
Factors affecting rice wastage in Mazandaran Province, Iran

Ebrahim Ebrahimi, Asghar Bagheri* and
Mojtaba Sookhtanlou

Faculty of Agriculture and Natural Resources,
University of Mohaghegh Ardabili, Iran
Email: mersadebrahimi@yahoo.com
Email: a_bagheri@uma.ac.ir
Email: m.sookhtanlo@uma.ac.ir
*Corresponding author

Fathollah Keshavarz Shal

Guilan Agricultural and Natural Resources
Research and Education Center,
Agricultural Research, Education and Extension Organization,
Rasht, Iran
Email: f_keshavarzshal@yahoo.com

Abstract: This study investigated factors influencing rice wastage in Mazandaran Province, Iran. The wastage was estimated by a combination of the Delphi technique and interviews. Nineteen experts were sampled by snowball sampling for the Delphi technique. In addition, a sample of 258 farmers was sampled using Cochran's formula. Ordinal logistic regression using STATA Software was employed for data analysis. According to the results, 12 local factors influencing rice wastage were derived among which 'pests (*Chilo suppressalis*, *Ephydra afghanica* Dahl, etc.)', accounting for 5% of the wastage, was found to be the most important cause of wastage in the region. The findings also showed six factors – including age, educational level, farm area, mean crop yield, number of machines owned, and waste management knowledge – had significant and positive impact on increasing the wastage and discriminated the paddy growers in four groups, i.e., farmers with low, relatively low, relatively high and high wastage.

Keywords: rice wastage; rice growers; Delphi technique; Mazandaran; Iran.

Reference to this paper should be made as follows: Ebrahimi, E., Bagheri, A., Sookhtanlou, M. and Shal, F.K. (2023) 'Factors affecting rice wastage in Mazandaran Province, Iran', *Int. J. Environment and Waste Management*, Vol. 31, No. 3, pp.308–324.

Biographical notes: Ebrahim Ebrahimi studied Agricultural Management at the University of Mohaghegh Ardabili. His research interests are waste management in agriculture, acceptance models and rural studies.

Asghar Bagheri currently works at the Department of Hydraulic Engineering and Agricultural Management, University of Mohaghegh Ardabili. He does research in environmental science, waste management and agricultural