (x32)	-0.048
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.16 presents the correlation coefficient of **Reasons for dissonance (y_5)** with thirty two independent variables of village Ghoragachha. Independent variables *viz.* **Age (x_1), Adoption leadership (x_{17}), Scientific orientation (x_{18}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Economic motivation (x_{22}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{26}), Information seeking behavior (x_{29})** have been recorded positively and significantly correlated with the dependent variable, **Reasons for dissonance (y_5)**.

Implication

The variable **Age (x_1)** has recorded positive and significant correlation with **Reasons for dissonance (y_5)**. The chronological age has got a profit of psychological growth and physiological maturity as well. The stage of dissonance, any mind is achieving resultant to exposure to score of stimuli can be estimated through the chronological age. Here it has been found that higher age category respondents of Ghoragachha have bestowed higher level of dissonance over the younger respondents of Ghoragachha. **Adoption leadership (x_{17})** has also shown a positive correlation with dissonance which means a complex farming system having greater Adoption leadership is also stressed with dissonance of the farmers. **Scientific orientation (x_{18})** is also carrying a note of dissonance since any kind of modernization cherishes not only wind fall effect but also a brunt of unpredictable risk. **Innovation proneness (x_{20})** provokes a kind of withdrawal from a perceived 'blunt majority'. This kind of value adds to nurturing of super ego which ultimately begets dissonance. The **Risk orientation (x_{21}), Economic motivation (x_{22}), Market orientation (x_{26}),** all have been found to have a strong and positive association with **Reasons for dissonance (y_5).** Risk always bears stress in mind. The variable, **Innovation proneness (x_{20})** on the other hand has got an intrinsic classical speculation in an unpredictable market behavior, so also **Market orientation (x_{26})** disposes courage of feelings, entrepreneurship of a behavior and dissonance of a mind. Both, **Utilization of cosmopolite source of information (x_{28})** and **Information seeking behavior (x_{29})** have added a kind of restlessness and dissonance of mind. This may be resultant to a patterns of unintended overlapping of information. Sometimes overlapping by nature and sometimes there is incoherent enough to add dissonance in mind.

Table 6.17: Stepwise regression analysis of Reasons for dissonance (y_5) versus 32 independent variables of village Ghoragachha, West Bengal: Predominating variables retained at the last Step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R square Adjusted**	**SE Estimated**

Adoption leadership (x17)	0.198	0.090	0.204	2.194*	0.803	0.645	0.590	0.72609
Market orientation (x26)	0.345	0.105	0.296	3.282**				
Family education Status (x3)	-0.161	0.039	-0.535	-4.145**				
Farm size (x10)	0.289	0.129	0.188	2.248*				
Urbanization index (x7)	-0.050	0.012	-0.331	-4.174**				
Age (x1)	0.011	0.008	0.121	1.489				
Information seeking behavior (x29)	0.325	0.107	0.323	3.040**				
Occupation (x8)	0.314	0.094	0.299	3.323**				
Educational aspiration (x4)	0.109	0.048	0.288	2.292*				
Orientation towards competition (x23)	0.212	0.098	0.201	2.168*				

Revelation

Table 6.17 presents the stepwise regression analysis of **Reasons for dissonance (y_5)** versus thirty two independent variables of village Ghoragachha.

It has been found that following variables because of their predominant causal impact have been retained at the last step, these are **Adoption leadership (x_{17}), Market orientation (x_{26}), Family education status(x_3), Farm size (x_{10}), Urbanization index (x_7), age (x_1), Information seeking behavior (x_{29}), Occupation(x_8), Educational aspiration(x4) and Orientation towards competition (x_{23}).** The R^2 being 0.645, it is to infer that all the above retained predictors have explained 64.5 per cent variance embedded in the dependent variable, **Reasons for dissonance (y_5)**.

Implication

These variables must be considered in the light of having tremendous policy impact and strategic implication while one would try to manage dissonance for adding better and higher system stability.

Table 6.18: Path analysis of Reasons for dissonance (y_5) versus 32 exogenous variables of village, Ghoragachha, West Bengal

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.249*	0.235	0.014	-0.101(x3)	0.053(x4)	0.048(x8)
Education (x2)	-0.178	0.018	-0.196	-0.262(x3)	0.212(x4)	0.063(x10)
Family Education Status (x3)	-0.110	-0.0559	0.449	0.390(x4)	-0.076(x25)	0.058(x29)
Educational Aspiration (x4)	-0.022	0.492	-0.514	-0.443(x3)	-0.056(x25)	-0.055(x27)
Family Size (x5)	0.058	-0.040	0.098	-0.138(x3)	0.125(x4)	0.065(x29)
Gender (x6)	-0.078	-0.040	-0.038	0.048(x13)	-0.040(x9)	0.032(x10)
Urbanization Index (x7)	-0.221	-0.241	0.020	-0.091(x13)	0.080(x29)	0.079(x12)
Occupation (x8)	0.198	0.342	-0.144	-0.095(x29)	-0.071(x23)	0.067(x3)
Cropping Intensity (x9)	0.134	0.230	-0.096	-0.055(x25)	-0.047(x10)	-0.046(x4)
Farm size (x10)	0.166	0.336	-0.170	-0.235(x13)	0.114(x11)	0.095(x29)
Expenditure Allotment (x11)	0.198	0.159	0.039	0.241(x10)	-0.207(x13)	-0.101(x3)
Credit Load (x12)	-0.062	0.171	-0.233	-0.124(x13)	-0.111(x7)	0.072(x10) -0.072(x8)
Annual Income (x13)	0.106	-0.315	0.421	0.251(x10)	0.104(x11)	0.086(x29)
Electricity Consumption (x14)	-0.028	-0.002	-0.030	-0.088(x3)	0.058(x10)	0.051(x4)
Fuel Consumption (x15)	0.098	-0.025	0.123	0.194(x10)	-0.121(x3)	-0.119(x13)
Irrigation Index (x16)	0.050	-0.098	0.148	0.082(x29)	-0.042(x18)	0.037(x27)
Adoption Leadership (x17)	0.490**	0.131	0.359	0.201(x29)	-0.075(x13)	0.072(x18)
Scientific Orientation (x18)	0.319**	0.281	0.038	0.170(x29)	-0.106(x3)	-0.083(x25)
Independency (x19)	0.167	0.075	0.092	-0.083(x3)	0.067(x29)	-0.059(x8)

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Innovation Proneness (x20)	0.363**	0.216	0.147	0.119(x29)	-0.058(x4)	0.052(x26)
Risk Orientation (x21)	0.357**	-0.140	0.497	0.104(x18)	0.089(x29)	-0.070(x3)
Economic Motivation (x22)	0.279*	-0.092	0.371	0.143(x29)	0.097(x20)	-0.061(x13)
Orientation Towards Competition (x23)	0.180	0.152	0.028	-0.160(x8)	0.134(x29)	-0.082(x3)
Management Orientation (x24)	0.224	0.063	0.161	0.114(x29)	0.094(x18)	-0.077(x3)
Production Orientation (x25)	-0.059	-0.0238	0.179	-0.179(x3)	0.116(x4)	0.097(x18)
Market Orientation (x26)	0.390**	0.121	0.269	-0.140(x3)	0.125(x29)	0.093(x4)
Social Participation (x27)	0.125	-0.166	0.291	-0.173(x3)	0.163(x4)	0.116(x29)
Utilization of Cosmopolite Source of Information (x28)	0.293*	-0.004	0.297	0.230(x29)	-0.145(x3)	0.108(x18)
Information Seeking Behavior (x29)	0.455**	0.375	0.080	0.127(x18)	-0.087(x3)(x8)	0.085(x10)
Training Received (x30)	-0.137	-0.183	0.046	-0.131(x3)	0.069(x29)	0.066(x4)
Drudgeries (x31)	0.114	0.155	-0.041	-0.047(x1)	0.040(x20)	0.039(x8)
Distance Matrix (x32)	-0.048	-0.113	0.065	0.087(x4)	-0.068(x3)	0.043(x29)
Residual effect	0.486					
Highest count	Family education status(x3):20					

Revelation

Table 6.18 presents the path analysis of **Reasons for dissonance (y_5)** versus thirty two exogenous variables.

It has been found that the variable, **Educational aspiration (x_4)** has recorded both highest direct as well as indirect effect. It has also been found that the variable, **Family education status (x_3)** has got highest individual dominating effect as many as on 20 times to define the tremendous impact on other exogenous variables to ultimately characterized the performance of the consequent variable, **Reasons for dissonance (y_5).** Residual effect being 0.486, it is to conclude that 51 per cent of variance embedded in the consequent variable, **Reasons for dissonance (y_5)** has been explained so far.

Implication

It has been found that the variable, **Educational aspiration (x4)** has recorded both highest direct effect and indirect effect to make a clear note on their predominating impact on the consequent variable, **Reasons for dissonance (y_5).** Family having highest educational score can also be a family ecosystem wherein differential state of mind and varied level of aspiration can go in conflicting pursuits and lead to a status of moderately extreme dissonance. Education promotes socialization on the other hand making the entire process simply inelastic because of mutually conflicting interest.

The variable, **Family education status (x_3)** has routed the highest Indirect effect of as many as twenty exogenous variables to write note on its extreme companionship in characterizing behavior of consequent variable i.e. **Reasons for dissonance(y_5).**

Table 6.19: Correlation coefficient of Reasons for reinvention (y6) with 32 independent variables of village, Ghoragachha, West Bengal

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.105
Education (x2)	-0.218
Family Education Status (x3)	-0.082
Educational Aspiration (x4)	-0.019
Family Size (x5)	0.143
Gender (x6)	-0.097
Urbanization Index (x7)	-0.012
Occupation (x8)	0.205
Cropping Intensity (x9)	-0.037
Farm size (x10)	0.071
Expenditure Allotment (x11)	-0.022
Credit Load (x12)	-0.028
Annual Income (x13)	0.068
Electricity Consumption (x14)	-0.137
Fuel Consumption (x15)	0.095
Irrigation Index (x16)	0.111
Adoption Leadership (x17)	0.314**
Scientific Orientation (x18)	0.164
Independency (x19)	-0.015
Innovation Proneness (x20)	0.181
Risk Orientation (x21)	0.229*
Economic Motivation (x22)	0.019
Orientation Towards Competition (x23)	0.044
Management Orientation (x24)	0.150
Production Orientation (x25)	-0.127
Market Orientation (x26)	0.138
Social Participation (x27)	0.052

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Utilization of Cosmopolite Source of Information (x28)	0.298**
Information Seeking Behavior (x29)	0.322**
Training Received (x30)	-0.123
Drudgeries (x31)	0.094
Distance Matrix (x32)	0.086
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.19 presents the Correlation coefficient of **Reasons for reinvention (y_6)** with 32 independent variables of village, Ghoragachha. The following Independent variables *viz*. **Adoption leadership (x_{17}), Risk orientation (x_{21}), Utilization of cosmopolite source of information (x_{28}), and Information seeking behavior (x_{29})** have recorded positive and significant correlation with the dependent variable, Reasons **for reinvention (y_6).**

Implication

The table reveals that the variable, **Adoption leadership (x_{17})** is positively and highly significantly correlated with the dependent variable, **Reasons for reinvention (y_6)**. This may be due to the fact that Adoption leadership is the most important for making farming system agile, polymorphic and constantly innovative for the slice of entrepreneurship. Adoption leadership has the amazing psychological effect that triggers the process of diversification as well as entrepreneurial modernization. This behavior makes the farming community both resilient and versatile that invites choices of crops and baskets of marketable surpluses that is how leadership quality, **Adoption leadership (x_{17})** has gone significant in making farmer amply confident to move for replacement *vis-à-vis* reinvention.

The variable, **Risk orientation (x_{21})** is a unique attitudinal dent that constantly striving for alternative with better properties and higher efficacy. It promotes faster modification vis-à-vis reinvention in making the crux of investment and the cause of entrepreneurship mutually complimentary in the ambit of given farming system i.e. how it has been clandestinely attuned to the **Reasons for reinvention (y_6).**

The variable, **Utilization of cosmopolite source of information (x_{28})** helps socialization process in the form of adoption, rejection or reinvention of any technology or concept. It opens the windows that invites innovations to come in and depletion to go out. Here in this case of information, helps reinvention of technology.

The variable, **Information seeking behavior (x_{29})** is also positive and highly significantly correlated with the reinvention, which is indicates that the more the information the higher and more intensifying would be the exposure into the world of innovation and disposal to the domain of information receiver. **Information seeking behavior (x_{29})** helps build up logic, seek alternatives and implant innovation with convention so that socialization process can find real destination towards making farming system effective and performing.

Table 6.20: Stepwise regression analysis Reasons for reinvention (y_6) versus 32 independent variables of village, Ghoragachha, West Bengal: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**T**	**R**	**R2**	**R square Adjusted**	**SE Estimated**
Information seeking behavior (x29)	0.458	0.117	0.418	3.909**	0.494	0.244	0.212	1.09
Occupation (x8)	0.329	0.122	0.288	2.694**				
Education (x2)	-0.074	0.033	-0.232	-2.225*				

Revelation

Table 6.20 presents the stepwise regression analysis of **Reasons for reinvention (y_6)** versus 32 independent variables of village Ghoragachha.

The predominating variables viz. **Information seeking behavior (x_{29}), Occupation (x_8) and Education (x_2)** have been retained at the last step of screening.

The R^2 being 0.244, it is to infer that the three variables together have explained 24.4% of variance embedded with the consequent variable, **Reasons for reinvention (y_6).**

Implication

It has been found that causal variables *viz.* **Information seeking behavior (x_{29}), Occupation (x_8) and Education (x_2)** has been retained at the last stage after trivial variables being drifted out. For reinvention information source and the nature of occupation and education process have rightly been identified as deterministic impact in determining characteristic of reinvention.

Table 6.21: Path Analysis of Reasons for reinvention (y_6) versus 32 exogenous variables of village, Ghoragachha, West Bengal

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.105	0.045	0.60	0.048(x2)	-0.043(x26)	0.037(x4) -0.037(x29)

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Education (x2)	-0.218	-0.308	0.90	0.150(x4)	0.076(x10)	-0.069(x3)
Family Education Status (x3)	-0.082	-0.148	0.066	0.277(x4)	-0.144(x2)	-0.063(x25)
Educational Aspiration (x4)	-0.019	0.349	-0.368	-0.133(x2)	-0.117(x3)	-0.050(x27)
Family Size (x5)	0.143	0.173	-0.30	0.089(x4)	-0.066(x11)	-0.060(x2)
Gender (x6)	-0.097	-0.117	0.020	-0.039(x2)	0.038(x10)	0.028(x11)
Urbanization Index (x7)	-0.012	-0.043	0.031	0.069(x29)	-0.043(x13)	0.026(x1) (x11)
Occupation (x8)	0.205	0.198	0.007	-0.083(x29)	0.047(x23)	-0.035(x24)
Cropping Intensity (x9)	-0.037	-0.008	-0.029	-0.057(x10)	0.051(x2)	-0.046(x25)
Farm size (x10)	0.071	0.406	-0.335	-0.228(x11)	-0.110(x13)	0.083(x29)
Expenditure Allotment (x11)	-0.022	-0.317	0.295	0.299(x10)	-0.097(x13)	0.062(x29)
Credit Load (x12)	-0.028	0.013	-0.041	0.087(x10)	0.061(x29)	-0.058(x13)
Annual Income (x13)	0.068	-0.147	0.215	0.303(x10)	-0.208(x11)	0.075(x29)
Electricity Consumption (x14)	-0.137	-0.130	-0.007	0.070(x10)	-0.050(x11)	-0.045(x5)
Fuel Consumption (x15)	0.095	0.046	0.049	0.234(x10)	-0.124(x11)	0.068(x29)
Irrigation Index (x16)	0.111	0.000	0.111	0.071(x29)	0.046(x2)	-0.045(x22)
Adoption Leadership (x17)	0.314**	0.154	0.160	0.176(x29)	-0.074(x11)	-0.069(x22)
Scientific Orientation (x18)	0.164	0.040	0.124	0.148(x29)	-0.068(x25)	0.064(x24)
Independency (x19)	-0.015	0.052	0.037	0.059(x29)	0.051(x24)	-0.043(x26)
Innovation Proneness (x20)	0.181	0.171	0.010	0.104(x29)	-0.082(x22)	-0.071(x26)
Risk Orientation (x21)	0.229*	-0.002	0.231	0.078(x29)	0.070(x2)	0.066(x24)
Economic Motivation (x22)	0.019	-0.185	0.204	0.125(x29)	-0.078(x11)	0.076(x20)
Orientation Towards Competition (x23)	0.044	-0.101	0.145	0.117(x29)	-0.092(x8)	0.082(x24)
Management Orientation (x24)	0.150	0.192	-0.042	0.100(x29)	0.059(x20)	-0.043(x23)
Production Orientation (x25)	-0.127	-0.197	0.070	0.082(x4)	0.056(x10)	-0.049(x3)
Market Orientation (x26)	0.138	-0.168	0.306	0.109(x29)	-0.090(x10)	0.073(x20)
Social Participation (x27)	0.052	-0.151	0.203	0.125(x10)	0.116(x4)	0.101(x29)
Utilization of Cosmopolite Source of Information (x28)	0.298**	0.153	0.145	0.201(x29)	0.105(x10)	-0.097(x2)
Information Seeking Behavior (x29)	0.322**	0.327	-0.005	0.102(x10)	0.094(x28)	0.083(x17)
Training Received (x30)	-0.123	-0.126	0.003	0.061(x29)	-0.054(x2)	0.048(x28)
Drudgeries (x31)	0.094	0.143	-0.049	-0.048(x22)	-0.041(x10)	0.031(x20)
Distance Matrix (x32)	0.086	-0.135	0.049	0.061(x4)	-0.038(x2) 0.038(x29)	0.035(x24)
Residual effect	0.7106					
Highest count	Information seeking behavior (x29): 22					

Revelation

Table 6.21 presents the path analysis of the dependent variable, **Reasons for reinvention (y_6)** versus 32 exogenous variables. The variable, **Farm size (x_{10})** has exerted the highest total direct effect on reinvention whereas the variable, **Educational aspiration (x_4)** has exerted the highest total indirect effect on **Reasons for reinvention (y_6).** The variable, **Information seeking behavior (x_{29})** has routed the highest substantial indirect effect of as many as, 22 exogenous variables to characterize the behaviors of the consequent variable, reinvention. The residual effect being 0.710, it is to infer that even with the combination of 32 exogenous variables 29 per cent of the variance embedded in the dependent variable, **Reasons for reinvention (y_6)** has been explained so far.

Implication:

The variable, **Farm size (x_{10})** is the manifestation of enterprise interaction within a given space and having sociological components that is why it has bestowed a fair amount of associational property towards characterizing reinvention process.

The residual effect being 0.7106, it is to infer that even with the combination of all these 32 exogenous variables 29 per

cent variance of reinvention has been explained so far. This indicates the need to relook into selection and consideration of certain variables.

Table 6.22: Correlation coefficient of Confusion Index (y_7) with 32 independent variables of village, Ghoragachha, West Bengal

N = 75	
Variables	**Coefficient of Correlation (r)**
Age (x1)	0.196
Education (x2)	-0.017
Family Education Status (x3)	-0.002
Educational Aspiration (x4)	0.013
Family Size (x5)	0.070
Gender (x6)	-0.123
Urbanization Index (x7)	-0.051
Occupation (x8)	0.294*
Cropping Intensity (x9)	-0.056
Farm size (x10)	0.093
Expenditure Allotment (x11)	0.053
Credit Load (x12)	-0.061
Annual Income (x13)	0.099
Electricity Consumption (x14)	0.023
Fuel Consumption (x15)	0.247*
Irrigation Index (x16)	0.131
Adoption Leadership (x17)	0.229
Scientific Orientation (x18)	0.107
Independency (x19)	0.025
Innovation Proneness (x20)	0.243*
Risk Orientation (x21)	0.246*
Economic Motivation (x22)	0.055
Orientation Towards Competition (x23)	0.012
Management Orientation (x24)	0132
Production Orientation (x25)	-0.088
Market Orientation (x26)	0.121
Social Participation (x27)	0.068
Utilization of Cosmopolite Source of Information (x28)	0.141
Information Seeking Behavior (x29)	0.277*
Training Received (x30)	-0.154
Drudgeries (x31)	-0.068
Distance Matrix (x32)	-0.070
*Significant at 0.05%	

Revelation

Table 6.22 presents the Correlation coefficient of dependent variable, **confusion index (y_7)** with 32 independent variables of Ghoragacha. The following independent variables *viz.* **Occupation (x_8), Fuel consumption (x_{15}), Innovation proneness (x_{20}), Risk orientation (x_{25}), Information seeking behavior (x_{29})** have been recorded positive and significant correlation with the dependent variable, **Confusion index (y_7).**

Implication

The interpretation of the table reveals that the variable, **Occupation (x_8)** has been positively and significantly correlated with the dependent variable, **Confusion index (y_7),** which indicates that the movement along with the ladder of occupation in a social echelon has added 'confusion' as to whether pursue farming as profitable venture or to sit elsewhere. While off-farm occupation along with service sector are dominating over core agricultural based occupation and some 42 per cent of the farmers ready to quit farming occupation. It is to infer that occupational security as well as complexity has elicited some confusion from within the farming system.

The variable, **Fuel consumption (x_{15})** is an indication of rate of impact of urbanization and modernization. So, with the increase of fuel consumption only site its cognate impact of modernization, the confusion index has also been influenced.

The table also shows that the variable, **Innovation proneness (x_{20})** and **Risk orientation (x_{21})** have recorded positive effect of confusion. The higher the Innovation proneness and faster the journey through innovation, the higher will be the confusion as well as this has been reflected by another variable also.

The variable, **Information seeking behavior (x_{29})** is positively and significantly correlated with the dependent variable, **Confusion index (y_7)** of the respondents of village, Ghoragachha which indicates that more of information, more of choices supposed to crop up and as a whole more of confusion would simmer up.

Table 6.23: Stepwise regression analysis Confusion index (y_7) versus 32 independent variables of village, Ghoragachha, West Bengal: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**T**	**R**	**R2**	**R square Adjusted**	**SE Estimated**
Occupation (x8)	0.436	0.121	0.389	3.609**	0.467	0.218	0.196	1.08
Information seeking behavior (x29)	0.403	0.116	0.375	3.484**				

Revelation

Table 6.23 presents the stepwise regression analysis of the dependent variable, **Confusion index (y_7)** versus 32 independent variables. The two predominating variable, **Occupation (x_8)** and **Information seeking behavior (x_{29})** have been retained at the last step. R^2 being 0.218, it is to infer that these two predominating variables retained, have

explained 22 per cent variance embedded in the predicted variable, **Confusion index (y_7).**

Implication

Transforming occupation with the up-search of nonfarm sectors which is coming after the transformation of farm based occupation has added to generation of occupation as to why and how to on with farm based occupation. So, also, the information seeking behavior after being confronted with lot of option and innovation might have had a deleterious effect in the prescribed utility of conventional technology.

Table 6.24: Path Analysis of Confusion index (y_7) versus 32 exogenous variables of village, Ghoragachha, West Bengal

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.196	0.073	0.123	-0.055(x3)	0.049(x29)	0.046(x8)
Education (x2)	-0.017	0.150	-0.167	0.145(x4)	-0.142(x3)	-0.072(x28)
Family Education Status (x3)	-0.002	-0.303	0.301	0.266(x4)	0.070(x2)	0.067(x29)
Educational Aspiration (x4)	0.013	0.335	-0.322	-0.240(x3)	0.065(x2)	-0.045(x28)
Family Size (x5)	0.070	0.119	-0.049	0.085(x4)	0.075(x29) -0.075(x3)	-0.066(x28)
Gender (x6)	-0.123	-0.080	-0.043	-0.023(x20)	-0.022(x32)	0.020(x15) -0.020(x13)
Urbanization Index (x7)	-0.051	-0.077	0.026	0.092(x29)	-0.042(x12)	0.038(x13)
Occupation (x8)	0.294*	0.331	-0.037	-0.110(x29)	0.036(x3)	0.021(x15)
Cropping Intensity (x9)	-0.056	-0.045	-0.011	0.043(x28)	-0.033(x8)	-0.032(x4)
Farm size (x10)	0.093	0.116	0.209	0.0169(x15)	0.110(x29)	0.097(x13)
Expenditure Allotment (x11)	0.053	-0.090	0.143	0.114(x15)	0.085(x13)	-0.084(x10)
Credit Load (x12)	-0.061	-0.091	0.030	0.080(x29)	-0.070(x8)	0.051(x13)
Annual Income (x13)	0.099	0.130	-0.031	0.111(x15)	0.100(x29)	-0.087(x10)
Electricity Consumption (x14)	0.023	0.016	0.007	0.055(x15)	-0.048(x3)	0.035(x4)
Fuel Consumption (x15)	0.247*	0.293	-0.046	0.090(x29)	-0.067(x10)	-0.066(x3)
Irrigation Index (x16)	0.131	0.071	0.060	0.095(x29)	-0.046(x22)	0.045(x20)
Adoption Leadership (x17)	0.229	0.062	0.167	0.233(x29)	-0.087(x28)	-0.070(x22)
Scientific Orientation (x18)	0.107	0.054	0.053	0.197(x29)	-0.088(x28)	-0.052(x3)
Independency (x19)	0.025	-0.081	0.106	0.078(x29)	-0.057(x8)	-0.045(x3)
Innovation Proneness (x20)	0.243*	0.285	-0.042	0.138(x29)	-0.084(x22)	-0.065(x28)
Risk Orientation (x21)	0.246*	0.089	0.157	0.103(x29)	0.068(x19)	-0.038(x3)
Economic Motivation (x22)	0.055	-0.188	0.243	0.166(x29)	0.127(x20)	-0.050(x28)
Orientation Towards Competition (x23)	0.012	0.022	-0.010	0.156(x29)	-0.155(x8)	0.050(x24)
Management Orientation (x24)	0132	0.118	0.014	0.132(x29)	0.099(x20)	-0.061(x8)
Production Orientation (x25)	-0.088	-0.135	0.047	-0.097(x3)	0.079(x4)	0.050(x29)
Market Orientation (x26)	0.121	-0.090	0.211	0.145(x29)	0.121(x20)	-0.076(x3)
Social Participation (x27)	0.068	-0.083	0.151	0.134(x29)	0.111(x4)	-0.094(x3)
Utilization of Cosmopolite Source of Information (x28)	0.141	-0.228	0.369	0.267(x29)	0.082(x20)	-0.079(x3)
Information Seeking Behavior (x29)	0.277*	0.435	-0.158	-0.140(x28)	0.090(x19)	-0.084(x8)
Training Received (x30)	-0.154	-0.102	-0.052	0.080(x20)	0.071(x3) (x28)	-0.051(x8)

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Drudgeries (x31)	-0.068	-0.074	0.006	0.052(x20)	-0.049(x22)	-0.045(x15) (x28)
Distance Matrix (x32)	-0.070	-0.114	0.044	0.059(x4)	0.050(x29)	-0.037(x3)
Residual Effect	0.7414					
Highest count	Information seeking behavior (x29): 23					

Revelation

Table 6.24 presents the path analysis of the dependent variable, **Confusion index (y_7)** versus 32 exogenous variables. The variable, **Information seeking behavior (x_{29})** has exerted the highest total direct effect on **Confusion index (y_7)**, whereas **Utilization of cosmopolite source of information (x_{28})** has exerted the highest total indirect effect on **Confusion index (y_7).** It has also been found that the variable, **Information seeking behavior (x_{29})** has routed the highest individual dominating effect as many as 23 times to characterize the consequent variable, **Confusion Index (y_7).** Residual effect being 0.7414, it is to infer that even with the combination of 32 exogenous variables, 26 per cent of the variance embedded in **Confusion index (y_7)** has been explained so far.

Implication

The farmers with high Information seeking behavior and high Utilization of cosmopolite source of information cannot any longer focus on 'mundane' agricultural occupation. He wants to move elsewhere rather than getting him glued to the parental pursuits. This is a kind of contradiction between what may be called conflict between harsh reality and perceived happiness.

It has been found that the variable, **Information seeking behavior (x_{29})** has routed highest indirect effect with 23 variables to state as companionship with other variable to the consequent variable, **Confusion index (y_7)**. Higher information flow or information shortfall may lead to information dissonance which we may called confusion faced by information seeker.

The residual effect being 0.7414, it is to infer that even with the combination of 32 exogenous variables 26 per cent of variance embedded in the consequent variable, **Confusion index (y_7)** has been explained so far.

Table 6.25: Correlation coefficient of Social Entropy (Y) with 32 independent variables of village, Ghoragachha, West Bengal

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.136
Education (x2)	-0.157
Family Education Status (x3)	0.008
Educational Aspiration (x4)	0.099
Family Size (x5)	0.125
Gender (x6)	-0.189
Urbanization Index (x7)	-0.011
Occupation (x8)	0.296**
Cropping Intensity (x9)	0.027
Farm size (x10)	-0.005
Expenditure Allotment (x11)	0.010
Credit Load (x12)	0.001
Annual Income (x13)	0.036
Electricity Consumption (x14)	-0.036
Fuel Consumption (x15)	0.110
Irrigation Index (x16)	0.088
Adoption Leadership (x17)	0.292*
Scientific Orientation (x18)	0.066
Independency (x19)	-0.066
Innovation Proneness (x20)	0.149
Risk Orientation (x21)	0.206
Economic Motivation (x22)	-0.047
Orientation Towards Competition (x23)	-0.032
Management Orientation (x24)	0.074
Production Orientation (x25)	-0.144
Market Orientation (x26)	0.160
Social Participation (x27)	0.048
Utilization of Cosmopolite Source of Information (x28)	0.235*
Information Seeking Behavior (x29)	0.179
Training Received (x30)	-0.142
Drudgeries (x31)	-0.038
Distance Matrix (x32)	-0.038
*Significant at 0.05% **Significant at 0.01%	

Revelation

The following variables *viz.* Occupation (x_8), Adoption leadership (x_{17}), and Utilization of cosmopolite source of information (x_{28}) have been recorded positive and significant correlation with the dependent variable, Social entropy (Y).

Implication

It has been found that the variables, **Occupation (x_8)**, **Adoption leadership (x_{17}),** and **Utilization of cosmopolite source of information (x_{28})** have exerted the highest influence on **Social entropy (Y)**, the ultimate and consequent variable.

Occupation or pursuits of livelihood has been affected in recent times by incompatibility with income, shivered by seasonality and stressed by drudgeries. The high rise of input cost and declining supportive market price have made the farming occupation vulnerable to uncertainty, risk, and stressful that is why it leads to a social entropy. Farmers are committing suicides in India and this indicates that farming as

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occupation is turning a dangerous and risky at least to a section of farming community.

The variable, **Adoption leadership (x_{17})** has also positively contributed to **Social entropy (Y).** The prescription and dictatorial mode of adoption has been gradually denied by the 'conscious farmers' who are more prone to follow agriculture as market driven proposition not merely non-adoption driven agriculture.

Table 6.26: Stepwise regression analysis Social entropy (Y) versus 32 independent variables of village, Ghoragachha, West Bengal: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R^2**	**R^2 Adjusted**	**SE Estimated**
Occupation (x8)	18972.096	6256.954	0.318	3.032**	0.473	0.224	0.191	58028.00
Adoption leadership (x17)	16986.733	5780.698	0.307	2.939**				
Gender (x6)	-15146.956	7446.915	-0.213	-2.034*				

As already discussed in previous page utilization of cosmopolite source of information has amounted to a knowledge dissonance, emotional crash and motivational distortion organized on useful knowledge can help can move anything to proper destination. On the other hand the unorganized or fractured knowledge can add both to confusion and contradiction that is why utilization of cosmopolite source of information has been attuned to higher entropy level.

Revelation

Table 6.26 presents the stepwise regression analysis of the dependent variable, **Social entropy (Y)** versus 32 independent variables. It has been found that three variable, **Occupation (x_8), Adoption leadership (x_{17})** and **Gender (x_6)** have been retained at the last stage of step down regression analysis towards predicting **Social entropy (Y).** The value of R^2 being 0.224, it is to infer that all the three predictors altogether have explained 22 per cent variance embedded with the predicted variable i.e. **Social entropy (Y).**

Implication

Occupation of respondents is the most important causing factor for generating **Social entropy (Y)** implies that farming occupation provided opportunities to them for adoption of modern agricultural technology to make them more ordered or stable financially.

The variable, Adoption leadership (x_{17}) further second most important independent variable for increase in Social entropy as higher the adoption of new technology gives impetus in the process of technology socialization which in turn make them more ordered.

The gender issue, as has been depicted, elicited that it has a decisive impact on the nature and extent of entropy.

Table 6.27: Path Analysis of Social entropy (Y) versus 32 exogenous variables of village, Ghoragachha, West Bengal.

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.136	0.021	0.115	-0.060(x3)	0.048(x4)	0.041(x8)
Education (x2)	-0.157	-0.093	-0.064	0.192(x4)	-0.155(x3)	0.096(x28)
Family Education Status (x3)	0.008	-0.331	0.339	0.352(x4)	0.057(x28)	-0.048(x25)
Educational Aspiration (x4)	0.099	0.445	-0.346	-0.262(x3)	0.046(x5)	0.044(x28)
Family Size (x5)	0.125	0.181	-0.056	0.113(x4)	-0.082(x3)	0.063(x28)
Gender (x6)	-0.189	-0.162	-0.027	0.038(x13)	-0.031(x9)	-0.023(x5)
Urbanization Index (x7)	-0.011	0.019	-0.030	-0.072(x13)	0.054(x12)	-0.028(x9)
Occupation (x8)	0.296**	0.293	0.003	0.058(x23)	0.039(x3)	-0.028(x4)
Cropping Intensity (x9)	0.027	0.179	-0.152	-0.042(x4)	-0.041(x28)	-0.035(x25)
Farm size (x10)	-0.005	0.148	-0.153	-0.185(x13)	0.077(x15)	0.057(x28)
Expenditure Allotment (x11)	0.010	-0.021	0.031	-0.162(x13)	0.107(x10)	-0.068(x22)
Credit Load (x12)	0.001	0.116	-0.115	-0.098(x13)	-0.062(x8)	-0.035(x5)
Annual Income (x13)	0.036	-0.248	0.284	0.111(x10)	0.061(x17)	-0.053(x22)
Electricity Consumption (x14)	-0.036	-0.065	0.029	-0.052(x3)	-0.047(x5)	0.046(x4)
Fuel Consumption (x15)	0.110	0.133	-0.023	-0.094(x13)	0.086(x10)	-0.072(x3)
Irrigation Index (x16)	0.088	0.191	-0.103	-0.068(x22)	-0.030(x8)	-0.029(x4)
Adoption Leadership (x17)	0.292*	0.256	0.036	-0.103(x22)	0.084(x28)	-0.059(x13)

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Scientific Orientation (x18)	0.066	-0.006	0.072	0.085(x28)	0.066(x17)	-0.063(x3)
Independency (x19)	-0.066	-0.089	0.023	0.069(x17)	-0.050(x8) 0.050(x16)	-0.049(x3)
Innovation Proneness (x20)	0.149	0.145	0.004	-0.123(x22)	0.063(x28)	0.062(x17)
Risk Orientation (x21)	0.206	0.046	0.160	0.089(x17)	0.043(x4)	-0.042(x3)
Economic Motivation (x22)	-0.047	-0.275	0.228	0.096(x17)	0.06(x20)	-0.048(x13) 0.048(x28)
Orientation Towards Competition (x23)	-0.032	-0.124	0.092	-0.137(x8)	0.072(x17)	0.051(x4)
Management Orientation (x24)	0.074	0.050	0.024	0.067(x17)	-0.054(x8)	-0.053(x23)
Production Orientation (x25)	-0.144	-0.149	0.005	-0.106(x3)	0.105(x4)	0.042(x9)
Market Orientation (x26)	0.160	0.006	0.154	0.084(x4)	-0.083(x3)	0.062(x20)
Social Participation (x27)	0.048	-0.113	0.161	0.147(x4)	-0.103(x3)	0.080(x28)
Utilization of Cosmopolite Source of Information (x28)	0.235*	0.220	0.015	0.098(x17)	0.089(x4)	-0.086(x3)
Information Seeking Behavior (x29)	0.179	0.093	0.086	0.138(x17)	0.135(x28)	-0.105(x22)
Training Received (x30)	-0.142	-0.123	-0.019	-0.078(x3)	0.069(x28)	0.060(x4)
Drudgeries (x31)	-0.038	-0.105	0.067	-0.072(x22)	0.043(x28)	0.034(x4) (x8)
Distance Matrix (x32)	-0.038	0.007	-0.045	0.078(x4)	-0.040(x3)	-0.032(x6)
Residual Effect		0.7307				
Highest count	Educational aspiration (x4):17					

Revelation

Table 6.27 presents the path analysis of the dependent variable, **Social entropy (Y)** versus 32 exogenous variables. It has been found that variable, **Educational aspiration (x_4)** has exerted both the highest direct effect as well as highest indirect effect to evince to its substantial impact on Social entropy. The variable, **Educational aspiration (x_4),** has routed the highest indirect effect of as many as 17 variables to justify its strategic importance in estimating entropy in any social system. The residual effect being 0.7303, it is to infer that the all the 32 exogenous variables together have explained, 27 per cent of variance embedded in the consequent variable, **Social entropy (Y).**

Implication

It is true that higher the variable, **Educational aspiration (x_4)** especially in transforming agrarian system must be supported by assured jobs otherwise they will remain as unemployed educated youth a potential source to **Social entropy (Y).**

Table: 6.28: Standardized Canonical correlation coefficient for Dependent variables as well as Independent variables of village, Ghoragachha, West Bengal

N = 75					
Dependent variables			**Independent variables**		
Disagreement (y3)	0.353		Family education status(x3)	0.587	
			Annual income (x13)	0.338	
Reasons for dissonance (y5)	-0.756		Educational aspiration (x4)	-0.533	
			Occupation (x8)	-0.401	
			Information seeking behavior (x29)	-0.546	
Variance explained by dependent variables			Variance explained by covariates		
CAN VAR	Pct Var Covariate	Pct Var Dependent	CAN VAR	Pct Var Covariate	Pct Var Dependent
1	25.93	32.69	1	7.13	5.65
Loading factor > 0.3					

Table 6.28 presents the standardized canonical correlation for covariate as well as for dependent variables of village, Ghoragachha, West Bengal.

Canonical correlation presents a unique inter and intra variable interaction in a didactic manner. Here, all the variables have been dichotomized into set of variables i.e. left side and right side variable. Here, in this case the left side variable represents sets of seven consequent variable *viz.* **Perception on discontinuance (y_1)**, **Perception on rejection (y_2)**. **Disagreement (y_3)**, **Conflict (y_4)**, **Reasons for dissonance (y_5)**, **Reasons for reinvention (y_6)**, **and Confusion index (y_7)** and the right side causal variable *viz.* **Age (x_1)**, **Education (x_2)**, **Family education status (x_3)**, **Educational aspiration (x_4)**, **Family size (x_5)**, **Gender (x_6)**, **Urbanization index (x_7)**, **Occupation (x_8)**, **Cropping intensity (x_9)**, **Farm size (x_{10})**, **Expenditure allotment (x_{11})**, **Credit load (x_{12})**,

Annual income (x_{13}), **Electricity consumption (x_{14})**, **Fuel consumption (x_{15})**, **Irrigation index (x_{16})**, **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Independency (x_{19})**, **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Economic motivation (x_{22})**, **Orientation towards competition (x_{23})**, **Management orientation (x_{24})**, **Production orientation (x_{25})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **Utilization of cosmopolite source of information (x_{28})**, **Information seeking behavior (x_{29})**, **Training received (x_{30})**, **Distance matrix (x_{31})**, **Drudgeries (x_{32})**.

Here, it has been found that the two left side variable *viz*. **Disagreement (y_3)** and **Reasons for dissonance (y_5)** have been selectively attuned to the following right side causal variable *viz.* **Family education status (x_3)**, **Information seeking behavior (x_{29}), Occupation (x_8)**, **Annual income (x_{13}) and Educational aspiration (x_4)**. Therefore, these variables are strategically attuned and interactive that may lead to a micro-level policy decision *e.g.* the respondents having perception on rejection, they are also confused and in this situation both the traits of respondents are selectively being impacted by the other cognate characters like **Educational aspiration (x_4)**, **Family size (x_5)**, **Electricity consumption (x_{14})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **and Farm size (x_{10})**.

It has also been found that the dependent variables, explained 32.69 per cent variance in self, whereas 25.93 per cent variance explained embedded in covariates variables. Table also shows that covariate variables have explained 7.13 per cent variance embedded in self and 5.65 per cent variance explained embedded in dependent variables.

Table 6.29: Factor analysis of village, Ghoragachha, West Bengal: The Clubbing of variables based on Factor Loading

Factors	Variables Included		% of Variance Explained	Cumulative Variance	Factor Renaming
1	Farm size(x10)	0.928	9.748	9.748	Farm management
	Expenditure allotment (x11)	0.812			
	Annual income (x13)	0.787			
	Fuel consumption (x15)	0.693			
2	Educational aspiration (x4)	0.915	8.212	17.96	Educational participation
	Family education status (x3)	0.886			
	Education (x2)	0.618			
	Social participation (x27)	0.364			
3	Orientation towards competition (x23)	0.744	6.785	24.74	Strategic capacity
	Occupation (x8)	-0.689			
	Planning orientation (x24)	0.608			
	Distance matrix (x31)	-0.529			
	Independency (x19)	0.435			
4	Innovation proneness(x20)	0.856	6.537	31.28	Entrepreneurial drive
	Marketing orientation (x26)	0.485			
5	Adoption leadership (x17)	0.867	6.517	37.44	Access
	Economic motivation (x22)	0.516			
	Information seeking behavior(x29)	0.509			
6	Age (x1)	0.742	5.911	43.35	Entrepreneurial Behavior
	Risk orientation (x21)	0.515			
7	Training received (x30)	0.658	5.775	49.12	Management
	Scientific orientation (x18)	0.576			
	Utilization of cosmopolite Source of information (x28)	0.489			
	Drudgeries (x32)	-0.474			
8	Urbanization index (x7)	0.854	5.732	54.86	Modernizations
	Credit load (x12)	0.722			
9	Family Size (x5)	0.728	5.089	59.95	Family modernization
	Electricity consumption (x14)	-0.735			
10	Gender (x6)	0.811	4.789	64.73	Gender
11	Irrigation index (x16)	0.864	4.752	69.49	Entrepreneurial Motivation

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12	Production orientation (x25)	0.755	4.695	74.18	Agripreneurship
	Cropping intensity (x9)	0.721			

Table 6.29 presents the factor analysis through the conglomeration of exogenous variable in the form of different factors. It has been found that **factor 1** has accommodated the following variables *viz.* **Farm size (x_{10}), Expenditure allotment (x_{11}), Annual income (x_{13}) and Fuel consumption (x_{15})** and has been renamed as **Farm management**. It has contributed to 9.748 per cent to explain the variance embedded with **Social entropy**.

The **factor 2** has included **Educational aspiration (x_4), Family education status (x_3) and Education (x_2).** This factor has been renamed as **Collective Education**. It has contributed 8.212 per cent alone and 17.96 cumulatively to explain the variance embedded with **Social entropy**.

The **factor 3** has included following variable such as **Orientation towards competition (x_{23}), Occupation (x_8), Planning orientation (x_{24}), Distance matrix (x_{31}) and Independency (x_{19}).** It has been renamed as **Strategic capacity**. This variable has contributed 6.785 per cent alone and 24.74 per cent cumulatively to explain the variance embedded with **Social entropy**.

The **factor 4** has included following variable *viz.* **Innovation proneness (x_{20}) and Marketing orientation (x_{26}).** It has been renamed as **Entrepreneurial drive**. It has contributed 6.537 per cent alone and 31.28 per cent cumulatively to explain the variance embedded with **Social entropy**.

The **factor 5** has included the variable, **Adoption leadership (x_{17}), Economic motivation (x_{22}) and Information seeking behavior (x_{29}).** It has been renamed as **Motivation.** This variable has contributed 6.517 per cent alone while 37.44 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 6 includes the variables, **Age (x_1) and Risk Orientation (x_{21})**. It has been renamed as **Enterprise behavior**. This variable has contributed 5.911 per cent alone and 43.35 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 7 has included the following variable such as **Training received (x_{30})**, **Scientific orientation (x_{18})**, **Utilization of cosmopolite source of information (x_{28})**, **and Drudgeries (x_{32})**. It has been renamed as **Management**. It has contributed 5.775 per cent alone and 49.12 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 8 includes the variables *viz.* **Urbanization index (x_7)** and **Credit load (x_{12})**. It has been renamed as Modernization. It has contributed 5.732 per cent alone and 54.86 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 9 has included the variables, **Family size (x_5)** and **Electricity consumption (x_{14})** which has contributed 5.089 per cent alone and 59.95 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 10 contains only one variable, **Gender**. It has contributed 4.789 per cent alone and 64. 73 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 11 has included the variable, **Irrigation index (x_{16}), and Social participation (x_{27}).** It has been renamed as **Entrepreneurial motivation.** It has contributed 4.752 per cent alone and 69.49 per cent cumulatively to explain the variance embedded with **Social entropy**.

The factor 12 includes the variables, **Production orientation (x_{25}), and Cropping intensity (x_9)**. It has been renamed as **Agripreneurship**. It has contributed 4.695 per cent alone and 74.18 per cent cumulatively to explain the variance embedded with **Social entropy**.

Research locale - Village: Chiroura

Table 6.30: Correlation coefficient of Perception on discontinuance (y_1) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Variables	**Coefficient of Correlation (r)**
Age (x1)	0.012
Education (x2)	-0.085
Family Education Status (x3)	-0.138
Educational Aspiration (x4)	-0.052
Family Size (x5)	0.027
Gender (x6)	-0.047
Urbanization Index (x7)	0.154
Occupation (x8)	0.019
Cropping Intensity (x9)	0.159
Farm size (x10)	-0.097
Expenditure Allotment (x11)	0.061
Credit Load (x12)	-0.117
Annual Income (x13)	0.011
Electricity Consumption (x14)	0.249*
Fuel Consumption (x15)	-0.149
Irrigation Index (x16)	0.054
Adoption Leadership (x17)	0.156
Scientific Orientation (x18)	0.087
Independency (x19)	0.018
Innovation Proneness (x20)	-0.052
Risk Orientation (x21)	-0.077
Economic Motivation (x22)	-0.028

Orientation Towards Competition (x23)	-0.108
Management Orientation (x24)	0.044
Production Orientation (x25)	0.038
Market Orientation (x26)	0.366**
Social Participation (x27)	-0.016
Utilization of Cosmopolite Source of Information (x28)	0.269*
Information Seeking Behavior (x29)	0.220
Training Received (x30)	-0.066
Drudgeries (x31)	-0.022
Distance Matrix (x32)	0.148
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.30 presents the Correlation coefficient of the dependent variable, **Perception on discontinuance (y_1)** with 32 independent variables. It has been found that the independent variables *viz.* **Electricity consumption (x_{14}), Market orientation (x_{26}) and Utilization of cosmopolite source of information (x_{28})** are positively and significantly correlated with dependent variable, **Perception of discontinuance (y_1).**

Implication

The variable, **Electricity consumption (x_{14})** is an important indicator for estimating the magnitude and direction of urbanization in a given rural ecosystem. Whenever the agricultural modernization keeps transforming it invites increase of power consumption and expedite market interaction to redefine a new goner of life style that is why **Electricity consumption (x_{14})** and **Market orientation (x_{26})** have been found significant.

The wider and intense exposure to cosmopolite sources of information make a person an innovation hunter who constantly seeks an alternative to his/her dilapidated enterprise. A cosmopolite frame of mind always welcomes discontinuance in favor of adoption of relatively advantageous practice that is why these variables have picked up a positive implication favoring discontinuance of mundane practices.

Table 6.31: Stepwise regression analysis Perception on discontinuance (y_1) versus 32 independent variables of village, Chiroura, Bihar: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**T**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.495	0.154	0.343	3.216**	0.435	0.189	0.167	1.168
Utilization of cosmopolite source of Information (x28)	1.642	0.741	0.741	2.217*				

Revelation

Table 6.31 presents the stepwise regression analysis of dependent variable, **Perception on discontinuance (y_1)** versus 32 independent variables. The table reveals that the two independent variable *viz*. **Market orientation (y_{26})** and **Utilization of cosmopolite source of information (x_{28})** have been retained at the last step of screening. The value of R^2 being 0.189, it is to infer that both the two independent variables together have explained 18.9 per cent of variance embedded with the consequent variable i.e. **Perception on discontinuance (y_1).**

Implication

The variable, **Market orientation (x_{26})** is the prime mover for hunting better and rewarding alternatives. In search for alternatives has been here resultant into discontinuance of conventional and apparently non rewarding practice and this process of selective discontinuance in favor of welcoming desired choices has been supported by increasing exposure to cosmopolite source of information. The cosmopolite impersonal opinion leaders along with mass media devices have brought about a belligerent socialization of modern and enterprising agricultural technology in this area.

Table 6.32: Path analysis of Perception on discontinuance (y_1) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.012	0.073	-0.061	-0.109(x3)	-0.076(x10)	-0.045(x5)
Education (x2)	-0.085	0.023	-0.108	-0.128(x3)	-0.099(x10)	0.064(x4)
Family Education Status (x3)	-0.138	-0.342	0.204	-0.132(x4)	-0.128(x10)	0.061(x28)
Educational Aspiration (x4)	-0.052	0.151	-0.203	-0.300(x3)	-0.126(x10)	0.077(x28)
Family Size (x5)	0.027	0.191	-0.164	-0.195(x14)	-0.105(x10)	0.029(x21)
Gender (x6)	-0.047	0.034	-0.081	-0.037(x10)	-0.027(x21)	-0.021(x9)

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Urbanization Index (x7)	0.154	0.154	0.000	0.037(x26)	0.030(x31)	0.025(x3)
Occupation (x8)	0.019	0.181	-0.162	-0.055(x28)	-0.044(x29)	-0.039(x31)
Cropping Intensity (x9)	0.159	0.042	0.117	0.087(x3)	0.065(x10)	-0.045(x21)
Farm size (x10)	-0.097	-0.305	0.208	-0.144(x3)	0.105(x15)	0.081(x28)
Expenditure Allotment (x11)	0.061	0.064	-0.003	-0.102(x10)	0.037(x29) -0.037(x8)	-0.036(x31)
Credit Load (x12)	-0.117	-0.035	-0.082	0.121(x14)	-0.086(x10)	0.083(x15)
Annual Income (x13)	0.011	-0.082	0.093	-0.113(x10)	0.075(x28)	0.066(x14)
Electricity Consumption (x14)	0.249*	0.387	-0.138	-0.096(x5)	-0.035(x27)	-0.032(x21) 0.032(x26)
Fuel Consumption (x15)	-0149	0.161	-0.310	-0.200(x10)	-0.099(x3)	-0.072(x29)
Irrigation Index (x16)	0.054	-0.123	0.177	0.050(x10)	-0.044(x27)	0.038(x3)
Adoption Leadership (x17)	0.156	0.109	0.047	0.084(x28)	0.063(x29)	-0.045(x3)
Scientific Orientation (x18)	0.087	-0.065	0.152	0.094(x29)	0.061(x10)	-0.059(x15)
Independency (x19)	0.018	0.044	-0.026	-0.049(x21)	-0.040(x14)	0.033(x28) (x30)
Innovation Proneness (x20)	-0.052	0.123	-0.175	-0.080(x3)	-0.070(x10)	-0.054(x14)
Risk Orientation (x21)	-0.077	-0.255	0.178	0.047(x14)	0.033(x29) (x15)	0.023(x26)
Economic Motivation (x22)	-0.028	-0.016	-0.012	-0.059(x21)	0.039(x10)	0.038(x3)
Orientation Towards Competition (x23)	-0.108	-0.112	0.004	-0.097(x10)	-0.085(x3)	0.044(x16)
Management Orientation (x24)	0.044	0.108	-0.064	0.086(x14)	0.070(x15)	-0.067(x3)
Production Orientation (x25)	0.038	0.147	-0.109	0.064(x10)	-0.048(x28)	-0.044(x14)
Market Orientation (x26)	0.366**	0.268	0.098	0.046(x14)	0.038(x29)	0.036(x3)
Social Participation (x27)	-0.016	0.156	-0.172	-0.106(x10)	-0.102(x3)	-0.087(x14)
Utilization of Cosmopolite Source of Information (x28)	0.269*	0.245	0.024	0.107(x29)	-0.100(x10)	-0.085(x3)
Information Seeking Behavior (x29)	0.220	0.233	-0.013	0.113(x28)	-0.050(x15)	0.043(x26)
Training Received (x30)	-0.066	-0.157	0.091	0.040(x14)	0.036(x29)	0.029(x27)
Drudgeries (x31)	-0.022	0.152	-0.174	-0.059(x26)	-0.057(x14)	-0.046(x8)
Distance Matrix (x32)	0.148	0.045	0.103	-0.062(x10)	0.046(x3)	0.042(x26)
Residual Effect	0.740					
Highest count	Farm size (x10):20					

Revelation

Table 6.32 presents the path analysis of **Perception on discontinuance (y_1)** versus 32 exogenous variables of village, Chiroura. The table revealed that the exogenous variable, **Electricity consumption (x_{14})** has exerted the highest total direct effect and the exogenous variable, **Fuel consumption (x_{15})** has exerted the highest indirect effect. The exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect of as many as 20 exogenous variables to characterize the perception on discontinuance. The residual effect being 0.740, it is to infer that even with the combination of 32 exogenous variable 26 per cent of variance embedded in **Perception on discontinuance (y_1)** has been explained so far.

Implication

The variable, **Electricity consumption (x_{14})** and **Fuel consumption (x_{15})**, both the variables present the nature of energy consumption vis *a vis* elements of modernization which is running at a high pace towards redefining the rural life and redefining the traditional knowledge in the form of 'hetrosis of changed rural life'. The intrusion of electricity in rural life does invite a kind of 'Social big bang'. The earlier stale society starts booming and expanding to an infinite direction a kind of exponential expansion. It is therefore and therewith rejection and discontinuance would come up as an effect of drifting practices in characterizing the rural social system.

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Table 6.33: Correlation coefficient of Perception on rejection (y_2) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Variables	**Coefficient of Correlation (r)**
Age (x1)	0.089
Education (x2)	-0.082
Family Education Status (x3)	0.095
Educational Aspiration (x4)	0.121
Family Size (x5)	-0.104
Gender (x6)	0.022
Urbanization Index (x7)	0.048
Occupation (x8)	-0.086
Cropping Intensity (x9)	0.000
Farm size (x10)	-0.211
Expenditure Allotment (x11)	0.103
Credit Load (x12)	-0.126
Annual Income (x13)	-0.152
Electricity Consumption (x14)	0.258*
Fuel Consumption (x15)	-0.311**
Irrigation Index (x16)	0.057
Adoption Leadership (x17)	0.172
Scientific Orientation (x18)	0.223
Independency (x19)	0.160
Innovation Proneness (x20)	-0.015
Risk Orientation (x21)	0.030
Economic Motivation (x22)	0.038
Orientation Towards Competition (x23)	-0.028
Management Orientation (x24)	0.104
Production Orientation (x25)	-0.104
Market Orientation (x26)	0.423**
Social Participation (x27)	0.015
Utilization of Cosmopolite Source of Information (x28)	0.227*
Information Seeking Behavior (x29)	0.268*
Training Received (x30)	-0.079
Drudgeries (x31)	-0.142
Distance Matrix (x32)	0.074
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.33 presents the correlation coefficient of the dependent variable, **Perception on rejection (y_2)** with 32 independent variables. The table reveals that the independent variables *viz*. **Electricity consumption (x_{14}), Utilization of cosmopolite sources of information (x_{28}), Market orientation and Information seeking behavior (x_{29})** are significantly and positively correlated with the dependent variable, **Perception on rejection (y_2).**

It has also been found that the independent variable, **Fuel consumption (x_{15})** is highly significant but negatively correlated with the dependent variable, **Perception on rejection (y_2).**

Implication

The dependent variable, **Perception on rejection (y_2),** presents a thoughtful discussion based on past experiences. It is basically and empirical as well as logical conclusion about a perceived consequences. The Psycho-somatic exposure of a respondent in the world of hurling information and bubbling ideas emanating through electronic media cosmopolite personal and hetrophilly interaction with different sound echelon have driven the respondents building a perceptual learning and in most cases have had led the information seeker to a logical rejection of conventional technology option. The variables *viz.* **Electricity consumption (x_{14}), Fuel consumption (x_{15})**, **Market orientation (x_{26}), Utilization of cosmopolite sources of information (x_{28})** and **Information seeking behavior (x_{29})** can be considered together a bunch of indicators that imply modernizing rural social system.

Table 6.34: Stepwise regression analysis of Perception on rejection (y_2) versus 32 independent variables of village, Chiroura, Bihar: Predominating variables retained at the last step

Predictors	B	S.E	Beta	t	R	R2	R2 Adjusted	SE Estimated
Market orientation (x26)	0.565	0.149	0.367	4.026**	0.641	0.411	0.368	1.148
Fuel consumption (x15)	0.000	0.000	-0.457	-4.651**				
Electricity consumption (x14)	0.027	0.009	0.289	3.153**				
Educational aspiration (x4)	-0.143	0.058	0.237	2.754**				
Expenditure allotment (x11)	0.033	0.015	0.202	2.087*				

Revelation

Table 6.34 presents the stepwise regression analysis of the dependent variable, **Perception on rejection (y_2)** versus 32 independent variables of village, Chiroura. It has been found that the independent variables *viz*. **Market orientation (x_{26}), Fuel consumption (x_{15}), Electricity consumption (x_{14}), Educational aspiration (x4) and Expenditure allotment (x_{11})** have been retained at the last step of screening.

The R^2 being 0.411, it is to conclude that all the five predictors altogether have explained 41 per cent of variance embedded with the predicted variable i.e. **Perception on rejection (y_2).**

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Implication

The causal variable retained at the last step indicates that there has been a conglomeration of causal variables that can move together to help make a decision that logical rejection always goes better over a reasonless continuance of anything already has gone worn out.

The variable, **Fuel consumption (x_{15})** among all these five causal variables has became conspicuous and its effect that in anything happens predominantly with the rural life style that has been changed in its fuel consumption. It can also be estimated though the reduction of forest stretches dwindling of cattle population, entries of LPGs gas, gradual withdrawal of cow dung consumption for cooking and other purposes and an increase in farm mechanization.

Table 6.35: Path analysis of Perception on rejection (y_2) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.089	0.022	0.067	0.069(x4)	-0.063(x15)	-0.053(x10)
Education (x2)	-0.082	0.070	-0.152	0.099(x4)	-0.095(x15)	-0.068(x10)
Family Education Status (x3)	0.095	0.084	0.011	0.205(x4)	-0.111(x15)	-0.089(x10)
Educational Aspiration (x4)	0.121	0.234	-0.113	-0.112(x15)	-0.087(x10)	0.074(x3)
Family Size (x5)	-0.104	0.093	-0.197	-0.150(x14)	-0.073(x10)	-0.038(x20)
Gender (x6)	0.022	0.110	-0.088	-0.039(x15)	-0.031(x18)	0.027(x25)
Urbanization Index (x7)	0.048	0.135	-0.087	0.049 (x25)	0.040(x26)	-0.034(x17)
Occupation (x8)	-0.086	-0.059	-0.027	-0.051(x11)	-0.027(x15)	0.024(x10)
Cropping Intensity (x9)	0.000	-0.086	0.086	0.102(x15)	-0.056(x4)	0.046(x20)
Farm size (x10)	-0.211	-0.211	0.000	-0.233(x15)	0.097(x4)	0.084(x11)
Expenditure Allotment (x11)	0.103	0.251	-0.148	-0.076(x15)	-0.071(x10)	0.046(x25)
Credit Load (x12)	-0.126	-0.086	-0.040	-0.199(x15)	0.093(x14)	0.074(x25)
Annual Income (x13)	-0.152	-0.114	-0.038	-0.144(x15)	-0.078(x10)	0.055(x4)
Electricity Consumption (x14)	0.258*	0.298	-0.040	-0.065(x15)	0.050(x24)	-0.047(x5)
Fuel Consumption (x15)	-0.311**	-0.385	0.074	-0.138(x10)	0.096(x24)	0.068(x4)
Irrigation Index (x16)	0.057	0.032	0.025	0.047(x17)	0.034(x10)	-0.031(x25)
Adoption Leadership (x17)	0.172	0.193	-0.0121	0.050(x15)	0.038(x18)	-0.037(x30) (x20)
Scientific Orientation (x18)	0.223	0.136	0.087	0.143(x15)	0.054(x17)	0.042(x10)
Independency (x19)	0.160	0.170	-0.010	-0.062(x25)	-0.035(x20)	0.034(x30)
Innovation Proneness (x20)	-0.015	-0.222	0.207	0.079(x25)	0.060(x4)	-0.049(x10) 0.049(x24)
Risk Orientation (x21)	0.030	-0.002	0.032	-0.079(x15)	0.042(x24)	0.038(x14)
Economic Motivation (x22)	0.038	0.045	-0.007	0.072(x19)	-0.051(x25)	0.027(x10)
Orientation Towards Competition (x23)	-0.028	-0.043	0.015	-0.095(x15)	-0.067(x10)	0.057(x11)
Management Orientation (x24)	0.104	0.222	-0.118	-0.167(x15)	0.066(x14)	0.060(x4)
Production Orientation (x25)	-0.104	-0.295	0.191	0.089(x15)	0.059(x20)	0.044(x10)
Market Orientation (x26)	0.423**	0.286	0.137	0.036(x14) (x15)	0.033(x24)	0.09(x7)
Social Participation (x27)	0.015	0.073	-0.058	-0.073(x10)	-0.067(x14)	0.055(x4)
Utilization of Cosmopolite Source of Information (x28)	0.227*	-0.012	0.239	0.074(x4)	-0.069(x10)	0.067(x17)
Information Seeking Behavior (x29)	0.268*	-0.060	0.328	0.119(x15)	0.055(x18)	0.052(x17)

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Training Received (x30)	-0.079	-0.163	0.084	-0.046(x11)	0.044(x17)	-0.035(x19)
Drudgeries (x31)	-0.142	-0.055	-0.087	-0.063(x26)	0.060(x11)	-0.043(x14)
Distance Matrix (x32)	0.074	0.086	-0.012	0.045(x26)	-0.043(x10)	-0.028(x4)
Residual Effect	0.621					
Highest count	Fuel Consumption (x15):20					

Revelation:

Table 6.35 presents the path analysis of dependent variable, **Perception on rejection (y_2)** versus 32 exogenous variables. It has been found that the exogenous variable, **Fuel consumption (x_{15})** has exerted the highest direct effect whereas the exogenous variable, **Information seeking behavior (x_{29})** has exerted highest indirect effect.

It has been further found that the exogenous variable, **Fuel consumption (x_{15})** has routed the highest substantial indirect effect of as many as, 20 exogenous variables to characterize the **Perception on rejection (y_2).**

The residual effect being 0.621, it is to infer that even with the combination of 32 exogenous variables 38 per cent of variance embedded in the dependent variable, **Perception on rejection (y_2)** has been explained so far.

Implication

It is discernible that the highest direct effect has been exerted on **Perception on rejection (y_2)** by the variable, **Fuel consumption (x_{15})**. It is again interesting to note that the other variable, **Information seeking behavior (x_{29})** has generated a huge viscosity of companionship in the form of indirect effect. Again important to modernization of rural lives vide **Fuel consumption (x_{15})** and **Information seeking behavior (x_{29})** have become conceptually and operationally active to beget a perception that rejection of tired entrepreneurship in better to invite adoption of belligerent entrepreneurship.

Table 6.36: Correlation coefficient of Disagreement (y_3) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.121
Education (x2)	0.141
Family Education Status (x3)	0.129
Educational Aspiration (x4)	0.217
Family Size (x5)	0.006
Gender (x6)	0.001
Urbanization Index (x7)	0.005
Occupation (x8)	-0.166
Cropping Intensity (x9)	-0.023
Farm size (x10)	-0.079
Expenditure Allotment (x11)	0.116
Credit Load (x12)	-0.215
Annual Income (x13)	-0.007
Electricity Consumption (x14)	0.265*
Fuel Consumption (x15)	-0.192
Irrigation Index (x16)	-0.056
Adoption Leadership (x17)	0.145
Scientific Orientation (x18)	0.155
Independency (x19)	0.015
Innovation Proneness (x20)	-0.037
Risk Orientation (x21)	-0.033
Economic Motivation (x22)	-0.127
Orientation Towards Competition (x23)	-0.048
Management Orientation (x24)	0.059
Production Orientation (x25)	0.005
Market Orientation (x26)	0.322**
Social Participation (x27)	0.032
Utilization of Cosmopolite Source of Information (x28)	0.263*
Information Seeking Behavior (x29)	0.392**
Training Received (x30)	-0.055
Drudgeries (x31)	-0.184
Distance Matrix (x32)	0.110
*Significant at 0.05% **Significant at 0.01%	

Revelation:

Table 6.36 presents the correlation coefficient of dependent variable, **Disagreement (y_3)** with 32 independent variables of village, Chiroura. It has been found that the variable *viz.* **Electricity consumption (x_{14})** and **Utilization of cosmopolite source of information (x_{28})** have been significantly and positively correlated with the **Disagreement (y_3)**. The table also reveals that the two variables *viz.* **Market orientation (x_{26}) and Information seeking behavior (x_{29})** has been recorded positive and significant correlation with the dependent variable, **Disagreement (y_3).**

Implication

Disagreement is basically a disposition of behaviorally and logically opposed interaction. In the realm of modernization especially when, occurs in an agro-ecosystem, the role of media and interpersonal communication stands important and predominant. The ‘enlighten’ helps generate arguments and cherish logic that ultimately go responsible for logical culmination of traditionally and entry of modernity into the pace and space of transforming life style. Cultivation transforms into impository investment and ultimately it will transform into belligerent entrepreneurship

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Table 6.37: Stepwise regression analysis of Disagreement (y_3) versus 32 independent variables of village, Chiroura, Bihar: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Information Seeking behavior (x29)	0.268	0.102	0.263	2.626**	0.606	0.367	0.321	0.010
Market orientation (x26)	0.297	0.137	0.214	2.171*				
Electricity consumption (x14)	0.025	0.008	0.307	2.977**				
Credit load (x12)	-3.022E-5	0.000	-0.278	-2.583**				
Educational aspiration (x4)	0.127	0.051	0.248	2.510**				

Revelation

Table 6.37 presents the stepwise regression analysis of the dependent variable, **Disagreement (y_3)** versus 32 independent variables of village, Chiroura. It has been found that predominating predictors *viz*. **Information seeking behavior (x_{29}), Market orientation (x_{26}), Electricity consumption (x_{14}), Credit load (x_{12})** and **Educational aspiration (x_4)** have been retained at the last step of screening.

The value of R^2 being 0.367, it is to infer that all the five predominating predictor have explained 36 per cent of variance embedded with the predicted variable i.e. **Disagreement (y_3).**

Implication:

Stepwise regression has ultimately retained five variables that includes Information seeking behavior (x_{29}), Market orientation (x_{26}), Electricity consumption (x_{14}), Credit load (x_{12}) and Educational aspiration (x_4). These bands of variables do present a constellation of modernity including entrepreneurial motivation and information seeking pursuits. The small constellation of causal variables can be of immense strategic implication to study the 'negentropy' in a typical technology socialization process.

Table 6.38: Path analysis of Disagreement (y_3) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.121	0.022	0.099	-0.141(x10)	0.129(x4)	-0.084(x3)
Education (x2)	0.141	0.314	-0.173	0.185(x4)	-0.183(x10)	-0.100(x3)
Family Education Status (x3)	0.129	0.394	0.382	0.382(x4)	-0.237(x10)	0.118(x2)
Educational Aspiration (x4)	0.217	0.436	-0.219	-0.234(x10)	-0.232(x3)	0.133(x2)
Family Size (x5)	0.006	0.270	-0.264	-0.208(x14)	-0.195(x10)	0.054(x12)
Gender (x6)	0.001	0.225	-0.224	-0.103(x12)	-0.068(x10)	0.037(x4)
Urbanization Index (x7)	0.005	0.023	-0.018	0.044(x10)	0.036(x2)	0.032(x19)
Occupation (x8)	-0.166	-0.191	0.023	0.064(x10)	-0.060(x29)	-0.051(x11)
Cropping Intensity (x9)	-0.023	-0.090	0.067	0.120(x10)	-0.103(x4)	-0.074(x15)
Farm size (x10)	-0.079	-0.565	0.468	0.188(x15)	0.181(x4)	-0.111(x3)
Expenditure Allotment (x11)	0.116	0.251	-0.135	-0.190(x10)	0.055(x15) -0.055(x12)	0.051(x29)
Credit Load (x12)	-0.215	-0.338	0.123	-0.159(x10)	0.144(x15)	0.129(x14)
Annual Income (x13)	-0.007	-0.037	0.030	-0.210(x10)	-0.123(x12)	0.104(x15)
Electricity Consumption (x14)	0.265*	0.413	-0.148	-0.136(x5)	-0.106(x12)	0.047(x15)
Fuel Consumption (x15)	-0.192	0.280	-0.472	-0.371(x10)	-0.174(x12)	0.127(x4)
Irrigation Index (x16)	-0.056	-0.234	0.178	0.092(x10)	0.059(x23)	0.047(x29)
Adoption Leadership (x17)	0.145	0.138	0.007	0.086(x29)	-0.057(x16)	-0.049(x30)
Scientific Orientation (x18)	0.155	0.051	0.104	0.129(x29)	0.113(x10)	-0.106(x15)
Independency (x19)	0.015	0.224	-0.209	0.057(x22)	-0.045(x30)	-0.043(x14)
Innovation Proneness (x20)	-0.037	-0.008	-0.029	-0.131(x10)	0.111(x4)	-0.062(x3)
Risk Orientation (x21)	-0.033	-0.166	0.133	0.057(x15)	-0.054(x12)	0.052(x14)
Economic Motivation (x22)	-0.127	0.134	0.007	0.093(x19)	0.073(x10)	-0.056(x12)
Orientation Towards Competition (x23)	-0.048	-0.164	0.116	-0.179(x10)	0.084(x16)	0.072(x4)
Management Orientation (x24)	0.059	0.083	-0.024	0.121(x15)	-0.116(x10)	0.111(x4)
Production Orientation (x25)	0.005	-0.007	0.012	0.119(x10)	0.084(x12)	-0.064(x15)

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Market Orientation (x26)	0.322**	0.219	0.103	-0.061(x2)	0.052(x29)	0.050(x14)
Social Participation (x27)	0.032	0.118	-0.086	-0.196(x10)	0.102(x4)	-0.098(x14)
Utilization of Cosmopolite Source of Information (x28)	0.263*	0.037	0.300	-0.186(x10)	0.147(x29)	0.138(x4)
Information Seeking Behavior (x29)	0.392**	0.318	0.074	-0.086(x15)	0.070(x12)	0.040(x11)
Training Received (x30)	-0.055	-0.216	0.161	0.063(x2)	0.049(x29)	-0.046(x11) (x19)
Drudgeries (x31)	-0.184	-0.055	-0.129	-0.077(x10)	0.060(x11) -0.060(x14)	-0.051(x4)
Distance Matrix (x32)	0.110	-0.015	0.125	-0.115(x10)	0.078(x12)	-0.052(x4)
Residual Effect	0.604					
Highest count	Farm size(x10):24					

Revelation

Table 6.38 presents the path analysis of the dependent variable, **Disagreement (y_3)** versus 32 exogenous variables of village, Chiroura. It has been found that the variable, **Farm size (x_{10})** has exerted highest total direct effect and the exogenous variables, **Fuel consumption (x_{15})** has exerted highest indirect effect on **Disagreement (y_3).** It has been further found that the exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect of as many as 24 exogenous variables characterizing the dependent variable, **Disagreement (y_3).**

The residual effect being 0.604, it is to infer that with the combination of 32 exogenous variables 40 per cent of the variance of **Disagreement (y_3)** has been explained so far.

Implication

It generates logic that the variable, **Farm size (x_{10})** or resource character is still a deciding factor as to whether and why a technology needs to be adopted or rejected. The empirical study evinces that disagreement or rejection is the choices for those having high size of holding. On the contrary high size of holding helps allow fragments of land go alternatively in receiving the trial of innovation or new enterprise.

The variable, **Fuel consumption (x_{15}),** by becoming a critical indicator to estimate process of rural modernization, has been found a cognate indicator for all other variables in characterizing the decision to disagree so as a companion variable it has got a kind of associational property in simulating the interaction of set of variables.

Table 6.39: Correlation coefficient of Conflict (y_4) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	-0.072
Education (x2)	-0.177
Family Education Status (x3)	-0.159
Educational Aspiration (x4)	-0.120
Family Size (x5)	-0.107
Gender (x6)	-0.063
Urbanization Index (x7)	0.034
Occupation (x8)	-0.141
Cropping Intensity (x9)	-0.101
Farm size (x10)	-0.441**
Expenditure Allotment (x11)	0.062
Credit Load (x12)	-0.165
Annual Income (x13)	-0.235*
Electricity Consumption (x14)	0.130
Fuel Consumption (x15)	-0.445**
Irrigation Index (x16)	-0.101
Adoption Leadership (x17)	-0.014
Scientific Orientation (x18)	0.293*
Independency (x19)	0.069
Innovation Proneness (x20)	-0.204
Risk Orientation (x21)	0.033
Economic Motivation (x22)	0.090
Orientation Towards Competition (x23)	0.003
Management Orientation (x24)	-0.051
Production Orientation (x25)	0.038
Market Orientation (x26)	0.320**
Social Participation (x27)	-0.132
Utilization of Cosmopolite Source of Information (x28)	0.084
Information Seeking Behavior (x29)	0.378**
Training Received (x30)	-0.043
Drudgeries (x31)	-0.139
Distance Matrix (x32)	-0.069
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.39 presents the correlation coefficient of dependent variable, **Conflict (y_4)** with 32 independent variables of village, Chiroura. It has been found that the variable, **Scientific orientation (x_{18})** is significant and positively correlated with the dependent variable, **Conflict (y_4).** The independent variable, **Annual income (x_{13})** has been found to be significantly but negatively correlated with the dependent variable, **Conflict (y_4).**

It has been further found that the two variables *viz*. **Market orientation (x_{26})** and **Information seeking behavior (x_{29})**

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have been recorded significant and positive correlation with the dependent variable, **Conflict (y_4).**

The table also reveals that the two variables *viz*. **Farm size (x_{10})** and **Fuel consumption (x_{15})** have been recorded significant but negative correlation with dependent variable, **Conflict (y_4).**

Implication

The history of science has been profiled through conflict and disagreement. The prime mover for scientific discourses has been the stride of counter logic and feat of innovation. This has become comprehensive while supported by **Information seeking behavior (x_{29}), Market orientation (x_{26})** and economic status including income of an individual in a given social cybernetics. That is why the above stated variables have contributed to the 'episode of conflict' in a given rural ecology which is on the offing of change and transformation.

Table 6.40: Stepwise regression analysis of dependent variable Conflict (y_4) versus 32 independent variables of village, Chiroura, Bihar: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.387	0.114	0.300	3.387**	0.692	0.478	0.432	0.86178
Innovation proneness (x20)	-0.303	0.137	-0.205	-2.221*				
Farm size (x10)	-0.092	0.036	-0.318	-2.554**				
Expenditure allotment (x11)	-0.034	0.012	-0.256	2.723**				
Fuel consumption (x15)	0.000	0.000	-0.336	-2.818**				
Cropping intensity (x9)	-0.016	0.005	-0.343	-3.657**				

Revelation

Table 6.40 presents the stepwise regression analysis dependent variable, **conflict (y_4)** versus 32 independent variables of village, Chiroura. It has been found that the following variables *viz.* **Market orientation (x_{26})**, **Innovation proneness (x_{20}), Farm size (x_{10}), Expenditure allotment (x_{11}), Fuel consumption (x_{15})**, and **Cropping intensity (x_9)** have been retained at the last step of screening.

The value of R^2 being 0.478, it is to infer that all the six predominating predictor have explained 47.8 per cent variance embedded with the predicted variable i.e. **Conflict (y_4).**

Implication

Conflict is basically the exposition of mutual disagreement, discord and dialects over a common issue. Conflict involves the 'negentropy' and creativity, renovation and innovation, abstract and alternatives; it is a journey from one decaying equilibrium to a earning equilibrium. With the increase of cropping intensity in a given space of agro-ecosystem, new concepts experiences and destination start crippling into it alongside package of practices, material inputs, pesticides dose as well as set of mechanized operation. This invited change also invites new conflicts which can be conceived as a new set of social entropy.

Table 6.41: Path analysis of dependent variable Conflict (y_4) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.072	-0.023	-0.049	-0.142(x10)	0.081(x4)	0.064(x3)
Education (x2)	-0.177	-0.018	-0.159	-0.184(x10)	0.116(x4)	-0.076(x3)
Family Education Status (x3)	-0.159	-0.202	-0.043	0.240(x4)	-0.239(x10)	-0.078(x9)
Educational Aspiration (x4)	-0.120	0.274	-0.394	-0.236(x10)	-0.177(x3)	0.073(x9)
Family Size (x5)	-0.107	0.223	-0.330	-0.196(x10)	-0.084(x14)	-0.027(x4)
Gender (x6)	-0.063	0.089	-0.152	-0.069(x10)	-0.034(x18)	-0.029(x16)
Urbanization Index (x7)	0.034	0.040	-0.006	0.044(x10)	0.035(x26)	-0.021(x16)
Occupation (x8)	-0.141	-0.175	0.034	0.064(x10)	-0.052(x29)	-0.040(x11)
Cropping Intensity (x9)	-0.101	-0.308	0.207	0.121(x10)	-0.065(x4)	0.052(x3)
Farm size (x10)	-0.441**	-0.569	0.128	0.113(x4)	-0.085(x3)	0.077(x5)
Expenditure Allotment (x11)	0.062	0.198	-0.136	-0.191(x10)	0.044(x29)	0.036(x8)

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Credit Load (x12)	-0.165	0.059	-0.224	-0.161(x10)	-0.070(x13)	-0.057(x29)
Annual Income (x13)	-0.235**	-0.192	-0.043	-0.212(x10)	0.081(x9)	0.064(x4)
Electricity Consumption (x14)	0.130	0.167	-0.037	-0.112(x5)	0.039(x10)	0.033(x13)
Fuel Consumption (x15)	-0.445**	0.007	-0.452	-0.374(x10)	-0.085(x29)	0.081(x9)
Irrigation Index (x16)	-0.101	-0.186	0.085	0.093(x10)	0.041(x29)	-0.022(x26) (x3)
Adoption Leadership (x17)	-0.014	0.012	-0.026	0.075(x29)	-0.045(x16)	-0.040(x18)
Scientific Orientation (x18)	0.293*	0.146	0.147	0.113(x10)	0.112(x29)	-0.021(x6) (x8)
Independency (x19)	0.069	0.132	-0.063	0.039(x9)	-0.029(x29)	-0.025(x20)
Innovation Proneness (x20)	-0.204	-0.159	-0.045	-0.132(x10)	0.070(x4)	0.064(x9)
Risk Orientation (x21)	0.033	-0.125	0.158	0.055(x9)	0.039(x29)	-0.025(x5) 0.025(x19)
Economic Motivation (x22)	0.090	0.011	0.079	0.073(x10)	0.056(x19)	0.045(x9)
Orientation Towards Competition (x23)	0.003	0.008	-0.005	-0.181(x10)	0.081(x9)	0.067(x16)
Management Orientation (x24)	-0.051	0.006	-0.045	-0.117(x10)	0.070(x4)	-0.057(x9)
Production Orientation (x25)	0.038	-0.040	0.078	0.120(x10)	0.042(x20)	-0.031(x11)
Market Orientation (x26)	0.320**	0.251	0.069	0.045(x29)	-0.027(x9) 0.027(x10)	0.021(x3)
Social Participation (x27)	-0.132	0.013	-0.145	-0.198(x10)	0.064(x4)	-0.060(x3)
Utilization of Cosmopolite Source of Information (x28)	0.084	-0.018	0.102	-0.187(x10)	0.127(x29)	0.086(x4)
Information Seeking Behavior (x29)	0.378**	0.276	0.102	0.059(x18)	0.041(x26)	0.033(x8)
Training Received (x30)	-0.043	-0.076	0.024	0.043(x29)	-0.036(x11)	-0.027(x19)
Drudgeries (x31)	-0.139	-0.069	-0.070	-0.077(x10)	-0.055(x26)	0.048(x11)
Distance Matrix (x32)	-0.069	-0.044	-0.025	-0.116(x10)	0.039(x26)	0.037(x5) (x8)
Residual Effect	0.596					
Highest count	Farm size (x10):26					

Revelation

Table 6.41 presents the path analysis of dependent, **conflict (y_4)** versus 32 exogenous variables of village, Chiroura. It has been found that the exogenous variable, **Farm size (x_{10})** has exerted the highest direct effect whereas the exogenous variable, **Fuel consumption (x_{15})** has exerted the highest indirect effect on the dependent variable, **Conflict (y_4)**. The table also reveals that the exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect of as many as 26 exogenous variables to characterize the dependent variable, **Conflict (y_4).** The residual effect being 0.596, it is to infer that even with the combination of 32 exogenous variable 41 per cent of the variance of conflict has been explained so far.

Implication

Those who are having high size of holding and higher resource endowments; they are also accessing plenty of choices in their entrepreneurial endowments. When choices go plenty, conflicts are coming by thousand and hence higher status of entropy. That is why it has exerted the highest direct effect on dependent variable, **Conflict (y_4).**

The other variable, **Fuel consumption (x_{15})** has recorded high operational intensity viscosity with a score of companion variable to ultimately characterize the nature and extent of conflict. **Fuel consumption (x_{15})** on the other hand estimates wider territorial mobility and intense consumption of urbanite lifestyle elements and quite logically this will fuel the domain of conflict, both implicit as well as explicit manner.

Table 6.42: Correlation coefficient of Reasons for dissonance (y_5) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.059
Education (x2)	-0.027
Family Education Status (x3)	-0.035

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Educational Aspiration (x4)	0.027
Family Size (x5)	-0.022
Gender (x6)	-0.161
Urbanization Index (x7)	-0.130
Occupation (x8)	-0.121
Cropping Intensity (x9)	-0.011
Farm size (x10)	-0.132
Expenditure Allotment (x11)	0.026
Credit Load (x12)	-0.086
Annual Income (x13)	-0.112
Electricity Consumption (x14)	0.271*
Fuel Consumption (x15)	-0.250*
Irrigation Index (x16)	-0.225
Adoption Leadership (x17)	-0.030
Scientific Orientation (x18)	0.035
Independency (x19)	-0.029
Innovation Proneness (x20)	0.086
Risk Orientation (x21)	-0.306**
Economic Motivation (x22)	-0.205
Orientation Towards Competition (x23)	0.084
Management Orientation (x24)	0.140
Production Orientation (x25)	0.219
Market Orientation (x26)	0.312**
Social Participation (x27)	0.018
Utilization of Cosmopolite Source of Information (x28)	0.002
Information Seeking Behavior (x29)	0.170
Training Received (x30)	0.090
Drudgeries (x31)	-0.397**
Distance Matrix (x32)	0.114
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.42 presents the correlation coefficient of dependent variable, **Reasons for Dissonance (y_5)** with 32 independent variables of village, Chiroura. The table reveals that the independent variable, **Electricity consumption (x_{14})** is significantly and positively correlated with the dependent variable, **Reasons for dissonance (y_5).** It has also been found that the independent variable, **Fuel consumption (x_{15})** is significantly but negatively correlated with the **Reasons for dissonance (y_5).** The table also reveals that the two variables *viz.* **Risk orientation (x_{22})** and **Distance matrix (x_{31})** are highly significant but negatively correlated with the **Reasons for dissonance (y_5).** It is clear from the table that the independent variable, **Market orientation (x_{26})** is highly significant but positively correlated with the dependent variable, **Reasons for dissonance (y_5).**

Implication

Closure territorial mobility of respondent, restricted access to information and lesser distance matrix, poor consumption of fuel and so on are creating a kind of psychological confinement of the respondent, especially of rural women. Sometimes meaningless physical proximity or prescribed psychological retrenchment associated with lesser risk taking ability *via a vis* orientation have framed up a collage of summating reason to invite dissonance. Dissonance is basically the critical input for igniting psychological entropy.

Table 6.43: Stepwise regression analysis of Reasons for dissonance (y_5) versus 32 independent variables of village, Chiroura: Predominating variables retained at the last step

N = 75								
Predictors	B	S.E	Beta	t	R	R2	R2 Adjusted	SE Estimated
Distance matrix (x31)	-0.330	0.112	-0.276	-2.938**	0.667	0.444	0.395	1.102
Risk orientation (x21)	-0.746	0.187	-0.368	-3.981**				
Market orientation (x26)	0.387	0.152	0.242	2.551**				
Electricity consumption (x14)	0.021	0.009	0.223	2.411*				
Irrigation index (x16)	-0.042	0.017	-0.228	-2.471*				
Information Seeking behavior (x29)	0.241	0.110	0.205	2.193*				

Revelation

Table 6.43 presents the stepwise regression analysis of dependent variable, **Reasons for Dissonance (y_5)** versus 32 independent variable of village Chiroura. It is clear from the table the predominating variables *viz.* **Distance matrix (x_{31})**, **Risk orientation (x_{21})**, **Market orientation (x_{26})**, **Electricity consumption (x_{14}), Irrigation index (x_{16}) Information seeking behavior (x_{24})** have been retained at the last step of screening. The value of R^2 being 0.44, it is to conclude that all the six predominating predictor have explained 44 per cent variance embedded with the predicted variable, i.e. **Reasons for dissonance (y_5).**

Implication

Pseudo modernization or unfinished modernizations in rural social ecosystem are expected to add more entropy *vis a vis* dissonance. The indications for pseudo modernization are clear while the same respondents are suffering from dichotomy of higher market orientation with less risk orientation and so on. All this partial modernization or unfinished modernization can be found dangerously oscillating between pull of traditionality and push of modernity. Same respondents, who are frequent of market and regular recipient of information through modern electronic gadget, are not practicing minimum hygiene for example

washing hand with soap. The 'modern farmer', who is applying plant hormone to get an organized harvest, is blatantly ignorant to immunize his kids. This kind of oscillating modernization, which is fragmented and fractured too, shall invite more stress and entropy to his psychic structures.

Table 6.44: Path analysis Reasons for dissonance (y_5) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.059	0.166	-0.107	-0.100(x3)	0.070(x4)	-0.069(x10)
Education (x2)	-0.027	0.156	-0.183	-0.117(x3)	0.101(x4)	-0.090(x10)
Family Education Status (x3)	-0.035	-0.313	0.278	0.208(x4)	-0.116(x10)	-0.072(x28)
Educational Aspiration (x4)	0.027	0.237	-0.210	-0.274(x3)	-0.115(x10)	-0.091(x28)
Family Size (x5)	-0.022	0.183	-0.205	-0.159(x14)	-0.096(x10)	0.044(x21)
Gender (x6)	-0.161	-0.067	-0.094	0.061(x12)	-0.042(x21)	-0.039(x19)
Urbanization Index (x7)	-0.130	0.060	-0.190	-0.043(x1)	0.036(x19)	-0.030(x25) (x31)
Occupation (x8)	-0.121	-0.081	-0.040	-0.068(x29)	0.065(x28)	0.039(x31)
Cropping Intensity (x9)	-0.011	-0.099	0.088	0.080(x3)	0.069(x21)	0.059(x10)
Farm size (x10)	-0.132	-0.277	0.145	-0.132(x3)	-0.112(x15)	0.098(x4)
Expenditure Allotment (x11)	0.026	0.117	-0.091	-0.093(x10)	0.057(x29)	-0.041(x28)
Credit Load (x12)	-0.086	0.199	-0.285	0.099(x14)	-0.088(x15)	-0.078(x10)
Annual Income (x13)	-0.112	-0.047	-0.065	-0.103(x10)	-0.089(x28)	0.072(x12) -0.062(x12)
Electricity Consumption (x14)	0.271*	0.316	-0.045	-0.092(x5)	0.062(x12)	-0.049(x21)
Fuel Consumption (x15)	-0.250*	-0.171	-0.079	-0.182(x10)	-0.110(x29)	-0.091(x3)
Irrigation Index (x16)	-0.225	-0.240	0.015	0.053(x29)	0.045(x10)	0.034(x3)
Adoption Leadership (x17)	-0.030	0.043	-0.073	-0.099(x28)	0.097(x29)	-0.058(x16)
Scientific Orientation (x18)	0.035	0.006	0.029	0.145(x29)	-0.069(x28)	0.063(x15)
Independency (x19)	-0.029	0.254	-0.283	-0.076(x22)	-0.074(x21)	-0.039(x28)
Innovation Proneness (x20)	0.086	0.075	0.011	-0.073(x3)	-0.064(x10)	0.061(x4)
Risk Orientation (x21)	-0.306**	-0.389	0.083	0.051(x29)	0.048(x19)	-0.041(x22)
Economic Motivation (x22)	-0.205	-0.179	-0.026	0.107(x19)	-0.090(x21)	0.036(x10)
Orientation Towards Competition (x23)	0.084	0.006	0.078	-0.088(x10)	0.087(x16)	-0.078(x3)
Management Orientation (x24)	0.140	0.194	-0.054	-0.074(x15)	-0.073(x21)	0.071(x14)
Production Orientation (x25)	0.219	-0.182	-0.037	0.058(x10)	0.056(x28)	0.053(x19)
Market Orientation (x26)	0.312**	0.162	0.150	0.058(x29)	0.038(x14)	-0.033(x21) 0.033(x3) (x31)
Social Participation (x27)	0.018	0.058	-0.040	-0.096(x10)	-0.094(x3)	-0.071(x14)
Utilization of Cosmopolite Source of Information (x28)	0.002	-0.288	0.290	0.165(x29)	-0.091(x10)	-0.078(x3)
Information Seeking Behavior (x29)	0.170	0.358	-0.188	-0.133(x28)	-0.056(x21)	0.053(x15)
Training Received (x30)	0.090	0.028	0.062	0.055(x29)	-0.053(x19)	0.042(x21)
Drudgeries (x31)	-0.397**	-0.151	-0.246	-0.047(x1)	-0.046(x14)	-0.036(x10)
Distance Matrix (x32)	0.114	0.026	0.088	-0.056(x10)	-0.046(x12)	0.042(x3)

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Residual Effect	0.599
Highest count	Cropping Intensity (x10):19

Revelation

Table 6.44 presents the path analysis of the dependent variable, **Reasons for dissonance (y_5)** versus 32 exogenous variables of village, Chiroura. The table reveals that the exogenous variable, **Risk orientation (x_{21})** has exerted the highest total direct effect whereas another exogenous variable, **Utilization of cosmopolite source of information (x_{28})** has exerted the highest total indirect effect on **Reasons for dissonance (y_5)**. It is also clear from the table that the exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect of as many as 19 exogenous variables to characterize the dependent variable, **Reasons for dissonance (y_5).** The residual effect being 0.599, it is to conclude that even with the combination of 32 exogenous variables 41 per cent of the variance of **Reasons for dissonance (y_5)** has been explained so far.

Implication

The lower the risk orientation, the higher would be the fragile state of stability. Respondent has been here found to go stress with higher magnitude while having less risk orientation. So, respondents with poorer risk orientation are supposed to go more vulnerable in a stressful context and ultimately towards higher status of dissonance. This has been complicated when the same respondent ha got an intense exposure to cosmopolite source of information so a new dichotomy has been found here wherein dissonance is increasing with higher level of exposure to information and poorer status for risk orientation. So, the respondents are suffering from an influx of information with lesser disposal which could have been higher, had there been a higher status of risk orientation on the part of respondents.

Table 6.45: Correlation coefficient of Reasons for reinvention (y_6) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.264*
Education (x2)	-0.096
Family Education Status (x3)	0.071
Educational Aspiration (x4)	0.097
Family Size (x5)	0.244*
Gender (x6)	-0.263*
Urbanization Index (x7)	-0.116
Occupation (x8)	-0.130
Cropping Intensity (x9)	0.076
Farm size (x10)	-0.075
Expenditure Allotment (x11)	0.056
Credit Load (x12)	-0.227*
Annual Income (x13)	-0.159
Electricity Consumption (x14)	0.032
Fuel Consumption (x15)	-0.232*
Irrigation Index (x16)	-0.087
Adoption Leadership (x17)	0.140
Scientific Orientation (x18)	0.226
Independency (x19)	0.151
Innovation Proneness (x20)	0.130
Risk Orientation (x21)	0.036
Economic Motivation (x22)	-0.029
Orientation Towards Competition (x23)	0.007
Management Orientation (x24)	0.000
Production Orientation (x25)	0.052
Market Orientation (x26)	0.342**
Social Participation (x27)	0.138
Utilization of Cosmopolite Source of Information (x28)	0.112
Information Seeking Behavior (x29)	0.149
Training Received (x30)	-0.066
Drudgeries (x31)	-0.187
Distance Matrix (x32)	0.008
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.45 presents the Correlation coefficient of the dependent variable, **Reasons for reinvention (y_6)** with 32 independent variables. The table reveals that the two variables *viz.* **Age (x_1)** and **Family size (x_5)** have significantly and positively correlated with the dependent variable, **Reasons for reinvention (y_6).** The table also reveals that the independent variable, **Market orientation (x_{26})** is highly significant but positively correlated with the **Reasons for reinvention (y_6)**. It has also been observed that three independent variables *viz.* **Gender (x_6), Credit load (x_{12})** and **Fuel consumption (x_{15})** have been significantly but negatively correlated with the dependent variable, **Reasons for reinvention (y_6).**

Implication

The desire to go for hunting innovation or adding some new components to a traditional one is well related to the tenderness of the age, level of maturity and degree of experiential learning. All these are well related to chronological age of respondents. The variable, **Family size (x_5)** and **Market orientation (x_{26})** are also found to have impacting on refining and defining older and new ideas into the process of socialization. Family size fosters innovation and **Market orientation (x_{26})** keeps it flourishing with great deal of entrepreneurial motivation. But, the other variable, **Gender (x_6), Credit load (x_{12})** and **Fuel consumption (x_{15})** are found to have significantly, but, negatively impact to imply that with the lesser degree of their entrance into interactive relation, they can make a bigger change in the favor of reinvention.

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Table 6.46: Stepwise regression analysis Reasons for reinvention (y_6) versus 32 independent variables of village Chiroura, Bihar: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.415	0.153	0.278	2.713**	0.540	0.292	0.252	1.146
Gender (x6)	-0.331	0.127	-0.265	-2.617**				
Age (x1)	0.024	0.009	0.285	2.754**				
Fuel consumption (x15)	0.000	0.000	-0.225	-2.183*				

Revelation

Table 6.46 presents the stepwise regression analysis of the dependent variable, **Reasons for reinvention (y_6)** versus 32 independent variables of village, Chiroura. The table reveals that the predominating variables *viz.* **Market orientation (x_{26})**, **Gender (x_6)**, **Age (x_1)** and **Fuel consumption (x_{15})** have been retained at the last step of screening. The R^2 being 0.292, it is to infer that all the four predominating predictors have explained 29 per cent variance embedded with the predicted variable i.e. **Reasons for reinvention (y_6).**

Implication

The variable, **Gender (x_6)**, basically presents a gender balance. The narrower male-female ratio presents an increasing participation of women Diaspora in the process of technology socialization and the tendency has been found to contribute to the reinvention process. It has been found across the world that women have contributed more corrective measure to the adoptive conventional technology and deleterious and pollution creating technology options. The other variable, **Fuel consumption (x_{15})** and **Market orientation ($x2_6$)** both are the subtle indication for urbanization *vis a vis* modernization which have been found and rightly show, to have generating impact on reinvention process in agricultural technology. As already discussed, age along with perception and psycho-experiential learning and behavioral composition is keenly responsible for adding innovation into tradition.

Table 6.47: Path analysis Reasons for reinvention (y_6) versus 32 exogenous variables of village Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.264*	0.211	0.053	-0.093(x10)	-0.089(x4)	-0.072(x5)
Education (x2)	-0.096	0.037	-0.133	0.128(x4)	-0.120(x10)	-0.079(x3)
Family Education Status (x3)	0.071	-0.211	0.282	0.264(x4)	-0.156(x10)	0.076(x1)
Educational Aspiration (x4)	0.097	0.302	-0.205	-0.184(x3)	-0.154(x10)	0.062(x1)
Family Size (x5)	0.244*	0.417	-0.173	-0.154(x14)	-0.128(x10)	-0.036(x1)
Gender (x6)	-0.263*	-0.139	0.124	-0.045(x10)	-0.042(x18)	-0.039(x19)
Urbanization Index (x7)	-0.116	-0.070	-0.046	-0.055(x1)	0.043(x26)	0.037(x19)
Occupation (x8)	-0.130	-0.212	0.082	0.042(x10)	0.029(x28)	-0.028(x11)
Cropping Intensity (x9)	0.076	-0.019	0.095	0.079(x10)	-0.072(x4)	0.054(x3)
Farm size (x10)	-0.075	-0.371	0.296	0.144(x5)	0.125(x4)	-0.088(x3)
Expenditure Allotment (x11)	0.056	0.137	-0.081	-0.125(x10)	0.043(x8)	0.033(x15)
Credit Load (x12)	-0.227*	0.077	-0.304	-0.105(x10)	0.096(x14)	0.087(x15)
Annual Income (x13)	-0.159	-0.139	-0.020	-0.138(x10)	0.071(x4)	0.063(x15)
Electricity Consumption (x14)	0.032	0.306	-0.274	-0.210(x5)	-0.039(x27)	0.037(x26)
Fuel Consumption (x15)	-0.232*	0.169	-0.401	-0.244(x10)	0.088(x4)	-0.068(x18)
Irrigation Index (x16)	-0.087	-0.071	-0.016	0.061(x10)	-0.048(x27)	0.028(x17) (x19)
Adoption Leadership (x17)	0.140	0.117	0.023	0.051(x18)	-0.045(x28)	0.043(x27)
Scientific Orientation (x18)	0.226	0.183	0.043	0.074(x10)	-0.062(x15)	0.039(x29)
Independency (x19)	0.151	0.258	-0.107	-0.049(x22)	-0.032(x14)	-0.027(x27)
Innovation Proneness (x20)	0.130	0.115	0.015	-0.086(x10)	0.077(x4)	0.071(x5)
Risk Orientation (x21)	0.036	-0.044	0.080	0.046(x19)	-0.048(x5)	0.039(x14)
Economic Motivation (x22)	-0.029	-0.115	0.086	0.109(x19)	0.048(x10)	-0.040(x5)

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Orientation Towards Competition (x23)	0.007	-0.048	0.053	-0.118(x10)	-0.052(x3)	0.050(x4)
Management Orientation (x24)	0.000	-0.146	0.146	0.077(x4)	0.073(x15)	-0.076(x10)
Production Orientation (x25)	0.052	0.097	-0.045	0.078(x10)	0.054(x19)	-0.039(x15)
Market Orientation (x26)	0.342**	0.310	-0.032	0.037(x14)	0.030(x1)	0.022(x3) -0.022(x24)
Social Participation (x27)	0.138	-0.131	0.243	-0.129(x10)	-0.070(x4)	-0.069(x14) 0.069(x5)
Utilization of Cosmopolite Source of Information (x28)	0.112	0.096	0.053	-0.122(x10)	0.095(x4)	-0.052(x3)
Information Seeking Behavior (x29)	0.149	-0.069	0.003	0.074(x18)	-0.061(x28)	-0.052(x15)
Training Received (x30)	-0.066	-0.026	-0.161	-0.053(x19)	0.035(x5)	0.032(x27) 0.032(x14)
Drudgeries (x31)	-0.187	-0.120	0.128	-0.068(x26)	-0.059(x1)	0.055(x8)
Distance Matrix (x32)	0.008	-0.139	0.147	-0.076(x10)	0.069(x5)	0.049(x26)
Residual Effect	0.699					
Highest count	Farm size (x10):22					

Revelation

Table 6.47 presents the path analysis of the dependent variable, **Reasons for reinvention (y_6)** versus 32 exogenous variables of village, Chiroura. It has been found that the exogenous variable, **Family size (x_5)** has exerted the highest total direct effect whereas the exogenous variable, **Fuel consumption (x_{15})** has exerted highest indirect effect. The table also reveals that the exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect of as many as 22 exogenous variables to characterize the dependent variable, **Reasons for reinvention (y_6).**

Implication

Every farm family is under constant presser to go on increasing yield upgrading quality and getting competitive in the cryptic market behavior. The larger the family size higher would be the pressure and faster would be the process of technology socialization through adding more modification refinement to what we call, entrepreneurially mundane technology basket.

Table 6.48: Correlation coefficient of Confusion index (y_7) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.030
Education (x2)	-0.041
Family Education Status (x3)	-0.068
Educational Aspiration (x4)	-0.001
Family Size (x5)	0.037
Gender (x6)	-0.193
Urbanization Index (x7)	-0.065
Occupation (x8)	-0.210
Cropping Intensity (x9)	-0.009
Farm size (x10)	-0.227
Expenditure Allotment (x11)	0.011
Credit Load (x12)	-0.220
Annual Income (x13)	0.046
Electricity Consumption (x14)	0.160
Fuel Consumption (x15)	-0.342**
Irrigation Index (x16)	-0.096
Adoption Leadership (x17)	0.148
Scientific Orientation (x18)	0.243*
Independency (x19)	0.020
Innovation Proneness (x20)	0.126
Risk Orientation (x21)	0.038
Economic Motivation (x22)	0.003
Orientation Towards Competition (x23)	0.108
Management Orientation (x24)	-0.004
Production Orientation (x25)	0.052
Market Orientation (x26)	0.413**
Social Participation (x27)	0.159
Utilization of Cosmopolite Source of Information (x28)	0.110
Information Seeking Behavior (x29)	0.328**
Training Received (x30)	-0.078
Drudgeries (x31)	-0.243*
Distance Matrix (x32)	-0.026
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.48 presents the Correlation coefficient of the dependent variable, **Confusion index (y_7)** with 32 independent variables of Chiroura. The table reveals that the two variables *viz*. **Market orientation (x_{26})** and **Information seeking behavior (x_{29})** and **Scientific orientation (x_{18})** are significant and positively correlated with the dependent variable, **Confusion index (y_7)**. It has also been found that the variable, **Fuel consumption (x_{15})** and **Distance matrix (x_{32})**

is highly significant but negatively correlated with the dependent variable, **Confusion index (y_7).**

Implication

Both the variable, **Market orientation (x_{26})** and **Information seeking behavior (x_{29})** are driving the respondents to go for alternatives and better choices for transforming the present agricultural based livelihood. In this entire process the hunt for information and consumer choices, many a time, go mutually juxtapose to create what we call confusion.

Negative correlation of the variable, **Fuel consumption (x_{15})** indicates status of pseudo-modernization emanating from a conflict between pull and push factor of modernity-traditionalism dichotomy so less the level of modernization, the higher has been the confusion.

Orientation towards science breeds both confidence and confusion. Confidences are coming because old disputes are resolved; Confusion is simmering because old solution has already been absolute, hence new confusion is generating.

The shorter the distance the higher would be the vicinity to strategic locations adding to, what we call access to higher number of alternatives and confusion.

Table 6.49: Stepwise regression analysis of Confusion index (y_7) versus 32 independent variables of village, Chiroura, Bihar: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.356	0.094	0.384	3.784**	0.513	0.263	0.243	0.714
Fuel consumption (x15)	0.000	0.000	-0.306	-3.014**				

Revelation

Table 6.49 presents the stepwise regression analysis of the dependent variable, **Confusion index (y_7)** versus 32 independent variables of village, Chiroura. It has been found that the two independent variables *viz*. **Market orientation (x_{26})** and **Fuel Consumption (x_{15})** have been retained at the last step of screening. The R^2 being 0.263, it is to infer that both two predominating variables have explained 26 per cent variance embedded with the predicted variable i.e. **Confusion index (y_7).**

Implication

The variable, **Market orientation (x_{26})** and **Fuel consumption (x_{15})** have explained 26 per cent variance embedded in the dependent variable, **Confusion index (y_6)** and is enough to conclude that the process of modernization it confined and goes stale half way then confusion is sure to visit the psyche of the farmer with good harvest and bad market price, with high scientific orientation and poor access to Fuel consumption all are emitting and simmering high level of confusion for taking the respondents to a really of confused behavioral disposal.

Table 6.50: Path analysis Confusion index (y_7) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	II	III
Age (x1)	0.030	-0.070	0.100	-0.165(x10)	-0.132(x3)	0.129(x27)
Education (x2)	-0.041	0.202	-0.243	-0.213(x10)	-0.156(x3)	0.126(x4)
Family Education Status (x3)	-0.068	-0.415	0.347	-0.277(x10)	0.261(x4)	0.138(x27)
Educational Aspiration (x4)	-0.001	0.298	-0.299	-0.363(x3)	-0.273(x10)	0.108(x27)
Family Size (x5)	0.037	0.390	-0.353	-0.227(x10)	-0.230(x14)	0.076(x27)
Gender (x6)	-0.193	0.037	-0.230	-0.080(x10)	-0.051(x12)	0.043(x32)
Urbanization Index (x7)	-0.065	-0.170	0.105	0.053(x26)	0.051(x10)	-0.034(x27)
Occupation (x8)	-0.210	-0.216	0.006	0.074(x10)	-0.061(x29)	0.047(x32)
Cropping Intensity (x9)	-0.009	-0.128	0.119	0.140(x10)	0.106(x3)	-0.074(x15)
Farm size (x10)	-0.227	-0.658	0.431	0.184(x15)	-0.174(x3)	0.160(x27)
Expenditure Allotment (x11)	0.011	0.045	-0.034	-0.221(x10)	0.056(x15)	0.051(x29)
Credit Load (x12)	-0.220	-0.167	-0.053	-0.186(x10)	0.145(x15)	0.143(x14)
Annual Income (x13)	0.046	0.081	-0.035	-0.245(x10)	0.105(x15)	0.078(x14)
Electricity Consumption (x14)	0.160	0.457	-0.297	-0.197(x5)	-0.104(x27)	-0.052(x12)
Fuel Consumption (x15)	-0.342**	0.280	-0.622	-0.432(x10)	-0.120(x3)	-0.100(x29)

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Irrigation Index (x16)	-0.096	-0.065	-0.031	-0.131(x27)	0.107(x10)	0.048(x29)
Adoption Leadership (x17)	0.148	0.002	0.146	0.116(x27)	0.087(x29)	-0.055(x30)
Scientific Orientation (x18)	0.243*	0.060	0.183	0.131(x10) (x29)	-0.104(x15)	0.071(x27)
Independency (x19)	0.020	0.171	-0.151	-0.073(x27)	0.050(x30)	-0.048(x14)
Innovation Proneness (x20)	0.126	0.230	-0.104	-0.152(x10)	-0.097(x3)	0.076(x4)
Risk Orientation (x21)	0.038	-0.122	0.160	0.058(x14)	0.057(x15)	0.046(x29)
Economic Motivation (x22)	0.003	-0.030	0.033	0.085(x10) -0.085(x27)	0.072(x19)	0.046(x3)
Orientation Towards Competition (x23)	0.108	0.084	0.024	-0.209(x10)	0.118(x27)	-0.103(x3)
Management Orientation (x24)	-0.004	-0.102	0.098	-0.135(x10)	0.122(x15)	0.102(x14)
Production Orientation (x25)	0.052	0.079	-0.027	0.138(x10)	-0.064(x15)	-0.061(x20)
Market Orientation (x26)	0.413**	0.394	0.019	0.055(x14)	0.052(x29)	0.044(x3)
Social Participation (x27)	0.159	0.462	-0.303	-0.228(x10)	-0.124(x3)	-0.103(x14)
Utilization of Cosmopolite Source of Information (x28)	0.110	-0.153	0.263	-0.217(x10)	0.149(x29)	0.108(x27)
Information Seeking Behavior (x29)	0.328**	0.323	0.005	-0.087(x15)	-0.075(x27)	-0.071(x28)
Training Received (x30)	-0.078	-0.243	0.165	0.087(x27)	0.050(x29)	0.048(x14)
Drudgeries (x31)	-0.243*	-0.031	-0.212	-0.090(x10)	-0.087(x26)	-0.067(x14)
Distance Matrix (x32)	-0.026	-0.222	0.196	-0.134(x10)	0.064(x5)	0.062(x26)
Residual Effect	0.574					

Highest count	Farm Size (x10):24

Revelation

Table 6.50 presents the path analysis of dependent variable, **Confusion index (y_7)** versus 32 exogenous variables of village, Chiroura. The table reveals that the exogenous variable, **Farm size (x_{10})** has exerted the highest total direct effect whereas the exogenous variable, **Fuel consumption (x_{15})** has exerted highest indirect effect. It has also been found that the exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect of as many as 24 exogenous variables to characterize the dependent variable, **Confusion index (y_7).** The residual effect being 0.574, it is to infer that even with the combination of 32 exogenous variables 43 per cent of the variance embedded in the consequent variable, **Confusion index (y_7)** has been explained so far.

Implication

Poor farmer, because of lower farm size and lower fuel consumption are prone to more confused. They are neither supported by the enhanced market price of their produce nor lowering of cost of inputs. This has created state of being of sandwiched between what we call a dual pressure from price and cost.

Table 6.51: Correlation coefficient of Social entropy (Y) with 32 independent variables of village, Chiroura, Bihar

N = 75	
Independent variables	Coefficient of Correlation (r)
Age (x1)	0.136
Education (x2)	-0.081
Family Education Status (x3)	-0.036
Educational Aspiration (x4)	0.011
Family Size (x5)	-0.056
Gender (x6)	-0.146
Urbanization Index (x7)	-0.058
Occupation (x8)	-0.127
Cropping Intensity (x9)	0.012
Farm size (x10)	-0.199
Expenditure Allotment (x11)	0.134
Credit Load (x12)	-0.159
Annual Income (x13)	-0.159
Electricity Consumption (x14)	0.298**
Fuel Consumption (x15)	-0.224
Irrigation Index (x16)	-0.051
Adoption Leadership (x17)	0.127
Scientific Orientation (x18)	0.124
Independency (x19)	0.203
Innovation Proneness (x20)	0.018
Risk Orientation (x21)	0.048
Economic Motivation (x22)	-0.025
Orientation Towards Competition (x23)	0.062
Management Orientation (x24)	0.167

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Production Orientation (x25)	0.048
Market Orientation (x26)	0.426**
Social Participation (x27)	0.026
Utilization of Cosmopolite Source of Information (x28)	0.228*
Information Seeking Behavior (x29)	0.267*
Training Received (x30)	-0.046
Drudgeries (x31)	-0.245*
Distance Matrix (x32)	0.058
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.51 presents the correlation coefficient of the dependent variable, **Social Entropy (Y)** with 32 independent variables. It has been found that the two variables *viz.* **Electricity consumption (x_{14}), Utilization of cosmopolite source of information (x_{28})**, **Information seeking behavior (x_{29})** and **Market orientation (x_{26})** are significantly and positively correlated with **Social entropy (Y).** Table also reveals that the independent variable, **Distance matrix (x_{32})** is significant but negatively correlated with the dependent variable, **Social Entropy (Y).**

Implication

Electricity has got a multifarious and polymorphic impact in transforming rural life. Perhaps it is the single and most significant intervention that has got a myriad of impact in making rural life modernizing, transforming, evolving and fast declining too in terms of it erosion of traditional culture and intrusion of global culture through electrified, mass media channel. Electricity can also accelerate the pace of change including farm mechanization as well as home innovation. So, it will be enough logical to conclude that introduction of electricity by becoming an integral process of urbanization with full of more social entropy and chaos.

Market orientation, in the same analogy and by becoming a part of the modernization process that drives a rural life hunting entrepreneurial alternatives and choices will lead to more confusion, distortion, sense of non fulfillment as well as choice conflict.

Access to huge pool of information sources and desire to seek innovation information to be applied to his own life process as also invited a score of semantic distortion, informational dissonance, information overloading and stress choice-confusion in the domain of changing agricultural market at the same time its globalization has became both bliss and bane. Lot of information sometimes adds confusion and choices. Hence, can add more social entropy, as for example villages both in West Bengal and Bihar have become the dumping ground of pesticide and fertilizer, provide companies and MNCs are the key perpetrator towards making the farmers perplexed of lot of choices and least benefits.

Vicinity of strategic location of different rural hubs and services center has both positive and negative impact. Here it has been found that the lesser the distance to market, higher would be interaction and at the same time the bunch of contradictory information keeps intruding the stale mind and make it rippling.

Table 6.52: Stepwise regression analysis Social entropy (Y) versus 32 independent variables of village, Chiroura, Bihar: Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	15339.402	4255.180	0.356	3.605**	0.582	0.339	0.301	31921.694
Electricity consumption (x14)	787.329	249.488	0.316	3.156**				
Fuel consumption (x15)	-4.719	2.021	-0.232	-2.335*				
Independency (x19)	5651.128	2719.35	0.204	2.078*				

Revelation

Table 6.52 presents the stepwise regression analysis of the dependent variable, **Social entropy (Y)** versus 32 independent variables of village, Chiroura. It has been found that the following predominating variables *viz.* **Market Orientation (x_{26}), Electricity consumption (x_{14}), Fuel consumption (x_{15})** and **Independency (x_{19})** have been retained at the last step of screening. The R^2 being 0.339, it is to conclude that all the above four predominating variables have explained 33 per cent variance embedded with the predicted variable, **Social entropy (Y).**

Implication

In the world of modernization the direction and dictum of modernizing rural life lines demands a unique sociology and social chemistry of transformation. When a city hubs is expedited for higher pace of modernization, it is only the dictum of addition viscosity when a rural set up is blatantly transform into a industrial hub or urban city center, the jerk of transformation and agonies of metamorphosis and the melancholy of migration invites a unique psyche of modernization. The process of transformation of rural life and therewith entry of elements of modernity in a tiny echelons of rural life starts with cultural marker like new fertilizer, pesticides, power tiller, land harmonies etc. Then, these are not just plethora of agro-chemical to augment the yield but also uncertainty more important, the cultural agents of social transformation to add the cultural agents of social

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transformation to add a new disequilibrium to a conventional equilibrium and culturally to foster a dialectics of social change as towards a new equilibrium.

Table 6.53: Path analysis of social entropy (Y) versus 32 exogenous variables of village, Chiroura, Bihar

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.136	0198	0.038	-0.167(x10)	-0.102(x3)	0.071(x27)
Education (x2)	-0.081	0.168	-0.249	-0.216(x10)	-0.120(x3)	0.095(x4)
Family Education Status (x3)	-0.036	-0.319	0.283	-0.280(x10)	0.195(x4)	0.084(x15)
Educational Aspiration (x4)	0.011	0.223	-0.212	-0.280(x3)	-0.276(x10)	0.084(x15)
Family Size (x5)	-0.056	0.268	-0.304	-0.230(x10)	-0.216(x14)	0.042(x27)
Gender (x6)	-0.146	0.011	-0.157	-0.081(x10)	-0.052(x19)	0.029(x15)
Urbanization Index (x7)	-0.058	-0.045	-0.013	0.052(x10)	0.049(x19)	0.045(x26)
Occupation (x8)	-0.127	-0.075	-0.052	0.075(x10)	-0.052(x29)	-0.046(x11)
Cropping Intensity (x9)	-0.012	-0.109	0.127	0.142(x10)	0.081(x3)	-0.076(x15)
Farm size (x10)	-0.199	-0.668	0.469	0.190(x15)	-0.134(x3)	0.092(x4)(x5)
Expenditure Allotment (x11)	0.134	0.227	-0.093	-0.224(x10)	0.057(x15)	0.043(x29)
Credit Load (x12)	-0.159	-0.019	-0.140	-0.188(x10)	0.149(x15)	0.134(x14)
Annual Income (x13)	-0.159	-0.193	0.034	-0.248(x10)	0.108(x15)	0.073(x14)
Electricity Consumption (x14)	0.298**	0.429	-0.131	-0.135(x5)	-0.058(x27)	0.049(x15)
Fuel Consumption (x15)	-0.224	0.289	-0.513	-0.438(x10)	-0.092(x3)	-0.084(x29)
Irrigation Index (x16)	-0.051	-0.159	0.108	0.109(x10)	-0.072(x27)	0.040(x29)
Adoption Leadership (x17)	0.127	0.123	0.004	0.073(x29)	0.064(x27)	-0.042(x3)
Scientific Orientation (x18)	0.124	-0.021	0.145	0.133(x10)	0.110(x29)	-0.107(x15)
Independency (x19)	0.203	0.341	-0.138	-0.064(x22)	-0.045(x14)	-0.040(x27)
Innovation Proneness (x20)	0.018	0.109	-0.091	-0.154(x10)	-0.075(x3)	-0.060(x14)
Risk Orientation (x21)	0.048	-0.158	0.206	0.065(x19)	0.059(x15)	0.054(x14)
Economic Motivation (x22)	-0.025	-0.152	0.127	0.144(x19)	0.086(x10)	-0.047(x27)
Orientation Towards Competition (x23)	0.062	-0.048	0.110	-0.212(x10)	-0.080(x3)	0.071(x15)
Management Orientation (x24)	0.167	0.100	0.067	-0.137(x10)	0.125(x15)	0.096(x14)
Production Orientation (x25)	0.048	0.125	-0.077	0.140(x10)	0.071(x19)	-0.066(x15)
Market Orientation (x26)	0.426**	0.326	0.100	0.052(x14)	0.044(x29)	0.034(x3)
Social Participation (x27)	0.026	0.255	-0.229	-0.232(x10)	-0.097(x14)	-0.096(x3)
Utilization of Cosmopolite Source of Information (x28)	0.228*	0.089	0.139	-0.220(x10)	0.125(x29)	-0.080(x3)
Information Seeking Behavior (x29)	0.267*	0.271	-0.004	-0.089(x15)	0.053(x26)	0.042(x27)
Training Received (x30)	-0.046	-0.117	0.071	-0.071(x19)	0.048(x27)	0.045(x14)
Drudgeries (x31)	-0.245*	-0.024	-0.221	-0.091(x10)	-0.071(x26)	-0.063(x14)
Distance Matrix (x32)	0.058	-0.062	0.120	-0.136(x10)	0.051(x26)	0.043(x5)
Residual Effect	0.740					
Highest count	Farm size (x10):24					

Revelation

Table 6.53 presents the path analysis of the dependent variable, **Social entropy (Y)** versus 32 exogenous variables of village, Chiroura. The table reveals that the variable, **Farm size (x_{10})** has exerted the highest total direct effect and the exogenous variable, **Fuel consumption (x_{15})** has exerted to highest total indirect effect. It has also been found that the exogenous variable, **Farm size (x_{10})** has routed the highest substantial indirect effect as many as 24 exogenous variables to characterize the dependent variable, **Social Entropy (Y).**

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The residual effect being 0.740, it is to infer that even with the combination of 32 exogenous variables 26 per cent of the variance of Social entropy has been explained so far.

Implication

A farm is both a social as well as natural resources; it supports production process and upholds social status. The lesser the size of farm, in a transforming rural system, the higher would be the stress in accessing market, adopting innovation and mitigating risk. It has already been stated that farm size has so far been critical in characterizing the planning and production process with a view to increase the productivity and pooled the unit out of the sub-optimal limitation.

The fuel consumption, having a property of social viscosity to accommodate assimilates and acclimatizes the innovation can go a long way in influencing the performance of other variables. Higher fuel consumption means attainment of status of modernity in making life comfortable and secure and at the same time it will lead to a cumulative depletion of natural resources to add to a kind of new disequilibrium, with the withdrawal of cow dung as an organic fuel from the rural life style and the entry of LPG gases in rural areas, a corollary to farm mechanization in leading to new status of social entropy as well as social metabolism.

Table 6.54: Standardized Canonical correlation for Independent as well as for Dependent variables of village, Chiroura, Bihar

N = 75					
Dependent variables			**Independent variables**		
Perception of rejection(y2)	+0.344		Educational aspiration (x4)	+0.433	
			Family size (x5)	+0.360	
			Electricity consumption (x14)	+0.494	
			Marketing orientation (x26)	+0.442	
			Social participation (x27)	+0.328	
			Farm Size (x10)	-0.757	
Confusion index (y7)	+0.536				
Variance in Dependent variables explained By Canonical variables			Variance in Covariate Variables explained By Canonical variables		
CAN VAR	Pct Var DEP	Pct Var COV	CAN VAR	Pct Var DEP	Pct Var COV
1	48.30	36.50	1	3.36	4.464
Loading Factor >0.3					

Table 6.54 presents the standardized canonical correlation for covariate as well as for dependent variables of village, Chiroura.

Canonical correlation presents a unique inter and intra variable interaction in a didactic manner. Here, all the variables have been dichotomized into set of variables i.e. left side and right side variable. Here, in this case the left side variables, represents sets of seven consequent variable viz. **Perception on discontinuance (y_1)**, **Perception on rejection (y_2)**. **Disagreement (y_3)**, **Conflict (y_4), Reasons for dissonance (y_5)**, **Reasons for reinvention (y_6)**, **and Confusion index (y_7)** and the right side causal variable *viz*. **Age (x_1)**, **Education (x_2)**, **Family Education Status (x_3)**, **Educational Aspiration (x_4)**, **Family Size (x_5)**, **Gender (x_6)**, **Urbanization Index (x_7)**, **Occupation (x_8)**, **Cropping Intensity (x_9)**, **Farm size (x_{10})**, **Expenditure allotment (x_{11})**, **Credit load (x_{12})**, **Annual income (x_{13})**, **Electricity consumption (x_{14})**, **Fuel consumption (x_{15})**, **Irrigation index (x_{16})**, **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Independency (x_{19})**, **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Economic motivation (x_{22})**, **Orientation towards competition (x_{23})**, **Management orientation (x_{24})**, **Production orientation (x_{25})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **Utilization of cosmopolite source of information (x_{28})**, **Information seeking behavior (x_{29})**, **Training received (x_{30})**, **Distance matrix (x_{31})**, **Drudgeries (x_{32})**, Here, it has been found that the two left side variable *viz*. **Perception on rejection (y_2) and Confusion index (y_7)** have been selectively attuned to the following right side causal variable viz. **Educational aspiration (x_4)**, **Family size (x_5)**, **Electricity consumption (x_{14})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **and Farm size (x_{10})**. Therefore, these variables are strategically attuned and interactive that may lead to a micro-level policy decision eg the respondents having perception on rejection, they are also confused and in this situation both the traits of respondents are selectively being impacted by the other cognate characters like **Educational aspiration (x_4)**, **Family size (x_5)**, **Electricity consumption (x_{14})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, and **Farm size (x_{10})**.

It has also been found that Dependent variables, explained 48.30 per cent variance embedded in self, whereas dependent variable explained 36.50 per cent variance in covariates variables. Table, also shows that covariate variables explain the 3.36 per cent variance in self and covariate variables explains 4.46 per cent variance in dependent variables.

Table 6.55: Factor analysis of village, Chiroura, Bihar: The Clubbing of variables based on factor loading

N = 75					
Factors	**Variables Included**		**% of Variance Explained**	**Cumulative Variance**	**Factor Renaming**
1	Education status (x3)	0.913	8.604	8.604	Educational Capacity

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	Educational aspiration (x4)	0.900			
2	Farm size (x10)	0.612	7.827	16.431	Family Resource
	Credit load (x13)	0.620			
	Annual income (x13)	0.726			
	Fuel consumption (x15)	0.631			
3	Scientific orientation(x18)	0.745	7.189	23.619	Investment Orientation
	Planning orientation(x24)	-0.364			
	Utilization of cosmopolite Source of information(x28)	0.652			
	Information seeking behavior (x29)	0.579			
4	Family size (x5)	0.776	6.491	30.11	Family Status
	Electricity consumption (x14)	-0.761			
5	Occupation (x8)	-0.663	6.031	36.141	Economic Capacity
	Expenditure allotment (x11)	0.714			
6	Independency (x19)	0.706	5.992	42.133	Entrepreneurship
	Economic motivation (x22)	0.790			
7	Age (x1)	0.559	5.185	47.318	Modernity
	Education (x2)	-0.407			
	Urbanization index(x7)	-0.780			
8	Irrigation index (x16)	0.884	5.100	52.418	Infrastructure
	Orientation towards Competition (x23)	-0.582			
	Social participation (x27)	-0.398			
9	Market orientation (x26)	0.857	5.043	57.461	
10	Adoption leadership (x17)	0.585	4.884	62.345	Leaders' capacity
	Training received (x30)	0.739			
11	Gender (x6)	0.647	4.514	66.859	Farm Dynamics
	Cropping intensity(x9)	0.781			
	Drudgeries (x32)	-0.421			
12	Innovation proneness (x20)	-0.656	3.951	70.81	Innovative Entrepreneurship
	Risk orientation (x21)	0.497			
	Production orientation (x25)	0.516			
Rotation Converged in 20 iteration					

The table 6.55 presents the factor analysis for conglomeration of apparently different variables into a clustered factor based on intrinsic homogeneity called, Eigen values.

The table reveals that the **factor 1** has accommodated the two variables *viz.* **Education status (x_3)** and **Educational aspiration (x_4)** and this factor has contributed 8.604 per cent variance embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Educational capacity**.

The **factor 2** has accommodated the four variables *viz.* **Farm size (x_{10})**, **Credit load (x13), Annual income (x_{13})** and **Fuel consumption (x_{15})** this factor has contributed 7.827 per cent individually and cumulatively 16.431 per cent variance embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Family resource**.

The **factor 3** has accommodated the four variables *viz.* **Scientific orientation (x_{18}), Planning orientation (x_{24}), Utilization of cosmopolite source of information** and **information seeking behavior (x_{29})**. This factor has contributed 7.189 per cent individually and 23.619 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Investment Orientation**.

The **factor 4** has accommodated the two variables *viz.* **Family Size (x_5)** and **Electricity consumption (x_{14})**. This factor has contributed 6.491 per cent individually and 30.11 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Family Status**.

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The **factor 5** has accommodated the two variables *viz.* **Occupation (x_8)** and **Expenditure allotment (x_{11})**. This factor has contributed 6.031 per cent individually and 36.141per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Economic Capacity**.

The **factor 6** has accommodated the two variables *viz.* **Independency (x_{19})** and **Economic motivation (x_{22})**. This factor has contributed 5.992 per cent individually and 42.133 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Entrepreneurship**.

The **factor 7** has accommodated the three variables *viz.* **Age (x_1)**, **Education (x_2)** and **Urbanization index (x_7)**. This factor has contributed 5.185 per cent individually and 47.318 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Modernity**.

The **factor 8** has accommodated the three variables *viz.* **Irrigation index (x_{16})**, **Orientation towards competition (x_{23})** and **Social participation (x_{27})**. This factor has contributed 5.100 per cent individually and 52.418 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Infrastructure**.

The **factor 9** has accommodated only one variable, **Market orientation (x_{26})**. This factor has contributed 5.043 per cent individually and 57.461 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been retained its original name as **Market orientation**.

The **factor 10** has accommodated the two variables *viz.* **Adoption leadership (x_{17})** and **Training received (x_{30})**. This factor has contributed 4.884 per cent individually and 62.345 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Leadership quality**.

The **factor 11** has accommodated the three variables *viz.* **Gender (x_6)**, **Cropping intensity (x_9)** and **Drudgeries (x_{32})**. This factor has contributed 4.514 per cent individually and 66.859 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Farm Dynamics**.

The **factor 12** has accommodated the three variables *viz.* **Innovation proneness (x_{20})**, **Risk orientation (x_{21})** and **Production orientation (x_{25})**. This factor has contributed 3.951 per cent individually and 70.81 per cent variance cumulatively embedded with **Social entropy (Y)**, the consequent variable. The factor has been renamed as **Innovative Entrepreneurship**.

Locale of the Research - Pooled village

(Ghoragachha and Chiroura)

Table 6.56: Correlation coefficient of Perception on discontinuance (y1) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	-0.138
Education (x2)	-0.366**
Family Education Status (x3)	-0.248**
Educational Aspiration (x4)	-0.252**
Family Size (x5)	-0.115
Gender (x6)	-0.040
Urbanization Index (x7)	-0.110
Occupation (x8)	-0.045
Cropping Intensity (x9)	0.225**
Farm size (x10)	-0.398**
Expenditure Allotment (x11)	0.235**
Credit Load (x12)	0.009
Annual Income (x13)	0.091
Electricity Consumption (x14)	0.172*
Fuel Consumption (x15)	0.070
Irrigation Index (x16)	0.104
Adoption Leadership (x17)	0.393**
Scientific Orientation (x18)	0.040
Independency (x19)	0.116
Innovation Proneness (x20)	0.240**
Risk Orientation (x21)	0.226**
Economic Motivation (x22)	-0.069
Orientation Towards Competition (x23)	0.203*
Management Orientation (x24)	0.208*
Production Orientation (x25)	0.068
Market Orientation (x26)	0.589**
Social Participation (x27)	0.026
Utilization of Cosmopolite Source of Information (x28)	0.309**
Information Seeking Behavior (x29)	0.347**
Training Received (x30)	0.007
Drudgeries (x31)	0.317**
Distance Matrix (x32)	0.054
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.56 presents the correlation coefficient of **Perception on discontinuance (y_1)** with 32 exogenous variables. The table reveals that following variables *viz.* **Cropping intensity (x_9)**, **Expenditure allotment (x_{11})**, **Adoption leadership (x_{17})**, **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Market orientation (x_{26})**, **Utilization of cosmopolite source of information (x_{28})**, **Information seeking behavior (x_{29})** and **distance matrix (x_{31})** have been highly significant and

positively correlated with the dependent variable, **Perception on Discontinuance (y_1).**

The table also reveals that the following variables *viz.* **Education (x_2)**, **Family education status (x_3)**, **Education aspiration (x_4)** and **Farm size (x_{10})** have been highly significant but negatively correlated with the dependent variable, **Perception on Discontinuance (y_1).**

It has also been found that the variables *viz.* **Electricity consumption (x_{14})**, **Orientation towards competition (x_{23})** and **Management orientation (x_{24})** have been significantly and positively correlated with the dependent variable, **Perception on discontinuance (y_1)**.

Implication

It has been implicated that the farmers with poor education have discontinued the prescribed agricultural practices. Things need to be further analyzed to derive the conclusion that whether, collective family education has better and additive role for the continuity of the agricultural practices. It has also been discernible that respondent with lesser educational aspiration have also failed to continue the technology. Education is the most important cultural polymer that helps transformation through both gainful adoption and logical extension of technology choice, can be in the domain of agricultural or elsewhere.

Cropping intensity (x_9) a variable that accounts for inclusion of more number of crop enterprises in a unit area of land, has helped the research to conclude that discontinuance is higher where entry of crops in a given unit of land higher also. It presents that in order to increase the entry of new crops the exit of crop *vis a vis* discontinuance of conventional crops is also must. It is just like a redox process. Adoption is always preceded by rejection and the whole process can breaded as progress of rejoption.

The negative and high correlation of **Farm size (x_{10})** with discontinuance helps the researcher conclude that the phenomenon of 'compulsion discontinuance' can be high for poorer farmers. Here, discontinuance has been not by choice, but, by compulsion.

The variable, **Expenditure allotment (x_{11})** has also helped to take a decision for discontinuance on the other hand a failure to allot expenditure after high value 'technology basket' can be reason for discontinuance of the same.

It is discernible from the correlation that the farmers tend to discontinue technology, are also characterized with consuming higher amount of electricity. So, farmer having higher elements of urbanization amenities are also an experimental of new venture to discontinue to traditional practice. So, also has been reflected in the relation between adoption leadership and discontinuance.

The other variables *viz.* **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Orientation towards competition (x23), Market orientation (x_{26})** all is representing a risk bearing prophesy and readiness of the respondents. The farmers from both the local pertaining to West Bengal and Bihar have bestowed that discontinuance tendency has been higher than those who dare to expose through a known investment for a future courage to gain an unknown return.

The communication variable **Utilization of cosmopolite source of information ($_{28}$)**, **Information seeking behavior (x_{29})** and **Distance matrix (x31)** all has helped inculcates the trend of the propensity of discontinuance into the behavioral complex of the farmers of both West Bengal and Bihar.

The whole of the episode generated from the structure of correlation matrix shows that discontinuance cannot be seen only in a negative manner. It is really exciting to see that for the same eventuality of discontinuance there are slices of differential interpretation. Even in the history of physics the concept of antiparticle and universe or antiproton etcetera are equally true within the existence of previous one. But it is inimical to observe that the in extension researches the phenomenon of discontinuance rejection or reinvention are not focused duly rather they have been set aside especially, rejection and discontinuance as negative behavior of laggards in social sciences all behavioral elements are in totally and as consequence to technology socialization process can just be seen as output from a unique form of social chemistry so, estimation of adoption or rejection in as isolated manner cannot justify the function of social chemistry rather these are all behavioral diodes. The progress of civilization presents a profile of histories of rejection all the denials by Aristotle, Copernicus, or Galileo to the religious dogmatism have not only enriched the civilization but also set the humanity from blunder and destruction.

Table 6.57: Stepwise regression analysis of Perception on discontinuance (y_1) versus 32 independent variables of pooled village, (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E.**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.587	0.089	0.447	6.864**				
Adoption leadership (x17)	0.343	0.097	0.242	3.536**	0.68	0.47	0.456	1.131

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Family education status (x3)	-0.091	0.026	-0.218	-3.467**	8	4		
Utilization of cosmopolite source of information (x28)	0.986	0.398	0.169	2.477**				
Economic motivation (x22)	-0.212	0.105	-0.127	-2.011*				

Revelation

Table 6.57 presents the stepwise regression analysis of the dependent variable, **Perception on discontinuance (y_1)** versus 32 independent variables of pooled village. It has been found that the predominating predictors *viz.* **Market orientation (x_{26})**, **Adoption leadership (x_{17})**, **Family education status (x_3)**, **Utilization of cosmopolite source of information (x_{28})** and **Economic motivation (x_{22})** have been retained at the last step of screening. The R^2 being 0.474, it is to infer that all the above five predominating predictors have explained 47.4 per cent variance embedded with the predicted variable, **Perception on discontinuance (y_1).**

Implication

Discontinuance is an integral component of technology socialization process and the causal variables which has been found generating critical impact on the phenomenon of discontinuance both in West Bengal and Bihar, are **Market orientation (x_{26})**, **Adoption leadership (x_{17})**, **Family education status (x_3)**, **Utilization of cosmopolite source of information (x_{28})**, and **Economic motivation (x_{22})** logical culmination of a technology suffering from a liabilities of conventionally or may be a compulsion due to situational development but orientation towards market, **Cosmopolite source of information (x_{28})**, **Economic motivation (x_{22})** and **Adoption leadership (x_{17})** are the psychological and management orientation of the farmers as whole are characterizing the process of discontinuance.

Table 6.58: Path analysis Perception on discontinuance (y_1) versus 32 exogenous variables of pooled village, (Ghoragachha and Chiroura)

N = 150						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.138	0.088	-0.226	0.095(x10)	-0.089(x3)	0.033(x5)
Education (x2)	-0.366**	0.020	-0.386	-0.136(x3)	-0.127(x26)	-0.119(x10)
Family Education Status (x3)	-0.248**	-0.257	0.009	-0.106(x10)	0.048(x4)	-0.043(x26)
Educational Aspiration (x4)	-0.252**	0.056	-0.308	-0.218(x3)	-0.111(x10)	-0.053(x26)
Family Size (x5)	-0.115	0.127	-0.242	-0.106(x10)	-0.062(x3)	-0.050(x26)
Gender (x6)	-0.040	-0.005	-0.035	-0.019(x10)	-0.017(x26)	-0.012(x5)
Urbanization Index (x7)	-0.110	0.098	-0.208	-0.048(x26)	-0.042(x10)	-0.037(x17)
Occupation (x8)	-0.045	0.084	-0.129	-0.036(x29)	-0.027(x26)	-0.024(x23)
Cropping Intensity (x9)	0.225**	0.065	0.160	0.072(x10)	0.065(x26)	0.051(x3)
Farm size (x10)	-0.398**	-0.249	-0.149	-0.122(x26)	-0.109(x3)	0.054(x5)
Expenditure Allotment (x11)	0.235**	0.113	0.122	0.043(x17) (x26)	0.036(x28)	0.031(x29)
Credit Load (x12)	0.009	0.085	-0.076	-0.040(x10)	-0.022(x5)	-0.019(x22) 0.021(x15)
Annual Income (x13)	0.091	-0.050	0.141	0.056(x11)	-0.045(x10)	-0.044(x17)
Electricity Consumption (x14)	0.172*	0.067	0.105	0.056(x26)	-0.049(x5)	0.042(x10)
Fuel Consumption (x15)	0.093	0.060	0.033	-0.060(x10)	0.044(x11)	-0.034(x3)
Irrigation Index (x16)	0.104	-0.028	0.132	0.051(x10)	0.027(x3)	0.024(x26)
Adoption Leadership (x17)	0.393**	0.202	0.191	0.076(x26)	0.067(x29)	0.050(x28)
Scientific Orientation (x18)	0.040	-0.054	0.094	0.064(x29)	0.046(x17)	-0.038(x3)
Independency (x19)	0.116	0.024	0.092	0.056(x26)	-0.042(x22)	0.025(x17)
Innovation Proneness (x20)	0.240**	0.015	0.225	0.105(x26)	0.058(x17)	-0.048(x22)
Risk Orientation (x21)	0.226**	0.001	0.225	0.088(x26)	0.039(x17)	0.033(x29)

Economic Motivation (x22)	-0.069	-0.179	0.110	0.047(x17)	0.024(x29)	-0.019(x26)
Orientation Towards Competition (x23)	0.203*	0.066	0.137	0.058(x26)	0.041(x17)	-0.031(x8)
Management Orientation (x24)	0.208*	0.043	0.165	0.079(x26)	0.036(x17)	-0.022(x3)
Production Orientation (x25)	0.068	0.063	0.005	0.035(x10)	-0.032(x3)	-0.023(x22)
Market Orientation (x26)	0.589**	0.293	0.296	0.104(x10)	0.052(x17)	0.043(x29)
Social Participation (x27)	0.026	0.010	0.016	-0.073(x10)	-0.072(x3)	0.032(x17)
Utilization of Cosmopolite Source of Information (x28)	0.309**	0.127	0.182	0.085(x29)	0.079(x17)	0.067(x26)
Information Seeking Behavior (x29)	0.347**	0.157	0.190	0.086(x17)	0.080(x26)	0.069(x28)
Training Received (x30)	0.007	-0.099	0.106	-0.035(x3)	0.034(x28)	0.032(x26)
Drudgeries (x31)	0.317**	0.049	0.268	0.102(x26)	0.079(x10)	0.061(x3)
Distance Matrix (x32)	0.054	0.023	0.031	-0.031(x10)	0.016(x29)	-0.012(x8) 0.012(x26)
Residual Effect	0.665					
Highest count	Market Orientation (x26):24					

Revelation

Table 6.58 presents the path analysis of the dependent variable **Perception on discontinuance (y_1)** versus 32 exogenous variables of pooled village. It has been found that exogenous variable **Market orientation (x_{26})** has exerted highest total direct effect whereas the other exogenous variable **Education (x_2)** has exerted highest total indirect effect. Table also reveals that the exogenous variables **Market orientation (x_{26})** has routed the highest substantial indirect effect as many as 24 times to define its tremendous impact on other exogenous variables to ultimately characterize the performance of consequent variable, **Perception on discontinuance (y_1).**

Implication

The variable, **Market orientation (x_{26})** discussed in the earlier tables regardless to West Bengal and Bihar has met the farmers enough logical towards welcoming alternatives or disillusioned over the non- functioning of prescribed technology. So, **Education (x_2)** having highest indirect effect has proved that a social and psychological companionship of the variable education in characterizing the performing behavior of other variable are well discernible for pooled respondents.

Table 6.59: Correlation coefficient of Perception on rejection (y_2) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Variables	**Coefficient of Correlation ®**
Age (x1)	-0.080
Education (x2)	-0.220**
Family Education Status (x3)	-0.052
Educational Aspiration (x4)	-0.038
Family Size (x5)	-0.128
Gender (x6)	-0.052
Urbanization Index (x7)	-0.078
Occupation (x8)	-0.078
Cropping Intensity (x9)	0.133
Farm size (x10)	-0.283**
Expenditure Allotment (x11)	0.210**
Credit Load (x12)	-0.024
Annual Income (x13)	0.003
Electricity Consumption (x14)	0.172*
Fuel Consumption (x15)	-0.046
Irrigation Index (x16)	0.091
Adoption Leadership (x17)	0.280**
Scientific Orientation (x18)	0.131
Independency (x19)	0.136
Innovation Proneness (x20)	0.200*
Risk Orientation (x21)	0.169*
Economic Motivation (x22)	0.049
Orientation Towards Competition (x23)	0.047
Management Orientation (x24)	0.092
Production Orientation (x25)	-0.115
Market Orientation (x26)	0.408**
Social Participation (x27)	0.040
Utilization of Cosmopolite Source of Information (x28)	0.242**
Information Seeking Behavior (x29)	0.299**
Training Received (x30)	-0.022
Drudgeries (x31)	0.125
Distance Matrix (x32)	-0.047
*Significant at 0.05% **Significant at 0.01%	

Revelation

The table 6.59 presents the Correlation coefficient of **Perception on rejection (y_2)** with 32 independent variables of pooled village. The table reveals that the following independent variables such as **Expenditure allotment (x_1)**, **Adoption leadership (x_{17})**, **Market orientation (x_{26})**, **Utilization of cosmopolite source of information (x_{28})**, **and Information seeking behavior (x_{29})**, have highly significant

and positively correlated with the dependent variable, **Perception on rejection (y_2)**.

The table also reveals that the independent variables *viz.* **Education (x_2)** and **Farm size (x_{10})** have highly significantly but negatively correlated with the dependent variable, **Perception on rejection (x_2).**

It has also been found that the independent variable *viz.* **Electricity consumption (x_{14})**, **Innovation proneness (x_{20})** and **Risk orientation (x_{21})** have significantly and positively correlated with the dependent variable, **Perception on rejection (y_2).**

Implication

The above stated web of relationship depicts that occurrence of rejection has been higher for those having lower level of education, Farm size, so, poorer farmers suffering from low level of education and resource support are most prone to reject prescribed technology. Discernibly farmers having better **Expenditure allotment (x_{11})**, higher **Electricity consumption (x_{11})**, higher **Adoption leadership (x_{17})**, higher **Innovation proneness (x_{20})**, higher **Risk orientation (x_{21})**, higher **Market orientation (x_{26}),** higher **Utilization of cosmopolite source of information** (**x_{28}**), higher **Information seeking behavior (x_{29})** are also rejection of higher scale and magnitude. So, rejection shows a mutually juxtapose disposition in rejection behavior. Nevertheless, both rejection and discontinuance are or the increasing side, whenever a transformation in agriculture both Bihar and West Bengal each under study.

Table 6.60: Stepwise regression analysis of Perception on rejection (y_2) versus 32 independent variables of pooled village, (Ghoragachha and Chiroura) : Predominating variables retained at the last step

N = 75								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market Orientation (x26)	0.337	0.098	0.281	3.421**	0.500	0.250	0.229	1.228
Information Seeking Behavior (x29)	0.265	0.090	0.222	2.955**				
Production Orientation (x25)	-0.265	0.115	-0.167	-2.955*				
Farm size (x10)	-0.067	0.031	-0.174	-2.168*				

Revelation

Table 6.60 presents the stepwise regression analysis of **Perception on rejection (y_2)** versus 32 independent variables of pooled village. The table reveals that the following predominating independent variables *viz.* **Market orientation (x_{26}), Information seeking behavior (x_{29})**, **Production orientation (x_{25})** and **Farm size (x_{10})** have been retained at the last step of screening. The R^2 being 0.250 it is to infer that all the above four predominating predictors have explained 25 per cent variance embedded with the predicted variable, **Perception on rejection (y_2)**.

Implication

Both the resource and orientation factor *viz*. **Production orientation (x_{25})**, **Market orientation (x_{26}), Information seeking behavior (x_{29})**, **Farm size (x_{10})** have been found for all the respondents covering Bihar and West Bengal have been found at attuning to rejection decision on the other hand it can be said the process of socialization, when keeps moving on an on, the cognate phenomenon like rejection, discontinuance are also taking newer pace. The study will help reclose to a new approach to measure the agricultural transformation in terms of rejection and discontinuance rather than in terms of adoption

Table 6.61: Path analysis of Perception on rejection (y_2) versus 32 exogenous variables of pooled village, (Ghoragachha and Chiroura)

N = 75						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.080	0.004	-0.084	-0.066(x10) 0.066(x4)	0.033(x31)	-0.029(x11)
Education (x2)	-0.220**	-0.040	-0.180	0.111(x4)	-0.099(x26)	-0.083(x10)
Family Education Status (x3)	-0.052	-0.069	0.017	0.173(x4)	-0.074(x10)	-0.034(x26)
Educational Aspiration (x4)	-0.038	0.203	-0.241	-0.077(x10)	-0.059(x3)	-0.042(x26)
Family Size (x5)	-0.128	-0.058	-0.070	-0.074(x10)	0.058(x4)	-0.039(x26)
Gender (x6)	-0.052	-0.006	-0.046	-0.013(x26) (x10)	-0.012(x13)	-0.011(x9)
Urbanization Index (x7)	-0.078	0.089	-0.167	-0.042(x11)	-0.037(x26)	-0.030(x14)

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Occupation (x8)	-0.078	-0.032	-0.046	0.043(x23)	-0.030(x29)	-0.026(x11)
Cropping Intensity (x9)	-0.133	-0.113	-0.020	-0.051(x26)	-0.050(x4) 0.050(x10)	0.035(x25)
Farm size (x10)	-0.283**	-0.173	-0.110	-0.096(x26)	0.090(x4)	-0.032(x9)
Expenditure Allotment (x11)	0.210**	0.263	-0.053	-0.073(x13)	0.045(x15)	-0.034(x26)
Credit Load (x12)	-0.024	0.019	-0.041	-0.054(x13)	-0.035(x15)	-0.028(x10) 0.028(x25)
Annual Income (x13)	0.003	-0.148	0.151	0.129(x11)	-0.043(x15)	-0.032(x10)
Electricity Consumption (x14)	0.172*	0.053	0.119	0.049(x11)	0.044(x26)	0.029(x10)
Fuel Consumption (x15)	-0.046	-0.117	-0.071	0.101(x11)	-0.055(x13)	-0.042(x10)
Irrigation Index (x16)	0.091	0.036	0.055	0.035(x10)	-0.021(x4)	-0.020(x25)
Adoption Leadership (x17)	0.280**	0.073	0.207	0.059(x26)	0.055(x11)	-0.054(x29)
Scientific Orientation (x18)	0.131	0.069	0.062	0.051(x29)	-0.040(x25)	0.023(x15)
Independency (x19)	0.136	0.091	0.045	0.044(x26)	-0.032(x25)	-0.028(x23)
Innovation Proneness (x20)	0.200*	0.074	0.126	0.082(x26)	-0.034(x11)	0.021(x29)
Risk Orientation (x21)	0.169*	0.007	0.162	0.069(x26)	-0.034(x25)	0.027(x29)
Economic Motivation (x22)	0.049	-0.016	0.065	0.030(x11)	-0.026(x25)	-0.021(x19) -0.021(x13)
Orientation Towards Competition (x23)	0.047	-0.120	0.167	0.046(x26)	0.042(x11)	0.024(x29)
Management Orientation (x24)	0.092	0.004	0.088	0.061(x26)	-0.046(x23)	-0.024(x25) 0.024(x20)
Production Orientation (x25)	-0.115	-0.200	0.085	0.025(x10)	0.020(x9)	0.015(x19)
Market Orientation (x26)	0.408**	0.229	0.179	0.072(x10)	0.039(x11)	-0.037(x4)
Social Participation (x27)	0.040	0.046	-0.006	0.052(x4)	-0.050(x10)	0.035(x11)
Utilization of Cosmopolite Source of Information (x28)	0.242**	0.096	0.146	0.075(x11)	0.069(x29)	0.053(x26)
Information Seeking Behavior (x29)	0.299**	0.127	0.172	0.063(x26)	0.052(x11) 0.052(x28)	0.031(x17)
Training Received (x30)	-0.022	-0.138	0.116	0.025(x26) 0.025(x28)	0.022(x29)	0.015(x11)
Drudgeries (x31)	0.125	-0.086	0.211	0.080(x26)	0.063(x11)	0.055(x10)
Distance Matrix (x32)	-0.047	-0.041	-0.006	-0.021(x10)	0.013(x29)	-0.012(x9)
Residual Effect	0.794					
Highest count	Market Orientation (x26):20					

Revelation

Table 6.61 presents the path analysis of Perception on rejection (y_2) versus 32 exogenous variables by decomposing the total effect 'r' into direct effect, indirect effect and residual effect of pooled village. The table revealed that the exogenous variable, Market **orientation (x_{26})** has exerted the highest total direct effect and other exogenous variable, **Educational aspiration (x_4)** has exerted highest total indirect effect on consequent variable, **Perception on rejection (y_2)**.

The table also reveals that the exogenous variable, **Market orientation (x_{26})** has routed the highest individual dominating effect as many as 20 times to define its tremendous impact on other exogenous variables to ultimately characterizing the performance of consequent variable, **Perception on rejection (y_2).**

The residual effect being 0.794, it is to infer that even with the combination of 32 exogenous variables, 21 per cent of the variance embedded with the consequent variable, **Perception on rejection (y_2)** has been explained so far.

Implication

The variable, Market orientation (x_{26}) has again played the pivotal role in characterizing the rejection decision both in Bihar and West Bengal. The variable, Market orientation (x_{26})

helps refine and reset, design and designate alternative enterprises through inviting innovation and discarding conventions.

Education by nature as it has been in earlier case also has exerted the power of social viscosity and operational companionship with other variables.

Table 6.62: Correlation coefficient of Disagreement (y_3) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Variables	**Coefficient of Correlation ®**
Age (x1)	0.043
Education (x2)	-0.120
Family Education Status (x3)	-0.066
Educational Aspiration (x4)	-0.017
Family Size (x5)	-0.130
Gender (x6)	0.017
Urbanization Index (x7)	-0.030
Occupation (x8)	0.011
Cropping Intensity (x9)	-0.047
Farm size (x10)	-0.158
Expenditure Allotment (x11)	-0.026
Credit Load (x12)	-0.112
Annual Income (x13)	-0.036
Electricity Consumption (x14)	0.190*
Fuel Consumption (x15)	-0.068
Irrigation Index (x16)	0.000
Adoption Leadership (x17)	0.158
Scientific Orientation (x18)	0.108
Independency (x19)	-0.047
Innovation Proneness (x20)	0.074
Risk Orientation (x21)	0.037
Economic Motivation (x22)	-0.100
Orientation Towards Competition (x23)	-0.104
Management Orientation (x24)	0.050
Production Orientation (x25)	-0.044
Market Orientation (x26)	0.290**
Social Participation (x27)	-0.048
Utilization of Cosmopolite Source of Information (x28)	0.156
Information Seeking Behavior (x29)	0.231**
Training Received (x30)	0.064
Drudgeries (x31)	-0.014
Distance Matrix (x32)	0.104
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.62 presents the Correlation coefficient of Disagreement (y_3) with 32 independent variables of pooled village. The table reveals that the variables *viz.* **Market orientation (x_{26})** and **Information seeking behavior (x_{29})** are highly significant and positively correlated with the dependent variable, **Disagreement (y_3)**.

The table also reveals that the variable, **Electricity consumption (x_{14})** is significantly and positively correlated with the dependent variable, **Disagreement (y_3)**.

Implication

All these three variables, have helped the respondents go on exposing themselves into the world of informational alternatives, and plethora when choices are more and opening ups are wider for alternatives they will keep showing disagreement to the narrow and myopic spectrum of conventional practices.

Table 6.63: Stepwise regression analysis of Disagreement (y_3) versus 32 independent variables of pooled village (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.275	0.080	0.276	3.429**	0.381	0.145	0.127	1.089
Orientation towards competition (x23)	-0.222	0.090	-0.195	-2.474**				
Information Seeking behavior (x29)	0.191	0.080	0.193	2.395**				

Revelation

Table 6.63 presents the stepwise regression analysis of the dependent variable, **Disagreement (y_3)** versus 32 independent variables of pooled village. The table reveals that the predominating variables *viz.* **Market orientation (x_{26})**, **Orientation towards competition (x_{23})** and **Information seeking behavior (x_{29})** have been retained at the last step of screening. The R^2 being 0.145, it is to infer that the three retained predominating predictors have explained 14 per cent of variance embedded with the predicted variable, **Disagreement (y_3)**.

Implication

Again, the three variables have steered the respondents to go for better market choice, gathering of relevant information and after their competencies in farming in a competitive market and these all have let them primarily disagree with the conventional practices and afterwards keep going for better choices.

Table 6.64: Path analysis of Disagreement (y_3) versus 32 exogenous variables of pooled village, (Ghoragachha and Chiroura)

N = 150						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.043	0.100	0.057	-0.078(x3)	0.070(x4)	-0.031(x5)
Education (x2)	-0.120	-0.003	-0.117	0.119(x4)	-0.112(x26)	-0.033(x5)
Family Education Status (x3)	-0.066	-0.225	0.159	0.185(x4)	-0.038(x26)	0.035(x1)
Educational Aspiration (x4)	-0.017	0.217	-0.234	-0.191(x3)	-0.047(x26)	-0.035(x5)
Family Size (x5)	-0.130	-0.121	-0.009	0.062(x4)	-0.055(x3)	-0.054(x14)
Gender (x6)	0.017	0.003	-0.016	-0.015(x26)	-0.014(x23)	0.011(x5) -0.011(x12) (x16)
Urbanization Index (x7)	-0.030	0.063	-0.093	-0.042(x26)	0.033(x4)	-0.018(x3) (x22)
Occupation (x8)	0.011	-0.034	0.045	0.067(x23)	-0.038(x29)	-0.024(x26)
Cropping Intensity (x9)	-0.047	-0.055	0.008	0.057(x26)	-0.053(x4)	0.044(x3)
Farm size (x10)	-0.158	-0.008	-0.150	-0.108(x26)	-0.973(x4)	-0.096(x3)
Expenditure Allotment (x11)	-0.026	-0.012	-0.014	0.038(x26)	0.032(x29)	-0.029(x23)
Credit Load (x12)	-0.112	-0.098	-0.014	0.030(x14)	0.021(x5)	-0.019(x13)
Annual Income (x13)	-0.036	-0.052	0.016	-0.036(x12)	0.032(x29)	0.025(x14)
Electricity Consumption (x14)	0.190*	0.139	0.051	0.049(x26)	0.047(x5)	-0.022(x30)
Fuel Consumption (x15)	-0.068	-0.031	-0.037	-0.030(x3)	-0.029(x12)	0.028(x14)
Irrigation Index (x16)	0.000	-0.094	0.094	0.028(x23) 0.028(x27)	0.024(x3)	-0.022(x4)
Adoption Leadership (x17)	0.158	0.108	0.050	0.070(x29)	0.067(x26)	-0.037(x23)
Scientific Orientation (x18)	0.108	0.071	0.037	0.065(x29)	-0.033(x3)	-0.023(x17)
Independency (x19)	-0.047	-0.048	0.001	0.049(x26)	-0.043(x23)	-0.033(x22)
Innovation Proneness (x20)	0.074	0.062	0.012	0.093(x26)	-0.036(x22)	-0.033(x23)
Risk Orientation (x21)	0.037	-0.072	0.109	0.077(x26)	0.034(x29)	-0.026(x23)
Economic Motivation (x22)	-0.100	-0.144	0.044	0.025(x29) (x17)	-0.017(x26)	0.012(x28)
Orientation Towards Competition (x23)	-0.104	-0.185	0.081	0.051(x26)	0.031(x29)	-0.002(x11)
Management Orientation (x24)	0.050	0.037	0.013	-0.070(x23)	0.069(x26)	-0.022(x21)
Production Orientation (x25)	-0.044	-0.002	-0.042	-0.028(x3)	-0.018(x22)	0.015(x4)
Market Orientation (x26)	0.290**	0.258	0.032	0.045(x29)	-0.040(x4)	-0.037(x23)
Social Participation (x27)	-0.048	-0.101	0.053	-0.064(x3)	0.056(x4)	0.032(x29)
Utilization of Cosmopolite Source of Information (x28)	0.156	0.083	0.073	0.088(x29)	0.059(x26)	-0.042(x17)
Information Seeking Behavior (x29)	0.231**	0.163	0.068	0.071(x26)	0.046(x17)	0.045(x28)
Training Received (x30)	0.064	-0.145	0.081	-0.031(x3)	0.028(x26) 0.028(x29)	0.022(x28)
Drudgeries (x31)	-0.014	-0.070	0.056	0.090(x26)	0.053(x3)	-0.047(x4)
Distance Matrix (x32)	0.104	0.048	0.056	0.017(x29)	-0.015(x23)	0.012(x12)
Residual Effect	0.845					
Highest count	Market Orientation (x26):21					

Revelation

Table 6.64 presents the path analysis of the dependent variable, **Disagreement (y_3)** versus 32 exogenous variables by decomposing the total effect 'r' into direct effect, indirect

effect and residual effect. The table revealed that the exogenous variable, **Market orientation (x_{26})** has exerted highest total direct effect and other exogenous variable, **Educational aspiration (x_4)** has exerted highest total indirect effect. The table also revealed that the exogenous variable **Market orientation (x_{26})** has routed the highest individual dominating effect as many as 21 times to define its tremendous impact on other exogenous variables to ultimately characterizing the performance to consequent variable **Disagreement (y_3)**. The residual effect being 0.845, it is to infer that even with the combination of 32 exogenous variables 16 per cent of variance embedded in **Disagreement (y_3)** has been explained so far.

Implication

The variable, **Market orientation (x_{26})** as a sequel to the previous studies has to invite a logical disagreement in favor of relational rejection of the mundane technology and inspirational welcome to a promising new technology.

The variable, **Educational aspiration (x_4)** a kind of attitude that helps the respondents go logically strong to stop or reject of prescribed technology and subsequently developed a kind of companionship with other variables interplaying within the echelons of technology socialization process.

Table 6.65: Correlation coefficient of dependent variable Conflict (y_4) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Variables	**Coefficient of Correlation (r)**
Age (x1)	-0.145
Education (x2)	-0.261**
Family Education Status (x3)	-0.255**
Educational Aspiration (x4)	-0.231**
Family Size (x5)	-0.200*
Gender (x6)	-0.028
Urbanization Index (x7)	-0.103
Occupation (x8)	-0.019
Cropping Intensity (x9)	0.105
Farm size (x10)	-0.458**
Expenditure Allotment (x11)	0.149
Credit Load (x12)	-0.065
Annual Income (x13)	-0.032
Electricity Consumption (x14)	0.107
Fuel Consumption (x15)	-0.068
Irrigation Index (x16)	0.009
Adoption Leadership (x17)	0.212**
Scientific Orientation (x18)	0.159
Independency (x19)	0.078
Innovation Proneness (x20)	0.121
Risk Orientation (x21)	0.156
Economic Motivation (x22)	0.095
Orientation Towards Competition (x23)	0.104
Management Orientation (x24)	0.103
Production Orientation (x25)	0.002
Market Orientation (x26)	0.354**
Social Participation (x27)	-0.080
Utilization of Cosmopolite Source of Information (x28)	0.248**
Information Seeking Behavior (x29)	0.381**
Training Received (x30)	-0.058
Drudgeries (x31)	0.175*
Distance Matrix (x32)	-0.053
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.65 presents Correlation coefficient of dependent variable, **Conflict (y_4)** with 32 independent variables of pooled village. The table reveals that the following variables *viz.* **Adoption leadership (x_{17}), Market orientation (x_{26})**, **Utilization of cosmopolite source of information (x_{28})**, and **Information seeking behavior (x_{29})**, have significantly and positively correlated with the dependent variable **Conflict (y_4)**. It has been found that the variable **Distance matrix (x_{31})** is significantly and positively correlated with the dependent variable, **Conflict (y_4)**.

The table also reveals that the following variables *viz.* **Education (x_2)**, **Family Education status (x_3)** and **Educational aspiration (x_4)**, and **Farm size (x_{10})** have been significantly but negatively correlated with the dependent variable, **Conflict (y_4)**.

The independent variable **Family size (x_5)** has also recorded significantly but negatively correlated with the dependent variable, **Conflict (y_4)**.

Implication

The result indicates the respondent of lower Education, lower family education status, lower Educational aspiration are vulnerable to ignite conflict. Conflict are also found prominent when Farm size is smaller, Conflict are also found dominant when adoption leadership is attempted and exercised upon in mobilizing respondents towards adopting new prescriptive practices.

Table 6.66: Stepwise regression analysis Conflict (y_4) versus 32 independent variables of pooled village (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Farm size (x10)	-0.133	0.020	-0.453	-6.781**				

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Information seeking behavior (x29)	0.259	0.071	0.287	3.628**	0.606	0.368	0.350	0.853
Training received (x30)	0.000	0.000	-0.164	-2.387*				
Utilization of cosmopolite source of information (x28)	0.664	0.326	0.165	2.038*				

Again the three close-by variables *viz*. **Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28})** and **Information seeking behavior (x_{29})** due to this properties of seeking information inventorying information and analyzing information, can invite a degree of informational dissonance *vis a vis* Social entropy. Distance matrix has inducted with high distance from the strategic location of different utility center have added more Social entropy with increase of distances.

Revelation

Table 6.66 presents the stepwise regression analysis of the dependent variable, **Conflict (y_4)** versus 32 independent variable of pooled village. It has been found that the following predominating variable *viz*. **Farm size (x_{10}), Information seeking behavior (x_{29}), Training received (x_{30})** and **Utilization of cosmopolite source of information (x_{28})** have been retained at the last step of screening. The R^2 being 0.368, it is to infer that all the four retained predominating predictors have explained 36.8 per cent, variance in predicted variable, **Conflict (y_4).**

Implication

The three variable already retained to infer that **Farm size (x_{10})**, **Information seeking behavior (x_{29})**, the exotic information farmers received through Training and Utilization of cosmopolite source of information have got deterministic role in inviting conflict. While undirected flow of information will go on adding more stress and dissonance, the result will invite a more conflicting situation.

Table 6.67: Path analysis of dependent variable Conflict (y_4) versus 32 exogenous variables of pooled village (Ghoragachha and Chiroura)

N = 150						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.145	0.066	-0.211	-0.161(x10)	-0.100(x3)	0.056(x4)
Education (x2)	-0.261**	0.029	-0.290	-0.202(x10)	-0.153(x3)	0.094(x4)
Family Education Status (x3)	-0.255**	-0.288	0.033	-0.180(x10)	0.146(x4)	0.023(x1)
Educational Aspiration (x4)	-0.231**	0.171	-0.402	-0.245(x3)	-0.188(x10)	0.021(x1)
Family Size (x5)	-0.200*	-0.016	-0.184	-0.181(x10)	-0.070(x3)	0.049(x4)
Gender (x6)	-0.028	0.010	-0.038	-0.033(x10)	-0.014(x6)	0.008(x13) -0.008(x30)
Urbanization Index (x7)	-0.103	0.036	-0.139	-0.072(x10)	0.026(x4)	-0.024(x11)
Occupation (x8)	-0.019	0.065	-0.084	-0.077(x29)	-0.015(x28) (x11) 0.015(x30)	0.009(x1) -0.009(x24)
Cropping Intensity (x9)	0.105	0.014	0.091	0.122(x10)	0.057(x3)	-0.042(x4)
Farm size (x10)	-0.458**	-0.424	-0.034	-0.122(x3)	0.076(x4)	-0.029(x26)
Expenditure Allotment (x11)	0.149	0.153	-0.004	-0.067(x13)	0.065(x29)	0.016(x10)
Credit Load (x12)	-0.065	0.020	-0.085	-0.067(x10)	-0.050(x13)	-0.014(x3)
Annual Income (x13)	-0.032	-0.136	0.104	-0.077(x10)	0.075(x11)	0.066(x29)
Electricity Consumption (x14)	0.107	0.012	0.095	0.072(x10)	0.028(x11)	0.027(x29)
Fuel Consumption (x15)	-0.068	0.034	-0.102	-0.102(x10)	0.059(x11)	-0.050(x13)
Irrigation Index (x16)	0.009	-0.121	0.130	0.086(x10)	0.039(x29)	0.030(x3)
Adoption Leadership (x17)	0.212**	-0.022	0.234	0.142(x29)	0.055(x10)	0.048(x28)
Scientific Orientation (x18)	0.159	0.046	0.113	0.132(x29)	-0.042(x3)	0.034(x28)
Independency (x19)	0.078	0.018	0.060	0.031(x10)	-0.018(x16)	0.014(x24)
Innovation Proneness (x20)	0.121	0.005	0.116	0.043(x29)	0.031(x28)	0.025(x26)

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Risk Orientation (x21)	0.156	-0.040	0.196	0.069(x29)	0.021(x26)	0.053(x10)
Economic Motivation (x22)	0.095	0.035	0.060	0.052(x29)	-0.021(x10)	-0.020(x13)
Orientation Towards Competition (x23)	0.104	0.020	0.084	0.063(x29)	-0.026(x3)	0.025(x24)
Management Orientation (x24)	0.103	0.066	0.037	0.038(x29)	-0.024(x3)	0.021(x28)
Production Orientation (x25)	0.002	-0.062	0.064	0.060(x10)	-0.035(x3)	0.025(x29)
Market Orientation (x26)	0.354**	0.071	0.283	0.177(x10)	0.091(x29)	0.042(x3)
Social Participation (x27)	-0.080	-0.043	-0.037	-0.123(x10)	-0.082(x3)	0.066(x29)
Utilization of Cosmopolite Source of Information (x28)	0.248**	0.124	0.124	0.179(x29)	-0.052(x3)	0.044(x11)
Information Seeking Behavior (x29)	0.381**	0.332	0.049	0.067(x28)	0.031(x10)	0.030(x11)
Training Received (x30)	-0.058	-0.131	0.073	0.056(x29)	-0.039(x3)	0.033(x28)
Drudgeries (x31)	0.175*	-0.021	0.196	0.134(x10)	0.068(x3)	-0.037(x4) 0.037(x11)
Distance Matrix (x32)	-0.053	-0.049	-0.004	-0.053(x10)	0.035(x29)	-0.009(x8)
Residual Effect	0.750					
Highest count	Farm size (x10):24					

Information overloading primarily with junked information are even more furniture and culturally toxic than heavy metal toxicity and pesticide pollution.

Revelation

Table 6.67 present the path analysis of the consequent variable, **conflict (y_4)** versus 32 exogenous variables by decomposing the total effect 'r' into direct effect, indirect effect and residual effect of pooled village. It has been found that the exogenous variable, **Farm size (x_{10})** has exerted highest total direct effect whereas the other exogenous variable, **Educational aspiration (x_4)** has exerted highest total indirect effect on the consequent variables, **conflict (y_4).**

It has also been found that the exogenous variable, **Farm size (x_{10})** has routed the highest individual dominating effect as many as 24 times to define the tremendous impact on other exogenous variables to ultimately characterize the performance of consequent variable, **Conflict (y_4).**

The residual effect being 0.750, it is to infer that even with the combination of 32 exogenous variables, 25 per cent of variance embedded in the consequent variable, **Conflict (y_4)** has been explained so far.

Implication

Conflict or cooperation, friendship or enmity, serenity or disorder, all are found in this case a subject of resource support to the farmers. Farm size here, has characterize the nature of conflict as a whole, encompassing farmers of West Bengal and Bihar simply because land is still the single largest and swashbuckling factor to catalyze the social chemistry of cultural dissonance *vis a vis* informational entropy. The question of adoptability to technology or repulsion to technology can ultimately be answered through a farm size category, small, marginal or big.

Educational aspiration (x_4) as already been discussed can go a long way in characterizing the performance of other variables due to its intrinsic association ship with other variables. Educational aspiration can generate space and scope, Elasticity and resilience in perceiving any technology from its totality and help faster socialization across a social space.

Table 6.68: Correlation coefficient of Reasons for dissonance (y_5) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Variables	**Coefficient of Correlation (r)**
Age (x1)	-0.110
Education (x2)	-0.359**
Family Education Status (x3)	-0.255**
Educational Aspiration (x4)	-0.226**
Family Size (x5)	-0.194*
Gender (x6)	-0.104
Urbanization Index (x7)	-0.310**
Occupation (x8)	-0.035
Cropping Intensity (x9)	0.256*
Farm size (x10)	-0.396**
Expenditure Allotment (x11)	0.246**
Credit Load (x12)	-0.041
Annual Income (x13)	0.061
Electricity Consumption (x14)	0.215**
Fuel Consumption (x15)	0.053

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Irrigation Index (x16)	-0.082
Adoption Leadership (x17)	0.331**
Scientific Orientation (x18)	0.045
Independency (x19)	0.108
Innovation Proneness (x20)	0.321**
Risk Orientation (x21)	0.100
Economic Motivation (x22)	-0.049
Orientation Towards Competition (x23)	0.228**
Management Orientation (x24)	0.241**
Production Orientation (x25)	-0100
Market Orientation (x26)	0.565**
Social Participation (x27)	0.010
Utilization of Cosmopolite Source of Information (x28)	0.214**
Information Seeking Behavior (x29)	0.312**
Training Received (x30)	-0.004
Drudgeries (x31)	0.251**
Distance Matrix (x32)	0.032
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.68 presents correlation coefficient of the dependent variable, **Reasons for Dissonance (y_5)** with 32 independent variables of pooled village. It has been recorded that the independent variable, **Market orientation (x_{26})** is highly significant and positively correlated with the dependent variable, **Reasons for Dissonance (y_5).**

The table also revealed that following variables *viz*. Expenditure allotment (x_{11}), Electricity consumption (x_{14}), Adoption leadership (x_{17}), Innovation proneness (x_{20}), Orientation towards competition (x_{23}), Management orientation (x_{24}), Utilization of cosmopolite source of information(x_{28}), Information seeking behavior (x_{29}), and Distance matrix (x_{31}) have been recorded significant and positive correlation with the dependent variable, Reasons for dissonance (y_5).

It has also been recorded that the following variables *viz.* Education (x_2), Family education status (x_3), Educational aspiration (x_4), Family size (x_5), Urbanization index (x_7), and Farm size (x_{10}) have recorded significant but negative correlation with the dependent variable, Reasons for dissonance(y_5).

Implication

Three variables in order of 'r' value have been picked up for discussion. The smaller the size of holding the higher has been dissonance. Having small size of land and getting undergone the process of modernization, yet they have failed to enjoy the wind-fall effect from the uprising market and this has become more prominent for the farmers with poor education and smaller piece of holding.

The respondents having higher Market orientation but poor access to the market are getting disillusioned by non supportive market price; they are also disillusioned and fallen victim to state of dissonance with little of marketable surplus. Higher of non supportive market behavior they are passing through dissonant situation with an extreme contradiction between better orientation and poor market experience.

Table 6.69: Stepwise regression analysis Reasons for dissonance (y_5) versus 32 independent variables of Pooled village, (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.439	0.096	0.334	4.564**	0.707	0.500	0.472	1.115
Urbanization index (x7)	-0.016	0.006	-0.0155	-2.489**				
Information seeking behavior (x29)	0.247	0.083	0.189	2.971**				
Family education status (x3)	-0.058	0.028	-0.138	-2.086*				
Irrigation index (x16)	-0.049	0.016	-0.193	-3.139**				
Farm size (x10)	-0.083	0.032	-0.196	-2.636**				
Adoption leadership (x17)	0.016	0.007	0.135	2.165*				
Innovation proneness (x20)	0.224	0.109	0.133	2.052*				

Revelation

Table 6.69 presents the stepwise regression analysis of dependent variable, **Reasons for dissonance (y_5)** versus 32 independent variables of pooled village. It has been found that following variables *viz*. **Market orientation (x_{26})**, **Urbanization index (x_7)**, **Information seeking behavior (x_{29})**, **Family education status (x_3)**, **Irrigation index (x_{10})**, **Farm size (x_{10})**, **Adoption leadership (x_{17})** and **Innovation proneness (x_{20})** are predominating predictors and have been retained at the last step of screening.

The R^2 being 0.500, it is to infer that all the above predominating predictors have explained 50 per cent variance embedded in predicted variable, **Reasons for dissonance (y_5)**.

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Implication

The conglomeration of these variables or operating traits of respondents in a given social volume and while are technology is prescribed to be adopted by the farmers, and inherent contradiction starts exposing. The constellation of the variables have made the farmer will oriented to market amply exposed to information, will turned to adoption leadership and yet not turned to better accomplishment in terms of economic and social gains. A modern farmer or a person undergone transformation having imbibed with elements of modernity, when not allowed to access real benefits, they will turn restless more with entropy and keep on building slices of questions and queries that are not palatable in terms of system coherency or norms. A farmer after being deceived by market behavior subsequently to a set of promises, disseminated by technology disseminators in likely to undergo a stressful situation what, may be called a dissonance state of mind. Promises are made when kept subsequently and the worst when made and not kept. Sometimes, he forget that the 'placed benefit' has been a stimulus at the same time turns deceitful when not realized through a real achievement or experienced.

Table 6.70: Path analysis Reasons for dissonance (y_5) versus 32 exogenous variables of pooled village, (Ghoragachha and Chiroura)

N = 150						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.110	0.108	-0.218	-0.149(x3)	0.102(x4)	-0.099(x10)
Education (x2)	-0.359**	0.060	-0.419	-0.228(x3)	0.173(x4)	-0.124(x10)
Family Education Status (x3)	-0.255**	-0.430	0.175	0.269(x4)	-0.110(x10)	-0.040(x26)
Educational Aspiration (x4)	-0.226**	0.316	-0.542	-0.365(x3)	-0.115(x10)	-0.049(x26)
Family Size (x5)	-0.194*	-0.004	-0.190	-0.111(x10)	-0.104(x3)	0.090(x4)
Gender (x6)	-0.104	-0.035	-0.069	-0.023(x16)	-0.020(x10)	-0.016(x26)
Urbanization Index (x7)	-0.310**	-0.099	-0.211	-0.047(x4)	-0.044(x26) (x10)	-0.034(x3)
Occupation (x8)	-0.035	0.116	-0.151	-0.063(x29)	-0.028(x23)	-0.025(x26)
Cropping Intensity (x9)	0.256*	-0.126	0.130	0.085(x3)	-0.077(x4)	0.074(x10)
Farm size (x10)	-0.396**	-0.259	-0.137	-0.183(x3)	0.140(x4)	-0.113(x26)
Expenditure Allotment (x11)	0.246**	0.134	0.112	0.053(x29)	0.040(x26)	0.025(x15)
Credit Load (x12)	-0.041	-0.004	-0.037	-0.041(x10)	0.022(x14)	0.021(x3)
Annual Income (x13)	0.061	-0.021	0.082	0.066(x11)	0.054(x29)	-0.047(x10)
Electricity Consumption (x14)	0.215**	0.104	0.111	0.051(x26)	0.044(x10)	0.025(x11)
Fuel Consumption (x15)	0.053	0.064	-0.011	-0.062(x10)	-0.058(x3)	0.052(x11)
Irrigation Index (x16)	-0.082	-0.204	0.122	0.053(x10)	0.045(x3)	-0.033(x4)
Adoption Leadership (x17)	0.331**	0.085	0.246	0.115(x29)	0.070(x26)	-0.039(x21)
Scientific Orientation (x18)	0.045	0.027	0.018	0.108(x29)	-0.063(x3)	-0.040(x21)
Independency (x19)	0.108	0.094	0.014	-0.054(x21)	0.052(x26)	-0.030(x16)
Innovation Proneness (x20)	0.321**	0.133	0.188	-0.097(x26)	0.045(x24)	0.035(x29)
Risk Orientation (x21)	0.100	-0.203	0.303	0.081(x26)	0.056(x29)	0.042(x24)
Economic Motivation (x22)	-0.049	-0.118	0.069	0.042(x29)	0.038(x20)	-0.031(x21)
Orientation Towards Competition (x23)	0.228**	0.079	0.149	0.054(x26)	0.052(x24)	0.051(x29)
Management Orientation (x24)	0.241**	0.138	0.103	0.072(x26)	0.044(x20)	-0.036(x3)
Production Orientation (x25)	-0100	-0.108	-0.008	-0.053(x3)	0.037(x10)	-0.034(x21)
Market Orientation (x26)	0.565**	0.271	0.294	0.108(x10)	0.074(x29)	0.063(x3)
Social Participation (x27)	0.010	-0.029	0.039	-0.122(x3)	0.081(x4)	-0.075(x10)
Utilization of Cosmopolite Source of Information (x28)	0.214**	-0.039	0.253	0.146(x29)	-0.077(x3)	0.062(x26)

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Information Seeking Behavior (x29)	0.312**	0.270	0.042	0.074(x26)	-0.042(x21)	-0.036(x17)
Training Received (x30)	-0.004	-0.085	0.081	-0.058(x3)	0.046(x29)	0.030(x26)
Drudgeries (x31)	0.251**	0.041	0.210	0.101(x3)	0.094(x26)	0.082(x10)
Distance Matrix (x32)	0.032	-0.022	0.054	-0.032(x10) 0.032(x21)	0.028(x29)	-0.016(x8)
Residual Effect	0.662					
Highest count	Market Orientation (x26):18					

Revelation

Table 6.70 presents the path analysis of consequent variable, **Reasons for dissonance (y_5)** versus 32 exogenous variables of pooled village by decomposing the total effect 'r' into direct, indirect effect and residual effect. The table revealed that the exogenous variable, **Family education status (x_3)** has exerted highest total direct effect and other exogenous variable, **Educational aspiration (x_4)** has exerted highest total indirect effect on the consequent variable, **Reasons for dissonance (y_5)**.

The table also reveals that the exogenous variable, **Market orientation (x_{26})** has routed the highest individual dominating effect as many as 24 times to define the tremendous impact on other exogenous variable to ultimately characterizing the performance of consequent variable, **Reasons for dissonance (y_5)**.

The residual effect being 0.662, it is to infer that even with the combination of 32 exogenous variables 34 per cent of variance embedded in the consequent variable, **Reasons for dissonance (y_5)** has been explained so far.

Implication

Education helps derives solution of a problem, generates inquiries for a new confusion. The ripples of education have been found in hunting for alternatives eliminating depletive tradition and enter into a world of informational dissonance. Education is the only stimulus that makes people argumentative at the same time capable of resolving a problem. It has been found that especially in rural areas when number of new illiterates is enough dominating that technology socialization process can gain both acceleration as well as retardation because of up roaring argument. Hence, dissonance sometimes may be the results in the form of Social entropy. While education has recorded highest direct effect no wonder that Educational aspiration will behave that Educational aspiration will behave like a companion variables though exerting highest magnitude of indirect effect.

Table 6.71: Correlation coefficient of dependent variable Reasons for reinvention (y_6) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	0.186*
Education (x2)	-0.130
Family Education Status (x3)	-0.007
Educational Aspiration (x4)	0.035
Family Size (x5)	0.193*
Gender (x6)	-0.189*
Urbanization Index (x7)	-0.073
Occupation (x8)	0.039
Cropping Intensity (x9)	-0.009
Farm size (x10)	-0.029
Expenditure Allotment (x11)	0.004
Credit Load (x12)	-0.138
Annual Income (x13)	-0.023
Electricity Consumption (x14)	-0.072
Fuel Consumption (x15)	-0.054
Irrigation Index (x16)	-0.074
Adoption Leadership (x17)	0.221**
Scientific Orientation (x18)	0.198*
Independency (x19)	0.076
Innovation Proneness (x20)	0.148
Risk Orientation (x21)	0.129
Economic Motivation (x22)	-0.001
Orientation Towards Competition (x23)	0.023
Management Orientation (x24)	0.078
Production Orientation (x25)	-0.028
Market Orientation (x26)	0.182*
Social Participation (x27)	0.106
Utilization of Cosmopolite Source of Information (x28)	0.213**
Information Seeking Behavior (x29)	0.226**
Training Received (x30)	-0.097
Drudgeries (x31)	-0.013
Distance Matrix (x32)	-0.036
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.71 presents the Correlation coefficient of the dependent variable, **Reasons for Reinvention (y_6)** with 32 independent variables o pooled village. The table revealed that the following independent variables *viz.* **Age (x_1)**, **Family size (x_5)**, **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Market orientation (x_{26})**, **Utilization of cosmopolite source of information (x_{28})**, and **Information seeking behavior (x_{29})**, have significantly and positively correlated with the dependent variable, **Reasons for reinvention (y_6)**.

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It has also been found that the variable **Gender (x_6)** is significant but negatively correlated with the dependent variable, **Reasons for reinvention (y_6)**.

Implication

The variable, **Age (x_1)** and **Family size (x_5)** have recorded positive input to suggest that reinvention is higher level happenings where in number of family members are big and average age level is high. It is a kind of compulsive reinvention where in family members have to go for rapid and higher modification of so called modern agricultural technology.

Both the orientation *viz*. **Market orientation (x_{26})** and **Scientific orientation (x_{18})** have played as boosters to verify and testify the classical technology and go for reinvention so also variables.

The variable, **Information seeking behavior (x_{29})** and **Utilization of cosmopolite source of information (x_{28})** are found to have positive and substantive impact on reinvention simply because for reinventing technology the basic inputs are up-to-date information and its appropriate application for the revision and rectified as demand by technology users in changing perspectives.

It is also discernible that increase of women population both in a village and family has made the ratio inelastic and at the same time an integral character of reinvention. The increase in participation of women in agriculture has been resulted to modification and refinement of conventional technology to earn 'new bread' and experience a new breadth in an enterprise.

Table 6.72: Stepwise regression analysis of Reasons for reinvention (y_6) versus 32 independent variables of pooled village, (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Information seeking behavior (x29)	0.252	0.082	0.232	3.063**	0.417	0.174	0.145	0.180
Family size (x5)	0.070	0.030	0.191	2.345*				
Education (x2)	-0.055	0.024	-0.181	-2.289*				
Gender (x6)	-0.214	0.099	-0.165	-2.165*				
Age (x1)	0.013	0.007	0.158	2.012*				

Revelation

Table 6.72 presents the stepwise regression analysis of the consequent variable, **Reasons for reinvention (y_6)** versus 32 criterion variables of pooled village. It has been found that the following predominating predictor *viz*. **Information seeking behavior (x_{29})**, **Family size (x_5)**, **Education (x_2)**, **Gender (x_6)**, **and Age (x_1)** have retained at the last step of screening.

The R^2 being 0.174, it is to infer that all the above five predominating predictors have explained 17.4 per cent variance embedded in predicted variable, **Reasons for reinvention (y_6).**

Implication

The importance of above stated variables have been discussed so, it is expected that the variables generate substantive input in characterizing the process of reinvention.

Table 6.73: Path analysis of dependent variable, Reasons for reinvention (y_6) versus 32 exogenous variables of pooled village, (Ghoragachha and Chiroura)

N = 150						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.186*	0.173	-0.013	-0.090(x3)	0.075(x4)	0.044(x5)
Education (x2)	-0.130	-0.095	-0.035	-0.0137(x3)	0.126(x4)	0.046(x5)
Family Education Status (x3)	-0.007	-0.259	0.252	0.196(x4)	0.060(x1)	-0.050(x2)
Educational Aspiration (x4)	0.035	0.231	-0.196	-0.220(x3)	0.056(x1)	-0.052(x2)
Family Size (x5)	0.193*	0.172	0.021	0.066(x4)	-0.063(x3)	0.044(x1)
Gender (x6)	-0.189*	-0.156	-0.033	-0.016(x5)	-0.012(x16)	-0.008(x30)
Urbanization Index (x7)	-0.073	0.014	-0.087	0.035(x4)	-0.030(x17)	-0.023(x2)
Occupation (x8)	0.039	0.023	0.016	-0.037(x29)	0.031(x23)	0.025(x1)
Cropping Intensity (x9)	-0.099	-0.029	0.020	-0.056(x4)	0.051(x3)	-0.034(x1)
Farm size (x10)	-0.029	-0.065	0.036	-0.110(x3)	0.102(x4)	0.073(x5)

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Expenditure Allotment (x11)	0.004	-0.016	0.020	-0.037(x13)	0.034(x17)	0.032(x28)
Credit Load (x12)	-0.138	-0.022	-0.116	-0.030(x5)	-0.029(x1)	-0.027(x13)
Annual Income (x13)	-0.023	-0.074	0.051	0.035(x17)	0.032(x29)	0.030(x28)
Electricity Consumption (x14)	-0.072	-0.021	-0.051	-0.066(x5)	-0.027(x1) 0.027(x17)	0.019(x30)
Fuel Consumption (x15)	-0.054	0.050	-0.104	-0.035(x3)	-0.027(x13)	-0.025(x5)
Irrigation Index (x16)	-0.074	-0.106	0.032	0.027(x3)	-0.024(x4)	0.020(x1)
Adoption Leadership (x17)	0.221**	0.163	0.058	0.068(x29)	0.044(x28)	-0.024(x22)
Scientific Orientation (x18)	0.198*	0.078	0.120	0.064(x29)	-0.033(x3)	0.035(x17)
Independency (x19)	0.076	0.051	0.025	-0.024(x22)	-0.020(x23) 0.020(x17)	-0.016(x16)
Innovation Proneness (x20)	0.148	0.068	0.080	0.044(x17)	0.028(x28)	-0.026(x22)
Risk Orientation (x21)	0.129	-0.007	0.136	0.033(x29)	0.032(x17)	-0.027(x5)
Economic Motivation (x22)	-0.001	-0.105	0.104	0.038(x17)	0.025(x29)	0.017(x20)
Orientation Towards Competition (x23)	0.023	-0.085	0.108	0.033(x17)	0.030(x29)	-0.024(x3)
Management Orientation (x24)	0.078	0.060	0.018	-0.032(x23)	0.029(x17)	0.022(x20) -0.022(x3)
Production Orientation (x25)	-0.028	-0.014	-0.014	-0.032(x3)	0.016(x18) 0.016(x4)	-0.013(x22)
Market Orientation (x26)	0.182*	0.045	0.137	0.044(x29)	-0.042(x4) 0.042(x17)	-0.041(x2)
Social Participation (x27)	0.106	-0.024	0.130	0.074(x3)	0.059(x4)	0.042(x1)
Utilization of Cosmopolite Source of Information (x28)	0.213**	0.112	0.101	0.086(x29)	0.064(x17)	-0.047(x3)
Information Seeking Behavior (x29)	0.226**	0.160	0.066	0.070(x17)	0.061(x28)	0.031(x18)
Training Received (x30)	-0.097	-0.123	0.026	-0.035(x3)	0.030(x28)	0.027(x29)
Drudgeries (x31)	-0.013	-0.008	-0.005	-0.065(x1)	0.061(x3)	-0.050(x4)
Distance Matrix (x32)	-0.036	-0.087	0.051	0.017(x29)	0.012(x5)	0.009(x17)
Residual Effect	0.849					
Highest count	Family Education Status (x3):16					

Revelation

Table 6.73 presents the path analysis of consequent variable, **Reasons for reinvention (y_6)** versus 32 exogenous variables of pooled village by decomposing the total effect 'r' into direct effect, indirect effect and residual effect. It has been found that the exogenous variable, **Family education status (x_3)** has exerted both total direct effect as well as total indirect effect. The table also reveals that the exogenous variable, **Family education status (x_3)** has routed the highest individual dominating effect as many as 16 times to define the tremendous impact on other exogenous variable to ultimately characterizing the performance of consequent variable, **Reasons for reinvention (y_6)**.

The residual effect being 0.849, it is to infer that even with the combination of 32 exogenous variables 16 per cent of variance embedded in **Reasons for reinvention (y_6)** has been explained so far.

Implication

Reinvention is basically a process of technology osmosis a dictum of technology exchange and a direction of knowledge journey in a transforming knowledge system. Starting from the onset of agrarian civilization some ten thousand years back and till today the agriculture and rural technology have been in the process of 'invention-reinvention-neo-invention' it can be considered a congenital process of social growth and knowledge explosion. Selection of right variety has started from a primitive society desperately hunting for palatable food plants and it is a now a daze a well known scientific produces called varietal up gradation, the generation of new variety through genetics and plant breeding. This is inevitable because two things have been left for ten thousands year and it is continuing so. These two things are hunger and instinct of survival. In invention and reinvention are only the knowledge tools to support their psycho physiological process.

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Table 6.74: Correlation coefficient of Confusion index (y_7) with 32 independent variables of pooled village, (Ghoragachha and Chiroura)

N = 150	
Variables	**Coefficient of Correlation (r)**
Age (x1)	0.011
Education (x2)	-0.144
Family Education Status (x3)	-0.108
Educational Aspiration (x4)	-0.090
Family Size (x5)	-0.039
Gender (x6)	-0.143
Urbanization Index (x7)	-0.128
Occupation (x8)	0.071
Cropping Intensity (x9)	0.042
Farm size (x10)	-0.231**
Expenditure Allotment (x11)	0.103
Credit Load (x12)	-0.113
Annual Income (x13)	0.103
Electricity Consumption (x14)	0.118
Fuel Consumption (x15)	0.082
Irrigation Index (x16)	-0.018
Adoption Leadership (x17)	0.251**
Scientific Orientation (x18)	0.123
Independency (x19)	0.049
Innovation Proneness (x20)	0.251**
Risk Orientation (x21)	0.199
Economic Motivation (x22)	0.001
Orientation Towards Competition (x23)	0.097
Management Orientation (x24)	0.123
Production Orientation (x25)	-0.012
Market Orientation (x26)	0.321**
Social Participation (x27)	0.088
Utilization of Cosmopolite Source of Information (x28)	0.162*
Information Seeking Behavior (x29)	0.311**
Training Received (x30)	-0.116
Drudgeries (x31)	0.040
Distance Matrix (x32)	-0.051
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.74 presents Correlation coefficient of the dependent variable, **Confusion index (y_7)** with 32 independent variables of pooled village. The table revealed that the following variables *viz.* **Adoption leadership (x_{17})**, **Innovation proneness (x_{20})**, **Market orientation (x_{26})**, and **Information seeking behavior (x_{29})** have recorded significant and positive correlation with the dependent variable, **Confusion index (y_7).** The variable, **Utilization of cosmopolite source of information (x_{28})** has been found to be significantly and positively correlated with dependent variable, **Confusion index (y_7)**. The table also reveals that the variable **Farm size (x_{10})** has recorded significant and negative correlation with the dependent variable, **Confusion index (y_7)**.

Implication

It has been found that, in estimating Confusion index (y_7), Adoption leadership (x_{17}), Innovation proneness (x_{22}), Market orientation (x_{26}), Information seeking behavior (x_{29}) have recorded significant association with the dependent variable, Confusion index (y_7). In the pooled sample the farmer with smaller Farm size has disposed of higher confusion. It might be that the farmers having small farm size they would be more stressed in an open marketing system where compulsion is turning worst for these marginal farmers.

Table 6.75: Stepwise regression analysis of dependent variable, Confusion index (y_7) versus 32 independent variables of pooled village (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	0.243	0.070	0.268	3.456**	0.438	0.192	0.176	0.9626
Information Seeking behavior (x29)	0.244	0.071	0.270	3.457**				
Training received (x30)	0.000	0.000	-0.192	-2.533**				

Revelation

Table 6.75 presents the stepwise regression analysis of the dependent variable, **Confusion Index (y_7)** versus 32 independent variables. The table revealed that the predominating variables *viz.* **Market orientation (x_{26}), Information seeking behavior (x_{29}),** and **Training received (x_{30})** have been retained at the last step of screening.

The R^2 being 0.192, it is to infer that all the three retained predominating predictors have explained 19.2 per cent variance embedded in predicted variable, **Confusion index (y_7)**.

Implication

Again with higher market orientation and Information seeking behavior the farmers are found to became more confused. The confusion here is simmering due to a contradictory interaction between changed deemed of and changes realized more of information derives them o go for higher choices for attaining better livelihood but non supportive institutional behavior as disposed of by fragile market, cryptic supply choices and skeptic credit organizations like bank etc., have made them utterly confused. The conventional training program in a biased organization in most cases with battery of information

which are mostly incoherent ambition to the poor farmers, incapable by nature, and cost expensive as already been discussed, it has gone indicative enough to infer that, the more the training loaded with in contextual information, impository by nature, the higher would be the stressed and confusion.

Table 6.76: Path analysis of dependent variable, Confusion Index (y_7) versus 32 exogenous variables of Pooled village, (Ghoragachha and Chiroura)

N = 150						
Variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	0.011	0.042	-0.031	-0.114(x10)	-0.102(x3)	0.055(x4)
Education (x2)	-0.144	0.173	-0.317	-0.156(x3)	-0.143(x10)	0.094(x2)
Family Education Status (x3)	-0.108	-0.294	0.186	0.145(x4)	-0.127(x10)	0.092(x2)
Educational Aspiration (x4)	-0.090	0.171	-0.261	-0.250(x3)	-0.133(x10)	0.095(x2)
Family Size (x5)	-0.039	0.121	-0.160	-0.127(x10)	-0.071(x3)	0.049(x4)
Gender (x6)	-0.143	-0.082	-0.061	-0.023(x10)	0.021(x15)	-0.019(x12)
Urbanization Index (x7)	-0.128	-0.030	-0.098	-0.051(x10)	0.042(x2)	-0.026(x20) 0.026 (x4)
Occupation (x8)	0.071	0.110	-0.039	-0.075(x29)	0.021(x30)	0.018(x32) (x12)
Cropping Intensity (x9)	0.042	-0.063	0.105	0.086(x10)	0.058(x3)	-0.053(x2)
Farm size (x10)	-0.231**	-0.299	0.068	-0.125(x3)	0.083(x2)	0.076(x4)
Expenditure Allotment (x11)	0.103	-0.057	0.160	0.078(x15)	0.063(x29)	0.052(x13)
Credit Load (x12)	-0.113	-0.164	0.051	0.061(x15)	0.039(x13)	-0.048(x10)
Annual Income (x13)	0.103	0.106	-0.003	0.075(x15)	0.064(x29)	-0.060(x12)
Electricity Consumption (x14)	0.118	0.110	0.008	0.051(x10)	-0.047(x5)	0.041(x15)
Fuel Consumption (x15)	0.082	0.204	-0.122	-0.072(x10)	-0.049(x12)	-0.039(x3) 0.039(x13)
Irrigation Index (x16)	-0.018	-0.080	0.062	0.061(x10)	0.037(x29)	0.031(x3)
Adoption Leadership (x17)	0.251**	0.076	0.175	0.138(x29)	0.046(x20)	-0.042(x28)
Scientific Orientation (x18)	0.123	-0.003	0.126	0.129(x29)	-0.043(x3)	-0.040(x15)
Independency (x19)	0.049	-0.017	0.066	0.029(x26)	0.024(x20)	0.023(x15)
Innovation Proneness (x20)	0.251**	0.170	0.081	0.054(x26)	0.042(x29)	0.032(x15)
Risk Orientation (x21)	0.199	0.041	0.158	0.067(x29)	0.045(x26)	-0.040(x2)
Economic Motivation (x22)	0.001	-0.087	0.088	0.050(x29)	0.042(x20)	0.021(x2)
Orientation Towards Competition (x23)	0.097	0.058	0.039	0.061(x29)	-0.040(x8)	0.030(x20) (x26)
Management Orientation (x24)	0.123	0.053	0.070	0.056(x20)	0.041(x26)	0.037(x29)
Production Orientation (x25)	-0.012	-0.038	0.026	0.042(x10)	-0.036(x3)	0.024(x29)
Market Orientation (x26)	0.321**	0.151	0.170	0.125(x10)	0.088(x29)	-0.075(x2)
Social Participation (x27)	0.088	0.074	0.014	-0.087(x10)	-0.084(x3)	0.064(x29)
Utilization of Cosmopolite Source of Information (x28)	0.162*	-0.108	0.270	0.174(x29)	-0.053(x3)	-0.047(x30)
Information Seeking Behavior (x29)	0.311**	0.322	-0.011	-0.058(x28)	0.041(x26)	0.033(x17)
Training Received (x30)	-0.116	-0.177	0.061	0.055(x29)	-0.040(x3)	-0.028(x28)
Drudgeries (x31)	0.040	0.081	0.121	0.094(x10)	0.069(x3)	0.052(x26)
Distance Matrix (x32)	-0.051	-0.127	0.076	-0.037(x10)	0.034(x29)	0.020(x12)
Residual Effect	0.791					
Highest count	Farm size (x10):17					

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Revelation

Table 6.76 presents the path analysis of the consequent variable, **Confusion index (y_7)** versus 32 exogenous variables of pooled village by decomposing total effect 'r' into direct effect, indirect effect and residual effect. Table revealed that the exogenous variable, **Information seeking behavior (x_{29})** has exerted highest total direct effect whereas other exogenous variable, **Education (x_2)** has exerted highest indirect effect on consequent variable.

The table also reveals that the variable, **Farm size (x_{10})** has routed the highest individual dominating effect as many as 17 times to define the tremendous impact on other exogenous variables to ultimately characterizing the performance of consequent variable, **Confusion index (y_7)**.

The residual effect being 0.791, it is to conclude that even with the combination of 32 exogenous variable 21 per cent of variance embedded in the consequent variable, **Confusion index (y_7)**, has been explained so far.

Implication

Information seeking behavior is a continuous process, but when a farmer is dumped with information he feels helpless and confused, it is not only the Information seeking behavior but also the kind of information here is collectively have failed to steer him in perspective achievement. This has got inimical consequences which turns serendipitous with annoyance and frustration.

Education here has highest solitary and indirectly influenced the performance of other variables ultimately characterizing the consequent variable Confusion index. These empirical studies may prompt to think that whether the person with higher education is also person with higher confusion may be impacted indirectly with these characters while exposing to a technology socialization process.

Table 6.77: Correlation coefficient of dependent variable, Social entropy (Y) with 32 independent variables of pooled village (Ghoragachha and Chiroura)

N = 150	
Independent variables	**Coefficient of Correlation (r)**
Age (x1)	-0.065
Education (x2)	-0.331**
Family Education Status (x3)	-0.165*
Educational Aspiration (x4)	-0.125
Family Size (x5)	-0.129
Gender (x6)	-0.144
Urbanization Index (x7)	-0.183*
Occupation (x8)	0.082
Cropping Intensity (x9)	0.179*
Farm size (x10)	-0.346**
Expenditure Allotment (x11)	0.157
Credit Load (x12)	-0.036
Annual Income (x13)	0.028
Electricity Consumption (x14)	0.157
Fuel Consumption (x15)	0.103
Irrigation Index (x16)	0.059
Adoption Leadership (x17)	0.325**
Scientific Orientation (x18)	0.015
Independency (x19)	0.092
Innovation Proneness (x20)	0.208*
Risk Orientation (x21)	0.208*
Economic Motivation (x22)	-0.101
Orientation Towards Competition (x23)	0.099
Management Orientation (x24)	0.166*
Production Orientation (x25)	-0.033
Market Orientation (x26)	0.447**
Social Participation (x27)	0.002
Utilization of Cosmopolite Source of Information (x28)	0.273**
Information Seeking Behavior (x29)	0.240**
Training Received (x30)	0.082
Drudgeries (x31)	0.183*
Distance Matrix (x32)	-0.005
*Significant at 0.05% **Significant at 0.01%	

Revelation

Table 6.77 presents the Correlation coefficient of dependent variable, **Social entropy (Y)** with 32 independent variables of pooled village. It has been found that the variable, **Market orientation (x_{26})** has recorded highly significant and positively correlated with the **Social entropy (Y).** The table also revealed that the following variable *viz.* **Adoption leadership (x_{17})**, **Cropping intensity (x_9)**, **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Management orientation (x_{24})**, **Utilization of cosmopolite source of information (x_{28})**, **Information seeking behavior (x_{29})**, **and Distance matrix (x_{31})** have recorded significant and positively correlated with the dependent variable, **Social entropy (Y)**.

It has also been found that the following variables *viz.* **Education (x_2)** and **Farm size (x_{10})**, have been highly significant, but, negatively correlated with the **Social entropy (Y).** The variable, **Urbanization index (x_7)** has recorded significant, but, negatively correlated with the dependent variable, **Social entropy (y_5).**

Implication

The variable, **Market orientation (x_{26})** opens up higher exposure to market interaction. The experience of marketing by most of the farmers in India is not pleasing and in many cases it generates social entropy.

The variable, **Adoption leadership (x_{17})** is basically a social process wherein 'good practices' are advocated, analyzed and

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accepted. In doing this sometimes opinion move in the non-compliance manner with the recipients, sometimes it turns extremely imposing that will go on creating strength conflicts.

Higher the **Cropping intensity (x_9)**, the higher would be the demand for alternatives. Besides, for increasing no. of crop enterprises in a given area of cultivation the information keep moving in some jeopardize manner. A respondents having lower size of holding generating conflicts; whenever the number of crops increasing in a same plot against a given time the entropy will keep up on moving

Searching for innovation may lead to move dissonance and hence higher entropy. Higher the Risk orientation, motivational energy is expected to release at higher scale and the entropy will go up.

The variable, **Management orientation (x_{24})**, encompasses a series of interrelated issues and aspects. The management personal are always busy and turns restless because he is the decision maker and at the same time he is most restless member in the decision making process.

The more the number of cosmopolite source of information higher would be the dissonance including serious conflicts at any point of time. Exposure to cosmopolite source of information helps go for quite range of choices and at the same time it makes farmer more vulnerable to informational stress as well.

When the respondents having higher Information seeking behavior, he accumulates more incomplete and contradictory information and become overloaded with the information which generates more social entropy.

Both proximity and isolation with and from market and other strategic location has got more impact on social entropy. Distance being the character of social ecology it helps generating energies as well as absorbing energy. The higher the distance higher has been the entropy.

Education (x_2), **Farm size (x_{10})** and **Urbanization index (x_7)**, these all variables have established inverse relationships with social entropy. It means people with lesser education, small size of holding and lower urbanization index are more vulnerable to social entropy. Study reveals ultimately that poorer farmers are exposed to Social entropy as a whole.

Table 6.78: Stepwise regression analysis of dependent variable, Social entropy (Y) versus 32 independent variables of pooled village (Ghoragachha and Chiroura): Predominating variables retained at the last step

N = 150								
Predictors	**B**	**S.E**	**Beta**	**t**	**R**	**R2**	**R2 Adjusted**	**SE Estimated**
Market orientation (x26)	13304.712	3955.266	0.264	3.364**	0.594	0.352	0.325	48439.726
Adoption leadership (x17)	10568.701	4173.004	0.194	2.533**				
Farm size (x10)	-3632.056	1234.193	-0.223	-2.943**				
Utilization of cosmopolite source of information (x28)	50836.849	17479.207	0.227	2.908**				
Training received (x30)	-47.038	16.415	-0.201	-2.866**				
Economic motivation (x22)	-10132.617	4513.667	-0.158	-2.245*				

Revelation

Table 6.78 presents the stepwise regression analysis of the dependent variable, **Social entropy (Y)** versus 32 independent variables of pooled village. The table revealed that the following predominating variable *viz.* **Market orientation (x_{26})**, **Adoption leadership (x_{17})**, **Farm size (x_{10})**, **Utilization of cosmopolite source of information (x_{28})**, **Training received (x_{30})** and **Economic motivation (x_{22})** have been retained at the last step of screening.

The R^2 being 0.352, it is to infer that all the above six retained predominating predictors have explained 35.2 per cent variance in predicted variable, **Social entropy (Y)**.

Implication

The variable which have been retained at the last step *viz*. Market orientation, Adoption leadership, Farm size, utilization of cosmopolite source of information, Training received and Economic motivation have indicated that these characters are very close and interactive with the social entropy and have got substantive contribution on social entropy.

Table 6.79: Path analysis of dependent variable, Social entropy (Y) versus 32 exogenous variables of pooled village, (Ghoragachha and Chiroura)

N = 150						
Independent variables	**TE**	**TDE**	**TIE**	**Substantial Indirect Effect**		
				I	**II**	**III**
Age (x1)	-0.065	0.043	-0.108	-0.117(x3)	0.104(x4)	-0.096(x10)

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Education (x2)	-0.331**	-0.078	-0.253	-0.179(x3)	0.176(x4)	-0.120(x10)
Family Education Status (x3)	-0.165*	-0.337	0.172	0.273(x4)	-0.107(x10)	-0.041(x2)
Educational Aspiration (x4)	-0.125	0.321	-0.446	-0.286(x3)	-0.112(x10)	-0.043(x2)
Family Size (x5)	-0.129	0.038	-0.167	-0.107(x10)	0.092(x4)	-0.082(x3)
Gender (x6)	-0.144	-0.138	-0.006	-0.019(x10)	0.013(x15)	0.012(x8)
Urbanization Index (x7)	-0.183*	-0.006	-0.177	0.048(x4)	-0.043(x10)	-0.031(x17)
Occupation (x8)	0.082	0.153	-0.073	-0.029(x29)	-0.028(x28)	0.016(x30) -0.016(x17)
Cropping Intensity (x9)	0.0179	0.073	0.106	-0.079(x4)	0.072(x10)	0.066(x3)
Farm size (x10)	-0.346**	-0.251	-0.095	-0.143(x3) 0.143(x4)	-0.060(x26)	-0.037(x2)
Expenditure Allotment (x11)	0.157	0.075	0.082	0.065(x28)	-0.056(x13)	0.047(x15)
Credit Load (x12)	-0.036	0.038	-0.074	-0.042(x13)	-0.040(x10)	0.037(x15)
Annual Income (x13)	0.028	-0.144	0.142	0.060(x28)	0.046(x15) -0.046(x10)	0.037(x11)
Electricity Consumption (x14)	0.157	0.055	0.102	0.043(x10)	0.028(x17)	0.027(x26)
Fuel Consumption (x15)	0.103	0.123	-0.020	-0.060(x10)	0.045(x28) -0.045(x3)	-0.042(x13)
Irrigation Index (x16)	0.059	-0.039	0.098	0.051(x10)	0.035(x3)	-0.033(x4)
Adoption Leadership (x17)	0.325**	0.168	0.157	0.089(x28)	0.053(x29)	-0.042(x22)
Scientific Orientation (x18)	0.015	-0.064	0.079	0.063(x28)	-0.050(x3) 0.050(x29)	0.036(x17)
Independency (x19)	0.092	0.040	0.052	-0.042(x22)	0.028(x26)	0.020(x17)
Innovation Proneness (x20)	0.208*	0.052	0.156	0.057(x28)	0.052(x26)	0.045(x17) -0.045(x22)
Risk Orientation (x21)	0.208*	0.004	0.204	0.043(x26)	0.033(x17)	0.031(x10)
Economic Motivation (x22)	-0.101	-0.181	0.080	0.039(x17)	0.033(x28)	0.019(x29)
Orientation Towards Competition (x23)	0.099	0.002	0.097	-0.056(x8)	0.034(x17)	-0.031(x3)
Management Orientation (x24)	0.166*	0.041	0.125	-0.056(x8)	0.034(x17)	-0.031(x3)
Production Orientation (x25)	-0.033	-0.008	-0.025	-0.041(x3)	0.036(x10)	-0.023(x22)
Market Orientation (x26)	0.447**	0.144	0.303	0.105(x10)	-0.058(x4)	0.052(x28)
Social Participation (x27)	0.002	-0.008	0.010	-0.096(x3)	0.082(x4)	-0.073(x10)
Utilization of Cosmopolite Source of Information (x28)	0.273**	0.227	0.046	0.067(x29)	0.065(x17)	-0.061(x3)
Information Seeking Behavior (x29)	0.240**	0.124	0.116	0.123(x28)	0.072(x17)	0.040(x26)
Training Received (x30)	0.082	-0.140	0.058	0.060(x28)	-0.046(x3)	0.022(x4)
Drudgeries (x31)	0.183*	-0.052	0.235	0.079(x9) (x3)	-0.070(x4)	0.051(x28)
Distance Matrix (x32)	-0.005	-0.018	0.013	-0.031(x10)	-0.022(x8)	0.013(x4) 0.013(x29)
Residual Effect	0.744					
Highest Count	Cropping intensity(x10): 18					

Whenever training goes affected and increases to venture with innovation and absorb risks therein then it will help perform efficiently even in a entropy status.

Revelation

Table 6.79 presents the path analysis of consequent variable, **Social entropy (Y)** versus 32 exogenous variables of pooled village by decomposing total effect 'r' into total direct effect, total indirect effect and residual effect. The table revealed that the exogenous variable, **Family education (x_3)** has exerted

highest total direct effect whereas other exogenous variable, **Educational aspiration (x_4)** has exerted highest indirect effect on consequent variable, **Social entropy (Y)**.

The also reveals that the exogenous variable, **Farm size (x_{10})** has routed highest individual dominating effect as many as 18 times to define tremendous impact on other exogenous variable to ultimately characterizing the performance of consequent variable, **Social entropy (Y)**.

The residual effect being 0.744, it is to infer that even with the combination of 32 exogenous variable 26 per cent of variance embedded in the consequent variable, **Social entropy (Y)** has been explained so far.

Implication

Both the variable, **Family education status (x_3)** and **Educational aspiration (x_4)** have higher contribution in total direct effect and total indirect effect respectively which indicates that exposition of social entropy in a performing social ecology is basically contribution made by educational pursuits and educational behavior of the respondents. Education and society is adding to Entropy and at the same time adding more social space to accommodate surplus entropy. And ultimately balances the social energy. The balances of social energy implies that education status of equilibrium between traditional knowledge and modern knowledge, innovation and convention, exotic knowledge and sustaining knowledge and in this way the whole dynamics of social ecology in every form undergoing technology socialization process would present a serendipitous display of social metabolism *vis a vis* **Social entropy (Y)**.

Table 6.80: Standardized Canonical Coefficients correlation for Independent as well as dependent variables of pooled village, (Ghoragachha and Chiroura)

Dependent variables			Independent variables		
Perception on Discontinuance(y1)		+0.440	Market orientation (x26)		+0.308
			Information seeking behavior (x29)		+0.331
Dissonance (y5)		+0.553	Family education status(x3)		-0.435
			Farm size (x10)		-0.462
Variance in Dependent variables explained By Canonical Variables			Variance in Covariates explained By Canonical Variables		
CAN VAR	Pct Var DEP	Pct Var COV	CAN VAR	Pct Var DEP	Pct Var COV
1	39.346	27.189	1	6.617	9.57
Factor loading >0.3					

Table 6.80 presents the standardized canonical correlation for covariate as well as for dependent variables of Pooled village.

Canonical correlation presents a unique inter and intra variable interaction in a didactic manner. Here, all the variables have been dichotomized into set of variables i.e. left side and right side variable. Here in this case the left side variable represents sets of seven consequent variable *viz.* **Perception on discontinuance (y_1)**, **Perception on rejection (y_2)**, **Disagreement (y_3)**, **Conflict (y_4)**, **Reasons for dissonance (y_5)**, **Reasons for reinvention (y_6)**, **and Confusion index (y_7)** and the right side causal variable *viz.* **Age (x_1)**, **Education (x_2)**, **Family education status (x_3)**, **Educational aspiration (x_4)**, **Family size (x_5)**, **Gender (x_6)**, **Urbanization index (x_7)**, **Occupation (x_8)**, **Cropping intensity (x_9)**, **Farm size (x_{10})**, **Expenditure allotment (x_{11})**, **Credit load (x_{12})**, **Annual income (x_{13})**, **Electricity consumption (x_{14})**, **Fuel consumption (x_{15})**, **Irrigation index (x_{16})**, **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Independency (x_{19})**, **Innovation proneness (x_{20})**, **Risk Orientation (x_{21})**, **Economic motivation (x_{22})**, **Orientation towards competition (x_{23})**, **Management orientation (x_{24})**, **Production orientation (x_{25})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **Utilization of cosmopolite source of information (x_{28})**, **Information seeking behavior (x_{29})**, **Training received (x_{30})**, **Distance matrix (x_{31})**, **Drudgeries (x_{32})**.

Here it has been found that the two left side variable *viz.* **Perception on Discontinuance (y_1)** and **Reasons for dissonance (y_5)** have been selectively attuned to the following right side causal variable *viz*. **Family education status (x_3)**, **Market orientation (x_{26})**, **Information seeking behavior (x_{29})** and **Farm size (x_{10})**. Therefore, these variables are strategically attuned and interactive that may lead to a micro-level policy decision *e.g.* the respondents having **Perception on rejection (y_2)**, they are also confused and in this situation both the traits of respondents are selectively being impacted by the other cognate characters like **Educational aspiration (x_4)**, **Family size (x_5)**, **Electricity consumption (x_{14})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **and Farm size (x_{10})**.

It has also been found that Dependent variables explained 39.34 per cent variance in self, whereas dependent variable explained 27.18 per cent variance in covariates variables. Table also shows that covariate variables explain the 9.57 per cent variance in self and covariate variables explain 6.61 per cent variance in dependent variables.

Table 6.81: Factor analysis of Pooled village (Ghoragachha and Chiroura): The Clubbing of variables based on Factor loading

Factors	Variables Included		% of Variance Explained	Cumulative Variance	Factor Renaming
1	Family education status (x3)	0.899			

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	Educational aspiration (x4)	0.87	9.772	9.72	Social Capacity
	Education (x2)	0.704			
	Farm Size (x11)	0.533			
	Social participation (x28)	0.364			
2	Adoption leadership (x17)	0.581	7.747	17.47	Enterprise Relationship
	Scientific orientation (x18)	0.692			
	Utilization of cosmopolite source of information (x28)	0.661			
	Information seeking behavior (x29)	0.827			
3	Expenditure allotment (x11)	0.766	6.812	24.28	Resources
	Annual income (x13)	0.771			
	Fuel consumption(x15)	0.71			
4	Innovation proneness (x20)	0.809	5.887	30.16	Innovative market
	Marketing orientation (x26)	0.446			
5	Family size (x5)	-0.685	5.8	35.96	Family modernizatio n index
	Credit load (x12)	0.364			
	Electricity consumption	0.778			
6	Age (x1)	-0.578	5.566	41.52	Strategy
	Cropping intensity (x9)	0.44			
	Training received (x30)	0.459			
	Distance matrix(x31)	0.702			
7	Occupation perception (x8)	-0.6.86	5.372	46.89	Competitive management
	Orientation towards competition(x23)	0.792			
	Planning orientation (x24)	0.487			
8	Independency (x19)	0.566	5.283	52.18	Investment
	Production orientation (x25)	0.73			
9	Urbanization index (x7)	0.59	5.039	57.22	Economic Advancemen t
	Economic motivation (x22)	0.625			
10	Irrigation index (x16)	-0.421	4.114	61.33	Stress
	Risk orientation (x21)	0.429			
	Drudgeries(x32)	-0.725			
11	Gender (x6)	0.895	3.848	65.18	
Rotation converged in 34 iterations					

Table 6.81 presents the factor analysis, by following principal component analysis, which has been carried out to conglomerate the apparently different variables under the same canopy of factors, based on factor loading and eigen values. Here all the 32 variables after being passed through varimax rotation have been accommodated and rescheduled in 11 principal components, called factor.

Factor 1 has accommodated as many as five variables *viz.* **Family education status (x_3)**, **Educational aspiration (x_4)**, **Education (x_2)**, **Farm size (x_{11})** and **Social participation (x_{28})** based on their homophile character, they are renamed as **Social Capacity**. This factor has explained 9.772 per cent variance individually embedded in **Social entropy (Y)**.

Factor 2 has accommodated as many as four variables *viz.* **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Utilization of cosmopolite source of information (x_{28})**, and **Information seeking behavior (x_{29})** based on their homophile character, they are renamed as **Enterprise relationship**. This factor has explained 7.747 per cent variance individually and 17.47 per cent cumulatively, embedded in **Social entropy (Y)**.

Factor 3 has accommodated only two variables viz. **Expenditure allotment (x_{11})** and **Annual income (x_{13})** based on their homophile character, they are renamed as **Resources**. This factor has explained 6.812 per cent variance individually and 24.28 per cent variance cumulatively, embedded in **Social entropy (Y)**.

Factor 4 has accommodated three variables *viz.* **Fuel consumption (x_{15})**, **Innovation proneness (x_{20})** and **Market orientation (x_{26})**, they are renamed as **Innovative market**. This factor has explained 5.887 per cent variance individually and 30.16 per cent variance cumulatively, embedded in **Social entropy (Y)**.

Factor 5 has accommodated three variables *viz.* **Family size (x_5)**, **Credit load (x_{12})** and **Electricity consumption (x_{14})** based on their homophile character, they are renamed as **Family modernization index**. This factor has explained 5.8 per cent variance individually and 35.96 per cent variance cumulatively, embedded in **Social entropy (Y)**.

Factor 6 has accommodated four variables *viz.* **Age (x_1)**, **Cropping intensity (x_9)**, **Training received (x_{30})** and **Distance matrix (x_{31})** base on their homophile character, they are renamed as **Strategy**. This factor has explained 5.566 per cent variance individually and 41.52 per cent variance cumulatively, embedded in **Social entropy (Y)**.

Factor 7 has accommodated three variables *viz.* **Occupation (x_8)**, **Orientation towards competition (x_{23})**, and **Planning orientation (x_{24})** based on their homophile in character, they

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are renamed as **Competitive occupation**. This factor has explained 5.372 per cent variance individually and 46.89 per cent variance cumulatively, embedded in **Social entropy (Y)**.

Factor 8 has accommodated two variables *viz.* **Independency (x_{19})** and **Production orientation (x_{25})** based on their homophile character, they are renamed as **Investment**. This factor has explained 5.283 per cent variance individually and 52.18 per cent cumulatively, embedded in **Social entropy (Y)**.

Factor 9 has accommodated two variables *viz.* **Urbanization index (x_7)** and **Economic motivation (x_{22})** based on their homophile character, they are renamed as **Economic advance**. This factor has explained 5.039 per cent variance individually and 57.22 per cent cumulatively, embedded in **Social entropy (Y)**.

Factor 10 has accommodated three variables *viz*. **Irrigation index (x_{16})**, **Risk orientation (x_{21})** and **Drudgeries (x_{32})** based on their homophile character, they are renamed as **Stress**. This factor has explained 5.283 per cent variance individually and 52.18 per cent cumulatively, embedded in **Social entropy (Y)**.

Factor 11 has accommodated only one variable, which is Gender. This factor has explained 3.848 per cent variance individually and 65.18 per cent cumulatively, embedded in **Social entropy (Y)**.

Canonical Discriminant Function

In discriminant analysis we are trying to predict a group membership, so firstly we examine whether there are any significant difference between groups on each of the independent variables using Mann Whitney U and Wilcoxon W test. The group statistics and tests of equality of group mean tables provide this information. If there are no significant group differences, it is not worthwhile proceeding any further with the analysis. A rough idea of variables that may be important can be obtained by examining the group means.

Table 6.82: Comparison of Group mean through Mann Whitney U and Wilcoxon W test of both the village, Ghoragacha and Chiroura

variable	Group		Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)	
	Ghoragachha	Chiroura					
x1	36.307	47.760	1554.00	4404.00	-4.73	0.00	
x2	6.373	10.720	1074.00	3924.00	-6.59	0.00	
x3	10.147	12.773	1648.00	4498.00	-4.48	0.00	
x4	13.093	15.520	1476.00	4326.00	-5.19	0.00	
x5	5.307	7.813	1353.00	4203.00	-5.55	0.00	
x6	1.533	1.524	2576.00	5426.00	-0.90	0.37	Ns
x7	5.464	16.082	1330.00	4180.00	-5.57	0.00	
x8	5.427	5.640	2488.00	5338.00	-1.73	0.08	Ns
x9	207.950	167.760	1902.00	4752.00	-3.44	0.00	
x10	0.938	5.403	248.00	3098.00	-9.65	0.00	
x11	28.015	20.865	2102.00	4952.00	-2.67	0.01	
x12	9622.500	8773.600	2440.00	5290.00	-1.40	0.16	Ns
x13	22737.000	19344.000	2502.00	5352.00	-1.17	0.24	Ns
x14	45.760	32.690	2103.00	4953.00	-2.67	0.01	
x15	2131.100	1345.900	1774.00	4624.00	-3.90	0.00	
x16	99.333	97.491	2550.00	5400.00	-2.03	0.04	
x17	6.068	5.486	1846.00	4696.00	-3.64	0.00	
x18	7.706	8.035	2108.00	4958.00	-2.66	0.01	
x19	7.813	7.507	2472.00	5322.00	-1.28	0.20	Ns
x20	6.576	6.101	1776.00	4626.00	-3.90	0.00	
x21	7.840	7.580	2154.00	5004.00	-2.48	0.01	
x22	6.276	6.547	2416.00	5266.00	-1.49	0.14	Ns
x23	6.007	5.548	2091.00	4941.00	-2.72	0.01	
x24	6.013	5.733	2285.00	5135.00	-1.99	0.05	
x25	6.714	6.625	2692.00	5542.00	-0.46	0.65	Ns
x26	7.407	5.981	781.50	3632.00	-7.64	0.00	
x27	1.626	1.719	2787.00	5637.00	-0.10	0.92	Ns
x28	1.857	1.779	2074.00	4924.00	-2.78	0.01	
x29	7.737	7.434	2334.00	5184.00	-1.80	0.07	Ns
x30	102.930	76.200	1862.00	4712.00	-3.67	0.00	
x31	6.231	3.862	802.00	3652.00	-7.58	0.00	
x32	4.007	4.036	2741.00	5591.00	-0.27	0.79	Ns
y1	6.755	4.962	769.50	3620.00	-7.68	0.00	

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y2	6.647	5.894	1918.00	4768.00	-3.37	0.00	
y3	6.612	6.231	2322.00	5172.00	-1.84	0.07	Ns
y4	6.832	6.115	1684.00	4534.00	-4.25	0.00	
y5	7.251	5.558	854.00	3704.00	-7.37	0.00	
y6	6.107	6.134	2758.00	5608.00	-0.21	0.84	Ns
y7	6.277	5.780	2024.00	4874.00	-2.97	0.00	

Table 6.82 presents the comparison of group mean of village Ghoragahhca of the state West Bengal with village Chiroura of the state Bihar.

The table reveals that the following variables *viz.* Age (x_1), Education (x_2), Family education status (x_3), Educational aspiration (x_4), Family size (x_5), Urbanization index (x_7), Cropping intensity (x_9), Farm size (x_{10}), Expenditure allotment (x_{11}), Electricity consumption (x_{14}), Fuel consumption (x_{15}), Irrigation index (x_{16}), Adoption leadership (x_{17}), Scientific orientation (x_{18}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Orientation towards competition (x_{23}), Management orientation (x_{24}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}), Training received (x_{30}), Distance matrix (x_{31}), Perception on discontinuance (y_1), Perception on rejection (y_2), Conflict (y_4), Reasons for dissonance (y_5) and Confusion index (y_7) have recorded significant difference between their means.

Table 6.83: Test of equality of Group Means of Canonical Discriminant Analysis

Predictors	Wilks' Lamda	F	df1	df2	Significance
Age (x1)	0.854	25.346	1	148	0.000
Education (x2)	0.728	55.228	1	148	0.000
Family Education Status (x3)	0.870	22.101	1	148	0.000
Educational Aspiration (x4)	0.831	30.176	1	148	0.000
Family Size (x5)	0.871	21.887	1	148	0.000
Gender (x6)	1.000	0.003	1	148	0.957
Urbanization Index (x7)	0.875	21.171	1	148	0.000
Occupation (x8)	0.989	1.582	1	148	0.210
Cropping Intensity (x9)	0.874	21.388	1	148	0.000
Farm size (x10)	0.616	92.195	1	148	0.000
Expenditure Allotment (x11)	0.925	12.037	1	148	0.001
Credit Load (x12)	0.998	0.242	1	148	0.624
Annual Income (x13)	0.991	1.359	1	148	0.246
Electricity Consumption (x14)	0.927	11.653	1	148	0.001
Fuel Consumption (x15)	0.961	6.029	1	148	0.015
Irrigation Index (x16)	0.976	3.574	1	148	0.061
Adoption Leadership (x17)	0.927	11.618	1	148	0.001
Scientific Orientation (x18)	0.981	2.849	1	148	0.094
Independency (x19)	0.985	2.188	1	148	0.141
Innovation Proneness (x20)	0.932	10.830	1	148	0.001
Risk Orientation (x21)	0.969	4.712	1	148	0.032
Economic Motivation (x22)	0.978	3.323	1	148	0.070
Orientation Towards Competition (x23)	0.950	7.842	1	148	0.006
Management Orientation (x24)	0.979	4.519	1	148	0.035
Production Orientation (x25)	0.997	0.382	1	148	0.538
Market Orientation (x26)	0.626	88.314	1	148	0.000
Social Participation (x27)	0.997	0.512	1	148	0.475
Utilization of Cosmopolite Source of Information (x28)	0.978	3.404	1	148	0.067
Information Seeking Behavior (x29)	0.983	2.539	1	148	0.113
Training Received (x30)	0.997	0.421	1	148	0.517
Drudgeries (x31)	0.687	67.510	1	148	0.000
Distance Matrix (x32)	1.000	0.013	1	148	0.908

Table 6.83 presents the test of equality of group mean. The table provides strong evidence of significant difference between means of Ghoragachha and Chiroura for **Farm size (x_{10})**, **Market orientation (x_{26})**, **Social participation (x_{27})** producing high value of F's.

Table 6.84: Log Determinants of Canonical Discriminant Analysis

Group	Rank	Log Determinant
Ghoragacha	10	25.400
Chiroura	10	28.851
Pooled within groups	10	29.513
The rank and natural logarithms of determinant printed are those of the group covariance matrices		

Table 6.84 presents the log determinants. In ANOVA, an assumption is that the variance was equivalent for each group but in Discriminant analysis, the basic assumption is that the variance-co-variance matrices are equivalent. Box's M tests the null hypothesis that the covariance matrices do not differ between groups formed by the dependent. It is very necessary that the test not to be significant so that the null hypothesis that the group do not differ can be retained. For this assumption to hold, the log determinants should be equal.

Table 6.85: Box' M Tests results

Box'M		353.347
F	apporx	5.968
	df1	55
	df2	7.073E4
	significance	0.000
Test null hypothesis of equal proportion covariance matrices		

The table 6.85 presents the Boxs' M test results. Boxs' M test was done for looking a non-significant M to show similarity and lack of significant differences. The table suggests that the

log determinants appear similar and Boxs' M is 353.347 with F 5.968 which is significant at P < 0.000. However, with large samples, a significant result is not regarded as too important where there are more groups exist, and M is significant, groups with very small log determinant should be deleted from the analysis.

Table 6.86: Eigen Values of Cannonical Discriminant Analysis

Function	Eigen Value	% of variance	Cumulative Variance	Canonical Correlation
1	3.856a	100	100	0.891
a. First one canonical discriminant functions were used in the analysis				

The table 6.86 presents the Eigen value which provides information on each of the discriminant functions (equations) produced. The maximum number of discriminant function produced is the number of groups minus 1. In the present case there are only two groups namely Ghoragachha and Chiroura, so only one function is displayed. The canonical correlation is the multiple correlation between the predictors and the discriminant function with only one function it provides an index of overall model fit which is interpreted as being the proportion of variance explained (R^2). It has been found that 0.891 as canonical correlation has been recorded which is to infer that 79.38 per cent of the variation is the grouping variable i.e. whether respondents belong to either Ghoragacha or Chiroura.

Table 6.87: Wilks' Lamda of Cannonical Discriminant Analysis

Tests of Functions	Wilks' Lamda	Chi-square	df	Significance
1	0.206	225.983	10	0.000

Table 6.87 presents the Wilks' Lamda which indicates the significance of the discriminant function. The table indicates a highly significant function (P< 0.000) and provides the proportion of total variability not explained, i.e. it is the converse of the squared canonical correlation. In the present study Wilks' lamda has been found to be 0.206, it is to infer that 20.6 per cent of the variability not explained.

Table 6.88: Structured matrix of Cannonical Discrimanant Analysis

Predictors	Function
	1
Farm size (x10)	-0.402
Market orientation (x26)	0.393
Distance matrix (x31)	0.344
Educational aspiration (x4)a	-0.247
Age (x1)a	-0.211
Education (x2)a	-0.205
Family education status(x3)a	-0.197
Urbanization index (x7)	-0.193
Family size(x5)a	-0.162
Risk orientation (x21)a	0.156
Management orientation (x24)a	0.134
Orientation towards competition (x23)	0.117
Fuel consumption (x15)	0.103
Information seeking behavior (x29)a	0.102
Cropping intensity(x9)a	0.100
Gender (x6)a	-0.081
Annual income (x13)a	-0.080
Scientific orientation (x18)a	0.076
Economic motivation (x22)	-0.076
Training received (x30)a	0.066
Innovation proneness(x20)a	0.063
Expenditure allotment (x11)a	0.058
Drudgeries (x32)a	-0.053
Utilization of cosmopolite source of information (x28)a	0.045
Adoption leadership (x17)a	0.042
Perception on occupation (x8)a	-0.041
Credit load(x12)a	0.031
Social participation (x27)	-0.030
Production orientation (x25)a	0.010
Independency(x19)a	-0.007
Irrigation index (x16)a	0.005
Electricity consumption (x14)a	0.000
Pooled within group correlation between discriminating variables and standardized canonical discriminant functions. Variable ordered by absolute size of correlation within function. a= variable not used in the analysis.	

Table 6.88 presents the structured matrix table which provides another way of indicating the relative importance of the predictors and it can be seen in the table that the same pattern holds. The structured matrix correlations are used because of more accurate than the standardized canonical discrimination function coefficients. The structured matrix table shows the correlation of each variable with each discriminant function. The Pearson coefficients are structure coefficients of discriminant loadings. They serve like factor loadings in factor analysis. By identifying the largest loadings for each discriminant function an insight has been gained into how to name each function. Here table suggest that **Farm size (x_{10})**, **Market orientation (x_{26})** and **distance matrix (x_{31})**, have personal confidence and effectiveness as function that discriminate between respondents of Ghoragachha and Chiroura. Generally, just like factor loadings 0.30 is seen as the cut off between important and less important variables.

Table 6.89: Standardized cannonical discriminant function coefficient

Predictors	Function
	1
Age (x1)	-0.244
Family education status (x3)	-0.292
Urbanization index (x7)	-0.382
Farm size (x10)	-0.821

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Fuel consumption (x15)	0.707
Economic motivation (x22)	-0.297
Orientation towards competition (x23)	0.357
Market orientation (x26)	0.472
Social participation (x27)	0.234
Distance matrix (x31)	0.499

Table 6.89 presents the standardized canonical discriminant function coefficient. The interpretation of the discriminant coefficients (or weight) is like that in multiple regressions. The table provides an index of the importance of each predictor like the standardized regression coefficients (beta) did in multiple regression. The sign indicates the direction of the relationship. The above table suggests that Farm size (x_{10}), while low (because of negative sign) was the strongest predictor while **Fuel consumption (x_{15})** was next in importance as a predictor. These two variables with large coefficients stand out as those that strongly predict respondents will either belong to Ghoragachha or Chiroura. **Distance matrix (x_{31})**, **Market orientation (x_{26})** also found to be stronger predictor. **Urbanization index (x_7)**, **Orientation towards competition (x_{23})** have been recorded as moderate predictors, whereas **Family education status (x_3)**, **Economic motivation (x_{22})**, **Age (x_1)** and **Social participation (x_{23})** have been recorded less successful as predictors.

Table 6.90: Canonical Discriminant Function Coefficient of Canonical Discriminant Analysis

Predictors	Function
Age (x1)	-0.017
Family Education Status (x3)	-0.085
Urbanization Index (x7)	-0.027
Farm Size (x10)	-0.288
Fuel Consumption (x15)	0.000
Economic Motivation (x22)	-0.326
Orientation Towards Competition (x23)	+0.355
Marketing Orientation (x26)	+0.508
Social Participation (x27)	+0.294
Distance Matrix (x31)	+0.283
Constant	-2.990
Unstandardized coefficient	

Table 6.90 presents the Canonical Discriminant Function Coefficients. The unstandardized coefficients (b) are used to create the discriminant function (equation). It operates just like regression equation.

From the table discriminant function (D) can be found out as follows,

$$D = \{-0.017X(x_1)\} + \{-0.085X(x_3)\} + \{-0.027X(x_7)\} + \{-0.288X(x_{10})\} + \{-0.000X(x_{15})\} + \{-0.326X(x_{22})\} + \{+0.355X(x_{23})\} + \{+0.508X(x_{26})\} + \{+0.294X(x_{27})\} + \{+0.283X(x_{31})\} - 2.990$$

The discriminant function coefficient b or standardized form 'beta' both indicate the partial contribution of each variable to the discriminate function controlling for all other variables in the equation. They can be used to assess each 10 unique contribution to the discriminate function and therefore provide information on the relative importance of each variable. If there are any dummy variables, as in regression, individual 'beta weight' cannot be used and dummy variables must be assessed as a group through hierarchical Discriminant analysis running the analysis first without the dummy variables then with them. The difference is squared canonical correlation indicates the explanatory effect of the set of dummy variables.

Table 6.91: Functions at Group Centroids of Canonical Discriminant Analysis

Group	
Ghoragachha	1.951
Chiroura	-1.951
Unstandardized canonical discriminant functions evaluated at group means	

The table 6.91 presents the Group centroids which is a further way of interpreting discriminant analysis results is to describe each group in terms of its profile, using the group means of the predictor variables. The group means are called centroids. These are displayed in the Group centroids table. The present study suggests that Ghoragachha has a mean of +1.951 while Chiroura has a mean of -1.951. Cases with scores near to a centroid are predicted as belonging to that group.

Table 6.92: Classification Results[bc] of Canonical Discriminant Analysis

		Group	Predicted Group Membership		Total
Original	count	Ghoragachha	74	1	75
		Chiroura	1	74	75
	%	Ghoragachha	98.7	1.3	100
		Chiroura	1.3	98.7	100
Cross Validated	count	Ghoragachha	73	2	75
		Chiroura	2	73	75
	%	Ghoragachha	97.3	2.7	100
		Chiroura	2.7	97.3	100
Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case. 98.7 % of original group cases correctly classified. 97.3 % of cross validated grouped cases correctly classified.					

The table 6.92 presents the classification phase. It is also called confusion table. In this table rows are the observed categories of the dependent and the columns are predicted categories. When prediction is perfect all cases will lie on the diagonal. The percentage of cases on the diagonal is the percentage of correct classification. The cross validated set of data is more honest presentation of the power of the discriminant function than that provided by original classifications and often produces a poorer outcome. The cross validation is often termed a 'Jack-knife' classification, in that it successively classifies all cases but one to develop a discriminant function and then categorizes the case that was left out. This process is reported with each are left out in turn. The cross validation produces a more reliable function. The argument behind it is that one should not use the case we are trying to predict as part of categorization process. The classification results reveal that 98.7 per cent of original group cases correctly classified and 97.3 per cent of cross validated group cases correctly classified. The overall predictive accuracy of the discriminant function is called the 'hit ratio.' It is important to compare the calculated hit ratio with what it can be achieved by chance. In the present study two samples are equal in size so it has 50/50 chance anyway. In most cases 'hit ratio' which is 25 per cent larger than that due to chance.

Comparative studies of Village Ghoragachha of Chakdah block of the state West Bengal, Village Chiroura of Naubatpur block of the state Bihar and Pooled village.

The entire study generates tremendous policy implication as properly organized technology socialization process. It has got a unique micro level implication at the village level, one in West Bengal, the other in Bihar and at the same time the pooled data can frame up a micro level policy implication on how to go for effective socialization process. However, the following are the village specific micro level policy implication.

Table 6.93: Correlation coefficient of dependent variable, Perception on discontinuance (y_1) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Independent variables	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	0.260*	0.012	-0.138
Education (x2)	-0.089	-0.085	-0.366**
Family Education Status (x3)	0.026	-0.138	-0.248**
Educational Aspiration (x4)	0.018	-0.052	-0.252**
Family Size (x5)	0.287*	0.027	-0.115
Gender (x6)	-0.059	-0.047	-0.040
Urbanization Index (x7)	0.097	0.154	-0.110
Occupation (x8)	0.020	0.019	-0.045
Cropping Intensity (x9)	-0.023	0.159	0.225**
Farm size (x10)	0.109	-0.097	-0.398**
Expenditure Allotment (x11)	0.124	0.061	0.235**
Credit Load (x12)	0.101	-0.117	0.009
Annual Income (x13)	0.068	0.011	0.091
Electricity Consumption (x14)	-0.108	0.249*	0.172*
Fuel Consumption (x15)	0.031	-0.149	0.070
Irrigation Index (x16)	0.000	0.054	0.104
Adoption Leadership (x17)	0.427**	0.156	0.393**
Scientific Orientation (x18)	0.234*	0.087	0.040
Independency (x19)	0.106	0.018	0.116
Innovation Proneness (x20)	0.248*	-0.052	0.240**
Risk Orientation (x21)	0.378**	-0.077	0.226**
Economic Motivation (x22)	0.063	-0.028	-0.069
Orientation Towards Competition (x23)	0.272*	-0.108	0.203*
Management Orientation (x24)	0.211	0.044	0.208*
Production Orientation (x25)	0.060	0.038	0.068
Market Orientation (x26)	0.356**	0.366**	0.589**
Social Participation (x27)	0.246*	-0.016	0.026
Utilization of Cosmopolite Source of Information (x28)	0.298**	0.269*	0.309**
Information Seeking Behavior (x29)	0.468**	0.220	0.347**
Training Received (x30)	-0.011	-0.066	0.007
Drudgeries (x31)	-0.014	-0.022	0.317**
Distance Matrix (x32)	-0.010	0.148	0.054
*significant at 0.05 % **Significant at 0.01%			

The table 6.93 presents the comparative study of correlation coefficient of **Perception on discontinuance (y_1)** with 32 independent variables. It has been found that in Ghoragachha in the state of West Bengal, dependent variable, **Perception on discontinuance (y_1)** has been significantly correlated with the following independent variables *viz*. **Age (x_1)**, **Family size (x_5)**, **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Orientation towards competition (x_{23})**, **Market orientation (x_{26})**, **Social participation (x_{27})**, **Utilization of cosmopolite source of information (x_{28})**. Whereas, in village Chiroura in the state of Bihar, following independent variables *viz.* **Electricity consumption (x_{15})**, **Market orientation (x_{26})**,

Utilization of cosmopolite source of information (x_{28}) have been found to be significantly correlated with the dependent variables **Perception on discontinuance (y_1)**.

When both the village Ghoragachha and Chiroura clubbed together it has been found that following variables *viz.* Education (x_2), Family education status (x_3), Education aspiration (x_4), Cropping intensity (x_9), Farm size (x_{10}), Expenditure allotment (x_{11}), Electricity consumption (x_{14}), Adoption leadership (x_{17}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Orientation towards competition (x_{23}), Management orientation (x_{24}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}), Information seeking behaviour (x_{29}) and Distance matrix (x_{31}) have been found to be significantly correlated with the dependent variable Perception on discontinuance (y_1).

Table 6.94: Correlation coefficient of Perception on rejection (y_2) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Independent variables	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	-0.068	0.089	-0.080
Education (x2)	-0.0112	-0.082	-0.220**
Family Education Status (x3)	0.012	0.095	-0.052
Educational Aspiration (x4)	0.051	0.121	-0.038
Family Size (x5)	0.084	-0.104	-0.128
Gender (x6)	0.159	0.022	-0.052
Urbanization Index (x7)	-0.059	0.048	-0.078
Occupation (x8)	-0.018	-0.086	-0.078
Cropping Intensity (x9)	0.067	0.000	0.133
Farm size (x10)	0.025	-0.211	-0.283**
Expenditure Allotment (x11)	0.191	0.103	0.210**
Credit Load (x12)	0.082	-0.126	-0.024
Annual Income (x13)	0.067	-0.152	0.003
Electricity Consumption (x14)	0.029	0.258*	0.172*
Fuel Consumption (x15)	0.075	-0.311**	-0.046
Irrigation Index (x16)	0.197	0.057	0.091
Adoption Leadership (x17)	0.278*	0.172	0.280**
Scientific Orientation (x18)	0.110	0.223	0.131
Independency (x19)	0.036	0.160	0.136
Innovation Proneness (x20)	0.285*	-0.015	0.200*
Risk Orientation (x21)	0.234*	0.030	0.169*
Economic Motivation (x22)	0.146	0.038	0.049
Orientation Towards Competition (x23)	0.001	-0.028	0.047
Management Orientation (x24)	0.000	0.104	0.092
Production Orientation (x25)	-0.174	-0.104	-0.115
Market Orientation (x26)	0.214	0.423**	0.408**
Social Participation (x27)	0.148	0.015	0.040
Utilization of Cosmopolite Source of Information (x28)	0.221	0.227*	0.242**
Information Seeking Behavior (x29)	0.288*	0.268*	0.299**
Training Received (x30)	-0.015	-0.079	-0.022
Drudgeries (x31)	0.032	-0.142	0.125
Distance Matrix (x32)	-0.195	0.074	-0.047
*significant at 0.05 % **Significant at 0.01%			

Table 6.94 presents the comparative display of correlation coefficient of **Perception on rejection (y_2)** with 32 independent variables of village Ghoragachha of the state West Bengal, Chiroura of the state Bihar and pooled villages of West Bengal and Bihar.

The table depicts that in village Ghoragachha, following independent variables *viz.* Adoption leadership (x_{17}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Information seeking behaviour (x_{29}) have been found to be significantly correlated with the dependent variable Perception on rejection (y_2), Whereas in village Chiroura, the independent variables *viz.* Electricity consumption (x_{14}), Fuel consumption (x_{15}), Market orientation (x26), Utilization of cosmopolite source of information (x_{28}), and Information seeking behaviour (x_{29}) have been found to be significantly correlated with the dependent variable, Perception on rejection (y_2).

When both the village clubbed together following variables *viz.* Education (x_2), Farm size (x_{10}), Expenditure allotment (x_{11}), Electricity consumption (x_{14}), Adoption leadership (x17), Innovation proneness (x_{20}), Risk orientation (x_{21}), Market orientation (x_{26}), Utilization of cosmopolite source of Information (x_{28}) and Information seeking behaviour (x_{29}) have been found to be significantly correlated with the dependent variable, Perception on rejection (y_2).

Table 6.95: Correlation coefficient of Disagreement (y_3) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Predictors	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	0.110	0.121	0.043
Education (x2)	-0.216	0.141	-0.120
Family Education Status (x3)	-0.134	0.129	-0.066
Educational Aspiration (x4)	-0.088	0.217	-0.017
Family Size (x5)	-0.220	0.006	-0.130
Gender (x6)	0.038	0.001	0.017
Urbanization Index (x7)	0.110	0.005	-0.030
Occupation (x8)	0.231*	-0.166	0.011
Cropping Intensity (x9)	-0.173	-0.023	-0.047
Farm size (x10)	-0.117	-0.079	-0.158
Expenditure Allotment (x11)	-0.203	0.116	-0.026
Credit Load (x12)	0.003	-0.215	-0.112
Annual Income (x13)	-0.089	-0.007	-0.036
Electricity Consumption (x14)	0.106	0.265*	0.190*
Fuel Consumption (x15)	0.011	-0.192	-0.068

Irrigation Index (x16)	0.121	-0.056	0.000
Adoption Leadership (x17)	0.101	0.145	0.158
Scientific Orientation (x18)	0.105	0.155	0.108
Independency (x19)	-0.180	0.015	-0.047
Innovation Proneness (x20)	0.097	-0.037	0.074
Risk Orientation (x21)	0.050	-0.033	0.037
Economic Motivation (x22)	-0.037	-0.127	-0.100
Orientation Towards Competition (x23)	-0.245*	-0.048	-0.104
Management Orientation (x24)	-0.010	0.059	0.050
Production Orientation (x25)	-0.132	0.005	-0.044
Market Orientation (x26)	0.164	0.322**	0.290**
Social Participation (x27)	-0.182	0.032	-0.048
Utilization of Cosmopolite Source of Information (x28)	0.064	0.263*	0.156
Information Seeking Behavior (x29)	0.000	0.392**	0.231**
Training Received (x30)	-0.094	-0.055	0.064
Drudgeries (x31)	-0.109	-0.184	-0.014
Distance Matrix (x32)	0.104	0.110	0.104
*significant at 0.05 % **Significant at 0.01%			

Table 6.95 presents the comparative display of the correlation coefficient of dependent variable, Disagreement (y_3) and 32 independent variables of village Ghoragachha of state West Bengal, village Chiroura of state Bihar and pooled villages of West Bengal and Bihar.

In village Ghoragachha, following variables *viz.* **Occupation (x_8), and orientation towards competition (x_{23})** have been significantly correlated with the dependent variable, **Disagreement (y_3),** Whereas, in village Chiroura of state Bihar following variables *viz.* **Electricity consumption (x_{14}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}) and Information seeking behaviour (x_{29})** have been significantly correlated with dependent variable, **Disagreement (y_3).**

When both the village Ghoragachha and Chiroura clubbed together the following variables *viz.* **Electricity consumption (x_{14})**, **Market orientation (x_{26})** and **Information seeking behaviour (x_{29})** have been significantly correlated with **dependent variable (y_3)**.

Table 6.96: Correlation coefficient of Conflict (y_4) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Predictors	**Ghoragachha (West Bengal) N = 75**	**Chiroura (Bihar) N = 75**	**Pooled N = 150**
Age (x1)	0.082	-0.072	-0.145
Education (x2)	-0.029	-0.177	-0.261**
Family Education Status (x3)	-0.154	-0.159	-0.255**
Educational Aspiration (x4)	0.101	-0.120	-0.231**
Family Size (x5)	-0.054	-0.107	-0.200*
Gender (x6)	0.020	-0.063	-0.028
Urbanization Index (x7)	-0.025	0.034	-0.103
Occupation (x8)	0.218	-0.141	-0.019
Cropping Intensity (x9)	0.015	-0.101	0.105
Farm size (x10)	0.140	-0.441**	-0.458**
Expenditure Allotment (x11)	0.074	0.062	0.149
Credit Load (x12)	0.046	-0.165	-0.065
Annual Income (x13)	0.064	-0.235*	-0.032
Electricity Consumption (x14)	-0.060	0.130	0.107
Fuel Consumption (x15)	0.210	-0.445**	-0.068
Irrigation Index (x16)	0.248*	-0.101	0.009
Adoption Leadership (x17)	0.301**	-0.014	0.212**
Scientific Orientation (x18)	0.100	0.293*	0.159
Independency (x19)	-0.007	0.069	0.078
Innovation Proneness (x20)	0.299**	-0.204	0.121
Risk Orientation (x21)	0.199	0.033	0.156
Economic Motivation (x22)	0.239*	0.090	0.095
Orientation Towards Competition (x23)	0.064	0.003	0.104
Management Orientation (x24)	0.157	-0.051	0.103
Production Orientation (x25)	-0.106	0.038	0.002
Market Orientation (x26)	0.051	0.320**	0.354**
Social Participation (x27)	0.098	-0.132	-0.080
Utilization of Cosmopolite Source of Information (x28)	0.349**	0.084	0.248**
Information Seeking Behavior (x29)	0.344**	0.378**	0.381**
Training Received (x30)	-0.125	-0.043	-0.058
Drudgeries (x31)	0.068	-0.139	0.175*
Distance Matrix (x32)	-0.031	-0.069	-0.053
*significant at 0.05 % **Significant at 0.01%			

Table 6.96 presents the comparative displays figure of correlation coefficient of with dependent variable, **Conflict (y_4)** and 32 independent variables of village Ghoragachha of the state West Bengal, village Chiroura of the state Bihar and pooled villages of both the state West Bengal and Bihar.

In village Ghoragachha it has been found that the following criterion variables *viz.* Irrigation index (x_{16}), Adoption leadership (x_{17}), Innovation proneness (x_{20}), Economic motivation (x_{22}), Utilization of cosmopolite source of information (x_{28}) and information seeking behaviour (x_{29}) have significantly correlated with the consequent variable, Conflict (y_4), whereas in village Chiroura the following independent variables *viz.* Farm size (x_{10}), Annual income (x_{13}), Fuel consumption (x_{15}), Scientific orientation (x_{18}), Market orientation (x_{26}) and Information seeking Behaviour (x_{29}) has been significantly correlated with the dependent variable, conflict (y_4).

When both the village of West Bengal and Bihar clubbed together, it has been found that the following independent variables *viz.* Education (x_2), Family education status (x_3), Educational aspiration (x_4), Family size (x5), Farm size (x10), Adoption leadership (x_{17}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}), Information seeking behaviour (x_{29}), and Distance matrix (x_{32}) have been significantly correlated with dependent, variable conflict (y_4).

Table 6.97: Correlation coefficient of Reasons for dissonance (y_5) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Predictors	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	0.249*	0.059	-0.110
Education (x2)	-0.178	-0.027	-0.359**
Family Education Status (x3)	-0.110	-0.035	-0.255**
Educational Aspiration (x4)	-0.022	0.027	-0.226**
Family Size (x5)	0.058	-0.022	-0.194*
Gender (x6)	-0.078	-0.161	-0.104
Urbanization Index (x7)	-0.221	-0.130	-0.310**
Occupation (x8)	0.198	-0.121	-0.035
Cropping Intensity (x9)	0.134	-0.011	0.256*
Farm size (x10)	0.166	-0.132	-0.396**
Expenditure Allotment (x11)	0.198	0.026	0.246**
Credit Load (x12)	-0.062	-0.086	-0.041
Annual Income (x13)	0.106	-0.112	0.061
Electricity Consumption (x14)	-0.028	0.271*	0.215**
Fuel Consumption (x15)	0.098	-0.250*	0.053
Irrigation Index (x16)	0.050	-0.225	-0.082
Adoption Leadership (x17)	0.490**	-0.030	0.331**
Scientific Orientation (x18)	0.319**	0.035	0.045
Independency (x19)	0.167	-0.029	0.108
Innovation Proneness (x20)	0.363**	0.086	0.321**
Risk Orientation (x21)	0.357**	-0.306**	0.100
Economic Motivation (x22)	0.279*	-0.205	-0.049
Orientation Towards Competition (x23)	0.180	0.084	0.228**
Management Orientation (x24)	0.224	0.140	0.241**
Production Orientation (x25)	-0.059	0.219	-0100
Market Orientation (x26)	0.390**	0.312**	0.565**
Social Participation (x27)	0.125	0.018	0.010
Utilization of Cosmopolite Source of Information (x28)	0.293*	0.002	0.214**
Information Seeking Behavior (x29)	0.455**	0.170	0.312**
Training Received (x30)	-0.137	0.090	-0.004
Drudgeries (x31)	0.114	-0.397**	0.251**
Distance Matrix (x32)	-0.048	0.114	0.032
*significant at 0.05 % **Significant at 0.01%			

Table 6.97 presents the comparative display of correlation coefficient of Reasons for dissonance (y_5) with 32 independent variables of village, Ghoragachha of the State West Bengal and village, Chiroura of the state Bihar and pooled village of both the state West Bengal and Bihar.

In village Ghoragachha, following criterion variables *viz.* Age (x_1), Adoption leadership (x_{17}), Scientific orientation (x_{18}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Economic motivation (x_{22}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}) and Information seeking behaviour (x_{29}) have been significantly correlated with the consequent variable, Reasons for Dissonance (y_5), whereas in village Chiroura, independent variables such as Electricity consumption (x_{14}), Fuel consumption (x_{15}), Risk orientation (x_{21}), Market orientation (x_{26}), and Distance matrix (x_{31}) have been found to be significantly correlated with the dependent variable, Reasons for dissonance (y_5).

When both the village, Ghoragachha and Chiroura pooled together, following criterion variables *viz.* Education (x_2), Family education status (x_3), Educational aspiration (x_4), Family size (x_5), Urbanization Index (x_7), Cropping intensity (x_9), Farm size (x_{10}), Expenditure allotment (x_{11}), Electricity consumption (x_{14}), Adoption leadership (x_{17}), Innovation proneness (x_{20}), Orientation towards competition (x_{23}), Management orientation (x_{24}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}), Information seeking behaviour (x_{29}), and Distance matrix (x_{31}) have been found to be correlated with the Reasons for dissonance (y_5).

Table 6.98: Correlation coefficient of Reasons for reinvention (y_6) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Predictors	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	0.105	0.264*	0.186*
Education (x2)	-0.218	-0.096	-0.130

Family Education Status (x3)	-0.082	0.071	-0.007
Educational Aspiration (x4)	-0.019	0.097	0.035
Family Size (x5)	0.143	0.244*	0.193*
Gender (x6)	-0.097	-0.263*	-0.189*
Urbanization Index (x7)	-0.012	-0.116	-0.073
Occupation (x8)	0.205	-0.130	0.039
Cropping Intensity (x9)	-0.037	0.076	-0.009
Farm size (x10)	0.071	-0.075	-0.029
Expenditure Allotment (x11)	-0.022	0.056	0.004
Credit Load (x12)	-0.028	-0.227*	-0.138
Annual Income (x13)	0.068	-0.159	-0.023
Electricity Consumption (x14)	-0.137	0.032	-0.072
Fuel Consumption (x15)	0.095	-0.232*	-0.054
Irrigation Index (x16)	0.111	-0.087	-0.074
Adoption Leadership (x17)	0.314**	0.140	0.221**
Scientific Orientation (x18)	0.164	0.226	0.198*
Independency (x19)	-0.015	0.151	0.076
Innovation Proneness (x20)	0.181	0.130	0.148
Risk Orientation (x21)	0.229*	0.036	0.129
Economic Motivation (x22)	0.019	-0.029	-0.001
Orientation Towards Competition (x23)	0.044	0.007	0.023
Management Orientation (x24)	0.150	0.000	0.078
Production Orientation (x25)	-0.127	0.052	-0.028
Market Orientation (x26)	0.138	0.342**	0.182*
Social Participation (x27)	0.052	0.138	0.106
Utilization of Cosmopolite Source of Information (x28)	0.298**	0.112	0.213**
Information Seeking Behavior (x29)	0.322**	0.149	0.226**
Training Received (x30)	-0.123	-0.066	-0.097
Drudgeries (x31)	0.094	-0.187	-0.013
Distance Matrix (x32)	0.086	0.008	-0.036
*significant at 0.05 % **Significant at 0.01%			

Table 6.98 presents the comparative display of correlation coefficient of **Reasons for reinvention (y_6)** with 32 independent variables of village of Ghoragachha of the state West Bengal, Chiroura of the state Bihar and both the villages of West Bengal and Bihar clubbed together.

In village Ghoragacha, following independent variables *viz.* **Adoption leadership (x_{17})**, **Risk orientation (x_{21})**, **Utilization of cosmopolite source of information (x_{28}) and Information seeking behaviour (x_{29})** have been found to be significantly correlated with the dependent variable **Reasons for reinvention (y_6),** whereas in village Chiroura the following independent variable *viz.* **Age (x_1)**, **Family size (x_5)**, **Gender (x_6)**, **Credit load (x_{12})**, **Fuel consumption (x_{15})**, **Market orientation (x_{26})** have been found to be significantly correlated with dependent variable **Reasons for reinvention (y_6)**, whereas, in village Chiroura, independent variables *viz.* **Age (x_1)**, **Family size (x_5)**, **Gender (x_6)**, **Credit load (x_{12})**, **Fuel consumption (x_{15})**, **Market orientation (x_{26})** have been significantly correlated with the dependent variable, **Reasons for reinvention (y_6)**.

When both the village Ghoragachha and Chiroura clubbed together following variable *viz.* **Age (x_1)**, **Family size (x_5)**, **Gender (x_6)**, **Adoption leadership (x_{17})**, **Scientific orientation (x_{18})**, **Market orientation (x_{26})**, **Utilization of cosmopolite source of information (x_{28}) and information seeking behaviour (x_{29})** have been significantly correlated with the **Reasons for reinvention (y_6).**

Table 6.99: Correlation coefficient of Confusion index (y_7) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Predictors	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	0.196	0.030	0.011
Education (x2)	-0.017	-0.041	-0.144
Family Education Status (x3)	-0.002	-0.068	-0.108
Educational Aspiration (x4)	0.013	-0.001	-0.090
Family Size (x5)	0.070	0.037	-0.039
Gender (x6)	-0.123	-0.193	-0.143
Urbanization Index (x7)	-0.051	-0.065	-0.128
Occupation (x8)	0.294*	-0.210	0.071
Cropping Intensity (x9)	-0.056	-0.009	0.042
Farm size (x10)	0.093	-0.227	-0.231**
Expenditure Allotment (x11)	0.053	0.011	0.103
Credit Load (x12)	-0.061	-0.220	-0.113
Annual Income (x13)	0.099	0.046	0.103
Electricity Consumption (x14)	0.023	0.160	0.118
Fuel Consumption (x15)	0.247*	-0.342**	0.082
Irrigation Index (x16)	0.131	-0.096	-0.018
Adoption Leadership (x17)	0.229	0.148	0.251**
Scientific Orientation (x18)	0.107	0.243*	0.123

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Independency (x19)	0.025	0.020	0.049
Innovation Proneness (x20)	0.243*	0.126	0.251**
Risk Orientation (x21)	0.246*	0.038	0.199
Economic Motivation (x22)	0.055	0.003	0.001
Orientation Towards Competition (x23)	0.012	0.108	0.097
Management Orientation (x24)	0132	-0.004	0.123
Production Orientation (x25)	-0.088	0.052	-0.012
Market Orientation (x26)	0.121	0.413**	0.321**
Social Participation (x27)	0.068	0.159	0.088
Utilization of Cosmopolite Source of Information (x28)	0.141	0.110	0.162*
Information Seeking Behavior (x29)	0.277*	0.328**	0.311**
Training Received (x30)	-0.154	-0.078	-0.116
Drudgeries (x31)	-0.068	-0.243*	0.040
Distance Matrix (x32)	-0.070	-0.026	-0.051
*significant at 0.05 % **Significant at 0.01%			

Table 6.99 presents the comparative display of Correlation coefficient of **Confusion Index (y_7)** with 32 independent variables of village Ghoragachha of the state West Bengal, village Chiroura of the state Bihar and both the villages of West Bengal and Bihar clubbed together.

In village Ghoragachha, it has been found that following criterion variables *viz.* **Occupation (x_8)**, **Fuel consumption (x_{15})**, **Innovation proneness (x_{20})**, **Risk orientation (x_{21})**, **Information seeking behaviour (x_{29})** have been correlated with the consequent variable, **confusion index (y_7)**, whereas in village Chiroura, following independent variables *viz.* **Fuel consumption (x_{15})**, **Scientific orientation (x_{18})**, **Market orientation (x_{26})**, **Information seeking behaviour (x_{29})** and **Distance matrix (x_{31})** have been found to be significantly correlated with the dependent variable, **Confusion index (y_7)**.

When both village Ghoragachha and Chiroura clubbed together following criterion variable *viz.* Farm size (x_{10}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}), Information seeking behaviour (x_{29}) have been found significantly correlated with Confusion Index (y_7).

Table 6.100: Correlation coefficient of Social entropy (Y) with 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Predictors	Ghoragachha (West Bengal) N = 75	Chiroura (Bihar) N = 75	Pooled N = 150
Age (x1)	0.136	0.136	-0.065
Education (x2)	-0.157	-0.081	-0.331**
Family Education Status (x3)	0.008	-0.036	-0.165*
Educational Aspiration (x4)	0.099	0.011	-0.125
Family Size (x5)	0.125	-0.056	-0.129
Gender (x6)	-0.189	-0.146	-0.144
Urbanization Index (x7)	-0.011	-0.058	-0.183*
Occupation (x8)	0.296**	-0.127	0.082
Cropping Intensity (x9)	0.027	0.012	0.179*
Farm size (x10)	-0.005	-0.199	-0.346**
Expenditure Allotment (x11)	0.010	0.134	0.157
Credit Load (x12)	0.001	-0.159	-0.036
Annual Income (x13)	0.036	-0.159	0.028
Electricity Consumption (x14)	-0.036	0.298**	0.157
Fuel Consumption (x15)	0.110	-0.224	0.103
Irrigation Index (x16)	0.088	-0.051	0.059
Adoption Leadership (x17)	0.292*	0.127	0.325**
Scientific Orientation (x18)	0.066	0.124	0.015
Independency (x19)	-0.066	0.203	0.092
Innovation Proneness (x20)	0.149	0.018	0.208*
Risk Orientation (x21)	0.206	0.048	0.208*
Economic Motivation (x22)	-0.047	-0.025	-0.101
Orientation Towards Competition (x23)	-0.032	0.062	0.099
Management Orientation (x24)	0.074	0.167	0.166*
Production Orientation (x25)	-0.144	0.048	-0.033
Market Orientation (x26)	0.160	0.426**	0.447**
Social Participation (x27)	0.048	0.026	0.002
Utilization of Cosmopolite Source of Information (x28)	0.235*	0.228*	0.273**
Information Seeking Behavior (x29)	0.179	0.267*	0.240**
Training Received (x30)	-0.142	-0.046	0.082
Drudgeries (x31)	-0.038	-0.245*	0.183*
Distance Matrix (x32)	-0.038	0.058	-0.005
*significant at 0.05 % **Significant at 0.01%			

A comparative display of the value of correlation coefficient depict that **Occupation (x_8)** and **Adoption leadership (x_{17})** have become decisive factor in characterizing the **Social entropy (Y)** in the rural social system of Ghoragachha village. This is simply because agro rural system of Ghoragachha village has already progressed to subsequent stages that is process of modernization and process of market networking that is economic drive agripreneurship but the aspect of

occupation as is expected of some dedicated income from structured occupation is left unattainable yet. So, this may lead to Social entropy.

While the village of Bihar is still hanging around two elements of modernity that is Electricity consumption and Market orientation. Wherein, Ghoragachha village of West Bengal has exerted the stage of agribased occupational pursuit. The village Chiroura of the state Bihar, is moving after process of unfinished modernization.

When, Bihar and West Bengal clubbed together the Entropy in social ecosystem is being characterized by the variables Education (x_2), Family education status(x_3), Urbanization index(x_7), Cropping intensity (x_9), Farm size (x_{10}), Adoption leadership (x_{17}), Innovation proneness (x_{20}), Risk orientation (x_{21}), Management orientation (x_{24}), Market orientation (x_{26}), Utilization of cosmopolite source of information (x_{28}), Information seeking behavior (x_{29}), Distance matrix (x_{31}). This would finally indicate that the general farmer in the part of eastern India in their way of agricultural modernization. They are entering into a domain of Social entropy which is decisively attributed by the variables mentioned above.

Table 6.101: Stepwise regression analysis of Perception on Discontinuance (y_1) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Variables retained at the last step			
Sl. No.	**Ghoragachha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Information seeking behavior (x29)	Market orientation (x26)	Market orientation (x26)
2	Risk orientation (x21)	Utilization of cosmopolite Source of information (x28)	Adoption leadership (x17)
3	Family size (x5)		Family education status (x3)
4			Utilization of cosmopolite source of information (x28)
5			Economic motivation (x22)

Table 6.101 presents the comparative display of predominating predictors retained, during the last step of stepwise regression analysis of predicted variable Perception on discontinuance (y_1) versus 32 predictors of village Ghoragachha of the state West Bengal, village Chiroura of the state Bihar and clubbed villages of both the state.

In village Ghoragacha, three criterion variables *viz.* **Information seeking behavior (x_{29})**, **Risk orientation (x_{21})** and **Family size (x_5)** finally retained in decreasing order of their magnitude at the last step of screening to characterize the predicted variable Perception on discontinuance. Whereas, in village Chiroura following predictors *viz.* **Market orientation (x_{26})**, **Utilization of cosmopolite source of information (x_{28})** in decreasing order of their magnitude have retained at the last step of screening to characterize the predicted variable, **Perception on discontinuance (y_1).**

When both the village clubbed together it has been found that following predictors *viz.* Market orientation (x_{26}), Adoption leadership (x_{17}), Family education status (x_3), Utilization of cosmopolite source of information (x_{28}) and Economic motivation (x_{22}) have been retained at the last step in decreasing order of their magnitude to characterize the predicted variable, Perception on discontinuance (y_1).

Table 6.102: Stepwise regression analysis of Perception on rejection (y_2) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Variables retained at the last step			
Sl. No.	**Ghoragacha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Information seeking behavior (x29)	Fuel consumption (-x15)	Market orientation (x26)
2	Drudgeries (-x32)	Market orientation (x26)	Information seeking motivation (x29)
3		Electricity consumption (x14)	Production orientation (-x25)
4		Educational aspiration (x4)	Farm size (-x10)
5		Expenditure allotment (x11)	

Table 6.102 presents the comparative display of predominating predictors retained, during the last step of stepwise regression analysis of predicted variable, **Perception on rejection (y_2)** versus 32 predictors of village Ghoragachha of the state West Bengal, village Chiroura of the state Bihar and clubbed village of both the state.

In village Ghoragachha it has been found that two predictor variables *viz.* **Information seeking behavior (x_{29})**, and **Drudgeries (x_{32})** have retained in decreasing order to characterize the predicted variable, **Perception on rejection (y_2)**. Whereas in village Chiroura following predominating predictors *viz.* **Fuel consumption (x_{15})**, **Market orientation (x_{26})**, **Electricity consumption (x_{14})**, **Educational aspiration (x_4)** and **Expenditure allotment (x_{11})** have been retained in decreasing order in the last step of screening to characterize the predicted variable, **Perception on rejection (y_2)**.

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Table 6.103: Stepwise regression analysis of Disagreement (y_3) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Variables retained at the last step			
Sl. No.	**Ghoragachha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Orientation towards competition (-x23)	Electricity consumption (x14)	Market orientation (x26)
2	Education (-x2)	Information seeking behavior (x29)	Orientation towards competition (-x23)
3		Credit load (-x12)	Information seeking behavior (x29)
4		Educational aspiration (x4)	
5		Market orientation (x26)	

When both the village clubbed together it has been recorded that following predominating predictors *viz.* **Market orientation (x_{26})**, **Information seeking behavior (x_{29})**, **Production orientation (x_{25})** and **Farm size (x_{10})** have retained in decreasing order in the last step of screening to characterize the predicted variable **Perception on rejection (y_2)**.

Table 6.103 presents the comparative display of predominating predictors retained, in deceasing order of their magnitude in the last step of screening during stepwise regression analysis of predicted variable, **Disagreement (y_3)** versus 32 predictors variable of village Ghoragacha of the state West Bengal, village Chiroura of the state Bihar and clubbed village of both the state.

In village Ghoragachha it has been found that following predominating predictors *viz.* **Orientation towards competition (x_{23})**, and **Education (x_2)** have retained at the last step of screening to characterize the predicted variable, **Disagreement (y_3).** Whereas, in village Chiroura following predominating predictors *viz.* **Electricity consumption (x_{14})**, **Information seeking behavior (x_{29})**, **Credit load (x_{12})**, **Educational aspiration (x_4)** and **Market orientation (x_{26})** have retained at the last step after screening to characterize predicted variable, **Disagreement (y_3).**

When both the village clubbed together following predictors *viz.* **Market orientation (x_{26})**, **Orientation towards competition (x_{23})** and **Information seeking behavior (x_{29})** have been retained at the last step to characterize the predicted variable, **Disagreement (y_3)**.

Table 6.104: Stepwise regression analysis of Conflict (y_4) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Variables retained at the last step			
Sl. No.	**Ghoragachha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Utilization of cosmopolite source of information (x28)	Cropping intensity (-x9)	Farm size (-x10)
2	Irrigation index (x16)	Market orientation (x26)	Information seeking behavior(x29)
3	Occupation (x8)	Fuel consumption (-x15)	Training received (-x30)
4	Family education status (-x3)	Expenditure Allotment (x11)	Utilization of cosmopolite source of Information (x28)
5		Farm size (-x10)	
5		Innovation proneness (-x20)	

Table 6.104 presents the comparative display of Stepwise regression analysis of the predicted variable, **Conflict (y_4)** versus 32 predictors of village Ghoragacha of the state West Bengal, village Chiroura of the state Bihar and clubbed villages of both the state in decreasing order.

In the village Ghoragacha, following predominating predictors *viz.* **Utilization of Cosmopolite source of information (x_{28})**, **Irrigation index (x_{16})**, **Occupation (x_8) and Family education status (x_3)** have been retained at the last step to characterize the predicted variable, **Conflict (y_4)**, whereas in the village Chiroura, following predictors *viz.* **Cropping intensity (x_9)**, **Market orientation (x_{26})**, **Fuel consumption (x_{15})**, **Expenditure allotment (x_{11})**, **Farm size (x_{10})** and **Innovation proneness (x_{20})** have been retained at the last step to characterize the predicted variable, **Conflict (y_4)**.

When both the village clubbed together, following independent variables *viz.* **Farm size (x_{10})**, **Information seeking behavior (x_{29})**, **Training received (x_{30})**, **Utilization of cosmopolite source of information (x_{28})** have been retained at the last step to characterize the dependent variable, **Conflict (y_4)**.

Table 6.105: Stepwise regression analysis of Reasons for dissonance (y_5) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Variables retained at the last step			
Sl. No.	**Ghoragachha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Urbanization index (-x7)	Risk orientation (-x21)	Market orientation (x26)
2	Family education status (-x3)	Distance matrix (-x31)	Irrigation index (-x16)
3	Occupation (x8)	Market orientation (x26)	Information seeking behavior(x29)

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4	Market orientation (x26)	Irrigation index (-x16)	Farm size (-x10)
5	Information seeking behavior (x29)	Electricity consumption (x14)	Urbanization index (-x7)
6	Educational aspiration (x4)	Information seeking behavior (x29)	Adoption leadership (17)
7	Farm size (x10)		Family education status (-x3)
8	Adoption leadership (x17)		Innovation proneness (x20)
9	Orientation towards competition (x23)		
10	Age (x1)		

Table 6.105 presents the comparative display of Regression analysis of **Reasons for dissonance (y_5)** in decreasing order of strength, of the village Ghoragacha in the state West Bengal, village, Chiroura of the state Bihar and clubbed villages of both the states.

In the village Ghoragacha following predictors *viz.* **Urbanization Index (x_7)**, **Family Education Status (x_3)**, **Occupation (x_8)**, **Marketing orientation (x_{26})**, **Information seeking behavior (x_{29})**, **Educational aspiration (x_4) and Farm size (x_{10})** have been retained at the last step to characterize the predicted variable **Reasons for dissonance (y_5)**, whereas in the village, Chiroura following variable *viz.* **Risk orientation (x_{21})**, **Distance Matrix (x_{31})**, **Market orientation (x_{26})**, **Irrigation index (x_{16})**, **Electricity consumption (x_{14}) and Information seeking behavior (x_{29})** have been retained at the last step of screening to characterize the predicted variable **Reasons for dissonance (y_5)**.

When both the village Ghoragacha and Chiroura clubbed together following predictors *viz.* **Market orientation (x_{26})**, **Irrigation index (x_{16})**, **Information seeking behavior (x_{29})**, **Farm size (x_{10})**, **Urbanization index (x_7)**, **Adoption leadership (x_{17})**, **Family education status (x_3)** have been retained at the last step of screening to characterize the predicted variable, **Reasons for dissonance (y_5)**.

Table 6.106: Stepwise Regression analysis of Reasons for Reinvention (y_6) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

	Variables retained at the last step		
Sl. No.	**Ghoragachha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Information seeking behavior (x29)	Age (x1)	Information seeking behavior (x29)
2	Occupation (x8)	Market orientation (x26)	Family size (x5)
3	Education (-x2)	Gender (-x6)	Education (-x2)
4		Fuel consumption (-x15)	Gender (-x6)
5			Age (x1)

Table 6.106 presents the comparative display of Stepwise regression analysis of predicted variable, **Reasons for reinvention (y_6)** versus 32 predictors in decreasing order of strength of village Ghoragachha in the State West Bengal, village, Chiroura in state Bihar and clubbed villages of both the state.

In village Ghoragachha following predictors *viz.* **Information seeking behavior (x_{29})**, **Occupation (x_8)** and **Education (x_2)** have been retained at the last step of screening to characterize the predicted variable **Reasons for reinvention (y_6)**, whereas in village Chiroura following predictors *viz* . **Age (x_1), Marketing orientation (x_{26})** and **Fuel consumption (x_{15})** have been retained at the last step of screening to characterize the predicted variable **Reasons for reinvention (y_6)**.

When both the village clubbed together following variables *viz.* **Information seeking behavior (x_{29})**, **Family size (x_5)**, **Education (x_2)**, **Gender (x_6)** and **Age (x_1)** have been retained at the last step of screening to characterize the predicted variable **Reasons for reinvention (y_6)**.

Table 6.107: Stepwise regression analysis of Confusion index (y_7) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

	Variables retained at the last step		
SL. No.	**Ghoragachha (West Bengal)**	**Chiroura (Bihar)**	**Pooled village**
1	Occupation (x8)	Market orientation (x26)	Information seeking behavior (x29)
2	Information seeking behavior (x29)	Fuel consumption (-x15)	Market orientation (x26)
3			Training received (-x30)

Table 6.107 presents the comparative display of Stepwise regression analysis of the predicted variable, **Confusion index (y_7)** versus 32 predictors in decreasing order of strength of the village Ghoragacha in the state of West Bengal, village Chiroura in the state of Bihar and clubbed village of both the state.

In village Ghoragachha following predictor variables *viz.* **Occupation (x_8)**, **Information seeking behavior (x_{29})** have been found to retained at the last step of screening to characterize the predicted variable, **Confusion index (y_7),** whereas in village Chiroura following village *viz.* **Market orientation (x_{26})** and **Fuel consumption (x_{15})** have been retained at the last step of screening to characterize the predicted variable, **Confusion index (y_7)**.

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When both the village clubbed together following predictor variables *viz.* **Information seeking behavior (x_{29})**, **Marketing orientation (x_{26})** and **Training received (x_{30})** have been retained at the last step of screening to characterize the predicted variable, **Confusion index (y_7)**.

Table 6.108: Stepwise regression analysis of Social entropy (Y) versus 32 independent variables: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

SL. No.	Variables retained at the last step		
	Ghoragachha (West Bengal)	**Chiroura (Bihar)**	**Pooled village**
1	Occupation (x8)	Market orientation (x26)	Market orientation (x26)
2	Adoption leadership (x17)	Electricity consumption (x14)	Farm size (-x10)
3	Gender (-x6)	Fuel consumption (-x15)	Utilization of cosmopolite source of information (x28)
4		Independency (x19)	Training received (-x30)
5			Adoption leadership (x17)
6			Economic motivation (-x22)

Village Ghoragacha, West Bengal

The variable, Occupation (x_8) has got an important contribution while Technology socialization process is underway. Ghoargachha village has already been found to have undergone a faster and diverse occupational transformation process. So, social chaos or unrest may be an inevitable outcome if the aspects of outcome as well as livelihood are taken care of adequately.

Adoption leadership (x_{17}) is another next important contribution to characterize social entropy. Leadership motivates people towards technology socialization process. Most of the time it has been found that improper motivation caused wrong adoption, ephemeral adoption without long term perspective and are causing unrest, chaos, frustration among farmers. Therefore, it is very necessary to focus policy on proper leadership development process for steering and unleashed guiding process for having proper technology socialization process.

Gender (x_6) is the next contributor in simmering of social entropy. Most of the research institutes along with the agricultural university develop the technology which is used mostly by male and female counterpart is often ignored. It has also been proved from the present empirical study in Ghoragachha (West Bengal) that increased male members in the family system caused uncertainty in smooth development of technology socialization process. As female members are also contributing in decision making process in family so, uninterrupted technology socialization process requires consideration of gender issue as well.

Chiroura, Bihar

In Bihar, under the present study village, it has been found that as **Market orientation (x_{20})** of the respondents increased social entropy has also increased. It may be due to the fact that market facilities such as supply chain, price structure and security of profit have not amply supported the farmers. Therefore, uncertainty reins the psychology of farmers after good harvest of their produce. This implies that while undertaking the process of technology socialization, market facilities must be properly build up which can overcome or help in reducing social entropy.

Electricity is the most important indicator in estimating the nature and amount of rural as well as agricultural modernization. Since, village Chiroura is moving through a clear dent of modernization, this variable has been found exerting a decisive impact in inviting both modernization and its contradiction.

Fuel consumption is equally an important indicator in measuring and predicting "Entropy" simply because it represents element of modernity and elements of entropy emanated from modernization.

Independency presents two things together at one end the mobility of and individual and a personal self sufficiency in his own terms of pursuits, on the other hand it indicates a series of contradiction as a person and entity deeming to the isolated from the main stream development.

However, when the respondents of two villages are pooled together to depict a comprehensive scenario, it has been found that the variable, **Market orientation (x_{26})** has featured in both the rural systems and it is inevitable in this part of India. Agricultural now changing from a farm practice to agripreneurship that is why Market orientation can device the process of modernization and entrepreneurial competition when it is completely attuned to Social entropy. The other variables featured hear are, **Farm size (x_{10})**, **Utilization of cosmopolite source of information (x_{28})**, **Training received (x_{30})**, **Adoption leadership (x_{17})** and **Economic motivation (x_{22})**.

Table 6.109 displays comparative study of Path analysis of village Ghoragachha, Chiroura and Pooled village.

In the village Goragachha, Educational aspiration (x_4) has exerted both highest direct effect as well as highest indirect effect on the consequent variable Social entropy (Y).

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Educational aspiration (x_4) has further routed through 17 other exogenous variables to characterize the consequent variable. Residual effect has been recorded 0.730.

In the village Chiroura, Farm size (x_{10}) has exerted highest direct effect whereas Fuel consumption (x_{15}) has exerted highest indirect effect and Farm size (x_{10}) has further routed through other 24 exogenous variables to characterize the consequent variable Social entropy (Y). Residual effect has been recorded 0.740.

In the pooled village, Family education status (x_3) has exerted highest direct effect whereas Educational aspiration (x_4) has exerted highest indirect effect on consequent variable Social entropy (Y). Farm size (x_{10}) has further routed through the 18 other exogenous variable to characterize the consequent variable Social entropy (Y). Residual effect has been recorded 0.744.

Table 6.110: Factor analysis: A comparative study of village Ghoragachha West Bengal, Chiroura, Bihar and Pooled village

Rank	Ghoragachha (West Bengal)	Chiroura (Bihar)	Pooled
1	Farm management	Education	Family resource
2	Educational participation	Family resource	Enterprise relationship
3	Strategic capacity	Scientific information utilization	Resource endowment
4	Enterprise drive	Family status	Innovative market
5	Access	Expenditure capacity	Family modernization index
6	Entrepreneurial Behavior	Entrepreneurship	Strategy
7	Management	Modernity	Competitive management
8	Modernization	Agricultural infrastructure	Investment
9	Energy consuming capacity	Market orientation	Modernization
10	Gender	Leadership quality	Entrepreneurship
11	Irrigation	Farm dynamics	Gender
12	Agrepreneurship	Innovative enterprise	

The village, Ghoragacha, as we mentioned earlier, has already passed off the rudimentary stages of agricultural modernization and entered an advance level of modernization process. That is why the village ecology has retained the factor farm management as the factor having highest variants in order to consolidate the pace of modernization and the emanating entropy embedded therewith, Educational participation comes as a second factor, that does indicates that the social ecology need not only the pace of modernization but also quality of modernization too. The third factor, as it stands to be, the strategic capacity does rightly imply that, we need to have a strategic capacity to spearhead the process of transforming agricultural modernization by incorporating high value agricultural to an agricultural pursuits having tremendous occupational diversity. The village has already recorded a gallant transformation and shift from banana to guava enterprises and guava enterprises to vegetable enterprises and all these history of transformation have been scripted by enterprising character of farmers of village Ghoragachha. Nevertheless it is a perception that this transformation did not happen without any brunt of transformational entropy and disorder.

The village chiroura from the state Bihar, having a transcendent through a few steps of modernization yet, the education has been set as number one factor to provide Philip to the cognitive up gradation of modernizing as well as socialization process of agricultural modernization. Family resources has also been considered the primary need to usher agricultural modernization process in Chiroura village because family support has been essential to make a headway agricultural modernization without scientific information and its utilization cannot help any modern process to take off. So, it has been figure up an important input for modernization of agriculture in Chiroura village of the state Bihar.

However, a synergies scenario the two villages of two different states depicts that the factor family resources, Enterprise relation and resource endowment are three important factors in order of importance have influences the process of modernization as well as receiving the brunt of entropy in the same process as well.

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