

# Land Issues Affecting Irrigated Agriculture

By R. D. Wanigaratne

Dr Wanigaratne is Director of the Planning and Monitoring Unit of Mahaweli Authority of Sri Lanka. Formerly he has served as a Deputy Director of the Agrarian Research and Training Institute and as a Lecturer in Peradeniya University of Sri Lanka. Dr Wanigaratne has a large number of research publications on Agrarian and Land Tenural problems to his credit.

## INTRODUCTION

The relationship between poverty and growth is often postulated *viatrade offs* between allocation of resources for production and consumption. Such a prognosis generally subsumes that conditions promoting poverty and growth operate at levels different to each other. Yet these conditions are but different manifestations of on-going processes of capital accumulation and in this sense 'level-neutral'. For example, the mode of incorporation of rights to land in the production process has a distinct bearing on the degree and nature of poverty.

Thus, a principal determinant of agricultural progress and economic opportunity creation as well as poverty generation in an agrarian setting such as Sri Lanka, lies in the nature of its land base, its agrarian structural relationships which assist or inhibit technological progress, agricultural productivity growth and wider access to benefits of such growth.

It is in the above context that the choices offered by the land base will be examined as they pertain to the issues of land ownership, tenure and land rights affecting irrigated agriculture.

### Tenure Systems In Irrigated Settlement Projects

Resettlement of landless poor of Wet Zone areas under village expansion schemes in the Wet Zone itself and under irrigated and rainfed resettlement projects in the Dry Zone, was viewed by successive governments since early 1930s as a gradualist strategy for ensur-

ing land, food and income security in rural areas. It was also seen as a means of increasing domestic food production and as a method of overall rural development.

Between 1920 and 1985 nearly 793,468 hectares (including land alienation under the new Mahaweli and other recent projects) of state lands were alienated through various projects among 870,622 families. Irrigated Settlement projects numbering 107 accounted for 298,304 hectares (40% of the total area alienated under different projects) and resettlement of 226,083 landless poor families (26% of the total resettled) in the Dry Zone.

The legal tenure system in irrigated settlement projects is based upon a 99 year lease prescribed by the Land Development Ordinance (LDO) No. 18 of 1935. The lease incorporates certain restrictions as well as flexibilities. Not only were restrictions placed upon sales, mortgages, leases and subdivisions in the inheritance process, but the ordinance also expressly prohibited the seizure or foreclosure sale of alienated state land for collection of debt repayments (LDO of 1935: Chapt. V., pp. 13-14; Chapt. vi., pp. 15-15). A minimum fraction rule restricted subdivision whereby lands could not be subdivided below a prescribed holding size. Through these provisions, the restricted rights held in land by settlers were protected against outside investors as well as against the normal inclination of settlers to subdivide their lands among all children.

On the succession issue, the Ordinance of 1935 prescribed that a permit holder could nominate only one successor to his allotted holding. According to this the

permit was personal to the holder. Upon his death the title passes to a successor duly nominated by the permit holder (LDO of 1935: Chapt. VII, Sect. 48 p. 16) In case of intestate succession, an order of preference amongst family claimants for the 99-year lease permit was prescribed.

Thus, the 99-year lease placed restrictions on holding size, land transfers, and access to alienated land.

The 1935 ordinance and the 99-year lease was based upon two central assumptions. According to Schickele (1968: 42) these are:

(a) that fee-simple ownership was not a necessary incentive to increase production. The subdivision of holdings in the inheritance process arising from fee-simple ownership, was therefore deemed counterproductive because this led to uneconomic fragmented holdings;

(b) in a milieu where land market imperfections exist, a restricted tenure prevents accumulation and related conditions of absentee landlordism in alienated state lands.

The expected outcome of lands alienated through the 99-year lease on the basis of above assumptions was, in the words of Sir Clifford, a Governor of Sri Lanka in the 1920s and a principal proponent of peasant settlements, to create "... a prosperous self-supporting, and self respecting multitude of peasant proprietors..." (Hansard: 1927: 283-307) - in essence, the creation of a "market-oriented" family farming system in settlement projects.

In creating irrigated settlements in the Dry Zone areas, successive governments from 1935 initially directed an extensive scale of aid to entice Wet Zone landless to resettle in the then hazardous environments of the Dry zone. However, in view of the substantial costs involved, relatively low cost strategies of resettlement of persons have been adopted since 1950s. The allotted holding sizes (including homesteads) have diminished over the years from 3.3 hectares in the 1930s and 1940s, to 2.9 - 2 hectares in 1950s, to 1.4 hectares in the early 1960s and to 1.1 hectares, thereafter. This reduction in

allotted holding size was rationalized by policy makers on grounds of:

- (a) higher absorption of landless persons in settlement lands,
- (b) higher intensification of production which was expected to yield an adequate output, employment and incomes.

In spite of numerous problems which have arisen in settlement projects, the territorial safeguards have largely prevented a permanent fragmentation of the land. Private investor accumulations are considered to account only for about 7-8 percent of the total land area alienated in Dry Zone settlements. These accumulations are transitory as the land laws reject them.

Increasing ownership and use value of agricultural land which accompanies market infiltration, stresses prevailing tenure systems of settlement lands in two ways. On the one hand, tenure systems are pressurized to accommodate the investor demand for prime agricultural land. On the other, a more basic and stronger pressure emerges from parcellary claimants to gain access to family lands and their product for their very survival. The operation of these pressures on the tenure base generates counter-productive features such as fragmentation and parcellisation of settlement lands, and increasing incidence of micro holdings, tenure insecurities and landlessness in these lands (as well as in private lands owned and operated under traditional tenure forms). The above features also retard technological progress in agricultural lands.

Mounting research evidence reveal that all is not well with the land and production base of settlements. The expected settlement initiated overall regional development, which would have contributed to reduce rural poverty, has also not materialised. Rather, as some recent reports contend (Wanigaratne: 1987; Wickremasekera: 1985; Gooneratne and Gunawardena: 1984), poverty seems to be generated within them as well as within their encompassing regions.

Land constraints arising from uniformity and small holding sizes, legal restrictions placed upon their ownership and use,

and the diminished availability of land for encroachment places a limit on the numbers that can be accommodated in available lands and their product. The production process itself is constrained by rising production costs and declining investment capacities of producers. The latter is partly a result of prevailing land and product fractionations that goes on in settlements as a part of family level accommodation processes to absorb increasing population.

While the total product of holdings tends to be fractionated among parcellary claimants, which in fact breeds poverty in settlement projects, physical fragmentation of land has largely been prevented (Wanigaratne: 1989). Informal land transactions exist in settlements leading to cash and produce share 'tehancies' as well as land leasing by non-settler entrepreneurs, acquisition of cultivation rights on account of default of loans from private sources. But, they indicate an impermanency on account of the overriding authority of the Ordinance.

For example at Uggal-Kaltota, a small-medium sized irrigated settlement scheme on the upper reaches of the Uda Walawe, Wanigaratne (1984: 129) observed, "Quite a range of land transfer forms exist at Kaltota. A general feature associated with these forms is a strong element of adaptability to changing situations. These range from the changing economic positions of settlers, their children and other relatives and outsiders (non-relatives) to the changing long term relationships associated with the maintenance of institutions such as marriage and family."

#### Evolution of Tenure Forms In Irrigated Settlements

Several studies provide corroborative evidence that informal land transactions are quite active in both old and new irrigated settlement projects of the Dry Zone. The evidence provided by these studies also reveal that forms of informal land transactions akin to what has been found within rainfed paddy lands of the wet zone, as well as within small tank irrigation systems of the dry zone, have also appeared within major irrigated settlement schemes of the dry zone.

Clearly in an agricultural environment based largely upon monocrop production, as found within irrigated settlements of the dry zone with little else in terms of new employment and income choices besides in paddy, increasing inter-generational populations tend to be pushed back into the paddy base, land and its product. Inevitably, complex tenure arrangements emerge (as was demonstrated before) to accommodate these populations to the best possible that settlers, their economy, and society could afford. This is only capable of maintaining increasing settler populations at a subsistence minimum.

Settlement research indicates that a high incidence of informal land transactions are present in settlement projects both in their inception phase as well as over the long-run. This, in effect, denotes that the holding size and "ownership" (through a 99-year lease) integrity that is sought through the Land Development Ordinance of 1935, as the basal land law governing alienation and subsequent use of state land by alienees, is negated through a process of informally driven land/product fractionation.

The process of informal land transactions is better understood through viewing settlement schemes as dynamic entities. Their land base, its ownership, use and size of operational holdings, undergo dynamic changes on account of economic, social and environmental changes which affect settler populations. The evolution concept pertaining to the development of frontier land settlements posits an initial phase of stress confronting new settlers as they strive to adapt to the new settlement environment. Scudder (1981) notes,

"It is a stage of settler adaptation, which can be expected to last for two to five years for the majority in well planned and well implemented projects, and for a considerably longer period in other settlements. In most cases, settlers need adapt to a new agroecological zone as well as to new production techniques and forms of social organization: to new neighbours (both hosts and other settlers); and to closer government supervision. For this reason it is a period of uncertainty for the settlers. Uncertainty involve stress,

with most settlers trying to reduce further risks by clinging to the familiar...land use tends to be characterized by extensive agricultural systems of relatively low productivity rather than by agricultural intensification... Throughout the transition stage, the majority of settlers tend to be risk-averse; they adopt a conservative stance, their first priority being to meet the food needs of their family" Scudder: 1981: 3-4.

A short-run subsistence orientation during this initial phase of settlement therefore, seems inevitable with "risk aversion" which usually accompany such as orientation among new settlers. According to one study... risk aversion may be quite strong because the returns above expected values may not offset the severe penalties (such as a serious lowering of living standards) for returns below the expected values".

In this transitional phase, as a strategy of minimizing risks of self management of holdings while also maximizing household earnings and meeting their subsistence needs, some settlers may let all or part of their holdings for a season or two for a cash sum of a produce share. In general, the need to gain cash to defray substantial costs incurred in adapting to a new environment is perhaps uppermost in the settler household allocation of land and labour during this phase.

Global and local settlement research reveals that two to five years after settlement, non-agricultural employment associated with infrastructure development are well nigh exhausted. Settlers who are so employed are eventually left to their own resources – their allotted lands and family labour. Agriculture then becomes more attractive as the best (and perhaps the only) choice available. More settlers may therefore opt to work the lands themselves than let them out to investors.

Over the long run, with second generation pressure on the economy on the increase, more of the settler lands would tend to be allocated among own family members either for produce shares or exclusively for their own subsistence. It may arise sooner as apparently found in the initial settlements of the Mahaweli H-area where over 50 percent of the settler

families were mature families with more second generation adults.

Generally, 'large' land accumulations, letting of lands to investors, become marginalised over the years with a minority of "failed settlers" habitually involved in it. The majority cultivates their own land with informal accommodation of family members in the land and its product, which maintains their food, income and employment needs. Reports of settler (heads of households) majorities responding to "own cultivation" of their holdings indicated in research studies on older settlement projects, on closer scrutiny reveal evidence of substantial individual family use accommodation – in land and its product – with accompanying land and product fractionation.

The consequent overall long run economic position of a majority of settlers would still remain risk-averse with expanding household populations largely dependent upon the economy of allotted holdings for their food and living needs. With expanded population accommodations (in a largely paddy based economy) lowering disposable incomes, most farms tend to be operated on a constant and low stock of capital. Once more, the overriding objective of investment among most settlers over the long run seems to be to secure a means of subsistence for expanding family populations at a minimal cash cost.

Evidence from empirical studies on settlement projects also points towards an apparent qualitative shift in forms of informal land transactions at different phases of development of settlement projects which justify the above thesis. Apparently, cash-based land transactions predominate in the inception phase of a settlement whereas produce share based land transactions dominate over the long run.

The need to accommodate rising settler household populations as a foremost consideration of permit holders in their allocation of resources within their reach, seems to be borne out. For example, Dewahuwa, Uggal-Kaltota, Kirindi Oya incorporated old settlement areas, and Padaviya, all of which are over 20 years of age, reveal that only a minuscule

number of their total settler population (3%-4%) operated paddy land on a cash lease basis. Much more were accommodated on a crop share basis.

It is considered that, on the detailed field in evidence from Uggal-Kaltota, a substantial part of the "share-tenancies" to the settlement projects would in fact be family level accommodations of an informal form and not a strict demarcation of crop shares as found in share tenancies in private lands (eg. in the Wet and Dry Zone villages).

The high incidence of share tenancies identified by Bulankulame (1986), Siriwardena (1981) and Tilakasiri (1980), in the H-Area of the Mahaweli Project, so early in its settlement history, indicates a problem of settler selection. Most were relocatees from Purana villages of the Kalawewa area and some were from Kotmale and Victoria relocatees. Most were mature families with able bodied children. In settling these families in the H-Area, the phenomenon of subsistence-maintenance through accommodation of family members in land and the product, usually noticeable 15-20 years after settlement, has been noticed quite early.

It is concluded that settlement projects, because of their largely paddy based economies, develop deviancies in their economies very early in the initial settlement phase. Operational holdings become much smaller than the allotted holdings as their "owners" strive to gain cash by leasing/mortgaging/selling them in order to defray high costs of settling down. The result is an initial subsistence maintenance and poverty.

Over the years, as the essentially mono-crop based settlement projects exhaust employment and income avenues, the scope for additional employment and enterprise niches become constricted. The increasing inter-generational settler populations are pushed back into family lands, where they are accommodated through customary pressures for maintenance of kith and kin from family resources. In this stage too, operational

Contd on page 41.

Contd -from page 33

holdings become minuscule. Both lands as well as its product become fractionated through complex family-level accommodative tenure forms such as what Wanigaratne (1984) identified at Uggal-Kaltota. The end result is once again a subsistence-maintenance system which shares poverty.

## Conclusions

Overall, it must be stated that tenure forms and their constraining influence on the formation of a market in land is also a reflection of problems in the overall economy. When economic growth is almost totally sought through agricultural development, as it is in Sri Lanka even at present, a preoccupation with land is well nigh inevitable.

Equally inevitable would be the development of additional tenure complexities, as owners of land and their users (e.g. tenants) will try to maximize their returns from land at a minimal cash cost to themselves. Under rotational tenure land will be exploited with little reinvestment to maintain land quality. Under swidden agriculture, land will be qualitatively more highly exploited with no attempt to maintain land quality, as their agriculture becomes increasingly market oriented and specialised.

In settlement projects where existing laws prohibit legal fragmentation of rights, de facto fragmentation of land rights through customary processes often result in a fragmentation of the product rather than of the land itself. Consequently, while pressures towards intensification is high, returns to individual users are too meager for them to move into an intensive and diversified production. The substantial increase in cash and non-cash costs which accompany such a move is too prohibitive for recipients of such holding/product transactions.

Thus, the preoccupation with land, a product of the failings of the total economy in most case inevitably leads to an underutilisation of the full potential of the land base.

*[Experts from staff working paper submitted to IMPSA, September 1990]*