

Editorial

Farmers' motivations and behaviour regarding the adoption of more sustainable agricultural practices and activities

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The IX EAAE PhD workshop took place on June 22-24, 2022, in Parma (Italy). A number of 126 PhD students from 72 European and non-European universities gathered together to attend keynote speeches, present their research and get feedback on that, informally talk and share research experiences and opinions, enjoy free time events. Talking with some of these students afterwards, you could realise how well-organised, fruitful and inspiring the three-day workshop was. For most of them, it was the first opportunity to present their work, share research challenges, and receive feedback from peers and senior economists in a conference setting. Once the PhD workshop was over, the participants were invited to submit their presented papers to *BAE Bio-based and Applied Economics*. The received original manuscripts underwent a double-blind peer-review process and five of them are finally part of this Special Issue. All of these five studies use primary data and analyse farmers behaviour. Four of them are focused on African countries. The studies report interesting insights into the analysis of farmers' aspirations (Deißler et al., 2023), of the factors affecting the adoption of strategies for adapting to climate change (Onyenekwe et al., 2023), of diversifying in off-farm activities (Ceriani et al., 2023), of improving economic, social and environmental sustainability with livelihood strategies (Prazeres, 2023) and agroforestry practices (Seegers et al., 2023).

The paper of Ceriani et al. (2023) entitled "How do farmers' pluriactivity project evolve?" investigates the motivations that lead farmers to diversify their income through off-farm activities, the barriers to diversification, and the management strategies for a long-lasting choice. The data were collected in Northern France through farmers interviews, and the results show that

the balance between agricultural and off-farm activities changes over time depending on family context, job opportunities and financial situation. The maintenance over time of the off-farm job is favoured by the flexibility of both on-farm and off-farm activities to adjust to each other and by the possibility of hiring labour on the farm.

The paper "Heterogeneity of adaptation strategies to climate shocks: Evidence from the Niger Delta region of Nigeria" authored by Onyenekwe et al. (2023) analyses the adaptation strategies to climate shocks uptaken by farmers and fishermen in the Niger delta region (Nigeria) and the main factors driving their adoption. The econometric analysis of the data collected from more than 500 interviewed farmers and fishermen shows that livelihood diversification, crop management, soil and water management strategies are the solutions mostly adopted. Fishermen use mainly livelihood diversification as an adaptation option. The study finds that household size and education are the main determinants of adoption, independent of the practices being adopted, while the factors discouraging the adoption are practice-specific.

The study by Prazeres (2023) entitled "Organic cocoa farmer's strategies and sustainability" investigates the social, economic and agro-ecological factors affecting the choice of livelihood strategies by organic cocoa producers in São Tomé and Príncipe. The study collected data through a survey administered to 810 farmers belonging to organic cocoa cooperatives and finds that education level, perception of social class, insurances, loans and access to services are the main determinants of livelihood strategies.

The paper authored by Deißler et al. (2023) entitled "A complex web of interactions: Personality traits and aspirations in the context of smallholder agriculture"

assesses whether personality traits contribute to shaping the individual aspirations of smallholder farmers, and how aspirations are connected with their socio-demographic characteristics. The statistical analysis of data collected from 272 smallholder farming households in Kenya, shows that openness, conscientiousness and extraversion affect aspirations, which are additionally influenced by extrinsic factors. The study concludes that analysing aspirations when evaluating development projects and policy is important for an effective outcome of the intervention.

In their work “Exploring the effectiveness of serious games in strengthening smallholders’ motivation to plant different trees on farms: Evidence from rural Rwanda” Seegers et al. (2023) use a role-play game to raise farmers’ awareness towards agroforestry adoption. The study involves 72 small-scale farmers from Rwanda and interviews them before and after the game. Results show the effectiveness of the game to increase the knowledge of the benefits of planting different tree species on the farm as well as the motivation to take that action.

Overall, the studies included in the Special Issue provide new insights into farmers’ behaviour analysis, in particular from developing countries. The authors emphasised relevant insights for policy-makers and researchers on the factors able to affect the adoption of strategies for improving the economic, social and environmental sustainability of farming activities.

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