Horticulture and Animal Production Improve Farm Income and Address Gender Equality in Northern Ghana

Mary Ruth McDonald  
Dept. of Plant Agriculture, University of Guelph, Guelph, ON, N1G 2W1 Canada . phone: 519 824-4120 X52791; fax: 519 763-8933; email: mrmcdona@uoguelph.ca,  

Abdul-Halim  Abubakari University for Development Studies, Tamale, Ghana,  
John Baah,  Agriculture and Agri-Food Canada, Lethbridge, AB, Canada  
Patrick Kumah, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana,  
Irene Idun, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana,  
Gustav Mahunu, University for Development Studies, Tamale, Ghana,  
Kwame Oppong-Anane, Oporhu Agricultural and Rural Development Consultancy Ltd.  
Cantonments, Ghana,  
Merv Pritchard, Faculty of Agricultural & Food Sciences, University of Manitoba, Winnipeg MB, Canada,  
Shannon Scott, Agriculture and Agri-Food Canada, Brandon, MB, Canada,  

Abstract  
Rural communities in the Northern and Upper West regions of Ghana face many challenges, including low agricultural productivity and limited water for human consumption and irrigation. Household incomes and food security are compromised, leading in turn to poor nutrition and overall health of rural inhabitants. In addition, many young people migrate to urban areas in the south in search of work. In order to counter these challenges, two agricultural partnership projects were initiated. In 2001, the first project partnered the Canadian Society for Horticultural Science (CSHS) with the Ghanaian Institute of Horticulturists (GhIH). It focused on improving household health and income through irrigated vegetable production in the Upper West. Project leaders worked with local extension staff to develop production strategies and farmer field schools. As a result of these interventions, the area under vegetable production per family has increased from 0.025 acres to 0.25 acres. The second project paired the Canadian Society of Animal Science (CSAS) and the Ghana Society of Animal Production (GSAP); it targeted improving household food security and income through working with women’s groups on sustainable sheanut-animal production systems in the Northern and Upper West regions. Provision of micro-credit to women’s organizations allowed them to purchase gloves and boots for protection from snake bites while collecting sheanuts. This in turn enhanced production of shea butter. There are 25 women’s groups involved and 350 women benefiting directly from the project. Both projects reported increased family incomes, more children in school, improved health and greater influence of women in decision making roles in participating communities.  
As the two projects progressed, it was clear that horticulture and animal production could and should interact, even though foraging pigs and goats are one of the greatest threats to vegetable plots. A formal collaboration would accelerate the pace at which they could achieve their common goals of increased food security and gender equality for households in rural
communities. The importance of animal production to food security was especially apparent following the devastating floods in 2007 which wiped out many crops. The collaboration between GhIH and GSAP resulted in the introduction of small ruminant production to vegetable growers in the GhIH project, while vegetable production has been introduced to shea butter and small ruminant producers in selected GSAP project sites. A baseline study for a new initiative in integrated agriculture aquaculture production in two GhIH and two GSAP project communities has been completed. The two societies are planning a joint annual meeting and have participated in a south-south exchange with Tanzania. In conclusion, these partnerships between agricultural scientific societies in Ghana and Canada have led to production of more nutritious food, higher family incomes, greater gender equality and vibrant scientific societies. Plans for the future include improved marketing of products, the introduction of dairy goats, further efforts to reduce bush fires, and the integration of aquaculture to contribute more to food security. These projects are funded by the Canadian International Development Agency and administered by the Agricultural Institute of Canada.

**Keywords:** Farm income, food security, vegetables, livestock, women