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"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

Black soldier flies (BSF) as alternative livestock feed in Kenya: Gendered perspectives on business models

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Abstract

Poultry and pig enterprises are among the fastest-growing agribusinesses in Sub-Saharan Africa. The conventional animal protein sources for pig and poultry production are fish meal and soybeans. In Kenya, these resources are expensive and limited. There is an over-dependence on imports especially for soy protein and the use of small fish used to produce fishmeal already led to overexploitation of Kenyan lakes. The use of insects, especially of black soldier flies (BSF), as a replacement protein source for feed is gaining momentum and BSF production is an emerging business. In this poster we analyse the preference for certain business models used by small and medium scale male and female BSF producers in Kiambu County in Kenya. By using semi-structured questionnaires for data collection we were able to identify three main business models: cyclic, market-driven and out-grower models. The cyclic business model is a circular business model which excludes the market. Available organic waste is used to rear BSF and the BSF larvae are used by the same firm as feed in their pig and poultry production. The market-driven model is characterised by using the market for their output and by selling BSF to feed millers or directly to livestock producers. The out-grower business model is characterised by binding arrangements between a small- scale BSF farmer and an established medium to large-scale firm. One third of the BSF producers identified were women. The majority (58.4 %) of the BSF farmers used the cyclic business model, followed by the marked driven model (29.4 %) and only 12.2 % being in out-grower business model. Women producers were dominantly using the out-grower model (75 %).

Keywords: Black soldier flies, business models, gender, livestock feed

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