

Pesticide Use Practices among Female Headed Households in the Amhara Region, Ethiopia

Authors : Birtukan Atinkut Asmare, Bernhard Freyer, Jim Bingen

Abstract : Though it is possible to transform the farming system towards a healthy, sustainable, and toxic-free food system by reducing pesticide use both in the field and postharvest, pesticides, including those that have been banned or severely restricted from use in developed countries, are indiscriminately used in African agriculture. Drawing on social practice theory, this study is about pesticide use practices in smallholder farms and its adverse impacts on women's health and the environment, with reference to Africa, with an empirical focus on Ethiopia. Data have been collected via integrating diverse quantitative and qualitative approaches such as household surveys (n= 318), focus group discussions (n=6), field observations (n=30), and key informant interviews (n=18), with people along the pesticide value chain, including sellers and extension workers up to women farmers. A binary logistic regression model was used to investigate the factors that influence the adoption of personal protective equipment among female headed households. The findings show that Female-headed households carried out risky and unsafe practices from pesticide purchasing up to disposal, largely motivated by material elements (such as labor, income, time, and the provisioning system) but were notably shaped by competences (skills and knowledge), and meanings (norms, values, rules, and shared ideas). The main meaning or material aspect for pesticide purchasing were the perceptions of efficacy on pests, diseases, and weeds (65%), cost and availability in smaller quantities (60.7%), and a woman's available time and mobility (58.9%). Pesticide hazards to human health or the environment seem not to be relevant for most female headed households. Unsafe practices of pesticide use among women led to the loss of biodiversity and ecosystem degradation, let alone their and family's health. As the regression results show, the significant factors that influenced PPE adoption among female headed households were age and retailer information ($p < 0.05$). In line with the empirical finding, in addition to changing individual competences through advisory services and training, a foundational shift is needed in the sociocultural environment (e.g., policy, advisory), or a change in the meanings (social norms), where women are living and working.

Keywords : biodiversity, competences, ecosystems, ethiopia, female headed households, materials, meanings, pesticide purchasing, pesticide using, social practice theory

Conference Title : ICEB 2024 : International Conference on Ecosystems and Biodiversity

Conference Location : London, United Kingdom

Conference Dates : January 15-16, 2024