

Agricultural Land Use, Tenure, Ownership, and Succession for Sustainable Landscapes

Key messages

The following recommendations are crucial for shaping informed policy directions aimed at enhancing agricultural productivity, ensuring equitable land access, and promoting sustainable land use practices in VTCS.

- Develop policies based on socio-economic and institutional factors that influence home garden systems to ensure food security and meet nutrient requirements.
- Implement targeted socio-economic interventions to encourage the adoption of diverse home garden systems.
- Strengthen land ownership by enhancing land registration procedures and digitizing records to ensure clear and secure land titles.
- Conduct awareness campaigns to emphasize the benefits of formalizing land transactions and provide legal aid services and capacity building to ensure fair outcomes in land transactions.
- Introduce policies promoting voluntary land consolidation, such as land pooling, joint farming, and establishing land consolidation funds, among small-scale farmers to enhance agricultural productivity.
- Implement centralized land use planning to ensure sustainable and effective land use.
- Review and refine existing land succession policies to address challenges such as land fragmentation, inequality, barriers to productive land use, and the perpetuation of inequalities.
- Address gender disparities in land ownership and inheritance rights through awareness campaigns and capacity-building initiatives.
- Facilitate joint ownership and registration of land titles in both spouses' names to ensure equal land rights and access for women.
- Promote women's participation in decision-making processes related to agricultural activities and land management.



Land use and land management dynamics in VTCS

Sri Lanka's VTCS has served as the backbone of the country's agricultural landscape for centuries. These intricate systems comprise a diverse range of land uses, each contributing to the sustainability and productivity of the region's agriculture. The diverse tenure, ownership patterns, and succession in the VTCS play a pivotal role in the land use and management of the system.

Land use in VTCSs:

Balancing tradition and modernization in land use

At the core of VTCS lies *Puranawela*, the irrigated land that sustains agriculture throughout both the *Yala* (Dry) and *Maha* (rainy) seasons. Ownership of



Puranawela is not merely a legal right; it carries profound social and cultural significance, granting holders a revered status as the original village inhabitants. *Akkarawela*, the one-acre parcel often developed for paddy cultivation, serves as the major land use type in VTCS. *Chena*, another important land use type is referred to as shifting agriculture in upland forest areas. The expansion of *Gamgoda*, comprising residential sites and home gardens, mirrors the growth of the population. This evolution poses new challenges and opportunities in land management and land tenure.

Importance of home gardens (Gamgoda) as a land use system in VTCS

As the population increases people have given more attention to developing home gardens as a food production system to meet daily food and nutrient requirements, ensure food security, and mitigate food scarcity problems. The global existence of small-scale food production at the household level has a wide range in terms of physical appearance and utilization. There are three fundamental food production systems based on a variety of type-specific general features. Based on some of these features, these three types of home food production systems i.e. household gardens, market gardens, and field gardens can be identified in a VTCS in the dry zone of Sri Lanka.

Land Management in VTCS

Paddy land tenure types and their changes over time

Among the land use patterns in VTCS, paddy cultivation holds a major place. There are many types of paddy land tenures in the VTCS, including share tenancy, mortgage, leasing (*badu*), *thattumar*, and *kattimar*. Share tenancy, commonly known as the *anda* system, is a land tenure system in which poor people grow paddy lands with the landlord's help. There are two kinds of share tenancies: *kuli ande* and *otu ande*. The landowner supplies all inputs necessary for paddy production except labor and management under the *Kuli ande* system (labor tenancy). The net produce is split evenly between the owner and the renter after the harvest. The landlord only provides the land in the *otu ande* system, and the tenant gives all inputs, including labor while managing the field. As a land rent, the landlord receives a quarter of the harvest. A mortgage is a method in which a landowner gives up the right to utilize

the land to a cultivator for one or more seasons in exchange for a predetermined fee. A leasing system is a contract between the lessor and the lessee. *Thattumar* is a method in which two or more farmers rotate land holdings in separate areas. *Kattimar* refers to a system of rotating land plots between two or more farmers throughout two or more seasons. The *bethma* method is used, in which the lower field is left out during times of water scarcity, but everyone gets a part in the top field that is irrigated. All these tenure systems maintained trustworthiness towards each stakeholder as a result of strong social cohesion. Later, people deviated from traditional tenancy systems which were more specifically based on trustworthiness and social interactions. Instead, they preferred more tenure rights in their cultivation lands.

Evolution of land ownership and succession laws

Ownership and title issues concerning land in Sri Lanka are typically influenced by a complex historical background that dates back to pre-colonial and colonial rule and subsequent land reforms. By the early 20th century, challenges arose with the collapse of the dry zone irrigation system, lack of concern for paddy cultivation, displacement of subsistence farmers, population overcrowding in the wet zone, and food shortages. Consequently, the first Land Commission was established in 1927 to redistribute land to landless peasants and promote agricultural development. A Land Development Ordinance (LDO) No. 19 was enacted in 1935 to retain state lands in trust for all citizens and alienate the lands for peasants' benefit. Under this ordinance, lands were given to farmers as permits and later converted to grants such as *Swarnabhoomi*, *Jayabhoomi*, *Isurubhoomi*, and *Ranabima*. However, these reforms were not without complexities in land ownership, as the land was distributed through various mechanisms. These include state-owned land, permits, land grants, and leasehold tenures imposing certain restrictions on land usage and transfer.

Problem statements

Optimization of land use: Home gardens, a solution to the food crisis?

With the rising population pressure, it has become important to give attention to the problems such as

food scarcity, food security, and nutrient deficiency that can result from recurring crises. The variation in the food production systems adopted in the VTCS serves differently for the community either by allowing them to provide their nutrient requirement or ensure financial security or serve as a system to ensure their food security respectively by three production system types. It is important to understand the determinants of this variation to support the community in the most suitable food production system for their well-being. Socio-economic and institutional variables might have an impact on the household choice of the food production system practiced in their home gardens.

Land ownership and succession issues: Secure tenure rights, and existing informal land market

All the tenure arrangements serve as a means for the farmer to obtain potential revenue from a certain land allotment. Farmers' income is already constrained by small land holdings; seasonality, and low productivity, thus complicated land tenure systems are an additional burden. In a cascade system, insecure land rights are one of the primary obstacles to enhancing agricultural production and resource management (Bugri, 2008). Under the LDO, beneficiaries were allowed to cultivate the lands, but the rights to sell, lease, mortgage, and abandon land were controlled. The LDO served as the government's guide in deciding how to distribute lands to the first generation of settlers. These deeds do not provide complete property rights and do not allow for open market transactions or property subdivisions. As subdivisions of agricultural lands are restricted and allowed only up to a minimum subdivision unit, the second generation who want to engage in agriculture has only a few options: cultivate their father's property or share the land informally among descendants, get a lease, or encroach forest lands for cultivations.

Conclusion and policy recommendations

Land use

A study that was done on this aspect has analyzed the socio-economic and institutional factors affecting the choice of food production system practiced in home gardens (Figure 1). The decision to have a household garden is more driven by socio-economic and institutional factors rather than market gardens and field gardens. The effect of these factors on the decision

to have a field garden is comparatively less. Each type of food production system plays a different role in fulfilling a household's essential requirements. The study identified which socio-economic factors are influential in having which type of home garden system. Understanding the socio-economic and institutional drivers behind the existence of diverse food production systems in home gardens not only deepens our comprehension of human and environmental interactions but also provides valuable insights for decision-makers regarding the development of socio-economic determinants aimed at encouraging the adoption of each type of home garden system. Using these results, policymakers can predict farm management decisions of households and plan evidence-based strategic government intervention to meet the daily nutrient requirement, ensure food security, and mitigate food scarcity.

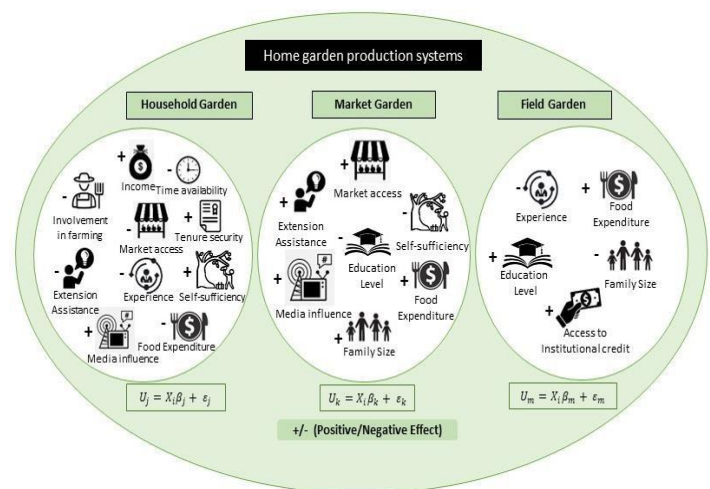


Figure 1: Effect of socio-economic and institutional factors on the choice of food production system practiced in home gardens.

Securing tenure rights and initiating a proper land transaction system

a) Addressing ownership and titling issues

To strengthen land ownership and ensure clear titles, the government should improve the land registration system by streamlining procedures, digitizing records, and creating online platforms for easy access to land information. Awareness campaigns should emphasize the benefits of formalizing land transactions, such as enhanced security and access to credit. Mechanisms for

regularizing informal transactions and simplified procedures should be developed. Dedicated legal aid services and capacity-building programs should ensure fair outcomes in land transactions. To address issues of fragmented land holdings and enhance agricultural productivity in Sri Lanka, the government should introduce policies and incentives promoting voluntary land consolidation among small-scale farmers, using methods like land pooling, joint farming, and the creation of land consolidation funds. Centralized land use planning is essential to identify suitable agricultural areas, encourage cluster farming, and discourage non-agricultural land use. This planning, incorporating factors like soil quality, water availability, ecology, and market demand, ensures sustainable and effective land use. Effective land use planning optimizes productivity while minimizing environmental harm and further informal fragmentation.

b) Proper land succession planning

In Sri Lanka, where agriculture remains a primary source of livelihood and employment, the inheritance and succession of paddy land significantly influence a family's choice to continue the tradition of heirloom farming. Prevailing land succession policies and the regulatory framework involve specific policies to deal with subdivision units for lands, land fragmentation, land sales, etc. The emphasis is tilted to ensure food security and economic development, but it is also vital to recognize and address any associated costs that arise from these policies. These can arise from various challenges that hinder agricultural land's productive use, perpetuate inequality, and impede sustainable development. Neglecting these issues, including landlessness, gender disparities, and complexities in land ownership resulting from informal land transactions, can have profound and interconnected implications. To better understand the successor characteristics affecting the choice of family farm succession decision of the current operator for paddy lands in Sri Lanka, a study was conducted on the succession of agricultural lands under the LDO.

References

Bandara, M. (1985). Catchment ecosystems and village tank cascades in the dry zone of Sri Lanka a time- tested system of land and water resource management. In *Strategies for river basin management*, Springer, Dordrecht. 99-113.

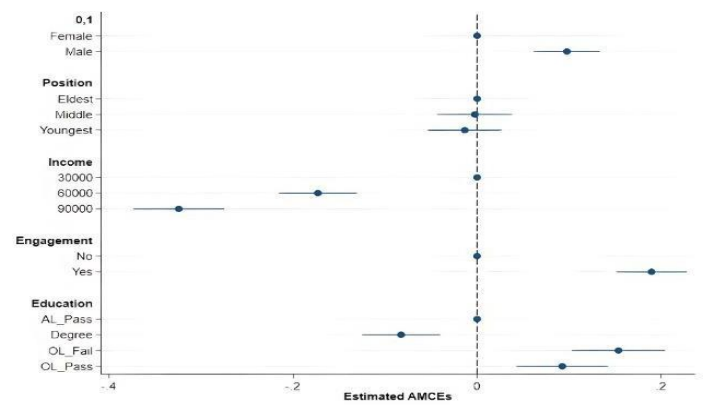


Figure 2: Change of Probabilities for being selected as the successor.

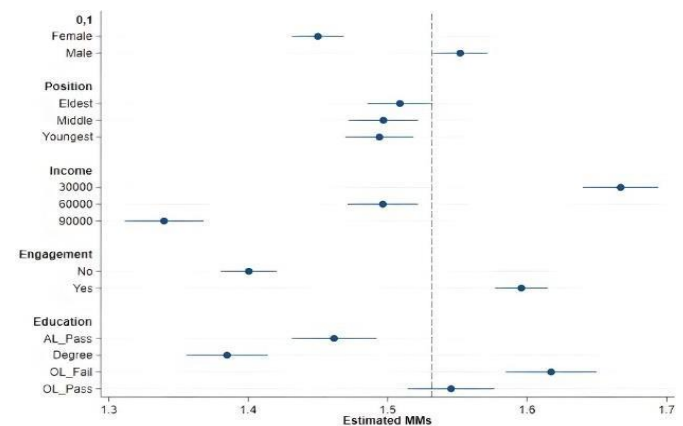


Figure 3: Marginal means

The findings (Figures 2 and 3) suggest that a child's gender, birth order, level of education, income, and involvement in paddy farming influence the decision of the landowner/operator to select a particular child as a successor. Addressing gender disparities in land ownership and inheritance rights is crucial. Awareness campaigns, capacity-building initiatives, and sound policymaking should address cultural and social barriers restricting women's access to land. Women should be educated about their land rights, legal entitlements, grievance redress channels, and options for seeking justice. Encouraging women's participation in decision-making processes through agricultural activities, leadership in farming associations, and representation in land committees is essential. Joint ownership and registration of land titles in both spouses' names should be facilitated to ensure equal rights and land access for women.

Bugri, J. T. (2008). The dynamics of tenure security, agricultural production, and environmental degradation in Africa: Evidence from stakeholders in North-East Ghana. *Land Use Policy*, 25(2), 271-285.

Acknowledgements

This work was financially supported by the project grant of AHEAD/RA3/DOR/STEM/PDN/No: 52 of the program titled Accelerating Higher Education Expansion and Development (AHEAD) administered by the Ministry of Higher Education, Sri Lanka.

Citation

Silva, S., & Weerasooriya, S. (2024). Agricultural Land Use, Tenure, Ownership, and Succession for Sustainable Landscapes. The Healthy Landscape Project.



Author contact: S. Silva (sulochanasi@agri.pdn.ac.lk)

Published by The Healthy Landscapes Project

Copyright © 2024, The Healthy Landscapes Project