## World Academy of Science, Engineering and Technology International Journal of Industrial and Systems Engineering Vol:16, No:07, 2022

## Market Chain Analysis of Onion: The Case of Northern Ethiopia

Authors: Belayneh Yohannes

Abstract: In Ethiopia, onion production is increasing from time to time mainly due to its high profitability per unit area. Onion has a significant contribution to generating cash income for farmers in the Raya Azebo district. Therefore, enhancing onion producers' access to the market and improving market linkage is an essential issue. Hence, this study aimed to analyze structure-conduct-performance of onion market and identifying factors affecting the market supply of onion producers. Data were collected from both primary and secondary sources. Primary data were collected from 150 farm households and 20 traders. Four onion marketing channels were identified in the study area. The highest total gross margin is 27.6 in channel IV. The highest gross marketing margin of producers of the onion market is 88% in channel II. The result from the analysis of market concentration indicated that the onion market is characterized by a strong oligopolistic market structure, with the buyers' concentration ratio of 88.7 in Maichew town and 82.7 in Mekelle town. Lack of capital, licensing problems, and seasonal supply was identified as the major entry barrier to onion marketing. Market conduct shows that the price of onion is set by traders while producers are price takers. Multiple linear regression model results indicated that family size in adult equivalent, irrigated land size, access to information, frequency of extension contact, and ownership of transport significantly determined the quantity of onion supplied to the market. It is recommended that strengthening and diversifying extension services in information, marketing, post-harvest handling, irrigation application, and water harvest technology is highly important.

**Keywords:** oligopoly, onion, market chain, multiple linear regression

Conference Title: ICSCML 2022: International Conference on Supply Chain Management and Logistics

**Conference Location :** Dubai, United Arab Emirates

Conference Dates: July 28-29, 2022