

Livelihood Strategies of Smallholder Coffee Farmers in South Sulawesi and East Nusa Tenggara (Flores)

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SUMMARY

The way coffee production is inserted within social and agro-ecological systems will affect the willingness of farmers to engage in quality upgrading initiatives. A key objective of ACIAR-supported research in Eastern Indonesia is to understand the varying livelihood strategies of smallholder coffee farmers across the islands of Sulawesi and Flores. How do livelihood strategies affect decision making processes that shape smallholder engagement with the growing specialty coffee market?

Our research interviewed a total of 803 smallholder households engaged in coffee production across South Sulawesi and East Nusa Tenggara. Coffee from these regions is produced by smallholder farmers, whose livelihood strategies are highly variable (Figure 1). For smallholders in Flores, coffee is the primary source of household income but is of secondary agricultural importance compared to livestock production and food production. Farmers here may be reluctant to invest in risky quality improvement initiatives. In the Enrekang district of Sulawesi, farmers maintain diverse and highly intensive cash crop production with minimal food production. In Toraja, smallholders are the least dependent on coffee for their livelihoods despite the fact that farm-gate prices here are the highest of all study sites and few other commodities are produced for external markets. Local economies in Toraja are strongly remittance-driven.

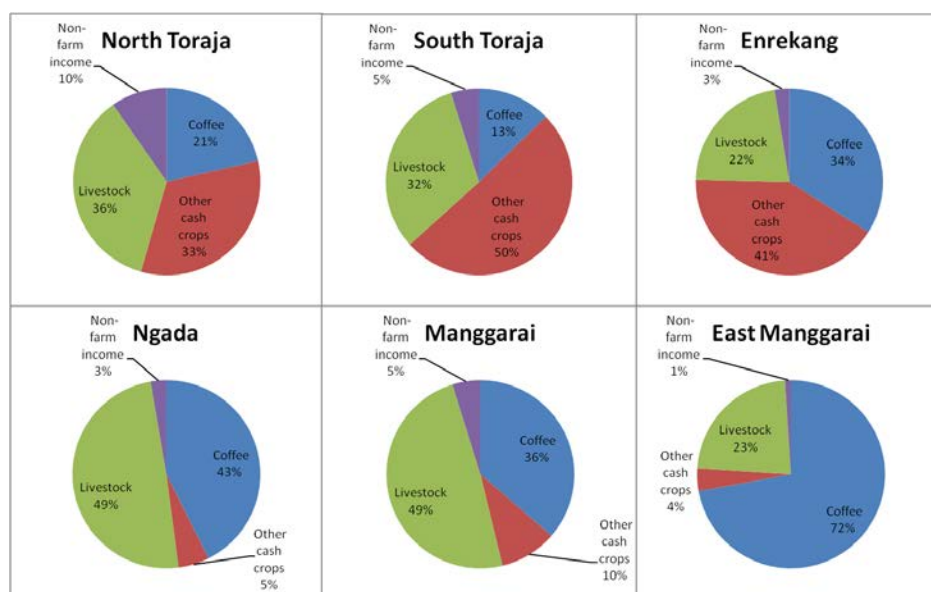


Figure 1. Livelihood strategies of farm households.

Table 1.

Region	Districts	Coffee's share in household income	Livelihood strategies	Share of farmers' producing food crop (rice or corn)
South Sulawesi	Enrekang (n=199)	56 %	Coffee and cocoa, intensive horticulture and goat farming	16 %
	Toraja (n=199)	38 %	Coffee, rice, pig farming, off-farm wage labor and remittances	61 %
East Nusa Tenggara (Flores)	Ngada (n=201)	87 %	Oriented towards food security	75 %
	Manggarai (n=97)	90 %	Oriented towards food security	92 %
	East Manggarai (n = 100)	96 %	Oriented towards food security	75 %

These preliminary results indicate different roles of coffee in smallholder farmers' livelihood strategies across the region. The results also suggest a need to tailor interventions that consider varying smallholder farmers' livelihood strategies in order for smallholder farmers to fully benefit from the upgrading of coffee quality in value chain.

INTRODUCTION

Sulawesi and Flores are among the key Arabica coffee producing regions of Indonesia. Majority of coffee farmers in Indonesia are smallholders. Their livelihood strategies are the combination of activities that not only include productive activities, but also investment and reproduction. Households choose different strategies to meet their ever changing needs. In a farming households, livelihood strategies are often not only confined to agriculture but also include non-farm activities. This diversifies household income and ensures households to pursue their goals. Migration, both seasonal and permanent, is also a part of rural households' livelihood strategy. It is often an important source of cash income for smallholder households.

METHODOLOGY

The focus of the study is on household as the basic unit of economic decision making. We carried our household survey in South Sulawesi (Enrekang, South and North Toraja districts) and Flores (Ngada, Manggarai and East Manggarai districts) between 2008-2009. We selected a total of 803 smallholder households that are engaged in coffee production in six districts.

RESULTS AND DISCUSSION

Table 2. shows that average smallholder farmer income in South Sulawesi is higher than in Flores. This is largely due to South Sulawesi farmers' involvement in intensive horticulture and livestock raising (e.g. goat, pigs), and off-farm wage labor. In contrast, farmers livelihoods in Flores is generally oriented towards food security.

Table 2. Household characteristics.

Region	Districts	Income (Rp/year)	Income only based on coffee	Farmers growing staple crop
South Sulawesi	Enrekang (n=199)	12.9 million	7 %	23 % (rice)
	South Toraja (n=65)	14.5 million	0 %	2 % (rice)
	North Toraja (n=135)	11.8 million	0 %	56 % (rice)
Flores	Ngada (n=207)	9.2 million	4 %	17 % (rice) 57 % (corn)
	Manggarai (n=97)	3.9 million	38 %	23% (rice) 89 % (corn)
	East Manggarai (n=100)	8.2 million	54 %	7 % (rice) 79 % (corn)

Table 3. Farm characteristics.

Districts	Average farm land	Forms of coffee produced and sold	Average price of coffee (GBE)	Farmers with access to credit (incl. informal credit)	Farmers with access to extension services	Membership to farmers' group
Enrekang	0.66 ha	Parchment (100%)	24,005 Rp	21 %	74 %	66 %
South Toraja	0.57 ha		23,819 Rp	9 %	34 %	26 %
North Toraja	0.78 ha		25,434 Rp	8 %	34 %	27 %
Ngada	0.43 ha	Green bean (49%) Cherry (50%)	17,309 Rp	43 %	57 %	65 %
Manggarai	0.88 ha	Green bean (94%) Cherry (6%)	16,632 Rp	23 %	45 %	51 %
East Manggarai	0.81 ha	Green bean (15%) Cherry (85%)	17,141 Rp	88 %	22 %	40 %

The main staple in Flores is essentially a mixture of rice and corn, Table 2 shows that in Flores majority of smallholders grow staple food in contrast to Sulawesi, where majority purchase their staple crop, rice (with the exception of North Toraja).

Our study also indicates differences of farm characteristics across the study sites. In Flores, farmers use little agricultural input for coffee production (i.e. application of fertilizer,

pesticide and herbicide etc.). In Enrekang, farmers are engaged in intensive horticultural production. In addition, some farmers raise goats and pigs.

Table 3 indicates that despite the fact farmers in South Sulawesi are producing parchment coffee, the farm gate prices of Arabica coffee are higher compared to Flores. In Flores, farmers sell coffee in different forms.

Cases from Toraja in Table 3 also indicates that access to extension services and memberships to farmers' group are not necessary a condition for attaining high farm gate price.

Figure 1 shows that in Flores the contribution of coffee income to household farmers income is higher than Sulawesi. It's also indicate that in Flores coffee is important income for households farmers than Sulawesi.

CONCLUSION

Preliminary results indicate that coffee consists only a part of smallholders' livelihood. Income from coffee is highly variable across the region. Farmers can upgrade quality of coffee, but this is conditioned by their access to basic resources and their capacity to reallocate resources across the spectrum of livelihood activities. Another critical element in upgrading involves development of close market relationships with buyers of specialty coffee. Building mutual trust and exchanging information is particularly essential. This suggests a need to reconsider the role of formal institutions supporting farmers such as credit, extension services and farmer organisations as a vehicle for promoting quality upgrading in the global value chain.