W_4	0.075*	0.044	0.092
D	0.529***	0.053	0.000
Adjusted R Square	0.906		

Note: *** significant at 1% level ($p < 0,01$)
** significant at 5% level ($p < 0,05$)
* significant at 10% level ($p < 0,10$)

Table 4 shows that land area, urea fertilizer, SP-36 fertilizer, labor force, and the role of women farmers had a significant effect on the lowland rice yield. The land area had a positive and significant effect on the lowland rice yield at α 1%, indicating that the addition of land areas could significantly increase lowland rice production. This finding shows that land area had a very important role in rice farming self-sufficiency. This result was supported by findings from Effendy [41], Effendy [44], and Zen [45] that land area had a role in increasing agricultural production. Besides the land area, urea and SP-36 fertilizers also had a positive and significant effect on the lowland rice yield at α 1%. This shows that the use of fertilizer still played a role in increasing the lowland rice yield in the study area. This result was supported by the findings of Li et al [46] and Effendy [44] that fertilizer could increase agricultural production. Fertilizers could increase nutrients in the soil that are much needed by lowland rice plants.

Labor had a positive and significant effect on the lowland rice yield at α 10%. This shows the addition of labor could increase the lowland rice yield. This result was supported by the findings of Li, et al [46], Effendy [41], and Effendy et al [47] that labor could increase agricultural production. Sufficient and skilled labor could complete the work in the production of lowland rice effectively and efficiently, such as fertilizing, controlling pests and diseases, and post-harvest.

The role of women farmers had a positive and significant effect on the lowland rice yield at α 1%. The women farmers had the second-highest role after land area in affecting the production of lowland rice, demonstrating the contribution of women farmers played an important role in increasing the lowland rice yield involving nurseries, dispelling bird attacks, and post-harvest work. This result was supported by the findings of Laven and Pyburn [10], White [11], Wijers [12], and Effendy et al [13]; overall, women farmers play an important role in agricultural production. Increasing human resources (women farmers) could be done by giving them innovation [48-50].

5 Conclusion

The role of women farmers in the production of lowland rice was affected by their education and farming income, with the effect on income being the most dominant. Land area, urea fertilizer, SP-36 fertilizer, labor, and the role of women farmers had a positive and significant effect on the lowland rice yield, but land area in conjunction with women farmers was greater. It was expected that farming households would optimize the use of women laborers as well as increasing resources through extension and training.

Acknowledgments

The authors would like to thank the Kemenristekdikti for providing support for this research.

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