Caught between Energy Demands and Food Needs: Dilemmas of Smallholder Farmers in Njoro, Kenya

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Abstract.

Smallholders in rural Kenya, like their counterparts in tropical Africa currently face acute shortage of fuel wood for domestic use. There has been rapid population increase in the last few decades resulting in increased demand for food crops. This has led to the expansion of area under subsistence agriculture eating into indigenous forests, the traditional source of wood fuel. This situation has been compounded by the limited access to alternative sources of domestic energy in rural parts of Kenya. The recent upsurge in the cost of fossil-derived fuels as well as in hydro-generated electricity has left the smallholder farmer with wood as the sole source of fuel. This paper therefore examines the conflicting demands of domestic fuel needs and foods. Key research questions were: What are the household domestic energy demand and constraints? What is the household food demand and constraint among smallholders? How do the smallholders reconcile these competing basic needs?

The paper reflects on the constraints of smallholders in their quest to fulfill their food and energy needs. The discussed model is a result based on discussions between the researchers and focus group discussions drawn from smallholder farmers. The primary data gathered from the discussions is augmented by secondary data to draw imperative implications on domestic energy use and food needs. The results indicate an average annual per capita wood fuel demand of 1.99 m3 and a deficit of 8.816 m3 per household. The deficit is usually catered for through purchase of wood fuel from the market, which has an implication on the pressure exerted on the forestry resources. This paper shows that households in Njoro have turned to desperate coping mechanisms and strategies such as use of maize straw, pruning and fallen twigs. The results of this study provide insights on how the dilemma may be resolved in a smallholder setup and suggest local policy options.