## DETERMINANTS OF ADOPTION OF SOYBEAN AND ITS IMPACT ON THE LIVELIHOOD OF SMALLHOLDER FARMERS IN JIMMA ZONE

## <sup>1</sup>SAMUEL DIRO AND <sup>2</sup>WONDAFERAHU MULUGETA

<sup>1</sup>POSTGRADUATE STUDENT IN MSC IN ECONOMIC POLICY ANALYSIS, DEPARTMENT OF ECONOMICS, JIMMA UNIVERSITY

<sup>2</sup>ASSISTANT PROFESSOR, DEPARTMENT OF ECONOMICS, JIMMA UNIVERSITY

## ABSTRACT

The study aims to analyze whether adopting farmers, particularly smallholders, benefit from the adoption of improved soybean technology in a subsistence environment and evaluating the way of transferring those technologies to the farm level. The analysis is based on the data collected from randomly selected 106 farm households in Jimma zone. Diagnostic survey was conducted to collect both primary and secondary data used in the study. Statistical package for social science SPSS-16 were used for data analysis. Data inputting was done in SPSS for descriptive analysis and cross tabulation. The study uses a logistic model to estimate the probability that a given household will adopt the technology.

The finding shows that education of the household head, farm size, participation on training of soybean production, and access to extension services all are positively and significantly related to adoption of technologies while distant from the market, age of the household head, and family size of the head have negative and significant impact on adoption. The result also indicated that being male headed is positively related to adopt the technology but not statistically significant. It seems that females have resource constraints like labor and cash as inputs. Other factors such as expenditure on hired labor and farm experience are negatively and positively related to adoption of the technology, respectively but both are not statistically significant. The result also shows that adoption of soybean technology has slightly modified the livelihood, the nutrition, and income of adopters.

KEY WORDS: Soybean, subsistence, adoption, logistic regression, training, extension services, diagnostic survey.

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