

Rebuilding Africa's capacity for agricultural development

The role of tertiary education



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TRANSFORMING LIVES AND LANDSCAPES



Gender-land degradation-livelihood nexus: lessons from Ndome and Ghazi, Taita Taveta, Kenya

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Abstract

As the world continues to grapple with the realities of sustainable development, it is becoming increasingly acceptable that meaningful progress cannot be made without active involvement of women and the youth at critical levels of decision-making. Research and experience from Ndome and Ghazi in Taita Taveta in Kenya showed that marginalisation of women and the youth is still particularly high in household labour distribution, ownership of essential assets and production decision-making, resulting in persistent land degradation and household poverty. Further, gender insensitivity in these areas was not based on ignorance on the part of men but was deliberate and had its foundation in deep-rooted sociocultural beliefs that gave men unfair advantage over women. Institutionalising gender equity is thus a critical requirement in building agricultural and natural resource capacity in Africa. Although simultaneous use of education, incentives and the rule of law are required in this endeavour, rapid positive change in Africa requires a 'needs-driven' and not a 'rights-driven' approach, as is common in developed countries.

Introduction

The sensitivity of gender in current ecological, socioeconomic, cultural and political development gives it different levels of importance in different parts of the world. Although women are acknowledged as equal partners in the development process, their marginalisation continues unabated, particularly in agricultural development decision-making in developing countries (Gellen 1994; Momsen 1996; FAC 1997; World Neighbours 1998). This is based in part on the assumption that environmental management is technical and scientific and as such 'non-affluent' people like women and minority groups or 'non-scientists' have no capacity to make informed decisions (Wickramasinghe 1997). In Kenya, for instance, women provide 75% of agricultural production and contribute 96% of family labour and 60% of the farm-derived income yet own only 1% of the land (Institute of Economic Affairs 1998). They, therefore, have little control over the land resource. This partly explains why women form a large percentage of the more than 50% of Kenyans classified as living below the poverty line (Republic of Kenya 1999). Institutionalising gender equity is thus a critical requirement in building agricultural and natural resource capacity in Africa, particularly towards sustainable land management (SLM).⁴

Methodology

This paper is based on a 1996–1999 case study in Taita Taveta District, Kenya, that was done to determine the root causes of persistent soil erosion that threatened the area's land resource and people's livelihood. An interpretation of 1997 aerial photographs obtained from

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⁴ SLM encompasses the use, care and improvement initiatives of the land resource that guarantee intra- and inter-generation equity in enjoyment of the products and services derived from the land.

the Survey of Kenya was used to map the extent of erosion damage in the study areas. By virtue of the study's diagnostic nature, questionnaire surveys and interviews were used to solicit answers and responses on issues, which covered the following broad areas: household socioeconomic information; extent of general environmental awareness; farm labour dynamics; land-tenure issues such as tenure security and decision-making patterns on the land resource; the role of gender disparities; land and water management approaches and strategies; and opportunity windows for sustainable land management. Data were collected from up to 129 individual households randomly selected from a list of farmers provided by the village development committee (VDC) in Ndome. The participatory rural appraisal (PRA) method was used to gather information from three villages in Ghazi regarded as most affected by the degradation problem: Mngalenyi (zone of sediment yield), Majengo (zone of massive gully development) and Mbulia (zone of extensive and massive sand deposition). In all the villages key respondents were selected and mobilised by the village development committees. The composition of participants was made as representative as possible and included village elders, local administrators, key farmers and representatives from the village soil conservation committees, the Ministry of Agriculture (extension department) and World Neighbours, the main NGO operating in the areas. Each PRA constituted 30 respondents. Additional secondary data were mainly gathered from World Neighbours East Africa Programme's documentation. The choice of World Neighbours was based on their more than 15 years of involvement in community development initiatives in the research area.

Results and discussion

Estimates by area village development committees showed that approximately 75% of males in the productive age group (20–49 years) had migrated to urban centres in search of off-farm employment. This was the explanation for the reason that approximately 90% of household labour was provided by women⁵ (Figure 1). Apart from reducing the amount of effective labour available for conservation and land productivity, absence of male household heads

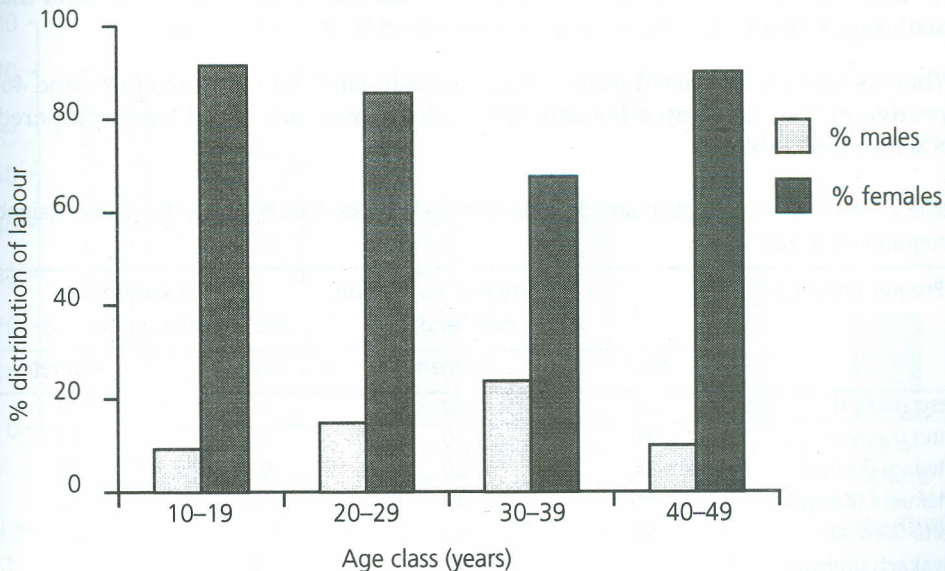


Figure 1: Distribution of agricultural labour by sex and age

Source: Adapted from DANIDA/MOPND (1988)

⁵ The youth, including girls and boys aged below 18 years and still dependants, are included in this category.

Table 1. Weighted percentage occupation by age and sex

Main occupation	Age class (years) and gender distribution								Total intra-class %
	15-19		20-39		40-49		> 50		
	F	M	F	M	F	M	F	M	
Farming	92	8	71	29	79	21	57	43	100
Casual wage employment	25	75	17	83	9	91	25	75	100

Key: M = male; F = female

Source: Adapted from Danida/MoPND (1988)

delayed important decisions on land management, while the land resource continued to degrade. A 1998 soil erosion study showed that approximately 17 and 50% of agricultural land in Ndome and Ghazi of Taita Taveta, respectively, had been permanently lost due to the combined effects of sheet erosion, gully erosion and sand deposition. Although climatic forces were responsible for the final land damages, the susceptibility of the land to erosion was enhanced largely by inappropriate and persistent survival-driven perturbations in the land-system such as shallow tillage, destruction of vegetation cover and failure to construct and maintain soil conservation measures (Waswa 2002).

Of the 25% of the male heads of household who remained on the farm, only about 30% were engaged in farming, focusing mainly on income generation. In contrast women farmers tended to concentrate mainly on subsistence farming (Table 1). For every man in the productive age category (20-49 years) engaged in farming in 1988, there were three women. Similarly, for every six men employed as casual labourers, there was only one woman. Apart from working generally more hours per day than men, women's other multiple roles (domestic chores, farm production, soil conservation, farm management, reproduction and parenting and community responsibilities) competed for time, one with the other (Waswa 2000). The effect of this was major disruptions in harmony within the integrated community livelihoods, with less and less attention going to land management requirements and efforts towards increased land productivity.

Whereas women interacted more with household land than did men (54% and 46%, respectively), they accounted for only 22% of decisions made about land, compared with 78% for men (Table 2).

Table 2: Percentage interaction and decision-making levels on land by sex within World Neighbours programmes in East Africa

Programme area	Use (extent of interaction with land)		Control (extent of decision-making on land)	
	Men	Women	Men	Women
Teso (Kenya)	20	80	90	10
Kitui (Kenya)	30	70	70	30
Mwingi (Kenya)	50	50	90	10
Makueni (Kenya)	60	40	90	10
Taita (Kenya)	50	50	80	20
Nyakach (Kenya)	30	70	70	30
Singida (Tanzania)	60	40	40	60
Nawou-Pallissa (Uganda)	70	30	90	10
Mean	46	54	78	22

Source: Adapted from World Neighbours (2002)

Women farmers could only make decisions with short term implications, which ruled out decisions governing terrain modifications for water conservation and safe disposal like terracing, construction of cut-off drains (CODs) and even planting of trees for land management purposes (Figure 2). Further, reliance by women on indigenous land and water management measures (ILWM⁶), coupled with their potential marginalisation with respect to access to financial capital, would undermine land management initiatives and improved productivity of their agricultural and natural resource businesses, as indirectly depicted by the low adoption rates of soil and water conservation practices (figures 3 and 4 and Table 3).

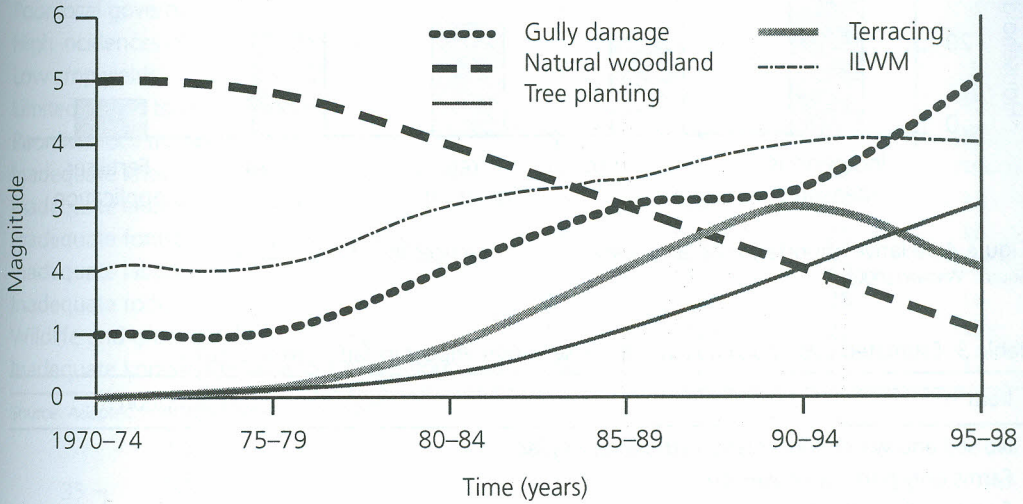


Figure 2: Participatory rural appraisal trend analysis of key environmental variables in Ghazi

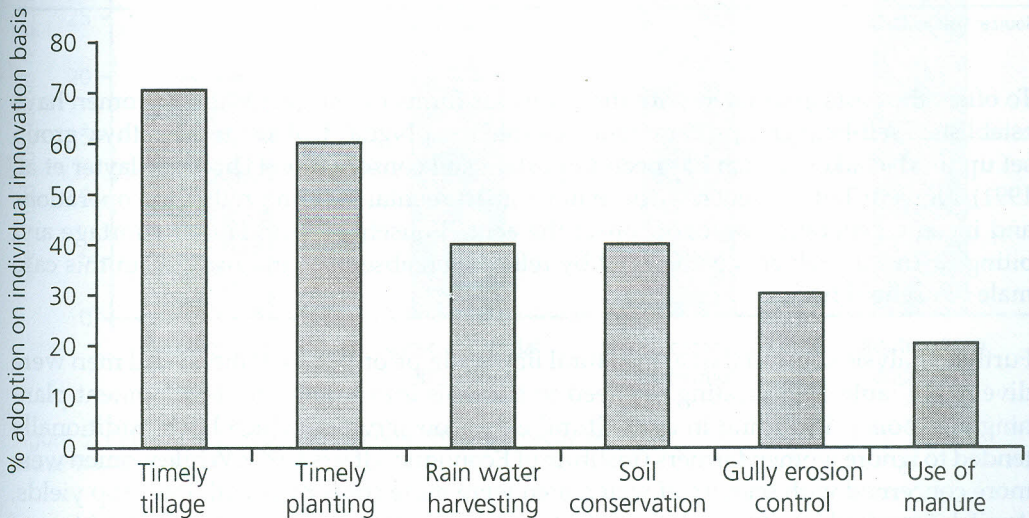


Figure 3: Percentage adoption levels of some soil and water conservation innovations in Taita Taveta District

Source: Republic of Kenya (1997)

⁶ILWM: Indigenous land and water management measures such as use of manure, mixed cropping, and trash lines or stone barriers in runoff control.

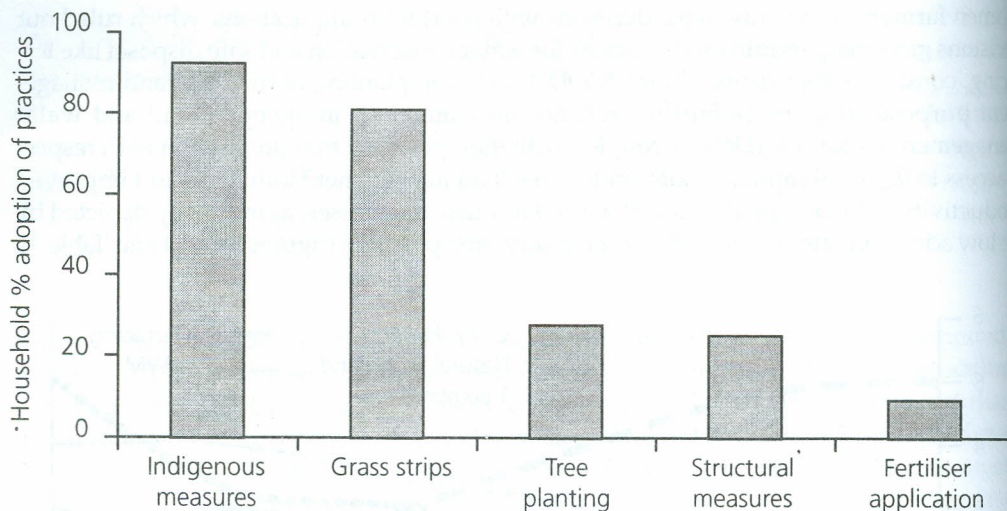


Figure 4: Relative importance of land management practices in Ndome and Ghazi
Source: Waswa (2000)

Table 3: Estimated overall soil and water conservation impact in Taita-Taveta District

Item	% adoption
No soil and water conservation structures in place	40
Farms only partially conserved	50
Farms well conserved	10
No maintenance of soil and water conservation structures	90
Good maintenance of soil and water conservation structures	10

Source: Waswa (2000)

To offset the costs associated with these various forms of marginalisation, women have established self-help groups, commonly referred to as 'Nguu'. Unlike the 'Mwethya' group set up in Machakos, which has been important soil conservation (Thomas-Slyter et al. 1991), Nguu in Taita Taveta have been more instrumental in farm production operations and income generation an effort offset the acute household farm labour shortage and biting financial problems occasioned by reliance on absentee land owners, in this case male household heads.

Further analysis showed that agricultural limitation priorities for women and men were divergent (Table 4), indicating the need to take this into account in development planning and policy, including in agricultural extension services, which have traditionally tended to ignore women farmers (Institute of Economic Affairs 1998). While women were more concerned with scarcity of water, men were more concerned with low crop yields. Availability of adequate water to supplement rainwater would counter the problem of crop failure and thus act as an incentive for land improvement. Similarly, availability of domestic water within reasonable distance from the homestead and availability of alternative domestic energy sources would reduce drudgery on the part of women farmers, affording them more time to invest in land management, agricultural production and family/child care, which are at the heart of African women farmers.

Table 4: Comparison of priority agricultural limitations by sex in Ghazi

Problem	Men rank	Women rank	Total score	Final rank
Poor roads	2	3	5	1
Increased soil erosion	6	2	8	2
Inappropriate postal services	5	6	11	3
Low income	7	8	15	4
Scarcity of agricultural and domestic water	14	1	15	4
Inappropriate livestock breeding material	11	5	16	6
Poor local governance	4	13	17	7
High incidences of human diseases	3	14	17	7
Low crop yields	1	18	19	9
Limited access to credit facilities	10	11	21	10
Poor livestock markets	12	9	21	10
Inadequate knowledge on group management	17	4	21	10
Inadequate extension services	9	15	24	13
Inadequate forest and fruit tree seedlings	18	7	25	14
Inadequate labour	8	17	25	14
Inadequate fodder	16	10	26	16
Wildlife and grazing related menace	15	12	27	17
Inadequate knowledge on water harvesting	15	12	27	17

Source: Adapted from World Neighbours (1997)

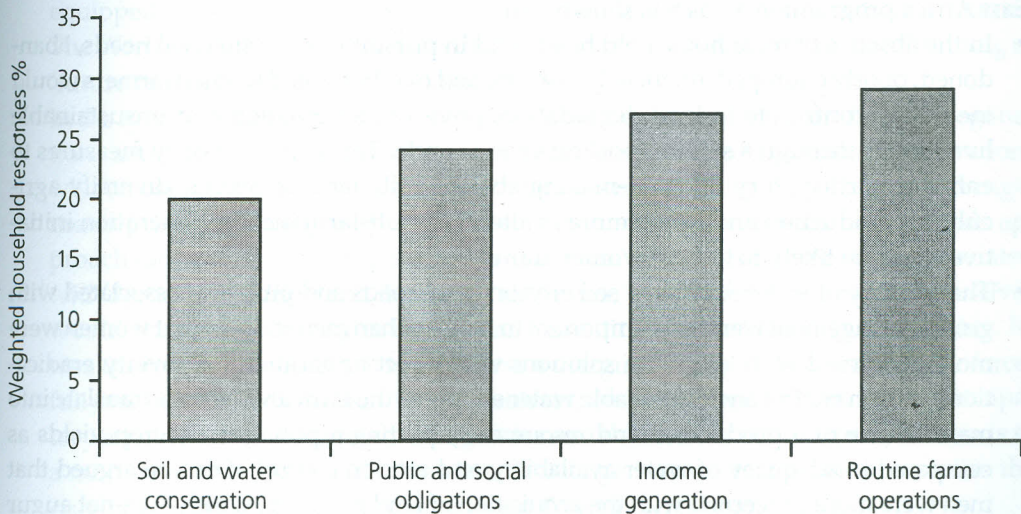


Figure 5: Relative importance of community group activities

Source: Waswa (2000)

That the problems of low yields and inadequate farm labour were more important to men, who hardly worked the land, than to women indicated that men were not oblivious of their agricultural, environmental and social obligations. On the contrary, their gender insensitivity was hinged upon deep-rooted cultural norms such as the notion that only men should work outside the community and wives should not accompany them, and that all domestic work was the domain of women. Similarly, the rather high ranking of

inappropriate postal services was an indirect indicator of communication and decision-making difficulties faced by women, as mediated by absentee male household heads. This would, in turn, delay land management decisions besides acting as a disincentive to effective agricultural extension services.

Contrary to conventional expectation, low financial capital endowment ranked rather low, seven and eighth for men and women, respectively. This was as a result of the increasing realisation through community capacity building (CCB⁷) that steady inflow of income depended on the stability, resilience and quality of production assets like land, instead of external sources of income like aid. However, the limited access to discretionary income meant that most households would have difficulties accessing critical production inputs like labour for land management. The low priority attached to access of credit facilities indicated that the whole concept of credit for land development was still foreign or deliberately ignored by the community, owing to the lack of entrepreneurial culture and the fear of losing ancestral land in cases of default (Waswa 2000). Women would also not be entrusted with such credit facilities, as they lacked land ownership rights. The rather low ranking of poor local governance by women compared to men was indicative of the seemingly institutionalised women marginalisation in decision-making. The same apathetic feeling is reflected in the relative importance of inadequate extension services between men and women.

Lessons learnt and policy suggestions

More than 15 years of field experience from Ndome, Ghazi and other World Neighbours East Africa programme areas has shown that:

- In the absence of male household heads and in pursuit of their survival needs, abandoned, poorly equipped, financially insecure and overburdened women farmers would inevitably contribute to land degradation, poverty perpetuation and unsustainable livelihoods through a self-supporting vicious cycle. This calls for policy measures to enhance participatory decision-making about family land resources, diversify agricultural production and invest more in alternative off-farm income generation initiatives that are likely to benefit women more.
- That scarcity of water, increased soil erosion, poor roads and problems associated with group management were more important to women than men showed that women were more concerned with long-term solutions with direct implication on poverty eradication. Erosion control and sustainable water supply at the farm level would translate into maintenance of a productive land resource. By putting a premium on crop yields as compared to adequacy of water availability and erosion control, it can be argued that men were more concerned with the acquisition of land products, which does not augur well for sustainable development because of the short-term nature of resource products. The high ranking of good roads by both men and women was indicative of the opportunities for more income generation — through increased trading possibilities — associated with the opening up of a hitherto spatially isolated area. Chambers (1983) discusses the role of spatial isolation in the entrenchment of poverty. Women thus seem to be more aware of the root causes of unsustainable livelihoods than are male counterparts. As

⁷ Facilitating the endowment of communities with necessary abilities/skills for better functioning and achievement of desired goals in pursuit of sustainable development.

such, planning for sustainable land management and livelihoods enhancement at the grassroots should put women at the centre of the focus, without marginalising the men due to their *de facto* roles as household heads.

- Technical training in agricultural and natural resource management and service provision alone have not been known to lead to improved welfare of the target communities (World Neighbours 2001). A necessary policy requirement is to improve communication and mutual understanding between men and women in order to enhance cooperation, collaboration and partnership, which are essential in decision-making for sustainable development.
- When dealing with gender, it is important to distinguish between what is natural (biological) and what is learnt (social). Ignorance about these two elements has been used as conventional wisdom to entrench women's marginalisation. This calls for policy shifts in the concept of gender away from sex-driven to capability-driven role allocation. In addition, gender should not be limited to the female dimension alone, but must include the male sex and the youth as integral stakeholders.
- The youth are a forgotten segment when it comes to gender studies and continue to be marginalised owing to their age, a condition that only adds to delays in gender changes within societies (Muthengi et al. 2001). In the African setup the youth still constitute an important component of the household and interact very closely with the women in pursuit of subsistence demands. Their increasing numbers as many drop out of formal education will continue to add to the pressure on livelihood resources, especially land. The subsequent degradation risks will depend on how equipped they are when it comes to harmonious interaction with household resources. The World Agroforestry Centre's (ICRAF) concept of investing in capacity building of 'future farmers' is thus a timely initiative.
- In the typical African setting, the man is still the bonafide head of the family. Negotiations and relationship building also tend to be preferred to litigations or arbitrations when it comes to conflict resolution and management. These organisational arrangements present a strong case for addressing gender equity concerns from a needs approach rather than a rights (power-based) approach. The rights approach is associated with domestic conflicts and defensive responses, which even the women themselves would wish to avoid in pursuit of family stability, a virtue still regarded highly. Its weakness lies in its attempts to empower a marginalised group like women by forcefully taking power from men. On the contrary, the needs approach involves participatory analysis of needs in relation to gender and the welfare of both groups. It leads to a more sensitive and sustainable attitude change, as men realise and internalise the cruelty of workloads imposed on women (World Neighbours 2000).
- In most communities debates on gender roles are very sensitive, as people tend to view gender as a reversal of roles rather than recognising its proper intention of balancing roles. As a result there tends to be a stand-off between males and females. However, instead of allowing confrontation to undermine positive change it is better to start with peripheral and easy issues to handle and slowly but sequentially deal with emerging core issues considered more sensitive and difficult. This approach is referred to a the 'onion-World Neighbours Approach' (World Neighbours 2001), imagery derived from the decreasing ease associated with peeling a bulb onion as one approaches the core from the periphery.

Conclusions

Although gender insensitivity in Ndome and Ghazi stems from deep-rooted cultural dogma, it is largely 'artificial' in nature in that it is not based on ignorance on the part of the men but is deliberate and, as such, manageable. It contributes directly to land degradation and poverty through marginalising women farmers, particularly in decision-making on land management, distribution of family labour and access to household income. Further, being largely an attitude problem, reversals in gender insensitivity require simultaneous application of education, incentives and coercion (rule of law). Though relevant, targeting gender disparities at the tertiary levels of education relating to natural resource management and agribusiness development is likely to have only limited positive impact because of the small numbers of women at those levels. Deliberate effort must be made to build capacity of the many resource poor, out of school women, whose daily engagement revolves around the household land. Policy shifts towards effective education, especially at the exit points in formal schooling and awareness campaigns targeting informal learners, would be vital. Further, agricultural education for development should adopt an ecosystems and integrated approach because of the interdependence among the land resource components and farmers, and also an entrepreneurial culture among farmers as a way of boosting household incomes.

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