

## 〈 Summary 〉

Purpose& Contents	This study analyzes the economic efficiency of farms by crops using the data envelopment analysis (DEA). We examine how management and production characteristics affect efficiency. Implications for improving efficiency are suggested based on the findings.			
Results	<p>This study evaluates an annual cost efficiency and profit efficiency by crops. In terms of cost efficiency, economic overall efficiency (OE), allocative efficiency (AE), technical efficiency (TE), pure technical efficiency (PTE), and scale efficiency (SE) are evaluated. And we evaluate the profit efficiency considering the expenditure constraint and risk premium as constraints. Additionally, two evaluation method are suggested. One is method to measure the change of technical efficiency of frontier farms and the other is that to evaluate profit efficiency of farms whose profit are below zero. We estimate the effects of some explanatory variables on overall, allocative, technical, pure technical, scale, and profit efficiencies.</p> <p>Farm management strategies, policies, and R&amp;D strategies to increase farm efficiency are suggested based on the results. And improved investigation questions of Farm Income Survey are proposed to effectively assess the efficiency.</p>			
Expected Contribution	Government and related research institutions could utilize the results of this as bases for the R&D technology and policies to improve the farm efficiency. The developed evaluation methods and investigation questions in this study may contribute to enhance effectiveness of efficiency management.			
Keywords	Efficiency	Data Envelop Analysis	Price Risk	Capital Restriction