Impacts of Intensive Dairy Production on Smallholder Farm Women in Coastal Kenya

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Welfare impacts of an intensive dairy technology package on women and their families are investigated on 32 smallholder crop-livestock farms in the sub-humid zone of Kilifi District, Coast Province, Kenya. Farms were stratified according to male or female extension contact. A female enumerator interviewed the wife or female head of household on each farm regarding her present and past household responsibilities and the affects of the intensive dairy enterprise on these duties and upon the welfare of the household. On three-quarters of the male contact farms, dairy operators were women. Across all farms, women performed half of all dairy-related activities, but only on female contact farms did income from the dairy enterprise accrue to women in proportion to their labor input. The equitable return of benefits to labor corresponded with better dairy unit performance on female contact farms, where women also indicated greater access to and autonomy over household resources and decision-making. Irrespective of extension contact, there was broad consensus among the women interviewed that intensive dairying has led to improved household welfare, primarily through increased household income and milk consumption. There was also wide agreement, however, that these gains have been achieved at the expense of more work for women. Women on female contact farms were observed spending dairy income on food for the household and childrens' schooling more often than their counterparts on male contact farms. Based on these and other findings, the study concludes that gender of the extension contact, dairy operator and farm owner were determinants of the intra-household impacts of intensive dairying on the smallholder farms in this study. Recommendations for design and delivery of...
livestock technologies for crop-based farming systems, with special emphasis on how to minimize negative impact on vulnerable household members, are inferred from study findings.

KEY WORDS: gender; dairy; sub-Saharan Africa.

INTRODUCTION

Women in Livestock Production

Over the last two decades, a considerable body of literature on gender and agriculture has been built up covering a wide range of topics. It addresses, among other issues: agricultural and economic development policy (Gladwin, 1992; Gladwin and McMillan, 1989; Smale and Heisey, 1994), household food security (Gittinger et al., 1990), and the impacts of technical change (von Braun and Webb, 1989; Ramaswamy and Sanders, 1992; Hassan and Salasya, 1994). In comparison, only limited information exists on the role of women in livestock production (Martins, 1990), especially for sub-Saharan Africa. Although exceptions exist, such as the work of Spring (1986) in Malawi, Spiro (1984) in West Africa, Whelan (1984) in Ethiopia, and Chavangi and Hansen (1983) in Kenya, much of past research on women and livestock production has focused on pastoralists, e.g., the Borana (Coppock, 1992), the Maasai (Bekure et al., 1991), and agropastoralists, e.g., the Fulani (Waters-Bayer, 1986), whose production systems have very different objectives, strategies, and organization than those of the crop-livestock systems in use by sedentary farmers.

Livestock production, and in particular dairying, is a complementary activity which can significantly contribute to the productivity and sustainability of crop-based smallholder farming systems through plant-animal-soil interactions, and income and employment generation. But predicted increases in sub-Saharan Africa's urban populations have significant implications for how rural populations and farming systems may respond to these new market opportunities. Already in widespread evidence, further male migration to cities in search of wage employment will mean an even greater share of farm activities being managed and conducted by women. While traditionally contributing substantial amounts of labor to crop activities, smallholder farm women may be less accustomed to working with and managing livestock, particularly the more demanding exotic breeds typically incorporated into intensive crop-livestock production systems.

Gender of livestock managers will therefore have a bearing on livestock technology development and delivery, as women managers may be disadvantaged in improving their knowledge and livestock management