

Smallholder Farmers' Adaptation Strategies and Socioeconomic Determinants of Climate Variability in Boset District, Oromia, Ethiopia

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Abstract : The study aimed at examining the ongoing adaptation strategies used by smallholder farmers in response to climate variability in Boset district. It also assessed the socioeconomic factors that influence the choice of adaptation strategies of smallholder farmers to climate variability risk. For attaining the objectives of the study, both primary and secondary sources of data were employed. The primary data were obtained through a household questionnaire, key informant interviews, focus group discussions, and observations, while secondary data were acquired through desk review. Questionnaires were distributed and filled by 328 respondents, and they were identified through systematic random sampling technique. Descriptive statistics and binary logistic regression model were applied in this study as the main analytical methods. The findings of the study reveal that the sample households have utilized multiple adaptation strategies in response to climate variability, such as cropping early mature crops, planting drought resistant crops, growing mixed crops on the same farm lands, and others. The results of the binary logistic model revealed that education, sex, age, family size, off farm income, farm experience, access to climate information, access to farm input, and farm size were significant and key factors determining farmers' choice of adaptation strategies to climate variability in the study area. To enable effective adaptation measures, Ministry of Agriculture and Natural Resource, with its regional bureaus and offices and concerned non-governmental organizations, should consider climate variability in their planning and budgeting in all levels of decision making.

Keywords : adaptation strategies, boset district, climate variability, smallholder farmers

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