

**CHANGING RURAL LAND OWNERSHIP, LAND USE PATTERN AND IT'S
SOCIO-ECONOMIC IMPLICATIONS: STUDY ON TWO VILLAGES OF
BATIAGHATA THANA, KHULNA**

Md. Ashraful Alam^{a*}, Dulal Chandra Roy^b

^a*Urban and Rural Planning Discipline, Khulna University, Khulna-9208, Bangladesh.*

^b*Department of Urban and Regional Planning, Bangladesh University of Engineering and Technology,
Dhaka-1000, Bangladesh.*

Manuscript received: October 15, 1999; Accepted: December 20, 1999

Abstract: Land is the main repository of wealth, means of production and important determinant of social status of rural households in any developing country. About 86% of the dwelling units in Bangladesh is located in rural areas where land use and land ownership is changing rapidly. Population pressure and persistent poverty of people in rural Bangladesh are making land ownership pattern skewed and facing the conversion of agricultural land to homesteads and other uses. This paper through an in depth empirical study of two villages of Batiaghata Thana, investigated their changing land ownership and land use pattern for 1962 to 1998. It is found that in the study area agricultural land has reduced gradually and this is increasingly being used for non-agricultural purposes. Agricultural land in the study area reduced from 86% (of the total) in 1962 to 65% of total land in 1998. The main non-agricultural uses that have increased are settlements, roads, psici/shrimp culture, commercial uses etc. In 1962 land-less people constitutes about 24.49% of the households, whereas in 1998 they are 36% of the households. Changing land ownership and land –use pattern directly or indirectly affects the rural economy, societal interaction, morality and values. The main implications are fragmented land holdings, change in occupation, unemployment, marginalisation and social conflicts. The present study suggests that an effective land use planning and zoning regulations for rural Bangladesh could alleviate some of these problems.

Keywords: Land ownership; Land use; Socio-economic impact; Bangladesh

Introduction

Land is the most important and valuable asset in any developing country because ownership of land confers social, economic and political status and power to the owners. Social morality and values has been degraded due to changes in the rural land ownership and land use pattern. Agricultural activities dominate the national economy, making up 38% of gross domestic product (GDP). Considering the size of the agricultural population, availability of arable land per capita is less than 0.1 hectare (GOB, 1993).

In the developing countries like Bangladesh, land enjoys the highest importance as a resource because agriculture is the dominant sector of the country. Another important aspect of land in Bangladesh is that the rapid growth of population puts tremendous pressure on land. The alarming population growth leading to an apparently serious reduction in cultivable land has created the problem of deprivation, poverty, hunger, malnutrition and diseases. It is also one of the 47

* Corresponding author: Tel.: +88-(041)-721791, 720171-3/ 279; Fax: +88-(041)-731244; e-mail: <ku@bdonline.com>

DOI: <https://doi.org/10.53808/KUS.1999.1.2.329-337-ss>

countries categorized as least developed countries in per capita income, literacy rate, and contribution of manufacturing to Gross National Product (Hye, 1996).

In Bangladesh, rural land ownership is highly skewed. About 10 % of the rural households own 51 % of the total cultivable lands. Total geographical area of Bangladesh is 35.58 million acres, out of which farm area is 21.96 million acres. About 61% of land are cultivated by owners, 37% by owner cum-share holders and 21% by tenants. Due to rapid population growth, agricultural land are gradually being occupied under human habitation resulting decrease in cultivable land. If the rate of decreasing is continued, it will occupy about 30% of the land area by the homesteads by the turn of the century (Planning Commission, 1990). In the last few decades, land use pattern has changed significantly in the rural areas. The agricultural lands have decreased and converted for non-agricultural purposes such as roads, homesteads, public utilities etc. In most cases, proper emphasis was not given to land use planning at both the micro and macro levels resulting in unplanned, unorganized and uneconomical use of land.

This paper has attempted to understand the nature, extent and direction of changes in the rural land ownership and land use pattern and find out the socio-economic implications through an in-depth study of two villages: Dauniafad and Guptamari of Batiaghata Thana of Khulna District during the period 1962-1998.

Brief Information about Study Area

The study area comprises two villages (Dauniafad and Guptamari) of Batiaghata Thana of Khulna District and comprises a land area about 206 acres, of which the government owned about 7.5 acres. Rural households own the rest of the land. The two villages under the study area have a total population of 780 (156 families). The average size of family is 5.0 (Table 1).

Table 1. Number of families, total population and average family size in the study area.

| Category of Family | Families | | Population | | Average family size |
|--------------------------|----------|------------|------------|------------|---------------------|
| | Numbers | Percentage | Number | Percentage | |
| Landless ¹ | 57 | 36.54 | 278 | 35.64 | 4.88 |
| Small Farm ² | 74 | 47.44 | 368 | 47.18 | 4.97 |
| Middle Farm ³ | 21 | 13.46 | 108 | 13.85 | 5.14 |
| Large Farm ⁴ | 4 | 2.56 | 26 | 3.33 | 6.50 |
| Total | 156 | 100.00 | 780 | 100.00 | 5.00 |

Source: Field Survey, 1998.

Changing Land Ownership Pattern

Land ownership not only affects the size of the land holdings, field patterns, land use practices and cropping intensity, but it is also an important yardstick in assessing the socio-economic conditions of the farmers. Table2 shows that the number of owners has increased consistently over the years being 98 and 156 in 1962 and 1998 respectively. There is some variation in the quantum of total land for the two periods because of variations in the amount of land owned by the government.

The Table2 reveals that over the period the relative share of land owned by the large land holding categories - '7.1 to 8 acres', '8.1 to 9 acres', and '10 acres and above' have declined. During 1962, these groups constituted about 10% of the total owners and owned more than 45% of the total land. In 1998, their share declined to 26.82% and their number also declined very sharply to 3.20%. In contrast to these, the share of small owners has increased and their number has increased much

more than the increase in their share of land. Thus their position in terms of per household land owned has not improved at all. The share of land owned by the small land holding categories '0.1 to 1 acre', '1.1 to 2 acres' and '2.1 to 3 acres' have increased. During 1962, these groups constituted about 53% of the total owners and owned more than 27% of the total land. In 1998, their share increased to 39.65% and their number has remained about 50%.

Table 2: Land distribution by ownership size (1962-1998).

| Land ownership size (acres) | 1962 | | 1988 | |
|-----------------------------|-----------------|--------------------|------------------|-------------------|
| | Number of owner | Area (acres) | Number of owners | Area (acres) |
| Landless | 24 (24.49) | -- | 57 (36.54) | --- |
| 0.1 to 1 | 31 (31.64) | 17.18 (8.48) | 46 (29.49) | 22.40 (11.24) |
| 1.1 to 2 | 13 (13.26) | 19.06 (9.41) | 23 (14.74) | 32.20 (16.16) |
| 2.1 to 3 | 8 (8.16) | 19.42 (9.59) | 10 (6.42) | 24.41 (12.25) |
| 3.1 to 4 | 5 (5.10) | 17.38 (8.59) | 7 (4.49) | 24.48 (12.29) |
| 4.1 to 5 | 3 (3.06) | 13.30 (6.56) | 4 (2.56) | 18.24 (9.15) |
| 5.1 to 6 | 2 (2.04) | 11.20 (5.53) | 2 (1.28) | 11.12 (5.58) |
| 6.1 to 7 | 2 (2.04) | 12.24 (6.04) | 2 (1.28) | 12.84 (6.44) |
| 7.1 to 8 | 2 (2.04) | 15.10 (7.45) | 1 (0.64) | 7.48 (3.57) |
| 8.1 to 9 | 2 (2.04) | 16.31 (8.05) | 1 (0.64) | 8.26 (4.15) |
| 9.1 to 10 | 1 (1.02) | 9.45 (4.67) | 1 (0.64) | 9.58 (4.80) |
| Above 10 | 5 (5.10) | 51.85 (25.59) | 2 (1.28) | 28.24 (14.17) |
| Total | 98 (100.00) | 202.49 (100.00) | 156 (100.00) | 199.25 (100.0) |

Source: Field Survey, 1998.

Farm Size Changing Pattern During The Period 1962-1998

Over the last few decades, land distribution among major three farms, small, medium and large farms has changed significantly.

Table 3. Changes in farm households distribution.

| Categories | 1962 | | 1998 | | Percentage change over 1962 (+) 54.17 |
|------------|---------|-------------|---------|-------------|--|
| | Numbers | Percentages | Numbers | Percentages | |
| Small farm | 48 | 48.98 | 74 | 47.44 | |
| Mediumfarm | 17 | 17.35 | 21 | 13.46 | (+) 23.53 |
| Large farm | 9 | 9.18 | 4 | 2.56 | (-) 55.56 |
| Landless | 24 | 24.49 | 57 | 36.54 | (+) 137.50 |
| Total | 98 | 100.00 | 156 | 100.00 | (+) 59.18 |

Source: Field Survey, 1998.

The rural farm households in the study area increased from 1962 to 1998 indicating an increase of more than 57%. Changes in operated areas of farm households are shown below:

Table 4. Changes of operated areas of farm households.

| Categories | 1962 | | 1998 | | Percentage change over 1962 |
|------------|--------|---------------------|--------|---------------------|-----------------------------|
| | Acres | Percentage of total | Acres | Percentage of total | |
| Small farm | 45.95 | 22.68 | 66.60 | 33.42 | (+) 44.94 |
| Mediumfarm | 87.08 | 42.98 | 82.57 | 41.44 | (-) 5.17 |
| Large farm | 69.57 | 34.34 | 50.08 | 25.14 | (-) 28.01 |
| Total | 202.60 | 100.00 | 199.25 | 100.00 | (-) 1.65 |

Source: Field Survey, 1998.

The proportion of small farm (0.05 to 2.49 acres) households sharply increased from 48 (48.98%) in 1962 to 74 (47.44%) of the total households in 1998. Though the small farm households constituted an overwhelming majority, yet they shared about one third (33.42%) of the total operated land in 1998. The percentage of medium farm (2.50 to 7.49 acres) households reduced from about 17.35% in 1962 to 13.46% in 1998. The share of land possessed by this group remains same (42.0%) over the period. In 1962, the large farm constituted about 9.18% of households is possessed about 34.34% of the total operated land. The corresponding figures for 1998 were 2.56% and 25.14% indicating a reduction in both the numbers of farm households and share of operated land.

Changes In Plot Distribution

The plot number and their distribution by eleven size categories are provided in Table 5. The Table 5 reveals that while in 1962 total land of the study villages were divided into 212 plots (average size of each plot being 0.97 acre), the same land in 1998 was divided into 304 (average size of each plot being 0.68 acre). Most discouraging picture that emerges from the table is that while in 1962, the number of plots belonging to '0.01 to 0.50 acre' and '0.50 to 1.00 acre' size were 108 and 46 and about 50.94% and 21.70% of the total plots respectively, in 1998 their number increased to 184 and 63 respectively, being 60.52% and 20.72% of the total plots.

In general, the number of plots of relatively bigger size groups is fewer in 1962 as against in 1998. This situation reflects the increasing pressure of a fast growing population on limited land resulting in decreasing plot size as well as loss of land for making plot boundaries. Very small sized plots are creating problems in agricultural operations such as tilling and levelling of land difficult with adverse effect on production. The mechanisation of agriculture, especially the use of power tiller, which is going to be an imperative in the context of shortage of bullock power, will become difficult in very tiny plots.

Table 5. Plots distribution by size categories.

| Plot size (acres) | 1962 | | 1998 | |
|-------------------|-----------------|-------------------|-----------------|-------------------|
| | Number of plots | Total land (acre) | Number of plots | Total land (acre) |
| 0.01 to 0.50 | 108 (50.94) | 25.44 (12.32) | 184 (60.52) | 44.95 (21.77) |
| 0.51 to 1.00 | 46 (21.70) | 30.88 (14.95) | 63 (20.72) | 47.25 (22.88) |
| 1.01 to 1.50 | 27 (12.74) | 32.75 (15.86) | 30 (9.87) | 35.44 (17.16) |
| 1.51 to 2.00 | 6 (2.83) | 10.56 (5.11) | 9 (2.96) | 16.24 (7.86) |
| 2.01 to 2.50 | 5 (2.36) | 11.21 (5.43) | 6 (1.97) | 13.75 (6.66) |
| 2.51 to 3.00 | 4 (1.88) | 10.75 (5.21) | 3 (0.99) | 8.31 (4.02) |
| 3.01 to 3.50 | 3 (1.42) | 9.44 (4.57) | 3 (0.99) | 9.20 (4.45) |
| 3.51 to 4.00 | 2 (0.94) | 6.83 (3.31) | 1 (0.33) | 3.78 (1.83) |
| 4.01 to 4.50 | 2 (0.94) | 8.74 (4.23) | 1 (0.33) | 4.29 (2.08) |
| 4.51 to 5.00 | 2 (0.94) | 9.36 (4.53) | 1 (0.33) | 4.70 (2.28) |
| Above 5.00 | 7 (3.30) | 50.56 (24.48) | 3 (0.99) | 18.61 (9.01) |
| Total | 212 (100.0) | 206.52 (100.0) | 304 (100.0) | 206.52 (100.0) |

Source: Field Survey, 1998.

Changing Land Use Pattern (1962-1998)

In the present paper, an attempt has been taken to analyse the pattern of land use change in the study area during the period 1962-1998.

Table 6. Land use of the study area.

| Categories | 1962 | | 1998 | | Land involved in change (acres) |
|----------------------|-------------|------------|-------------|------------|---------------------------------|
| | Land(acres) | Percentage | Land(acres) | Percentage | |
| Settlements | 22.68 | 10.98 | 48.60 | 23.53 | (+) 25.92 |
| Roads | 1.30 | 0.62 | 4.30 | 2.08 | (+) 3.00 |
| Agricultural land | 178.02 | 86.20 | 132.56 | 64.18 | (-) 45.46 |
| Shrimp/pisci culture | 0.30 | 0.15 | 1.98 | 0.96 | (+) 1.68 |
| Water bodies | 2.62 | 1.27 | 14.38 | 6.96 | (+) 11.76 |
| Unused land | 0.80 | 0.39 | 0.30 | 0.15 | (-) 0.50 |
| Institutions | -- | -- | 2.12 | 1.03 | (+) 2.12 |
| Commercial places | 0.60 | 0.29 | 1.80 | 0.87 | (+) 1.20 |
| Others | 0.20 | 0.10 | 0.48 | 0.23 | (+) 0.28 |
| Total | 206.52 | 100.0 | 206.52 | 100.0 | |

Source: Field Survey, 1998.

From the Table 6, a brief discussion about the identified land use categories is given below:

Settlement: It is seen from the study that the rapid population growth has increased the large-scale use of cultivable land for homestead purposes. The rural settlements has not developed properly and economically resulting uneconomical use of land (Lal.N. 1989). Human settlements cover an area of 22.68 acres and 48.60 acres in 1962 and in 1998 respectively, which represents 10.98% and 23.53% of the total land of the study area. During the period (1962-1998), the total land converted from other purposes to settlements is about 25.92 acres being 12.50% of the total land.

Agricultural land: About 86% of the dwelling units are located in rural areas and they mainly depend on the agricultural land (Anon, 1993). The agricultural land presents 178.02 acres in 1962 being 86.20 % of the total area. The present agricultural land is 132.56 acres, which is 64.18% of the total study area. The agricultural land (45.46 acres) has been decreased and converted from agriculture to other non-agricultural used. Therefore, 22.02 % of the total land has been transferred from agriculture to other purposes

Commercial: In 1962, 0.60 acre of land being 0.29% of the total land of the study area were used for commercial purposes. Recently, the commercial activities including small business, shopping etc. has been increased in the study area. Now, 1.80 acres of land which is 0.87 % of the study area are being used for commercial purposes.

Shrimp/Pisci culture: In the study area, shrimp/pisci culture is being practiced significantly over the last few years. In 1962, about 0.30 acre of land were used for pisci culture. Now, shrimp/pisci culture presents 1.98 acres of land being about 1% of the total land.

Educational/Institutions: In 1962, there were no educational institutions in the study area. At present, 2.12 acres of land are being used for educational institutions, mainly for primary school. Other non-governmental organizations, such as CSS (Christian Service Society), Proshikha Manabic Unnayan Kendra etc. also exist there.

Roads/Transportation: In the study area, the Khulna- Batiaghata road is the only metal road. Other roads are katcha and brick built. In 1962, the total roads presented only 1.30 acres of the study area which was 0.62% of the total area. In 1998, 4.30 acres of land is used for roads, which is 2.08% of the total land (Table 6).

Waterbodies: Water bodies including three canals and various kinds of household ponds occupied about 2.62 acres of land representing 1.27% of the total land in 1962. On the other hand, in 1998 water bodies occupied about 14.38 acres of land, which is 6.96% of the total land.

Vacant land: The amount of unused land was 0.80 acre being 0.39% of the total land in 1962. The vacant or unused land has decreased over times. In 1998, the vacant land occupied 0.30 acre which is 0.15% of the total land.

Various Socio-Economic Implications

The landowners of the study area are facing a multiplicity of problems, which have contributed to their low agricultural production, low income, low standard of living, poor health and nutrition, low rate of literacy etc. A brief discussion about various implications due to land ownership and land use changes are given below:

Increasing Landlessness and Poverty: The peoples of the study area are facing the crucial problems of incessantly growing pressure of population on the limited land resources. At present, the small farms constitute about 48% of the rural households of the study area. In 1962, land less owners constituted about 24% of the total households, while in 1998, they are more than 35% of the total households. So it is said that landlessness is increasing rapidly in the study area. Landlessness is accelerated because small landholders can not survive on their lower agricultural income and are compelled to sell their land. This phenomenon leads to fragmentation of land holdings and splitting them into a number of very uneconomic small pieces of land, which effectively holds back the economic viability of land productivity and also labour productivity. The most evident reason of rural poverty is the low productivity of arable land devoted to crop.

Increasing Fragmented Land Holdings: Due to population pressure and operation of the laws of inheritance, there is continuous subdivision of holdings. The increasing pressure results not only in fragmentation of existing land holding but also downward mobility in the distribution of land ownership over the period. From the survey finding, it is seen that the total number of plots during 1962 period was 212 in the study area. These plots have been increased in 1998 to 304 (Table 5). Among them, plot size '0.01 to 0.50 acre' in 1998 constitutes 184 number of plots, which are about 60% of total number of plots. So, a characteristic feature of the cultivated land is its increasing division into small plots.

Reduction of Agricultural Land and Increase in Non-agricultural Land Use: During the study period 1962-1998, a large amount of agricultural land has been decreased at a very large extent. In the study area, in 1962 total agricultural lands were 178.02 acres representing about 86% of the total land. Now, the agricultural lands are 132.56 acres, which are about 64% of the total land. A large amount of agricultural land in the study area during 1962-1998 period has been transferred into non-agricultural uses. Erratic sprawling of housing and industries, imprudent alignment of roads and buildings, construction of brickfields and ponds on good agricultural land are some common features of the existing situation. Among others, changes in income and occupation, degradation of social morality and values, severe seasonal unemployment are the important impacts due to land ownership and land use changes.

Recommendations

The rural land ownership and land use pattern have been changing frequently in the study area. From the study, the major recommendations for reducing landlessness and better land utilization are stated below:

1. In the study area, human settlements, roads, commercial places etc. are increasing indiscriminately over the period without any planning or policies. It is also seen from the study that a large amount of agricultural land (45.46%) has been converted to non-agricultural purposes. So physical planning guidelines should be implemented through local administrative interventions such as Thana/Zonal Settlement Offices, Land Offices etc. In this purpose, proper laws and regulations may be provided by the national body such as the relevant ministry or other directorates.
2. It is revealed from the study that the landlessness among the rural people is increasing at a high rate. In the study area, the landless households constitute more than 35% of the total households. Agricultural *Khas* lands should be distributed by the government to the landless people. In this case, real landless people should be chosen by the Thana *Khas* Land Management and Distribution Committee (*Khas* Land Management and Distribution Policy, 1997). There are 2 million rural homeless families; if 5 kathas of land is given to each, 165,200

acres would be required, compared with 680,000 acres of *Khas* land identified by the government up till July, 1987 (Rahman, 1993)

3. According to East Bengal State Acquisition and Tenancy Act, 1950 (EBSATA, 1950), there was provision to hold maximum 375 *bigha* land for each family, in 1972, the maximum land of 100 *bigha* is determined for each family by the president order (order no. 18). Then in 1984, this is limited to 60 *bigha*. But no detailed rules and procedures were laid down for implementing such provisions. In the study area, there is an increasing trend of concentrating most of the lands in the hands of a few people. So rural land ceiling should be maintained by the relevant administrative interventions such as Thana/Zonal Settlement Offices, Land Offices etc.
4. There were inadequacy, inefficiency and corruption in land administration in the rural areas. The government of the country could undertake remedial measures and bold steps to strengthen and restructure the land administration and reduce corruption.
5. Decisions on the allocation of land for physical infrastructure such as roads, housing, commercial places etc. are not taken consciously at all. The land also is taken haphazardly by households, local bodies and central public departments without any co-ordination. So without people's participation in both decision-making and implementation, even the existing legal provisions of land use will continue to remain unimplemented. Therefore, distributive land reforms should be implemented and people's participation in the grassroots level should be ensured through proper co-ordination among the households, local bodies and central government.

Conclusion

The study tried so far to understand the nature, extent and direction of changes in the rural land ownership and land use pattern during the period 1962-1998. The survey shows that the small farms and landless households constituted major portion of the rural households, but owned comparatively a small portion of the total land of the study area. Land holdings typically are fragmented into a number of scattered fields. The survey also reveals that a large amount of agricultural lands have been transferred into non-agricultural uses during 1962-1998 period. Settlement is increasing indiscriminately without any planning or policies. The present study has provided some recommendations and guidelines to reduce landlines and for better use of land resources. If the local and relevant authorities with proper co-ordination with each other follow the provided regulations and guidelines, land reduction and proper land utilisation will be ensured. The present study also will be helpful for the further relevant study to gather new information in rural land ownership and land use changes in other part of the country.

Notes:

1. Landless: Landless families are those families, who do not own any cultivable land, but may or may not own homestead land.
2. Small farm: Small farm families are those families who own 0.01 to 2.50 acres of cultivable land besides homestead land.
3. Middle Farm: Middle farm families are those who own 2.51 to 7.50 acres of cultivable land besides homestead land.
4. Large Farm: Large farm families are those who own cultivable land above 7.50 acres besides homestead lands.

References

- Anon, 1993. *National Housing Policy*. Ministry of Works, Government of the People's Republic of Bangladesh, p.2.
- GOB (Government of Bangladesh),1993. *Forestry Master Plan*. Ministry of Environment and Forestry, Dhaka, p. 4.
- Hye, A.H., 1996. *Below the Line, Rural Poverty in Bangladesh*. University Press Limited, Dhaka, p. 1.
- Lal, N., 1989. *Rural Settlement Planning and Development*. Chugh Publication, Allahabad, India, p.126.
- Planning Commission, 1990. *The Fourth Five Year Plan(1990-1995)*. Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka, p. XIV-6.
- Rahman, T., 1993. *The rural homeless in Bangladesh*. UNICEF, Dhaka, Bangladesh, p. 40.