

صفحه اصلی ×پرتال ورود یکپارچه ×Nasibeh Zarei+Re: ×Investigation of th ×10.71877/ijamad.2 ×Investigation of th ×GIGALIB | Extend | ×International Jouri ×+ −

oiccpres.com/ijamad/article/view/827950%Sign in

Webmail :: InboxKOBRA :: Searchدانشگاه فردوسی مشهد...سازمان الکترونیک پیوندScienceDirect.com | Sc...TED: Ideas change eve...Search Page | Springer...WhatsAppInbox - prezvanimogh...لايف لاین>>Other Bookmarks

Search



DAMAD HOMEABOUT ·CURRENTARCHIVESFOR AUTHORS ·JOURNAL POLICIES ·INDEXING AND ABSTRACTINGSUBMISSIONS

INTERNATIONAL JOURNAL OF AGRICULTURAL MANAGEMENT AND DEVELOPMENT / VOL. 14, NO. 4 (2024) / ORIGINAL ARTICLES10.71877/ijamad.2024.8279

Investigation of the Dust Effect on the Technical Efficiency of Irrigated Wheat Production in Five Selected Provinces in Iran

Nasibeh Zarei^{✉1}, Mahmood Saboohi^{✉1}, Mahmood Daneshvar^{✉1}, Naser Shahnoushi^{✉1}, Parviz Rezvani Moghaddam^{✉2}

¹ Department of Agricultural Economics, Faculty of Agriculture, Ferdowsi University of Mashhad (FUM), Iran
² Ago-technology dept. Agriculture Faculty, Ferdowsi University of Mashhad

Categories

- Environmental policy and management

Revised: 12/05/2023
Accepted: 07/21/2024
Published in Issue 01/01/2025

How to Cite

Zarei, N. , Saboohi, M., Daneshvar, M., Shahnoushi, N. , & Rezvani Moghaddam, P. . (2025). Investigation of the Dust Effect on the Technical Efficiency of Irrigated Wheat Production in Five Selected Provinces in Iran. *International Journal of Agricultural Management and Development*, 14(4). - <https://doi.org/10.71877/ijamad.2024.8279>

More Citation Formats

Scopus[®]



Share:


Abstract

This article investigates the dust effect on the technical efficiency of wheat production in major wheat producing provinces of Iran – Khuzestan, Ilam, Kermanshah, Hormozgan, and Lorestan provinces in Iran. In this regard, the non-parametric Window Data Envelopment Analysis (WDEA) approach and panel Tobit model were used from 2010 to 2018. Considering five years in each window, the average technical efficiency of 5 windows was evaluated in each province. The results of the WDEA model indicate that Kermanshah province has the highest average efficiency (0.92). Likewise, the lowest average efficiency in Windows (1), (2), (3), (4), and (5) belong to Khuzestan and Lorestan provinces, respectively. Four forms of the Cobb-Douglas, generalized quadratic, transcendental, and translog functions were evaluated to estimate the second model, and based on the goodness of fit criteria, the transcendental function was selected as the preferred function. The results of the panel Tobit model show that the number of dusty days has an adverse and effect on the average irrigated wheat production efficiency. In this regard, recommended to use smart agriculture to manage wheat fields, tackle the challenges and issues in insurance of agricultural products by changing the laws and increasing investment in the agricultural insurance fund.

Keywords

Environmental Pollution, Climate Change, Window Data Envelopment Analysis

Type here to search



Address11:47 PM10/10/2025