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Not Only Humans Like Cacao: Conflicts with Wildlife Threaten Farmers' Livelihoods Around the Bia Conservation Area, Ghana

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Abstract

Human-wildlife conflicts (HWC) are a severe threat to smallholders' livelihoods around many conservation areas in the tropics and subtropics. Among them is the Bia Conservation Area (BCA) in Ghana, where many farmers are experiencing increasing levels of crop-raiding. We determined the wildlife species involved in HWC and examined the effects of crop-raiding on the livelihood of people around the BCA. The kind and extent of damage was recorded and possible factors influencing the risk of raids were investigated. Also, prevention measures applied by farmers and their pay-offs were analyzed. 100 interviews were conducted in 10 fringe communities around the BCA. The presence and relative density of different wildlife species were assessed through transect walks and spoor plot monitoring in the transition zone of the BCA. Crop-raiding took place all around the BCA but was most severe in the northern part. Elephants (*Loxodonta africana cyclotis*) were identified as the major conflict generating species, but also smaller mammals such as squirrels (*Sciuridae* spp), bushbuck (*Tragelaphus scriptus*) and cane rats (*Thryonomys swinderianus*) were found to cause damage. The relative density for squirrels was by far the highest of all species recorded in the farmland. Cocoa (*Theobroma cacao*) was most frequently raided (99%), followed by cassava (*Manihot esculenta*), yam (*Dioscorea* spp.) and plantain (*Musa* spp.). Traditional prevention measures applied by farmers were only partly effective and hardly any non-traditional methods based on chili pepper were used. One mitigation approach could be the use of buffer crops that are unpalatable for wildlife, such as ginger or chili pepper. Latter could then serve as basic material for wildlife repellent measures like chili grease fences or chili-dung bricks. However, further education of farmers on such mitigation measures is needed, as is general training on improved farming practices.

Keywords: Crop-raiding, Ghana, smallholders' livelihood, wildlife, human-wildlife conflict