LAND RENTAL TRANSACTIONS IN IRRIGATED SETTLEMENTS: EQUITY AND PRODUCTIVITY IMPLICATIONS

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The rural land market in Sri Lanka is considered to be highly restrictive due to rigid controls on transfer of lands, which were assigned to settlers only with cultivation rights at the time of distribution. However, an emergence of an informal land market has now been evident. Such informal market transactions are considered to enhance economic efficiency of rural agricultural systems by transferring land to more efficient producers, which would also lead to improve in land productivities. There are implications on distribution of operational size of the land holdings as well. The purpose of this study was to describe the nature of the informal land market in irrigation settlements in Sri Lanka. The specific objectives were to: (i) examine the effects of rental transactions on distribution of operational holdings. (ii) quantify the extents of own and rented land operated by different size classes. (iii) analyze the land productivity of owned and rented lands.

Data required for the analysis were gathered from a household survey conducted in five major irrigation schemes in Anuradhapura District among 450 paddy farmers. Three groups of farmers were interviewed in equal proportions (150), *i.e.*, those who do not participate in land rental transactions (non-participants), those who rent in (lessees) and rent out (lessors) and information on transactions made on lowlands was obtained using a structured questionnaire. The survey was conducted in 2010/11 *Maha* season. Lorenz curves and *Gini*-coefficients were used to assess the distribution of operational holdings and allied equality. ANOVA and correlation coefficients were used to compare land productivity levels.

Results indicated that three types of rental transactions were predominant *i.e. Wee badu* (90.5%), *Mortgage* (7.9%), *Ande* (1.6%). Eighty five percent of transactions were observed between either neighbours or relations of the same settlement. The period of agreement varied from 1 to 40 seasons and 97% of them were verbal agreements.

Informal transactions have helped an average lessee to increase the holding size from 3.53 ac to 5.23 ac. The majority of lessees owned small holdings or were landless (92%) before they acquired lands through informal transactions and were able to increase the size of holding from 0.38 to 2.14 ac (463% increase). Lessees who owned small and large sized holdings have acquired smaller extents (1.82 and 1 ac respectively) compared to medium sized owners (2.5 ac). Though there are no significant differences of mean land productivities of operational holdings across size classes, a positive correlation between operational holding size and land productivity has been observed (Table 1).

The results of the analysis of lessors indicated that on average a lessor has rented out 1.27 ac of land and had decreased the operational holding from 2.94 to 1.65 ac. Table 2 shows that the majority of the lessors owned small holdings (55.3%) followed by medium (32%) and large holdings (12.7%) prior to the transaction. The extents rented out were 0.62 ac, 2.3 ac and 0.9 ac for small, medium and large farmers, respectively. Size reduction of operational holdings compared to own land was recorded as 44.9%, 76.7% and 20.9%, respectively of small, medium and large lessors. Land productivity also demonstrated a positive correlation with the size of operational holding (Table 2).

Table 1: Size of the land holdings and productivity of lessees

Ownership class	Number of farmers	Mean extent of own land (ac)	Mean lands rented in (ac)	Mean size of operational holding (ac)	% increase of op. Holding	Yield (kg/ac)
Small (< 2 ac)	138 (92.0%)	0.38	1.82	2.14	463.2	1,908
Medium (2 <and < 3 ac)	10 (6.7%)	3.18	2.50	5.68	78.6	1,963
Large (> 3 ac)	2 (1.3%)	7.00	1.00	8.00	14.3	2,033
All	150	3.53	1.77	5.23	185.3	1,968

The small, medium and large sized holders among non-participants were 48.0%, 43.3% and 18.7% respectively. A positive correlation between operational holding size and land productivity has been observed.

Table 2: Size of the land holdings and productivity of lessors

Ownership class	Number of farmers	Mean extent of own land (ac)	Mean lands rented in (ac)	Mean size of operational holding (ac)	% increase of op. Holding	Yield (kg/ac)
Small (< 2 ac)	83 (55.3)	1.38	0.62	0.76	44.9	1,983
Medium (2 <and < 3 ac)	48 (32.0)	3.00	2.30	0.70	76.7	1,967
Large (> 3 ac)	19 (12.7)	4.43	0.90	3.50	20.9	2,130
All	150	2.94	1.27	1.65	47.5	2,027

Land productivity of lessees, lessors and non-participants were recorded respectively as 1,968, 2,027 and 2,248 kg/ac, but not significant (p,0.05). The reason for this could be attributed to the presence of high degree of fixed rental (*wee badu*) contracts which reduces the problem of moral hazard compared to sharecropping that shares the production risk between owner and the operator of rented land.

It can be concluded that rental transactions in these settlements has a reallocation effect transferring lands to landless and large scale commercial farmers. Type of land ownership does not have an impact on land productivity. Finally it can be concluded that land rental market can work as a versatile and less restricted means of redistributing land resources, while protecting productivity in these settlements.

REFERENCES

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