Abstract

Organic farming is increasingly being promoted worldwide as a better alternative to conventional farming in terms of producing healthy food and alleviating poverty with a huge sustainability potential paradigm coupled with relatively less environmental damage. Such production paradigm which is also argued to be effective in achieving food security aligns well with many of the critical development policy objectives of the royal government of Bhutan. Thus Bhutan declared to be a full organic country by 2020. However, given a set of constraints prevalent in Bhutan and in the face of increasing influence of conventional farming, it is unclear how and to what technological, management and social extent organic farming can meet the expectations.

Therefore, the overall goal of the study is to compare the performance of organic and conventional farming in terms of yield, soil nutrient status, cost-benefits and socio-economics as well as to analyze support provisions, including policies towards achieving the country’s ambitious goal of going fully organic by 2020.

The comparative study of yield, soil nutrient status and cost-benefit will be carried out under farmers’ prevailing management practices. Twenty representative farmers’ paddy fields (ten organic and ten conventional fields) located in the mid agro-ecological zone will be purposively selected. Paddy rice will be used for this study as it is one of the most dominant crops of Bhutan. The data generated from farmers’ field study will use appropriate ANOVA and Multivariate designs to evaluate differences in yield, soil nutrient status and cost-benefits between organic and conventional farming.

The socio-economics study will be carried out through survey interviews of 380 organic and another 380 conventional farmers across the three agro-ecological zones of the country. These farmers will be selected through a multi-stage sampling, and stratified as low, middle and high income group farmers based on landholding size. Data obtained through this study will be analyzed using principle component and regression analysis.

The study on policies and support system will be conducted through experts’ group interviews and discussion with at least 50 key informants, officials of the Ministry of Agriculture and Forests, policies makers, organic traders, representative farmers and consumers in a transdisciplinarity set up. Data generated from this study will be analyzed using descriptive and inferential statistics.

Eventually the study will integrate the results of field experiment, survey interviews and experts’ group interviews and discussions to draw conclusions on the prospects of organic farming in Bhutan and to derive the constraints and conditions, under which organic farming should be recommended at the farm level. It is also expected that the findings of the study will contribute to the national knowledge base for developing sustainable agricultural policies.

Keywords: Bhutan, organic farming, conventional farming, yield, soil nutrients, cost-benefits, socio-economics, agricultural practices, policy support