

**The Impact of Customary Inter-Household Transfers on  
Labour-led Cash Crop Intensification among the Smallholder  
Farmers of Malekula Island, Vanuatu**

by

Tim Martyn

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School of Global Food Studies  
Faculty of the Professions  
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## **Declaration**

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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University of Adelaide, December 2015

Tim Martyn



## **Abstract**

Smallholder farming households in the Small Island Development State (SIDS) of Vanuatu have been observed to withhold family labour from cash crop production in order to contribute to participate in inter-household transfers of resources presided over by local elites, despite rising demand for income. Research throughout the Pacific suggests that inter-household transfers are principally motivated by differences in household social capital and the payment of tribute to high status households. Contributing labour to these transfers restricts the adoption of smallholder cash-crop intensification, complicating development program efforts to increase rural household incomes.

This study investigates the benefits of cash-crop intensification (CCI) to cocoa growing smallholders on Malekula Island, in the north of the Vanuatu archipelago. The research presents an empirical investigation analyzing how the relationship between inter-household transfers and the adoption of labour intensive cocoa production methods, with the objective of informing the design of more effective rural development interventions in SIDS.

The specific objectives of the study are to analyze: (1) the factors affecting the assignment of household labour to inter-household transfers; (2) the factors affecting the assignment of group or village labour to private households; (3) the impact of the assignment of group or village labour on household labour supply responses to on and off-farm production activities; and (4) the implications of the supply of household

labour to village or group labour activities, for labour-led CCI among remote rural communities in SIDS.

This study provides empirical evidence from a survey of 530 households. The analysis demonstrates that private households supply labour to village labour activities to both obtain public good benefits and as well as improve their access to shared land and labour resources in the future. The research identifies that households which are assigned village labour tend to possess higher levels of asset and social capital endowments. Households assigned village labour, tend to reallocate family labour to off-farm activities offering higher returns to their efforts. Rather than help address deficits in the supply of labour to support cash crop production at times of peak demand, smallholder households transfer labour to elite households in order to strengthen these strategic relationships and improve future access to farm inputs (land and labour). Elite households gain additional utility by using inputs of village labour to substitute on-farm family labour, releasing it to engage in off-farm employment and deliver higher income levels.

This study determines that smallholder households in the study group are not sufficiently incentivised to increase their supply of labour inputs to cash crop intensification, preferring to shift surplus labour into off-farm employment and inter-household exchanges due to the higher returns to labour and potential long-run economic rewards offered by those activities. Subsequently, this study concludes that labour-led cash crop intensification programs are not the most effective method for increasing smallholder household incomes; and that national authorities and technical



agencies should prioritise interventions which reduce cash crop marketing costs, facilitate improved access to income generating opportunities in off-farm employment and reduce demand for household labour from village authorities for public good production.

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## List of Acronyms

AusAID	Australian Aid Program
ACIAR	Australian Centre for International Agricultural Research
ANOVA	Analysis of Variance
BIBD	Balanced Incomplete Block Design
BIC	Bayesian Information Criterion
BW	Best Worst
CCI	Cash Crop Intensification
CDP	Vanuatu Cocoa Development Plan (2010-14)
CE	Central Area Council, Malekula
DARD	Department for Agricultural Research and Development, Vanuatu
ENSO	El Nino Oscillation System
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
HSD	Honesty Significance Difference
ILO	International Labour Organisation
IMF	International Monetary Fund
IMR	Inverse Mills Ratio
IPDM	Integrated Pest and Disease Management
LC	Latent Cluster
LL	Log Likelihood
MANOVA	Multivariate Analysis of Variance



NE	North East Area Council, Malekula
NW	North West Area Council, Malekula
OLS	Ordinary Least Square
PARDI	Pacific Agribusiness Research and Development Initiative
PIC	Pacific Island Country
PWB	Public Works Bureau, Vanuatu
SE	South East Area Council, Malekula
SIDS	Small Island Development State
SIS	Standard Interval Scale
SO	South Area Council, Malekula
SQRT	Square Root
SW	South West Area Council, Malekula
VCE	Variance Component Estimator
VNSO	Vanuatu National Statistics Office