PRIORITIZING RESEARCH USING EX-ANTE METHOD

-A CASE STUDY IN THE COCONUT SECTOR-

ABSTRACT

With the growing population there is a need to increase food production, but the scope for further increasing the cultivated area is limited. Therefore, it is imperative to improve productivity through higher technology and intensive production systems by conducting agricultural research. In Sri Lanka, there is a scarcity for public research spending and in the coconut sector, apart from the state funds, the research funds are obtained from the Export Cess revenue. In order to use these funds efficiently, there is a need to prioritize various research activities carried out at the Coconut Research Institute of Sri Lanka (CRISL), by using economic methods.

As this study is done to prioritize the proposed research projects to be carried out in the future, the ex-ante method is selected under which the economic surplus approach and scoring methods are used. Twelve applied research projects are selected from the Agronomy division of CRI and two sets of questionnaires for both the methods used, are distributed to the scientists at CRI and the Faculty of Agriculture, Peradeniya.

Different patterns of ranking are obtained from the economic surplus method based on the Benefit Cost Ratios, Net Present Values and Internal Rates of Return. However, ranking based on the NPV values is considered to be more appropriate under the economic surplus method, as the funds at CRI are scarce and research projects are considered as mutually exclusive. According to this ranking where the economic efficiency is considered, the highest priority is given for the study regarding the use of Gliricidia and Accacia loppings as substitute for inorganic nitrogen fertilizers for coconut. By adopting the scoring method, which is concerned about the multiple objectives, a different pattern of ranking is obtained where the highest priority is given for the demonstration on the use of cover crops and Gliricidia in coconut lands. Therefore, the policy makers should give equal attention to both multiple and efficiency objectives and make their priorities. Since, IRR values are low between 20-24%, there is no way for the private sector to get involved in research and therefore public funds should be allocated.