## The role of equipping and modernization plans in the development of mechanization of rice cultivation in paddy fields of Amlash city

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Equipping and modernization of paddy fields are two important infrastructure actions in provision of infrastructures for mechanized rice cultivation. In this regard, a survey research was conducted to investigate the influencing factors in implementation of equipping and modernization plans of paddy fields in Amlash County, Guilan Province. Accordingly, the sample size for the two groups of farmers employed in traditional and equipped paddy fields using Cochran formula was determined 105 and 160, respectively. Research data collected by a self-made questionnaire. The results show that the mechanization degree of agricultural operations in equipped and modernized paddy fields was significantly higher than the corresponding values in traditional fields, except rice weeding. The largest share of total mechanization capacity in traditional fields was related to tillage operation, while the largest share of mechanization capacity in equipped fields was related to harvest and field preparation operations, respectively. So, regardless of the degree of mechanization close to zero in mechanical weeding and not-so-favorable conclusion due to higher share quantitative and qualitative index of capacity or harvesting energy of rice harvest operations mechanization in equipped and modernized fields, generally effect of implementing these projects on development of mechanization of rice cultivation has been positive. Hence, it is recommended that Guilan Agricultural Organization meanwhile planning to develop Equipping and modernization plans of paddy fields in other parts of the province, consider the promotion of mechanization degree of mechanical weeding by providing practical solutions. Also, special attention to careful examination of necessary agricultural machinery size, especially rice harvesting

machines in order to improve the quality of mechanization in equipped and modernized paddy fields will be useful.

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