

Impact of GlobalGAP Compliance on the Relative Poverty Status of Smallholder

Horticultural Farmers in Eastern and Central Kenya

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ABSTRACT

Global good agricultural practices (GlobalGAP) have significant, yet contentious impacts on different livelihood aspects of smallholder farmers. The GlobalGAP pose the threat of eliminating smallholder farmers from accessing international markets due to the high costs of implementation, maintenance and certification. But the practices associated with GlobalGAP improve the health of farmers and create employment opportunities. The practices are therefore useful in reducing poverty levels among smallholders and especially in rural areas. GlobalGAP was introduced in Eastern and Central Kenya but its impacts, especially on poverty status in the region, are unknown. The extent to which the modes of GlobalGAP compliance affect the poverty status of the farmers involved in production and marketing of fresh export produce is also unknown. This study was undertaken in order to fill this gap in knowledge. The objectives were to compare the poverty status of smallholder horticultural farmers under different compliance arrangements, and to determine the relative effect of GlobalGAP compliance on the poverty status of smallholder horticultural farmers in Eastern and Central Kenya. The impacts were classified into of four categories based on whether: (a) smallholder farming household compliance status was continuous throughout the study period; (b) compliance was gained during the study period; (c) the household lost compliance during the study period or (d) gained and lost compliance during the study period. The study used a longitudinal research design whereby panel data from three study areas in Eastern and Central Province (i.e. Buuri, Mbooni and Kirinyaga) were collected during baseline and follow-up surveys done in 2009 and 2012. The target population was 1,324 farmers from the baseline survey, out of which a sample size of 573 follow-up respondents was selected using a stratified method that mainly comprised

proportionate to population size. Interview schedules and questionnaires were employed in collecting the data. One-way analysis of variance (ANOVA) and paired t-tests were used to establish poverty status of horticultural smallholders under different compliance arrangements. Group compliant farmers had lower levels of poverty, though statistically insignificant compared to non-compliant farmers. Since there were no significant differences in the mean poverty status between GlobalGAP compliant farmers, it was concluded that the poverty status of smallholder horticultural farmers was equal across all compliance arrangements. Comparison between baseline and follow-up periods showed that only Mbooni recorded significant ($P \leq 0.05$) poverty reduction among the group contract farmers while Kirinyaga had significant ($P \leq 0.01$) poverty reduction under individually fully compliant farmers. Impacts of GlobalGAP compliance relative to the period of compliance uptake was estimated using the difference-in-differences method (DD). The results showed that GlobalGAP compliance reduced poverty status of farmers who had gained and maintained compliance in Buuri and Kirinyaga. Continuous GlobalGAP compliance reduced poverty status in all study areas though only significant ($P \leq 0.10$) in Buuri and Mbooni. Short-term impacts of gaining compliance during the study period showed reduction on poverty in all the study areas except Mbooni. Although households that gained GlobalGAP compliance showed mixed changes on poverty status, these influences were not significant. The assessment of farmer interaction with GlobalGAP compliance on poverty status showed increased poverty in all the study areas except Mbooni but was not significant in any of the study areas. The study recommended that policies that improve on consistent implementation, certification and maintenance of GlobalGAP compliance should be formulated in order to aid in alleviating poverty among fresh producer in Kenya.