CAPACITY BUILDING TRAINING ON

TECHNICAL EFFICIENCY AND PRODUCTIVITY ANALYSIS USING FRONTIER SOFTWARE

DECEMBER 10, 2021

Vision:
Envisioned to become a leading firm that delivers quality service through innovative harmonious efforts and serve organization in the horn of Africa.

Mission:
to support our clients to make knowledgeable decisions.

SUMMARY
This publication narrates the summary reports of TECHNICAL EFFICIENCY AND PRODUCTIVITY ANALYSIS USING FRONTIER SOFTWARE Capacity building training project of Ethiopian Economics Association under the finance support from the Open Society Imitative for Eastern Africa.

EXECUTIVE SUMMARY

The training on efficiency & productivity analysis using frontier is selected by EEA as one of the important training tops due to its significance in providing information for making relevant decision in the use of scare resources and for formulating relevant development policies. Although, efficiency and productivity are well recognized concepts, there is still limitation in their application on STATA software's.

The main objective of this training is to enhance the capacity of *practitioners, researchers, & academicians* on how to conduct efficiency analysis.

Specific objectives of the training are;
1. to understand the basic concepts of efficiency, productivity and their measurements; and
2. to estimate production and inefficiency parameters using cross-sectional & panel frontier models.

The scope of the training includes the following aspects;
- The training will introduce the trainee with basic tools & techniques of efficiency and productivity analysis using STATA software;
- The training will focus on conceptual, methodological & analytical issues using real data sets.

The first parts of this training introduce short-term training rational, objectives, and scope of the training. The second section deals on production, productivity and efficiency measurements. Explain the concepts of production, productivity, and efficiency. Discusses methods of measurement of efficiency and productivity and relevant others. Third section deals with foundation of basic econometrics model using real data sets will be provided as a foundation for the training. In this section brief descriptions of the software- STATA-16 and its customization to frontier model will be explained. Fourth section deals with the modification of OLS to frontier. Finally, practical exercise will be demonstrated.

This five day training briefly reviews production theory and introduces the concepts and methods of measuring efficiency analysis. Provides hands-on training on the estimation of productivity and efficiency analysis will be supported by standard training modules, real-world datasets, and econometric software packages.

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