Abstract:

Efficiency evaluation in agriculture is one and a very useful tool for determining the farm's capability to survive in an open free market. Horticultural farms in Andalusia have a consolidated situation where big investments in land and technology were made. The competition from outside EU (mostly from North Africa) and recently joined countries has increased the uncertainty in a less and less profitable environment. In this situation, an efficient resource management -lower costs- is an attractive competitive strategy when combined with a sustainable high quality production (EU guidelines). Continuing our previous work about efficiency in agriculture, this paper studies forty different horticultural strategies in Andalusia. The gross value-added method was chosen to select horticultural farms in the original databases (García et al., 2003). The productive strategies in the final set of horticultural enterprises were determined using both the combination of horticultural crops and the productive system of the farm (open-air or protected cultivation -greenhouses). Different geographical locations were also considered. Three different efficient levels in the selected horticultural typologies were obtained using standard output-oriented DEA. From an efficiency point of view, relevant parameters (inputs and outputs) were statistically studied to compare these three efficient levels. Finally, using average parameters, a context-oriented DEA was selected to determine the relative attractiveness of horticultural productive typologies for selecting the best choice in each efficient level.