

**TREND ANALYSIS ON THE RESOURCE USE EFFICIENCY OF
BLOCK FARM AND COOPERATIVE SCHEMES
IN SUGARCANE PRODUCTION**

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ABSTRACT

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The primary aim of the study was to determine if there is significant difference between the resource-use efficiency of sugarcane production between block farm members and cooperative members with 216 farmers from Kiblawan and Hagonoy. A descriptive-comparative research design was utilized last December 2024- February 2025. Data was analyzed using Frequency Distribution, Mean, Net Profit Margin, Cobb-Douglas production function, Marginal Value Productivity, and Resource Use Efficiency. Majority of the respondents were 52-67 years old, male, and almost all of them are married, and reached tertiary education. They dedicate their entire landholding to sugarcane farming, all of the farmers had been into sugarcane production for 5 years and above, while 68.50% are members of sugarcane farmer cooperative, and all of them have undergone trainings related to sugarcane production. Farmers who are members of sugarcane

cooperatives spend more than their counterparts from block farms in terms of labor cost per hectare. Even with higher cost of production, cooperative members still reported slightly higher net income, and Net Profit Margin of 0.18, and with this, the Benefit: Cost Ratio is also higher for farmers who are members of cooperative at 0.23. All the variables associated in sugarcane production for farms of cooperative members are overutilized, and that production can be increased by reducing the units of inputs. On the other hand, for farmers under block farm system, there is a mix of underutilization and overutilization of variables. Labor, land preparation and transportation costs were underutilized, while the rest of the costs associated with sugarcane production are overutilized. To increase efficiency of sugarcane production under block farms, there is a need to increase the unit of inputs for labor, land preparation and transportation costs to maximize productivity, whereas inputs such as machinery and equipment, fertilizers and pesticides area overutilized.

Keywords: *Sugarcane Farming, Profitability, Benefit: Cost Ratio, Resource Use efficiency*
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