

## **Awareness about sustainable agriculture and food Security-- some challenges.**

SK. Rezaul Hoque

*Guest - Lecturer, Dinabandhu Mahavidyalaya Centre, Directorate of Open and Distance Learning (DODL), University of Kalyani, Nadia, W.B., India.*

**ABSTRACT:** *The present study deals with the awareness and perceptions of farmers about the Sustainable Agriculture and Food Security. For this purpose a survey type research is carried out by the researcher. The sample was 100 Farmers, collected by the situational sampling technique form the different villages of Habra Block – 1 area. The tool used is an interview schedule, prepared by the researcher to collected the data the findings indicate that majority of the farmers are not aware about the sustainable agriculture and Food Security. The findings also indicate that most of the farmers have not completed their elementary education. Though they have some practical knowledge, they lack theoretical knowledge about sustainable farming. Most of them have no clear idea about the adverse effects of pesticides, soil erosion, chemical fertilizers etc.*

**Keywords**—*Sustainable agriculture, Food Security, Pesticides, Soil erosion Chemical fertilizers.*

### **I. INTRODUCTION**

Granatsetin (1988) summarized the historical development of the concept of sustainable agriculture. Earlier, the concept was construed as “organic farming: - a term which was originally coined by J.I.Rodale in the 1940’s.

Recent treatises about the meanings of agriculture sustainability distinguish three schools of thought (Douglass 1984, 1985):

The “ford sufficiency” or “productivity” school where agriculture is primarily an instrument for feeding the World through a combination of more resources and greater efficiency.

The “stewardship” school which regards agricultural sustainability primary as an ecological phenomenon; and, The “Community: school or “alternative” where attention is focused primarily on the effects of different agriculture system on the social organization and culture of rural life.

“Agricultural sustainability means different things to different groups of people”. However, there is one common denominator to the various approaches to promoting sustainable agriculture, and that is the integration of sustainable development techniques and traditional farming practices towards environmentally sound economically viable, socially just and humane agricultural system.

The University of Nebraska currently uses the following definition (Granatstein, 1988):

“A management strategy which helps the producer to select hybrids and varieties, cultural practices, soil fertility programmes and pest management approaches which reduce costs of purchased inputs minimize the impact of the system on the immediately and off-farm environment, and provide sustained level of production profit from farming”.

The Technical Advisory Committee (TAC) of the consultative Group of International Agricultural Research has suggested the following definition of sustainability (Food and Agriculture Organization, 1989)

“Sustainable agriculture should involve the successful management of resource for agriculture of satisfy changing human needs while maintaining or enhancing the quality of the environment and coarsening national resources.”

In this study I have focused on the awareness and perceptions of farmers about the sustainable farming and food security of the nations. The block was so chosen because it may give a status of farmers of our country with regard to variation in education economic advancement and other vital human development parameters.

### **II. OBJECTIVE OF THE STUDY**

1. To study the educational status of the farmers.
2. To study the awareness of farmer about the adverse effects of pesticides, chemical fertilizers, soil erosion etc.
3. To study the perceptions of farmers about the sustainable agriculture and food security.

### III. METHODOLOGY

**Type of the research:** The study is basically survey type research.

**Sample:** The sample was 100 farmers collected by situational sampling technique from the different villages of Habra Block -1 area.

**Tools:** An interview schedule prepared by the researcher to collect the data.

**Findings and Discussion:**

**Table – I Educational Status of the Farmers.**

Level of Education	No. of Passed Candidates	% of passed candidates
Gradation and Above	1	1%
M.P. to H.S	12	12%
Class VIII	21	21%
Class IV	30	30%
Below Class IV	15	15%
Illiterate	21	21%

Data reveals that: Majority of the farmers have not completed their elementary education. Many of them were even illiterate. They mainly have low level of formal education.

**Table – II Awareness among farmers about adverse effects of pesticides, chemical fertilizers, soil erosion.**

Type of Awareness	No. of farmers	% of farmers
Awareness about bad impacts of pesticides	39	39%
Awareness about bad impacts of chemical fertilizers.	31	31%
Awareness about bad impacts of soil erosion.	25	25%

Data reveals that only 39% of the farmers are aware about bad impacts of pesticides, 31% of the farmers are aware about bad impact of chemicals fertilizers and only 25% of the farmers are aware about bad impacts of soil erosion.

**Table – III Awareness of farmers about sustainable agriculture and food security**

Awareness	No. of farmers	% of farmers
Awareness about sustainable agriculture and food security	11	11%

Data reveals that only 11% of the farmers are aware about sustainable agriculture and food security of the nations that means 89% of the farmers are unaware about the sustainable agriculture and food security.

### IV. CONCLUSION

The findings indicate that majority of the farmers have not completed their elementary education and many of them even illiterate. The findings also indicate that majority of the farmers are unaware about the adverse impacts of pesticides, chemical fertilizers, soil erosion in agricultural systems. Majority of the farmers are unaware about sustainable farming and even most of the farmers have not heard the terms sustainable agriculture and food security. Intensive programs need to be taken up to make the farmers aware about the adverse impacts of pesticides, chemical fertilizers, soil erosion etc. Some workshops, seminars, meetings with the farmers should be organized at Village level, Panchayet level , Block level, etc. by the concerned authorities and governments time to time to keep the farmers updated and informed in this regard for the interest of our society and nation.

### **REFERENCES**

- [1]. Agarwal, A.S., Narain and A. Sharma (1999): Green Politics-Global Environmental Negotiations.
- [2]. Anonymous (1992-2002) Survey of the Environmental. The Hindu
- [3]. Anonymous (2000): World Resources 2000-2001 People and Ecosystem. UNDP, UNEP, World Bank, World Resource Institute.
- [4]. Chary, S.N. and V.Vasulu(2000): Environmental Management. Macmillan India Ltd.
- [5]. Global Water outlook to 2025: Averting and Impending Crisis, a new food policy report from IFPRI
- [6]. Indian Assessment (2002): water Supply and Sanitation a WHO-UNICHIF Sponsored Study, Planning Commission, Govt. of India.
- [7]. Navalwala, B.N. (1994): Water Resource Development and water for Life, Fao
- [8]. Sarma, J.S. and Ratan Singh, (2002): Integrated Watershed Management; India Farming.
- [9]. Sinha, D.K. and A.D. Mukharjee (2000): Fundamentals of Environmental Studies. Visva-Bharati, Calcutta.
- [10]. Sustainable Agriculture, Issues, perspectives and prospects in Semi Arid Tropics Vol. I & II, Indian Society of Agronomy.
- [11]. World Development Report (1992): development and Environmental. S. Krishna(1996) Environmental Politics. Sage Publications.
- [12]. World Bank, (1998): Groundwater Regulation and Management Report, South Asia Rural Development Unit.