Problem of Sharecrop Tenancy System in Rice Farming in Bangladesh: A case study on Alinapara village in Sherpur district

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Abstract

The 1984 Land Reform Act in Bangladesh fixed land rent for sharecropping tenants at 33% of harvest yield without input sharing and at 50% with 50% of input sharing. This positively influenced expansion of HYV rice farming. However, the returns for tenants fell over time because of a gradual increase in input prices and wages. This research analysed the present distribution of returns in the dominant rice farming area in Bangladesh. A field survey was conducted in an advanced rice farming village where sharecropping was practiced. There was semi feudalism in the tenancy market with landowners earning more from sharecropping than they could from cash renting. Land-rich farmers often cultivated only a small part of their cultivable land and rented out most of it. The existing economic structure did not fairly balance the returns between tenants and landowners. This study suggested the need to reset the land rent at 20% of harvest yield without input sharing and at 40% with input sharing, to protect land-poor tenants.

Keywords: land reform, sharecrop tenancy, rice farming, Bangladesh

I INTRODUCTION

In 1996 there was extreme inequality of land ownership in rural Bangladesh with about 80% of farmers owning less than one ha (BBS, 1999). The land-poor farmers usually operated as owner-cum-tenant, cultivating leased as well as owned land. Landless farmers cultivated others' land only. Under traditional sharecropping landowners received 50% of harvest yield as land rent. Januzzi and Peach (1980) in their research found that the land ownership pattern and the dominance of sharecropping were the major constraints to technological progress in Bangladesh agriculture. Subsequently, the 1984 Land Reform Act fixed the land rent at 33% of harvest yield (without input sharing) and at 50% if landowners paid 50% of material input costs. This change helped expand high yielding variety (HYV) rice farming. Hossain's research (1989) found that small farmers and tenants adopted modern technology as much as large farmers.

The number of tenants increased from 3.73 to 4.55 million between 1983/4 and 1996. A total of 33.8% of farmers operated as tenants in 1996 and 10.2% of them were pure tenants. The area under sharecropping remained almost the same between 1983/4 and 1996 amounting to 1.9 million ha (BBS, 1999). Tenants grew mostly rice because this is the staple food of the Bangladeshi people. The distribution of the crop returns between landowners and tenants became an agrarian problem because of increasing prices (expressed in Taka[1]) of inputs and wages of agricultural labourers both paid by tenants. The returns from rice production did not increase as rapidly as the costs, even though yields of rice were increasing (Hossain, 2001). The rice grown was paddy (paddy-base) in this research. Changes in input prices, rice yields and rice prices are shown in Table I.

Table I. Changes in input prices, rice yields and prices at harvest

Year	Agric. labour wage (Tk /man-day)	Fertilizer price (Tk /100 kg)			Diesel price (Tk /100 litres)	Harvest time rice price (Tk/ MT)	Rice yield (MT /ha)
		Urea	TSP	MP			
1980/81	14	Average 300			505	3,200	2.02
1990/91	37	472	536	428	860	6,120	2.55
2001/02	65	576	1,135	884	1,700*	6,550	3.40

Note: Fertilizer and diesel prices for 1980/81 were taken from Ahmed (1995)
(*): Diesel price in June 2006 increased to Tk 3,300 per 100 litres

Source: Ahmed (1995), BBS (1995) and MOA (2005)

The wage rate increased from Tk. 14 to Tk. 65 per man-day between 1980/1 and 2001/2. In the case of fertilizers between 1990/91 and 2001/2, the price of Triple Super Phosphate (TSP) more than doubled; Muriate of Potash (MOP) doubled and the price of urea also rose. Diesel mostly used as energy in irrigation went from Tk. 5.05 /litre to Tk. 17.00 /litre during this period, and then to Tk. 33 /litre in 2006. The costs of production rose faster than the returns because of the very small increase in rice price between 1990/1 and 2001/2. The changes in costs of HYV Boro rice production between 1981 and 1999 are shown in Table II.

The cost of land, tillage & labour, and material inputs were 32%, 34% and 34% respectively of the total cost of production in 1981. The land cost decreased from 32% of total costs to 19% between 1981 and 1999. On the other hand, tillage & labour costs increased from 34% to 38% of total costs, even though the cost of family labour was underestimated in 1999. The tenants faced a rent burden paying 33% of harvest yield as land rent under sharecropping.

[1] Taka (shortly written as Tk.) is the currency of Bangladesh. The conversion rates for 1USD were equivalent to Tk. 16 in 1980, Tk. 33 in 1990, Tk. 51 in 2000 and Tk. 59 in 2004.

Table II. Changes in the cost structure of HYV rice production in Bangladesh

Year	Land cost		Labour & tillage cost		Material input cost		Total costs	
	Tk. /ha	Share	Tk. /ha	Share	Tk. /ha	Share	Tk. /ha	Share
1981	3,055	32%	3,305	34%	3,250	34%	9, 160	100%
1991	4,860	21%	9,700	41%	8,960	38%	23,520	100%
1999	6,175	19%	11,975	38%	13,640	43%	31,790	100%

Note: Cost of production for 1981 and 1991 were calculated by the Ministry of Agriculture and that for 1999 by the Ministry of Food. The 1999 figure underestimated labour cost taking different wage rates for hired and family labour @ Tk. 55 and Tk. 33 per man-day, respectively.

Source: BBS (1995) and BBS (2005)

Meanwhile, Hossain *et. al.* (2003) found from research a shift from sharecropping to fixed cash and in-kind tenancy. Land under sharecropping tenancy declined from 77% to 64% of the tenanted area between 1987/8 and 1999/00. This change to fixed rent tenancy favoured tenants. However, the Centre for Policy Development (2004) reported that landowners charged 0.9 MT rice per ha in 2000/1, but 1.5 MT in 2004 for in-kind tenancy.

The economics of sharecropping tenancy arrangements has become an agrarian issue in recent years. The problem centres on returns to tenants when their costs are rising. This research explored the tenancy problem in rice farming in a village of Bangladesh. The objectives of this research were (1) to evaluate the rewards to sharecropping tenants from cost and return analyses and (2) to identify a possible solution to the tenancy problem.

II METHODOLOGY

2.1. Selection of study area

The Sherpur was selected as a typical district from 64 districts in Bangladesh. In 1996, 31.2% of the farmers were tenants including 11.5% pure tenants (BBS, 2002), which was consistent with national figures of 33.8% and 10.2%, respectively (BBS, 1999). Nearly 75% of the tenanted area in the district was sharecropped in 2002/3 (DAE, 2004). The problems in sharecrop tenancy in rice farming were analysed in Alinapara village because sharecropping was practised in that village and rice farming occupied 85% of the total cropped area.

2.2. Sample and data

This research used secondary data collected from statistical reports of the Bangladesh Bureau of Statistics (BBS) and Department of Agricultural Extension (DAE), Sherpur Office. The primary data were collected from a field survey in September 2004. Current data about the village was collected from the local Agriculture Officer and from discussions with groups of farmers. For farm-level data collection, farmers were classified as small (owning up to 1 ha), medium (1 to 3 ha), and large (above

3 ha). There were 600 small, 71 medium and four large farmers in the village from whom seven small, four medium and one large farmer were selected as a representative sample by the Agriculture Officer. This sample included one pure tenant and two owner-cum-tenant rice farmers among seven small farmers and one owner-cum-tenant among the four medium farmers.

2.3. Analytical tools

The cost accounting method was used to analyse the costs and returns from rice. The cost of production was the sum of the land, material inputs, labour and tillage costs. Tillage cost was taken at Tk. 1,400 per ha, which was the average charge of power tillers in the village. Labour cost was the sum of family and hired labour costs, which were calculated using an average wage rate of Tk 70 /man-day estimated by Department of Agricultural Extension, Sherpur (2004). The material input cost included the cost of seeds, fertilizers, irrigation and pesticides. The land cost of Tk. 6,175 per ha per crop season was the cash rent estimated by BBS (2005) for 1999/2000 and by DAE Sherpur (2004) for 2002/3. Some farmers cultivated mortgage-in land taking the rights to land from landowners for a handsome refundable cash deposit. The land cost for mortgage-in land was calculated as the interest payable on the deposit. In the case of input share-tenancy, tenants paid the labour and tillage costs plus 50% of material input costs. Landowners paid 50% of material input costs.

The returns from rice farming were the value of rice receipts at Tk 8 per kg plus the value of by-product at Tk 3,700 per ha. Landowners' return under input share-tenancy was 50% of the rice with tenants' receiving 50% of the rice plus the straw. The profitability of rice farming was estimated as the net return and also disposable rice income. The net return per ha was the total return less total cost including land cost, divided by the total rice area. The disposable rice income was the sum of the net return and costs for land and family labour not payable as cash expenses.

III CHARACTERISTICS OF STUDY AREA AND SAMPLE FARMERS

Alinapara village is located about 200 km north of the capital city Dhaka and 10 km east of Sherpur district town. The area is medium lowland and is seasonally flooded. A river originating from the northern hilly part of the district flows beside the village and there is a risk of sudden floods from forest rainwater from May to July. Farmers until 1980 grew rice in two seasons each year; Aus (summer) rice between March and July, and Aman (monsoon) rice during August to November. The HYV Boro (winter) rice grown between December and April was started in 1981 and this changed the rice area in other seasons. Farmers got relief from flood damage risk by stopping the low productive Aus rice and growing the more productive and risk free Boro rice. Rice was easy to sell because Sherpur was a rice-processing block with many rice mills. Farmers grew mostly Aman and Boro rice and produced 42% surplus over consumption needs of 4,000 people in the village in 2004.

There were 1,000 households in about 4 sq. km area of Alinapara village. The composition of the households in the village is presented in Table III. The number of both farm and non-farm households increased from 1983/4 to 2004, but their proportion remained almost the same indicating that farmers were not leaving agriculture. There were fewer large and medium farmers but more small farmers.

Table III: Composition of households in Alinapara village 1983/4, 1996 and 2004

Characters	Year 1983/4	Year 1996	Year 2004
Total households	683 (100%)	852 (100%)	1,000 (100%)
Farm households	478 (70%)	577 (68%)	675 (67%)
Small farmers	342	483	600
Medium farmers	124	90	71
Large farmers	12	4	4
Non-farm households	205 (30%)	275 (32%)	325 (33%)
Households engaged in non-farm activities			
Rural transport	NA	77	100
Agricultural labour	321	279	200
Cottage industry	30	22	NA

Source: BBS (1988), BBS (2002) and Field survey (2004)

There was a decrease in agricultural labourers in the households engaged in non-farm activities. A severe scarcity of permanent labour was observed in 2004 because the extremely poor people could earn non-farm income even obtaining micro-credits from three NGOs working in the village. They sent their children to primary school as every child (who used to work as a permanent labourer) of a poor family got a stipend from the government. Involvement of agricultural labourers in other activities reduced the labour supply and drove wages up. However, the scope for non-farm activities for small farmers was mostly limited to petty shop keeping and other low income activities. The incomes of farmers with various enterprises differed with land ownership. The income composition of the sample farmers in 2004 is presented in Table IV.

Table IV. Distribution of income among different enterprises by farmer groups in 2004

Farmer groups	No. of sample	Categories of enterprises (Amount in '000 Taka and Figures in bracket indicates % of total)							
		Crop	Livestock	Fishery	Business	Sources	Service	Sources	Total
Small	7	47 (58)	9 (11)	10 (12)	8 (10)	Small shop at roadside	7 (9)	Pesticide spray, local postmaster	81 (100)
Medium	4	89 (48)	13 (7)	12 (7)	54 (29)	Grocery shop	17 (9)	Official job, pension	185 (100)
Large	1	173 (50)	31 (9)	38 (11)	104 (30)	Grocery shop	0 (0)	-	346 (100)
All	12	71 (52)	13 (9)	13 (9)	31 (23)	-	10 (7)	-	137 (100)

Source: Field survey (2004)

The average incomes of small, medium and large farmers were 81, 185 and 346 thousand Taka, respectively in 2004. Crop was the main source of income accounting for 52% of households' income. The share of crop income was highest (58%) for small farmers but their non-farm income share was the lowest. On the other hand, medium and large farmers undertook more business and service activities.

Crop income ranged from 47-173 thousand Taka depending upon the area of owned land. Land ownership and utilization for the sample farmers are presented in Table 5. Owned cultivable land of

small, medium and the large farmer were 0.35, 1.76 and 4.32 ha, respectively. The soil in the village was mostly clay and loam types suitable for rice farming. The large farmer had a sandy loam soil near to his homestead that was easy to take care of.

Table V. Ownership and utilization of land among different farmer groups in 2004

Farmer groups	Land distribution and utilization (area in ha)								
	Homestead (A)	Own cultivable (B)	Own non cultivable (C)	Owned area (A+B+C)	Rented in (D)	Rented out (E)	Mortgage in (F)	Mortgage out (G)	Operated farm (B+D-E+F-G)
Small	0.13	0.35	0.00	0.48	0.37	0.00	0.13	0.00	0.85
Medium	0.14	1.76	0.05	1.95	0.09	0.46	0.00	0.28	1.11
Large	0.20	4.32	0.04	4.56	0.00	3.24	0.00	0.00	1.08
All	0.14	1.15	0.02	1.31	0.25	0.42	0.07	0.09	0.96

Source: Field survey (2004)

The operated area did not differ much (from 0.85 to 1.11 ha) between the farmer groups because the medium and large farmers cultivated only a small part of their owned land and rented out most of it. Small farmers cultivated others' land more than their own (0.37 ha rented-in > 0.35 ha own land). It was found that tenants usually received the straw which the 1984 Land Reform law allowed a landowner to receive. Landowners gave up their straw because they did not have many bullocks or cows to feed.

Farmers operated as individuals and had no entity to represent them in the village. The agricultural extension service was not readily available in the village as it was located far from the Agriculture Offices. The organizational linkages of farmers were mostly loan-based and the sample farmers had links with a government bank, NGOs and local businesses. Small farmers borrowed from both NGOs and banks. However, the medium and large farmers borrowed only from banks.

IV EXTENT OF RICE FARMING AND DISTRIBUTION OF PROFIT

4.1. Extent of rice farming and rice yield among sample farmers

There were 459 ha in rice out of 540 ha cropped in Alinapara village in 2003/4. The cropping intensity (C.I.) measured the extent of crop farming, as a percentage of the net crop area. The C. I. of the operated farm area and the proportion in rice by farmer groups are presented in Table VI. Operated farm area is that land that is cultivated for cropping and can be owned, rented-in and mortgaged-in areas. The C. I.(s) of small, medium and the large farms were 205%, 201% and 236%, respectively. The highest C. I., that for the large farmer, reflected his concentration on rice farming. The operated rice areas of small, medium and the large farm, were 1.46, 1.87 and 2.09 ha, respectively. It was noted that 81% of the operated area of the large farmer was occupied by sandy and sandy-loam soils, not the best soils for rice, but he preferred rice farming irrespective of soil types because rice was easily sold.

Table VI. Composition of rice area among farmer groups and tenancy status

Farmer groups	C.I of operated farm area (%)		Operated rice area (ha)				Rent-out rice area (ha)	Total rice area (ha)
			Own land	Rented - in	Mortgage -in	Total D		
	Total	Rice	A	B	C	=(A+B+C)	E	(D+E)
Small	205	171	0.61	0.63	0.22	1.46	0.00	1.46
Medium	201	166	1.71	0.16	0.00	1.87	0.91	2.78
Large	236	192	2.09	0.00	0.00	2.09	6.48	8.57

Source: Field survey (2004)

The total rice area was the sum of the operated rice area and that rented-out. Total rice area and operated rice area were the same for small farmers because they had no rented-out land. The large farmer rented 76% of his total rice area. Medium and large farmers engaged tenants in rice farming as it was easy to collect their share of the rice income. Landowners did not usually change their tenants, and tenants were found to have cultivated the same land for several years. All sample tenants cultivated rice in both Aman and Boro rice seasons on rented-in lands. The profitability of rice growing was found by aggregating the two crops. The productivity of rice differed with land ownership and tenancy status as shown in Table VII.

Table VII. Rice yield of the sample farmers by farmer group and tenancy status

Farmer groups	Rice yield (MT/ha)				
	Operated rice area			Rented out	Average
	Own land	Rented-in	Mortgage in		
Small	3.63	3.40	3.10	-	3.45
Medium	4.01	3.80	-	3.45	3.81
Large	4.38	-	-	3.55	3.75

Source: Field survey (2004)

Rice yields were lowest for small farmers but were above the national average of 3.42 MT/ha in 2003/4 (MOA, 2005). The yield was highest for the large farmer on his own operated area because of using new seeds, extension advice and keeping contacts with Agriculture Officers. Rice yields of small farmers were low in rented-in areas. However, there was not much variation in HYV of rice between landowner and tenant. Landowners reported that tenants were less interested and less careful in cultivating rented land.

4.2. Profitability of rice farming, the farmer groups and tenancy status

The profitability of rice farming differed between farmer groups mainly because of the variation in yields. The costs and returns in rice production for farmer groups and tenancy status are shown in Table VIII. The net return from own operated farms was higher for large and medium farmers than for small farmers. However, large and medium farmers rented out most of their owned land because of limited availability of family labour. At most, about 2 ha could be operated and controlled by a family. Land-rich farmers reported that they could not provide good management for large operated areas. Moreover, higher costs from higher wages would occur if they hired more labour in a tight labour market. It was found that the large farmer received a net return of Tk. 4,275 /ha from rented-out land

compared to Tk 6,175 for cash renting. The large farmer tried to get higher returns by keeping his tenants under pressure by comparing his higher yield with the lower yields the tenants obtained.

Table VIII. Cost and return of rice farming (Tk. /ha) by farmer groups and tenancy status

Farmer groups and tenancy status	Total return (A)	Costs					Net return (G =A-B-C-D-E-F)	Disposable income (E+F+G)
		Tillage (B)	Materials (C)	Hired labour (D)	Family labour (E)	Land (F)		
Small farmer	25,295	1,400	5,949	3,180	6,376	3,434	4,956	14,766
Own operated	32,356	1,400	7,770	4,546	5,200	6,175	7,265	18,640
Rented in	17,300	1,400	3,678	1,798	7,620	-	2,802	10,422
Mortgage in	28,522	1,400	7,370	3,346	6,089	5,612	4,705	16,406
Medium farmer	27,704	942	6,365	4,291	2,412	5,815	7,879	16,106
Own operated	35,800	1,400	7,968	6,346	3,638	6,175	10,273	20,086
Rented in	18,890	1,400	3,825	6,691	3,023	-	3,951	6,974
Rented out	14,066	0	3,775	-	-	6,175	4,116	10,291
Large farmer	20,210	342	4,863	1,230	1,185	6,175	6,415	13,775
Own operated	38,775	1,400	7,990	5,041	4,866	6,175	13,305	24,346
Rented out	14,225	0	3,775	-	-	6,175	4,275	10,450

Note: Both the amounts of total return and material input costs for rented-in and rented-out areas were lower than those of own operated area because, the calculation was based on the actual receipts and payments of output and input shares after dividing those among landowners and tenants.

Source: Field survey (2004)

Average net returns and the net return from rented-in land were lowest for small farmers. However, small farmers had 43% rented in land in their operated rice area. They earned the lowest net return (Tk. 2,802) from rented-in rice farming but cultivated rented land instead of working as agricultural labourers. Tenants believed that working as agricultural labourers would hamper social prestige and they made a trade-off between economic gain and social prestige in cultivating rented land. However, disposable rice income did not differ much among farmer groups because 2/3rds of the labour supplied by small farmers came from the family.

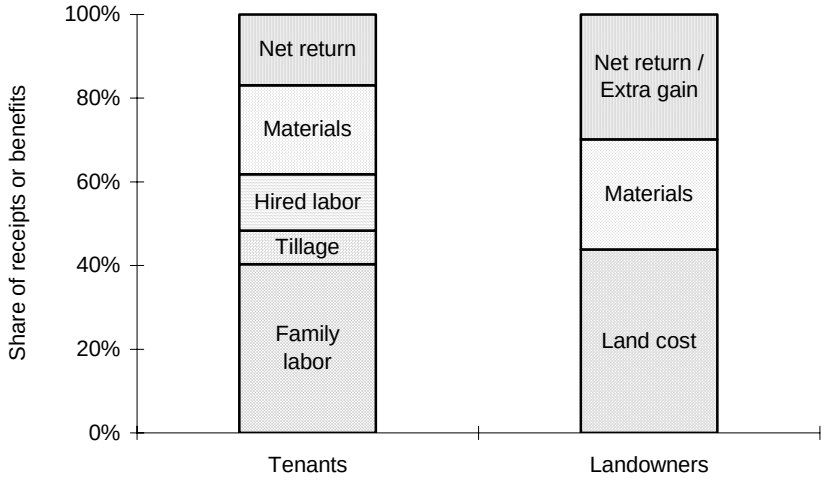
V PROBLEM IN SHARECROP TENANCY AND A POSSIBLE SOLUTION

5.1. Inequalities in distribution of returns and suggested re-distribution

The tenants were subsistence farmers and had much lower net returns than landowners. The distribution of returns between tenants and landowners can be seen from the analyses of the same rented-in farms (Table IX). The gross return from rented-in land was Tk. 31,580 per ha, the tenant receiving Tk. 17,505 (the value of the rice share and straw), and the landowner Tk. 14,075 (the value of the rice share). The difference between receipts and payments (Tk. 17,505 – Tk. 14,075 = Tk. 3,430) per ha was less than the value of the straw (Tk. 3,700), because one tenant paid for a share of the straw. After allowing for all costs, the net benefit for the tenant was Tk. 2,945, and Tk. 4,195 for the landowner. The distribution of costs and benefits between tenants and landowners is presented in

Figure 1. It can be seen that the relative net benefit or gain for landowners was higher than that for tenants.

Figure 1. Nature of receipts for tenants and landowners from a rented rice farm



Source: Field survey (2004)

The distribution of receipts for tenants and the payments to landowners from rented-in land and a possible rational re-distribution is presented in Table IX. Landowners cash renting would receive rent of Tk 6,175 but after paying for their share of material inputs, there remains a surplus. This sum could be termed 'landowner reward for materials' and is Tk 4,195 (landowner total receipts Tk. 14,075 – cash rent for land Tk 6,175 – material input costs Tk 3,705).

On the other hand, tenants pay explicit costs for tillage and hired labour in addition to their share of material inputs, family labour and management. The tenant would receive a 'tenant reward for material input' like the landowner because they also share costs for material inputs. In calculating the net return for tenants, nothing was allowed to them for their management but the tenants should get a reward for their management ('tenant reward for management'). This was estimated at Tk 2,400 per ha being the total net return of Tk 7,140 (Tk 4,195 + Tk. 2,945) distributed proportionately over the cash costs for material inputs, hired labour and tillage. No reward was allowed for any household assets. The 'tenant reward for management' of Tk. 2,400 was distributed for the cash expenses on tillage and hired labour.

Table IX. Distribution of returns from rented-in land and proposed re-distribution

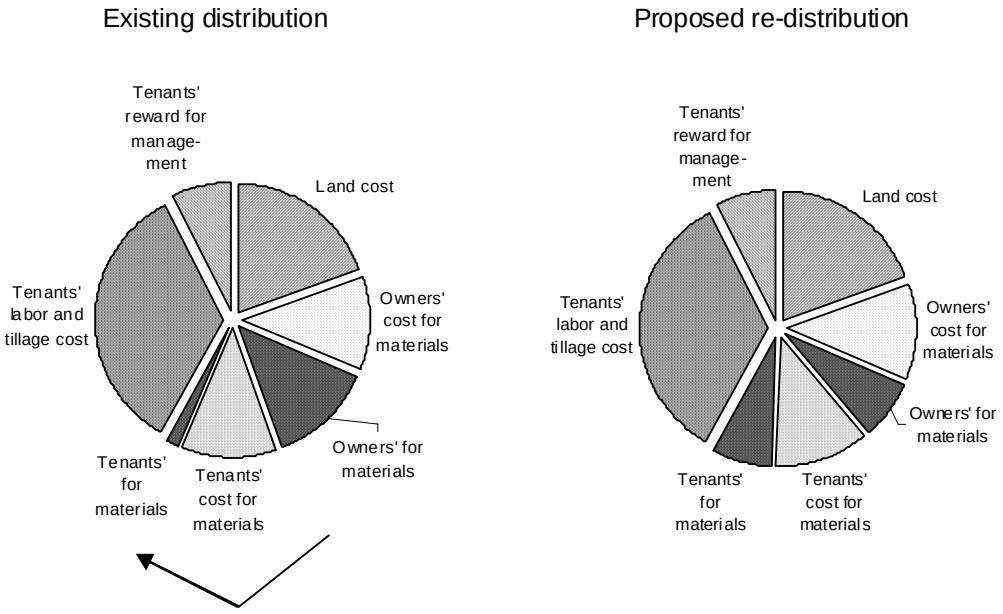
Groups	Distribution of existing returns		Re-category of existing distribution				Proposed re-distribution	
	Items	Tk/ha	No.	Items	Tk. /ha	%	Tk. /ha	%
Landowners' return Tk. 14,075 /ha	Land cost	6,175	A	Land cost	6,175	19.6	6,175	19.6
	Materials cost	3,705	B	Materials cost	3,705	(B+C)	3,705	(B+C)
	Net return	4,195	C	Reward for materials	4,195	25.0	2,370 (-1,825)	19.3
Tenants' return Tk. 17,505 /ha	Family labour cost	7.030	D	Family labour cost	7,030	(D+E+F+G)	7,030	(D+E+F+G)
	Hired labour cost	2,425	E	Hired labour cost	2,425	41.8	2,425	41.8
	Tillage cost	1,400	F	Tillage cost	1,400		1,400	
			G	Reward for management	2,400		2,400	
	Materials cost	3,705	H	Materials cost	3,705	(H+I)	3,705	(H+I)
	Net return	2,945 (I+G)	I	Reward for materials	545	13.5	2,370 (+ 1,825)	19.3
Total return Tk. 31,580 /ha					31,580	100	31,580	100

Source: Field survey (2004)

After allowing for a management reward, the residual (net return Tk. 2,945 – reward for management Tk. 2,400 = Tk. 545 per ha) was deemed the 'tenant reward for materials'. The 'reward for materials' differed greatly between tenants (Tk. 545) and landowners (Tk. 4,195). To more fairly distribute the rewards for material inputs of Tk 4,740 (Tk. 545 for tenants + Tk. 4,195 for landowners), it was decided to divide the amount equally between tenants and landowners. Tenants received Tk 1,825 from landowners after balancing the 'reward for materials' (Tk 4,195 - Tk 2,370). The current and possible distributions are presented in Figure 2.

The possible re-distribution suggests that 19.6% of gross harvest be the reward for land, 38.6% (landowner 19.3% + tenant 19.3%) for material inputs and 41.8% for tillage and labour. The amounts rounded would be 20%, 40% and 40% for land, tillage & labour and material inputs, respectively. In other word, landowners would receive 20% of gross harvest as land rent instead of the existing rate of 33% and would receive 40% of gross harvest after paying 50% of the material inputs instead of the existing 50% under the sharecrop tenancy system.

Figure 2. Distribution of return on rented-in rice farm and proposed re-distribution



Source: Field survey (2004)

5.2. Rationale for the proposed re-distribution

The landowners receive 50% of both rice and straw after paying 50% of material input costs under share-tenancy system as per the 1994 Land Reform Act. The land-rich farmers preferred share-tenancy because they gained more (Tk 10,370 per ha) than from cash renting (Tk 6,175 per ha). Even paying high rents, tenants in the study village cultivated rented-in land because not all could gain non-farm jobs as these were limited to rural transport, petty shopping or agricultural labouring.

Tenants would benefit from cash renting or payment of rent in-kind where rent is payable in terms of rice after harvest. However, tenants in the study village could not leave the share-tenancy system because they (a) were afraid of the risk of crop failure from flooding, (b) were unable to pay the cash rent that landowners demanded in advance, and (c) needed a higher in-kind rent. Moreover, they could not bargain with the landowners because there was no entity to bargain on their behalf.

The economic circumstances of capital-poor tenants did not allow them to rent land for cash. Considering only the well-being of tenants, government could legislate to change the income distribution between tenants and landowners. The reduction of crop-share for land from 50% to 40% of harvest in case of input sharing would reduce returns to landowners. This would encourage them to rent-out land with easy terms and shift towards cash renting. The suggested re-distribution would increase the return of tenants encouraging them to intensify production and increase productivity, and would reduce income inequalities.

VI CONCLUSIONS AND POLICY ISSUES

This research evaluated sharecropping as practised in one village. The soil was medium lowland with clay and loam soils suitable for rice farming. The village had a risk of crop damage from sudden flooding. Farmers grew rice twice a year in Aman and Boro seasons and had abandoned low productive Aus rice farming. The HYV Boro rice farming in the dry season had increased because suitable soils needed relatively limited irrigation. Rice productivity was highest for the large farmer because of using new seeds and taking great care of a small area of owned land. All farmers were in advantageous position in selling rice as there were many rice mills in and around the village. The land-poor farmers preferred rice farming on both the operated and rented out area as the crop was easily sold and it was easy to collect their share under the share-tenancy system.

The large and medium farmers preferred to rent-out most of their land and employ tenants. The large farmer from share-tenancy earned about 70% more than cash renting after paying 50% of material input costs. On the other hand, tenants received a lesser share from their rented-in farms. The distribution of costs fixed in the 1984 Land Reform Act could no longer support tenants. There were inequalities in rewards not balanced by economic forces. New legislation to re-fix the returns at 20% harvest for land, 40% for tillage & labor, and 40% for inputs would assist tenants.

This research evaluated sharecropping in one village where there was a risk of sudden and seasonal floods. However, the share-tenancy system was found to be changing towards cash and in-kind rent tenancy systems in some other areas in the country. The economic agents for these transformations are important issues in analysing agrarian changes. Any future study should be extended to evaluate the cash, in-kind as well as sharecropping to strengthen any recommendation.

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