EU pesticide standards promote safer farming in developing countries

EU pesticide regulations have encouraged farmers in developing countries to adopt alternative pest management practices and employ safer means of handling pesticides, according to a recent study which investigated green bean farming in Kenya.

Many developing countries have diversified their traditional agricultural exports by growing fresh produce for the European market. However, consumer demand for food with a pleasing physical appearance, together with growing conditions that tend to be tropical with abundant pests and diseases, have led to increased reliance on pesticides.

This has led to concerns about the effects of toxic pesticides on farm worker health, as well as the potential risks to consumers of the products. Consequently, retailers increasingly require growers in developing countries who export to the EU to meet EU food safety standards relating to, among other things, pesticide usage, such as restrictions on maximum pesticide residue limits. European retailers have also instituted their own food safety protocols. These must be strictly implemented by the exporters, who train their farmers on the safe use, storage and disposal of pesticides. In addition, consumers in the EU are protected against residues of pesticides on imported produce by EU legislation since all imports of food into the EU have to be in compliance with the legislation on pesticide residues.

Kenya is a major exporter of green beans to large EU retailers. The study investigated the effect of EU pesticide legislation on Kenyan smallholder farmers growing green beans for export to major UK supermarkets. The supermarkets demand food safety standards that comply with EU regulations, in addition to their own private requirements. Using 2003/2004 survey data from 180 family farmers, the researchers compared two groups of growers: one group which supplies exporting companies that enforce EU-Pesticide Standards (EU-PS) compliance, and the other group which supplies non-discriminating (EU-PS non-compliant) exporters.

The results suggest that EU-PS compliant farmers use approximately 30 per cent more alternative pest management strategies than non-compliant farmers, for example, they were more likely to use beneficial insects to control pests. In addition, farmers with a higher standard of education and access to information on pesticides, such as through radio broadcasts, were more likely to practice alternative pest management strategies than those who were less educated and had little access to pesticide information.

Complying with EU-PS also increased the use of protective clothing by farm workers when handling pesticides. It was estimated that EU-PS compliant farm workers wore, on average, 80 per cent more items of protective gear than non-compliant farmers.

The study found differences in the types and quantities of pesticides used by the two groups of farmers. Using WHO toxicity classification, EU-PS compliant farmers applied greater quantities of the class 2 (toxic) fungicides than non-compliant farmers, whereas non-compliant farmers used more of the class 3 (slightly toxic) fungicides and more of the class 1 (very toxic) insecticides than compliant farmers. Fungicides are used to control bean rust, a serious disease which spoils appearance and reduces yield. Compliant farmers must balance the demand by EU supermarkets for blemish-free beans with the safety standards required by their clients. However, all farmers producing food for export to the EU have to respect EU legislation on pesticide residues.

Farmers nevertheless benefit from complying with EU-PS regulations, but the study suggests the health benefits are the result of wearing more protective clothing and applying pesticides more carefully, rather than necessarily using less pesticides.


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