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**The Consequences of Emerging Cash
Crops on Small-Scale Rural Farmers'
Livelihoods:
A Case Study of the Energy Crop, *Jatropha Curcas* L,
In Kenya**



A thesis presented in partial fulfilment of the requirements for the Degree
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Abstract

This thesis investigates claims that growing of drought resistant cash crops such as *Jatropha Curcas L (Jatropha)* by small-scale rural farmers living in arid and semi-arid regions is an effective way to improve their livelihoods through increased income and improved food security. One school of thought supports this claim – often made by proponents of the bio-fuel industry - and another is sceptical about the claim. This research used the Sustainable Livelihoods Framework to evaluate the impact of growing *Jatropha* on the livelihoods of small-scale rural farmers in the Meru North district in Kenya. The findings revealed that, some elements of *Jatropha* farming as an agricultural strategy could be capable of improving rural livelihoods.

Interviews carried out with farmers showed that *Jatropha* growing has had positive and negative impacts on the farmers' livelihoods. Farmers - especially those who were also traders in *Jatropha* - noted significant positive impacts in their financial, physical, human, and natural capital domains as demonstrated in the asset pentagon. However, the impacts were far less positive for those farmers who only produced *Jatropha*. Positive impacts of *Jatropha* were also noted amongst the wider rural communities. Local people interviewed indicated that *Jatropha* growing has increased their access to job opportunities as farmers were now employing local people on a casual basis to help out on the *Jatropha* farms. The local people including farmers have also used the *Jatropha* plant as a soil protector in places where land is susceptible to soil erosion and mud slides in the region.

There were some fundamentals of rural livelihoods that did not experience any immediate impact as a result of *Jatropha* farming. For instance, food production has not been impacted upon negatively as expected. Food supply in the region has remained constant due to the modes of *Jatropha* production adopted by farmers that do not interfere with the production of food crops. Similarly, no evidence was found that *Jatropha* growing had impacted positively or negatively on communal or state-owned physical capital assets.

Negative impacts were however noted in the social capital domains of farmers, as many farmers who produced *Jatropha* but did not trade it themselves have lost trust in their neighbours who acted as their middlemen or traders. More so, this study concludes that the expansion of the *Jatropha* trade has increased inequality among farmers. Farmers who are

presumed to be the poorest in the region are not taking up the growing of Jatropha, therefore the benefits of growing Jatropha are only being tapped by the richer farmers. In addition this thesis concludes that growing of Jatropha has increased labour demand for family members and particularly women are bearing much of the heavy labour impact in households in rural areas.

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Abbreviations and Glossaries

ADB	Asian Development Bank
ADC	Agriculture Development Corporation
AGR	Asian Green Revolution
ASALs	Arid and Semi-Arid Lands
CARE	Canada America Relief Everywhere
CDM	Clean Development Mechanism
DFID	Department for International Development
ERC	Energy Regulatory Commission
FELISA	Farming for Energy Better Livelihoods in Southern Africa
GAF	Green Africa Foundation
GDP	Gross Domestic Product
GFC	Global Forest Coalition
IDS	Institute of Development Studies
IMF	International Monetary Fund
IRD	Integrated Rural Development
KEFRI	Kenya Forestry Research Institute
MOA	Ministry of Agriculture
MOE	Ministry of Energy
NGO	Non-governmental Organisation
SAPs	Structural Adjustment Programmes
SLA	Sustainable Livelihoods Approach
SLF	Sustainable Livelihoods Framework
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNFAO	United Nations Food and Agriculture Organisation
USA	United States of America
WB	World Bank