

# Socioeconomic Study on Bediya Community of Burakocha Village, Jharkhand

Aditi Khan

B.Sc Agriculture Rural and Tribal Development

Saswatik Tripathy

B.Sc Agriculture Rural and Tribal Development

**Abstract:-** The word bedia is a corrupt form of the Hindi word behara, which means a forest dweller they are mainly hunters they don't know the skill of cultivation.. But in case of Burakocha is totally different. The Burakocha name originated from two Nagpuri words Bura means old man and Kocha means bowl. The village has a unique story behind its name. The village was established by an old man and the village is surrounded with three hills so its forms a bowl like structure. Socioeconomic study of the village shows that it is a remote village. Total 57 families are in this village belonging from Bedia caste. More than half of the villagers are literate but education standard is poor, only one middle school is present here. 100% population belongs to the below poverty line. Male and female both literacy rates are highest in (16-21) age group people and lowest in (36-40) & (56-60) age group people. 10% family earn Rs.10000-20000/annum, 20% family earn Rs.21000-30000/annum, 30% family earn Rs.31000-40000/annum, 22% family earn Rs.41000-50000, 10% family earn Rs.51000-60000/annum and lastly only 8% family earn Rs. above 61000.

## I. INTRODUCTION

The word bedia is a corrupt form of the Hindi word behara, which means a forest dweller. Bedia is one of the large tribal communities in Jharkhand. Bedia's are mainly hunters they don't know the skill of cultivation. Actually Jharkhand is a state where water crisis is very common. So lack of water is not a favorable condition for agricultural cultivations. But in case of Burakocha is totally different. The Burakocha name originated from two Nagpuri words Bura means old man and Kocha means bowl. The village has a unique story behind its name. The village was established by an old man and the village is surrounded with three hills so its forms a bowl like structure. So the name is Burakocha. The old man was a man of the bedia community who was assigned to find a suitable place for their permanent residence. So he visited many place into the forest and left some eggs each and every place where he visited. Then at the time of coming back he tried to find are the eggs hatched or not? If the eggs are hatched then the place is safe for staying of human. In Burakocha only the eggs are hatched so they started to live in this village. After that one King namely, Monkey Raja of Jonha decided that he should take tax on this village and then he sends a "Paloan" (Strong man) in this village but this old man defeated this paloan". By hearing this incident Monkey Raja became pleased and spread his hand for friendship towards

this old man and didn't charge any type of tax above the villagers. As the village is surrounded by three hills so it has lot of waters to cultivate the crops. In summer and winter also they can cultivate their crops what is impossible for the farmers all over the Jharkhand. The communities mainly follow the Sarna (Tribal God).

## II. REVIEW OF LITERATURE

Neville Clarke et al (2017) said that adoption of new farming technology and using the integrated decision support system (IDSS) helps to increase the food production. This IDSS approach was applied in Amhara region Ethiopia for resource scarcity purpose. Resulted that the improvement of family income and family livelihood is possible by using irrigation technologies, proper fertilizer, Improved seed varieties uses and also maintaining the environmental condition.

SP Singh et al. (2009) studied the sugarcane-based farming system that is predominant in this Western Uttar Pradesh area, Sugarcane-Wheat covered 84% area in this plain. It was found that vegetable based farming system provided the highest income (Rs.81661/ha) and cereal-based farming system provided the lowest income (Rs.44575/ha).

S.S. Acharya (2006) based on his studies, improvement of rural livelihood and sustainable agriculture development come by reducing the poverty. This study says the needs of the present generation and their children are more important rather than the future generation. For the sustainable growth of agriculture, it is necessary to give importance the organic farming.

## III. STUDY AREA

### A. Jharkhand State Profile

The state Jharkhand came into existence on 15<sup>th</sup> November 2000 as a 28<sup>th</sup> State of Union of India after being division from Bihar state. This state is located at 23.6102°N latitude and 85.2799°E longitude and total geographical area of Jharkhand is 79.90 lakh ha, that lies on Chota Nagpur Plateau. Many rivers pass through it and this state is surrounded by hills. (Wikipedia) Total cultivable land of Jharkhand is about 38 lakh ha, comprising 25-26 lakh ha net shown area and cropping intensity is 126% (www.sameti.org). Rainfall is 1300mm. Jharkhand is consists of 24 districts and 259 blocks. As per 2011 census population of this state is 32.96 million and major religion is Hinduism.

**B. Ranchi District profile**

Ranchi district is one of the 24 districts of Jharkhand. Ranchi is located at 23°20'38.7636"N latitude and 85°18'34.4268"E longitude and total geographical area of Ranchi is about 5231sq.km, which is full of several plateaus, mountains, valleys, forests. Ranchi has a humid subtropical climate, but due to its position and the forest around the city, it is known for its pleasant climate. Rainfall is 1430 mm. maximum temperature 25°-42°C in summer season and minimum temperature 2°-20°C in winter season. Ranchi consists of 18 blocks and 305 panchayats. Different types of tribal cast like Bedia, Ho, Munda, Sanotal, Mahato etc. are habitant of here; Ranchi has about 44.6% population that is sarana is the caste. (District Ranchi: Official website of government of Jharkhand)(Wikipedia).

The case study was conducted in Burakochoa village of Angara block

**C. Angara Block Profile**

Angara is one of the twenty administrative community development block of Ranchi dist, Jharkhand. It is located 26km. far away from Ranchi Railway Station. Angara consists of 142 villages and 23 Panchayats. (Wikipedia &www.onefivenine.com).

**D. About Village, Burakochoa**

This village is come under Jonha Panchayat, Angara block, Ranchi. Village is surrounded by hills and forests so it has a pleasant weather. It is located 38 km away from Ranchi Ramakrishna Mission Vivekananda Educational Research Institute.

**E. Basic Information**

Basically, it is a remote village. Total 57 families are about in this village belonging from Bedia caste. More than half of the villagers are literate but education standard is poor, only one middle school is present here. 100% population belongs to the below poverty line.Land topography of this village is undulated; it includes upland(forest and lac host trees), middle land and low land(crop field). Soil type is clay and sandy loam.Because of a low area, here people have not face the water scarcity problem but here almost all the area is getting over irrigated because of miss management of water.

Most of the families mainly depend on agriculture, besides this lac cultivation also plays a significant role in the villagers' life, they have also different types of livestock. In the marketing purpose, they go to the Jonha Market and Gitalsudh.This village is totally organic. Nobody is doing inorganic cultivation. They mainly inspired by Divyayan, KVK, Morabadi, Ranchi.

|       |                    |
|-------|--------------------|
| East  | Paina Pahadh       |
| West  | Gitalsudh Dam      |
| North | Hundru water falls |
| South | Jonha water falls  |

Table 1. Village Boundaries

| Cereals             | Pulses      | Vegetables   | Oil seeds | Lac Host Plant |
|---------------------|-------------|--|-----------|----------------|
| Paddy, Wheat, Maize | Arhar, Urad | Potato, Tomato, Cauliflower, Brinjal, Cabbage, Pea, Bottle gourd, Bitter gourd, Onion, Chilli. | Mustard,  | Kusum, Ber     |

Table 2. Crop Husbandry

**F. Livestock Profile**

Goat, Poultry, Cattle, Buffalo, Pig, Duck.

**IV. METHODOLOGY**

Research methodology is the structural configuration of the study for conducting the research. It describes the research design, tools, sampling techniques, mode of data collection and analytical procedures for establishing the objectives of the study within the framework.

**A. Research Design**

The research design describes the overall strategy of the study that combines all the components of the study and defines the research problems. Different types of design of the study like descriptive (case study, survey), experimental, review (literature review) and PRA are the way of finding the answer to research questions.

**B. Sampling**

Samples of 40 households were selected.

➤ **Sampling techniques**

• **Block selection**

From the Ranchi district Angara block was selected.

➤ **Village selection**

Under this block, Burakochoa village was selected purposively, that comes under the Jonha panchayat.

➤ **Selection of respondents**

Respondents were selected randomly in the normal statistically procedure for avoiding biases.

➤ **Method of data collection**

For data collection both quantitative (survey- personal interview) and qualitative (observation, case study) methods had been adopted. PRA is also another important part of data collection.

• **Preparation of schedule**

The first part of the schedule is socio-personal variables and some general information about age, sex, marital status, education, no. of family members etc. The second part of the schedule is Land holdings per family, land types, irrigation facility. The third part of the schedule

is the economics of others farming enterprises like livelihood, lac and last part of the schedule contained in the cost of cultivation of different crops.

➤ *Interview*

• *Structured Interview*

It is a type of interview where each interviewee is asked the same questions, in the same way. Consistent responses are obtained by the posing questions in such a way that responds to each question is limited to choices that can be recorded numerically through the checklists. An interview used in which the interviewer asks the questions, nothing more than it. The questions can only be answered yes, no or don't know or know or not known or applied or not applied. (Ray & Mondol, 1999).

• *Unstructured Interview*

It is a method of interviews where questions can be changed to know respondent's intelligence, understanding and belief. They do not offer a pre-set question for respondent, but they care about how each individual person responds to their questions. (Ray & Mondol, 1999).

• *Observation*

According to Pierre Belon observation is a special activity of human being consisting of receiving knowledge from the outside world by observing people's activity.

• *PRA*

Chambers (1992) has defined PRA is an approach and methods for learning about rural life and conditions from, with and by rural people. He further stated that PRA extends into analysis, planning and action. The aim of PRA is to help strengthen the capacity of villagers to plan, make decisions, and to take action towards improving their own situation. It is based on the principle that local people are creative and capable and can do their own investigations, analysis, and planning. Main target of PRA is to learn from rural people.

**V. RESULTS AND DISCUSSION**

After conducting the PRA we know many things about village like village resources, land topography, type of crop cultivation, development comes through the according to time changing etc. important things.

*A. Resource Map*

One of the important PRA tool is Resource map that is conducted by involving all villagers and facilitator. By using this tool knew about village resources. This village is surrounded by hills, one temple is also present in the entrance of village. Most of the grazing land is present in upland, and the middle and low land are take possession of crop land. Solar panel is the most important thing in this village. Though here, electricity problem is the main problem but in the evening, one or two light gets power from this solar and irrigation pamp also takes power from this solar, so in irrigation it's also play a vital role.

*B. Transect Walk*

It is conducted by researcher and participant to gain an understanding about land topography, soil fertility, water resources, water management, and diversity problem like that. In this village land topography is undulated, low land is situated between both side upland. Soil type is clay and sandy loam. Though in upland area water resources are not enough but in low land, villagers do not suffer in water scarcity problem but here almost all the area is getting over irrigated because of miss management of water.

| Male Population | Female Population | Total Population |
|-----------------|-------------------|------------------|
| 104 (40%)       | 153 (60%)         | 257              |

Table 3. Distribution of Respondents and their family members according to Male and Female population Index

This table reveals that, in this village female population is more than male population, where female population is 60% and male population is 40%.

| Age     | Male | Female |
|---------|------|--------|
| 0-5     | 13   | 24     |
| 6-10th  | 11   | 21     |
| 11-15th | 13   | 18     |
| 16-20   | 15   | 24     |
| 21-25   | 11   | 19     |
| 26-30   | 13   | 12     |
| 31-35   | 5    | 10     |
| 36-40   | 8    | 8      |
| 41-45   | 4    | 3      |
| 46-50   | 3    | 2      |
| 51-55   | 1    | 3      |
| 56-60   | 4    | 5      |
| 61-65   | 1    | 2      |
| 66-70   | 1    | 0      |
| 71-75   | 0    | 1      |
| 76-80   | 1    | 1      |

Table 4. Age wise distribution of Respondents and their family members according to the Male and Female population index

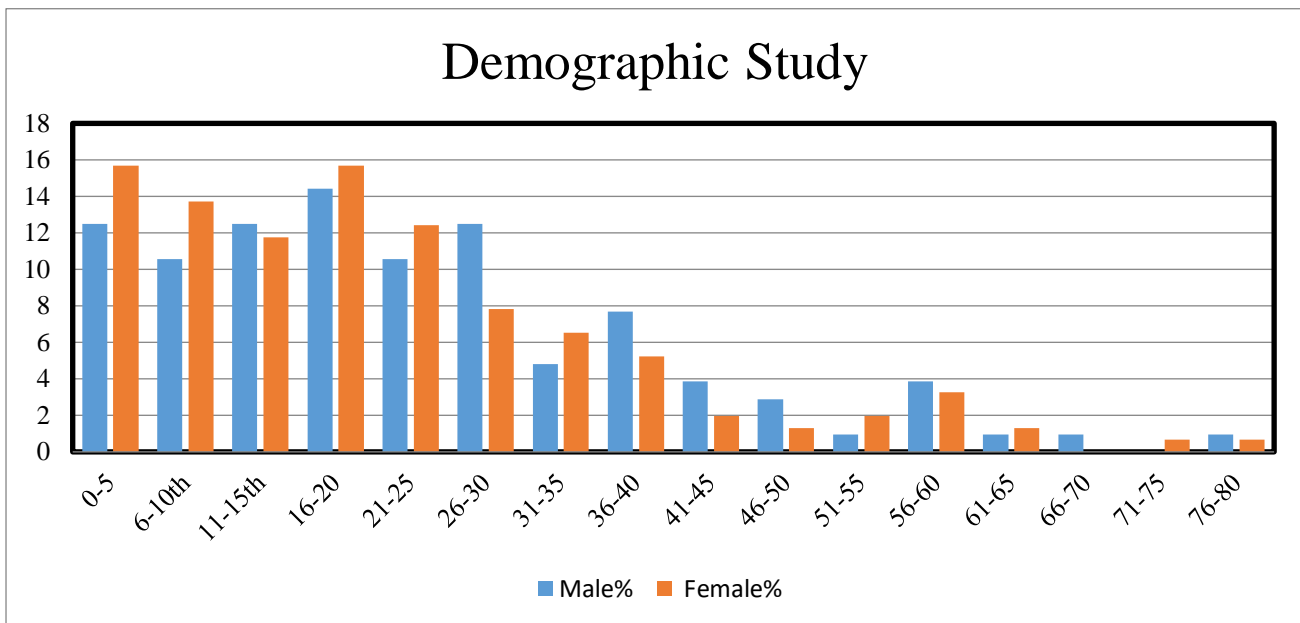
| Particular         | Very less   | High density           | Very less   |
|--------------------|-------------|------------------------|-------------|
| Household          | Very less   | High density           | Very less   |
| Temple             | Present     | Not present            | Not present |
| Agriculture land   | Very less   | Mainly fields are here | Moderate    |
| School             | Not Present | Not Present            | Present     |
| Water Availability | Not enough  | Very high              | Enough      |
| Grazing land       | Present     | Not Present            | Present     |



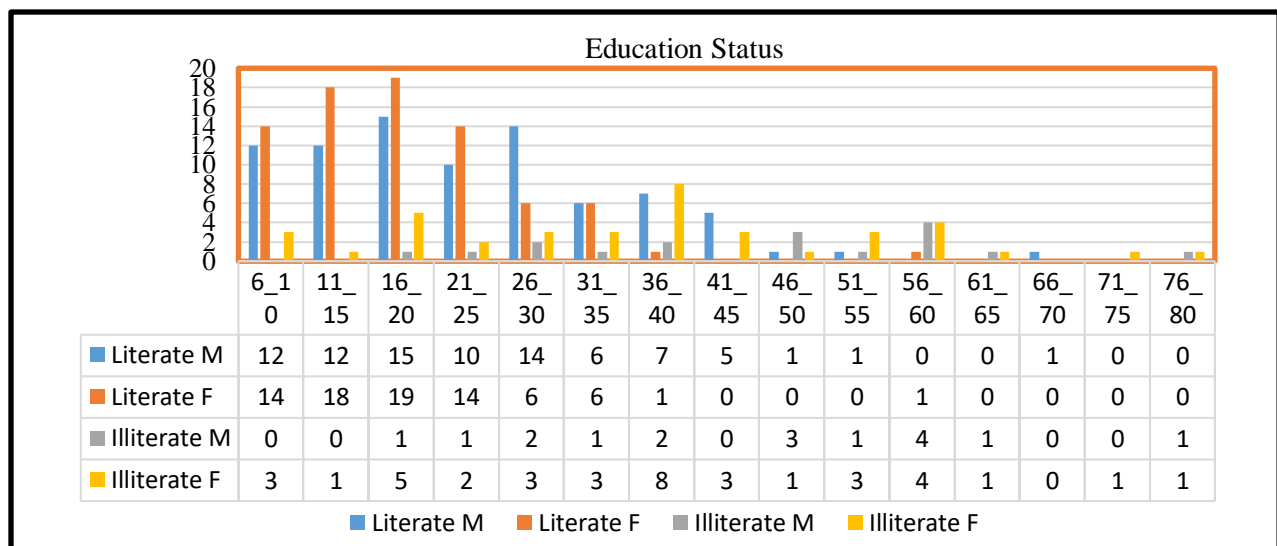
Age wise distribution of Respondents and their family members according to the Male and Female population Index. This table reveals that male and female population status of the respondents and their family members, that is high in (0-35) age group people and low in (36-80) age group people.

Table represents that the Female population is higher than the male population among (0-5), (6-10), (16-20), (21-25), (31-35) age groups members in young category and (51-55), (61-65) age groups members in old category people, whereas male population is higher than the female population among (11-15), (26-30) age group members in young category and (36-40), (41-45), (46-50), (56-60), (76-80) age group members in old category.

No male is present in (71-75) age group people and no female is present in (66-70) age group people.



➤ *Distribution of Respondents and their family members according to Education Level Index*



| Literate Male | Literate Female | Illiterate Male | Illiterate Female |
|---------------|-----------------|-----------------|-------------------|
| 84(38.35%)    | 79(36.07%)      | 17(7.7%)        | 39(17.80%)        |

Table 5. Distribution of Respondents and their family members according to Education Level Index

This table reveals that Education status of respondents and their family members where No. of Male literate is higher than the no. of female literate rate and no. of female illiterate is higher than the no. of male illiterate.

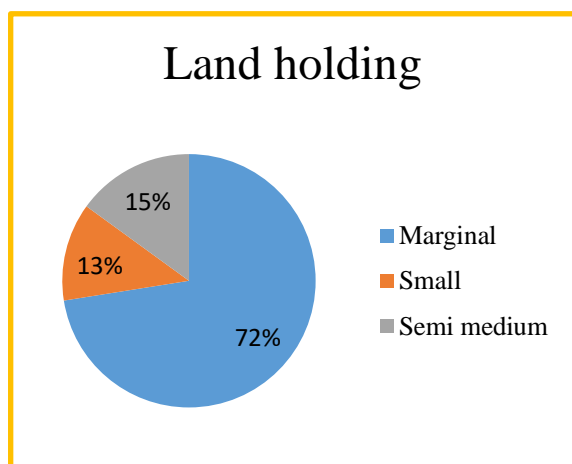
Male and female both literacy rates are highest in (16-21) age group people and lowest in (36-40) & (56-60) age group people. Male illiteracy rate is highest in (56-60) age group people and lowest in (16-20), (21-22) age group and most of the old males are illiterate. Female illiteracy rate is also highest in (56-60) age group people and lowest in (11-15) age group of people and most of the old females are illiterate.

| Type of farmers | Size of land(acre) | No. of farmers |
|-----------------|--------------------|----------------|
| Marginal        | ≥2.5 acre          | 29 (72%)       |
| Small           | 2.5 to 5 acre      | 5 (13%)        |
| Semi-medium     | 5 to 10 acre       | 6 (15%)        |

Table 6. Distribution of Respondents according to their Size of Land Holding

➤ *Distribution of Respondents according to their Size of Land Holding*

This table reveals to the different size of family, viz. Marginal, small and semi-medium category, where 72% farmers are marginal, 15% farmers are semi medium and 13% farmers are the small farmer. So, here most of the family belongs to marginal size family. Obviously, they are poor category farmers with this low land holding capacity.



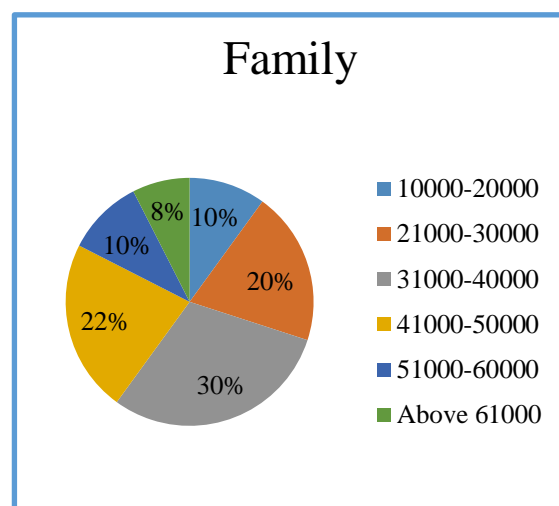
➤ *Distribution of Respondents according to their family Income*

This table reveals that 10% family earn Rs.10000-20000/annum, 20% family earn Rs.21000-30000/annum, 30% family earn Rs.31000-40000/annum, 22% family earn

Rs.41000-50000, 10% family earn Rs.51000-60000/annum and lastly only 8% family earn Rs. above 61000 .

| Income( Annualy) | Number of Family | Percentage of family |
|------------------|------------------|----------------------|
| 10000-20000      | 4                | 10%                  |
| 21000-30000      | 8                | 20%                  |
| 31000-40000      | 12               | 30%                  |
| 41000-50000      | 9                | 22%                  |
| 51000-60000      | 4                | 10%                  |
| Above 61000      | 3                | 8%                   |

Table 7. Distribution of Respondents according to their family Income



**VI. SUMMARY**

Basically, it is a remote village. Total 57 families are about in this village belonging from Bedia caste. More than half of the villagers are literate but education standard is poor, only one middle school is present here. 100% population belongs to the below poverty line. Female population is higher than the male population among (0-5), (6-10), (16-20), (21-25), (31-35) age groups members in young category and (51-55), (61-65) age groups members in old category people, whereas male population is higher than the female population among (11-15), (26-30) age group members in young category and (36-40), (41-45), (46-50), (56-60), (76-80) age group members in old category. Male and female both literacy rates are highest in (16-21) age group people and lowest in (36-40) & (56-60) age group people. Male illiteracy rate is highest in (56-60) age group people and lowest in (16-20), (21-22) age group and most of the old males are illiterate. Female illiteracy rate is also highest in (56-60) age group people and lowest in (11-15) age group of people and most of the old females are illiterate. In the village 72% farmers are marginal, 15% farmers are semi medium and 13% farmers are the small farmer. So, here most of the family belongs to marginal size family. Obviously, they are poor category farmers with this

low land holding capacity. 10% family's earn Rs.10000-20000/annum, 20% family earn Rs.21000-30000/annum, 30% family earn Rs.31000-40000/annum, 22% family earn Rs.41000-50000, 10% family earn Rs.51000-60000/annum and lastly only 8% family earn Rs. above 61000.

## VII. CONCLUSION

The villagers are now in below poverty line. But the intervention of organic farming by Divyayan KVK, Ranchi make their life little stable. And after 3years when they get the organic certification it will be much more sustainable and stable economy in the village.

## REFERENCES

- Acharya, S. S. (2006). Sustainable agriculture and rural livelihoods. *Agricultural Economics Research Review*, 19(2): 205-217.
- Behera, U. K. and Sharma, A. R. (2007). Modern concepts of agriculture: farming systems. Indian Agricultural Research Institute: New Delhi, India.
- Bond, W. and Grundy, A. C. (2001). Non-chemical weed management in organic farming systems. *Weed research*, 41(5): 383-405.
- Brandth, B. (2002). Gender identity in European family farming: A literature review. *Sociologia Ruralis*, 42(3): 181-200.
- Bulson, H. A. J., Snaydon, R. W. and Stopes, C. E. (1997). Effects of plant density on intercropped wheat and field beans in an organic farming system. *The Journal of Agricultural Science*, 128(1): 59-71.
- Chan, G. L. (1985). Integrated farming system. *Landscape Planning*, 12(3): 257-266.
- Clarke, N., Bizimana, J. C., Dile, Y., Worqlul, A., Osorio, J., Herbst, B. and Jones, C. A. (2017). Evaluation of new farming technologies in Ethiopia using the Integrated Decision Support System (IDSS). *Agricultural water management*, 180: 267-279.
- Deb, A and Sengupta, A (2016), Family Farms of East Singhbhum, Jharkhand: An Empirical Study.
- Integrated farming system (ss rana) Rajmani, R.C.(2007).Optimism on growth constrains over inflation, *Yojna*, (3): 44-47.
- Lal, R. and Miller, F. P. (1990). Sustainable farming system for tropics. In: Sustainable agriculture: Issues and Prospective. Vol.I (Ed.) R. P.Singh.pp.68-89, Indian Society of Agronomy, IARI, New Delhi.
- Lanjouw, J. O. and Lanjouw, P. (2001). The rural non-farm sector: issues and evidence from developing countries. *Agricultural economics*, 26(1): 1-23.
- Mahapatra, I. C. and Bapat, S. C. (1992). Farming systems research challenges and opportunities. *Eastern Indian Farming System Research & Extension, Newsletter*, 6(4): 3-10.
- Mandal, K. G., Saha, K. P., Ghosh, P. K., Hati, K. M. and Bandyopadhyay, K. K. (2002). Bioenergy and economic analysis of soybean-based crop production systems in central India. *Biomass and Bioenergy*, 23(5): 337-345.
- Morris, C. and Winter, M. (1999). Integrated farming systems: the third way for European agriculture? *Land Use Policy*, 16(4): 193-205.
- Ray GL and Mondol S. *Research Methods in Social Science and Extension Education*, Kalyani Publishers, New Delhi, Page 77-92.
- Reganold, J. P., Glover, J. D., Andrews, P. K. and Hinman, H. R. (2001). Sustainability of three apple production systems. *Nature*, 410(6831): 926.
- Singh, S. P., Gangwar, B., & Singh, M. P. (2009). Economics of Farming Systems in Uttar Pradesh. *Agricultural Economics Research Review*, 22(1): 129-138.
- Skillicorn, P., Spira, W., & Journey, W. (1993). Duckweed aquaculture: a new aquatic farming system for developing countries. *World Bank*.
- Stockdale, E. A., Lampkin, N. H., Hovi, M., Keatinge, R., Lennartsson, E. K. M., Macdonald, D. W. and Watson, C. A. (2001). Agronomic and environmental implications of organic farming systems. *Advances in Agronomy*, 70: 261-327.
- Yilmaz, I., Akcaoz, H and Ozkan, B. (2005). An analysis of energy use and input costs for cotton production in Turkey. *Renewable Energy*, 30(2): 145-155.