Chapter 7

Epilogue

Indian farmers are the only rural diaspora, perhaps on this planet, who are thrown into such a stressful economy and ecology, ashave to have a lethal consequences in the form of suicides or to ride a train called Bhatinda Express, carrying cancer patients by a huge count. Here, every cost of farm production is increasing, and expected return is decreasing. Here, farmers are proving breakfast to dinner for us to be called , instruments to earn food security, but they themselves are suffering from both chronic and acute hunger,. The stress, chaos, entropy, and also the dissonance being inflicted into the psyches of farmers in India, have seldom been researched from an ecological point of view. If a farmer has to reel constantly under stress, no NPK can reach the field to cause the golden harvest. The present paper examines the concepts of stress, chaos and entropy of farmers' social ecology and how do this impact on the process of earning sustainable development in Indian Agriculture. Some axiomatic interpretation suggest that irregularity of income from agriculture, vagaries of market response, apparent ignominy of agricultural job condition in an open-air condition and crude exposure to harsh weather parameters, transformation of risk into threats, are coming badly on the way to continue agriculture as profitable venture and remunerative pursuits. The emergence of off farm economy as well as economically viable service sectors have gone enough miles to disprove the so called profitability of agriculture over other rural livelihood options. Even with good weather and splendid technological support to potato growers, and of course to a resultant record production of potato, the farmers were thrown into an extreme entropy due to market failure, in worst cases some of them committed suicides too. Sometimes good harvests bring more agony to growers and lead to a situation called

vicarious and dissonant. New age extension research should throw lights on system research rather than simply adoption research to elicit the factor contributory to social disorder, before adding to a new order into the same system.

Research setting

The area of investigation of this study is situated in the state of West Bengal located in the eastern part of India. West Bengal has a unique social, cultural and ecological background, which influence the living standard and behavioural patterns of the people in many ways. The LABPUR block of BIRBHUM district of West Bengal has been selected for this purpose. The village FINGTORE of Labpur block has been selected as the area of the study.

RESEARCH METHODOLOGY

Aftercollectionofdata,datawereprocessedandanalysedinaccordancewiththe outlinelaiddownforthepurposeatthetimeofdeveloping theresearch plan.Process implies editing, coding, classificationandtabulationof collected data. The mainstatisticaltools andtechniques usedinthepresentstudyareasfollows:

1. Mean
2. Standarddeviation
3. CoefficientofVariance
4. Correlationofcoefficient
5. Multiple regressionanalysis
6. Factor analysis (P.C.A)

All these have been done to establish and estimate the pattern, direction and intensity of interaction to ultimately estimate the energy consumption pattern in a farming system.

Results

Table11 presents the distribution of variables in terms of mean, SD and CV. It has been found from the study that the mean age(X1) is 41.92 years with standard deviation, 9.03 for the total distribution taken for the study.

Coefficient of variation of age is 18 which show a high level of consistency in its distribution nature.

The independent variable, **education (X2)** of farmers has been found from the study that the mean 6.02 years of schooling with standard deviation (SD), 2.80 for the total distribution taken for the study. Coefficient of variation of **education(X2)** is 46.5 which shows a moderate level of consistency in its distribution.

The independent variable, **family size (X3)** of farmers has been found from the study that the mean 6.02 with standard deviation (SD), 2.80 for the total distribution taken for the study. Coefficient of variation of **family size (X2)** is 46.5 which show a moderate level of consistency in its distribution.

The independent variable, **gender ratio (X4)** of farmers has been found from the study that the mean 1.13 with standard deviation(SD), 0.81 for the total distribution taken for the study. Coefficient of variation of **gender ratio (X4)** is 71.6 which shows a moderate level of consistency in its distribution.

The independent variable, **educational aspiration (X5)** of farmers has been found from the study that the mean 3.90 with standard deviation(SD), 1.56 for the total distribution taken for the study. Coefficient of variation of **educational aspiration (X5)** is 40which shows a moderate level of consistency in its distribution.

The independent variable, **size of holding(X6)** of farmers has been found from the study that the mean 6.44 with standard deviation(SD), 5.79 for the total distribution taken for the study. Coefficient of variation of **size of holding(X6)** is 89.9 which shows a moderate level of consistency in its distribution.

The independent variable, **cropping intensity(X7)** of farmers has been found from the study that the mean 1.65 with standard deviation(SD), 0.42 for the total distribution taken for the study. Coefficient of variation of **cropping intensity(X7)** is 25.4 which shows a moderate level of consistency in its distribution.

The independent variable, **total number of livestock(X8)** of farmers has been found from the study that the mean 3.92 with standard deviation(SD), 2.46 for the total distribution taken for the study. Coefficient

of variation **total number of livestock(X8)** of is 62.7 which shows a moderate level of consistency in its distribution.

The independent variable, **total annual income(X9)** of farmers has been found from the study that the mean 44328.33 with standard deviation (SD), 53167.13 for the total distribution taken for the study. Coefficient of variation of **total annual income(X9)** is 119.9 which shows a moderate level of consistency in its distribution.

The independent variable, **per capita annual income (X10)** of farmers has been found from the study that the mean 8228.24 with standard deviation(SD), 9360.05 for the total distribution taken for the study. Coefficient of variation of **per capita annual income (X10)** is 113.7 which shows a moderate level of consistency in its distribution.

The independent variable, **income ratio (X11)** of farmers has been found from the study that the mean 11.45 with standard deviation(SD), 22.22 for the total distribution taken for the study. Coefficient of variation of **income ratio (X11)** is 194 which shows a moderate level of consistency in its distribution.

The independent variable, **capital intensity(X12)** of farmers has been found from the study that the mean 7234.17 with standard deviation(SD), 1511.61 for the total distribution taken for the study. Coefficient of variation of **capital intensity(X12)** is 20.8 which shows a moderate level of consistency in its distribution.

The independent variable, **scientific orientation(X13)** of farmers has been found from the study that the mean 3.03 with standard deviation(SD), 1.44 for the total distribution taken for the study. Coefficient of variation of **scientific orientation(X13)** is 47.5 which shows a moderate level of consistency in its distribution.

The independent variable, **self efficacy (X14)** of farmers has been found from the study that the mean 3.08 with standard deviation(SD),1.24 for the total distribution taken for the study. Coefficient of variation of**self efficacy (X14)** is 40.2 which shows a moderate level of consistency in its distribution.

The independent variable, **risk orientation(X15)** of farmers has been found from the study that the mean 2.77 with standard deviation (SD), 1.12

for the total distribution taken for the study. Coefficient of variation of **risk orientation(X15)is** 40.4 which shows a moderate level of consistency in its distribution.

The independent variable, **economic motivation (X16)** of farmers has been found from the study that the mean 2.67 with standard deviation(SD), 1.31 for the total distribution taken for the study. Coefficient of variation of **economic motivation (X16)** is 49 which shows a moderate level of consistency in its distribution.

The independent variable, **competition (X17)** of farmers has been found from the study that the mean 2.77 with standard deviation(SD), 0.95 for the total distribution taken for the study. Coefficient of variation of **competition (X17)** is 34.2 which shows a moderate level of consistency in its distribution.

The independent variable, **information index (X18)** of farmers has been found from the study that the mean 28.83 with standard deviation(SD), 27.93 for the total distribution taken for the study. Coefficient of variation of **information index (X18)** is 96.8 which shows a moderate level of consistency in its distribution.

The independent variable, **distance matrix (X19)** of farmers has been found from the study that the mean 33.86 with standard deviation (SD),17.60 for the total distribution taken for the study. Coefficient of variation of **distance matrix (X19)** is 51.9 which shows a moderate level of consistency in its distribution.

CONCLUSION

"We live in a world where nearly 800 million people go to bed hungry every night. Nearly 1.2 billion people remain extremely poor, struggling to care for their families." Said IFAD's President Kanayo F. Nwanze. With over three-quarters of the world's poorest people living in the rural areas of developing countries, it is worty to be discussed why investing in rural people is crucial to helping the world overcome these global challenges.

It is to be concluded that the situation prevailing there is not so much healthy condition for a farmer and the authorized govt officials are saying that they are quiet helpless in this situation because they are not getting the root to be treated with. But the fact is that farmers are losing their self

efficacy in farming practice and gradually getting disillusioned. In this way suddenly they are being migrated to any off farm economy for a lucrative cash receipt and in a more severe form some ill-fated are compelled to commit suicide. The recommendations made by the farmers for themselves as well as the authors should be reviewed carefully.

Disillusionment and Dissonance among the farmers regarding prescribed technology is apparently an aberrant social phenomenon, which makes the farmers alienated from the technology socialization process. Innovative farmers adopt the new technology but when they are finally exposed to market infrastructure and profitability of the technology, they are confused and disillusioned. Moreover, the farmers are conceptually confused, operationally juxtaposed and motivationally perplexed. This is an invisible psychological barrier towards effective socialization technology.This kind of empirical research can help a go towards creating a resilient model accommodating effective and sustainable process of technology socialization, confusion embedded within a farmer needs to be pumped out or resolved otherwise the perplexed horse will be just limping without progress.

RECOMMENDATION

While interviewingwith farmers there it contained one issue to recommend something for themselves and simply those are stated as it was told by the interviewed farmers

- Though subsidization the fertilizer price should be cut down
- The selling price of paddy should be increased
- The price of electricity in agricultural irrigation
- Availability of the ago laborers should be increased
- Krishi loans should be properly distributed

But here, Weare recommending some issues in the following heading which are badly needed to be taken care of.

- **The Issues, that Speaks a Dictum :-**
- **Equal Monthly Return** (EMR) is an important issue that remains an illusion yet for the farmers as in other profession there is a certain

monthly return whereas the agriculture sector provides it when the crop is harvested. It may be after 3 months, 6 months or even more. So. There should be a provision of the Monthly return of the farmers as they can sustain to their livelihood requirements.

- **More Biological production but very little value addition**i.e, less than 2% contribution to global agriculture produce.
- Agriculture industry should **be lucrative and healthy** to be attractive to come closer. The existing health is miserable in this aspect that the farmers who has a slightest chance to migrate to an off farm economy they are finding it more profitable.
- Agriculture industry should **cover a larger area** to be covered up. As we all know the economic rationale behind the Average cost of production being reduced as the Quantity increased.
- Agriculture should bear some **social status** as many of the educated farm family member is not finding it prestigious to be attached with this sector, which is so called the primary sector of India.
- **Drudgery Reduction technologies** should be adopted very intensively as many people nowadays finding farm work too strenuous a job to be done in comparison with the other.
- **Sufficient Market access** should be there as we found there for many villagers they are producing their crop in a satisfactory level but still are being compelled to distress selling due to lack of market access.
- Apart from the monthly return, the **Relative value of Profit** is an another issue which should be taken care of to allow the farmers to be in a higher position.
- No other but this industry certainly has a **gestation period** with no return. so some initiatives to be taken up for them.
- Small holdings are not bad but it is found to be **extremelyfragmented** that is dangerous.
- **Climate change** offers more stress, more migration, less mitigation and stability.

- **Intrusion of heavy metals** and its subsequent **biomagnifications** leads to occurrence of Carcinoma, PSO (Poly Cystic Ovary) and Diabetic Problems.

FUTURE SCOPE OF THISRESEARCH:-

Considering the nature and result obtained from it, many researches can be conducted in this direction. The present study thus leaves behind the following domains to be researched out in future:

- This study is confined to one particular village of Burdwan district, so generalization from this study is not possible. So it should be conducted in other districts also.
- The future study of this particular topic has a scope to include several contextual and realistic variables other than the variables included in this study.
- To standardizethemodelthelocational,technological,temporaland Compositionalvariablesmaybeincluded.
- Information on farmers capacity building and human skills should be incorporated into the study and their relationship should be studied with technical aspects of energy management.

Expected Contribution of this paper

1. Modern day extension science needs more of innovative thinking to touch and deal with the ground realities.
2. Unless the residual disorders in the form of chaos/entropy/disillusionment is removed or redressed, no new order can work properly with the same social ecology in function.
3. The back crosses analysis of rejection/ discontinuance can also provide the most realistic data to estimate the reasons why they should adopt the proposed practices.
4. This discourse will help understand the resilience of a social ecology, taken both the embedded and residual energy, vis-à-vis motivation into account.
5. Unless a system behavior is in critical examination, it is really difficult to find out the reasons and ground for effective intervention.