Extended Abstract
Please do not add your name or affiliation

Paper/Poster Title	**Market Institution and Its Impacts on Agricultural and Rural Transformation in Indonesia**

Abstract prepared for presentation at the 98th Annual Conference of The Agricultural Economics Society will be held at The University of Edinburgh, UK, 18th - 20th March 2024.

Abstract	*200 words max*

Agricultural and rural transformation in Indonesia involves the modernization of farming practices and the improvement of rural areas. Economic policies, infrastructure, human capital, technology, and market institutions play important roles in this process. Market institutions, including traditional markets, supermarkets, and online platforms, have an impact on market access, credit availability, technology adoption, non-farm employment, and poverty reduction. This paper aims to examine the role and impacts of market institutions on agricultural and rural transformation in Indonesia, utilizing data and conducting analysis through the description and Data Panel Analysis. Various parameter estimation models such as Common Effect, Fixed Effect, and Random Effect are compared, and suitable models are determined through a series of tests such as Chow, Hausman, and LM tests. The shift towards high-value commodities and commercialization in Indonesian agriculture, particularly in Java, has brought about positive changes by transitioning from subsistence farming to market-driven practices, thereby improving farmers' incomes. Market-based approaches and diversification contribute to economic growth, necessitating government support in the form of policies, infrastructure development, and investment. While non-agricultural employment opportunities are emerging in rural areas, challenges such as marketing strategies and regional disparities need to be addressed. Overall, comprehensive measures are crucial for achieving inclusive rural economic growth, poverty reduction, and sustainable development in Indonesia.

Keywords	Agricultural, rural transformation, market institution, rural economics
JEL Code	R:Rural economics=O18 see: www.aeaweb.org/jel/guide/jel.php?class=Q)

Introduction	*100– 250 words*

There are several questions and problems that may arise in relation to the market institutions and their impacts on agricultural and rural transformation in Indonesia. Some examples include: (a) What is the role of traditional markets in driving agricultural and rural transformation in Indonesia? (b) How do market institutions influence the flow of goods and services within and between rural and urban areas in Indonesia? What are the implications of these flows for the competitiveness and performance of the agricultural sector? (c) How can market institutions be strengthened and supported to better contribute to agricultural and rural transformation?, and (d) How do market institutions influence the access of farmers and agribusinesses to markets in Indonesia? What are the implications of this access for the income and welfare of rural households? Overall, these are some of the questions and problems that may arise in relation to the market institutions and their impacts on agricultural and rural transformation in Indonesia, and that may need to be addressed to support the development of more efficient and effective market systems. Therefore, the main objective of this paper is to assess the role of market institutions in promoting agricultural and rural transformation in Indonesia, and to explore the impacts of these institutions on the sector.

AES

Methodology	100 – 250 words

This study utilizes data from the Indonesian Central Statistics Agency and publications from 2000-2020, including employment data collected in August each year to reflect mid-year employment statistics. The data indicated an analysis of various factors related to rural transformation, market institutions, income distribution, poverty reduction, infrastructure, and electricity usage in rural areas. The analysis also utilizes Data Panel Analysis to analyse the factors influencing these variables. The research is carried out using a regional classification based on the growth centers concept.

Impact of market institutions and their facilitating and RT1, RT2, rural income and poverty reduction with Data Panel Analysis. Data Panel Analysis is a statistical method that combines cross-sectional and time-series data to investigate relationships between variables. It allows for the examination of fixed effects, random effects, and time-invariant variables. This approach is useful for studying the factors that influence various socioeconomic indicators in rural areas.

In the realm of panel regression analysis, accurate parameter estimation is crucial. The method used to estimate these parameters relies heavily on assumptions made about the intercept, slope, coefficient, and error. In the panel data setting, there are three main models for parameter estimation: the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). To determine the most suitable model, a series of statistical tests are performed, namely the Chow test, the Hausman test, and the Lagrange Multiplier (LM) test.

Results	100 – 250 words

Based on the FEM analysis, there is a strong positive relationship between the presence of traditional markets and high-value activities (RT1). This implies that the existence of traditional markets has the potential to contribute to the increase in high-value activities (RT1) in the area. On the other hand, the relationship between conventional markets, shopping centre, and roadand RT1 is not statistically significant. This suggests that the presence of conventional markets may not have a strong influence on high-value activities (RT1) in the area. Furthermore, the positive coefficient of electricity usage indicates that an increase in electricity usage is associated with a increase in the share of high-value activities (RT1). This indicates that higher electricity usage is linked to a higher proportion of high-value activities (RT1).

Based on the analysis results, making changes to the non-agricultural rural workforce between traditional markets and conventional markets mutually influence the allocation of labor in rural areas. Although the coefficient of the conventional market is larger than the traditional market, the significance level of the traditional market is higher. Therefore, the development of traditional markets is relatively more reliable in improving non-agricultural labor.

The growth of conventional markets has the potential to positively impact the national economy. The development of these markets creates employment opportunities in the agricultural sector and related industries, potentially reducing unemployment rates and improving the well-being of the population. Nonetheless, challenges persist in developing conventional markets. Inadequate infrastructure, limited accessibility, and a lack of awareness regarding the benefits of conventional agricultural products hinder progress in certain regions.

In conclusion, the growth of conventional markets in Indonesia presents opportunities for agricultural stakeholders and economic advancement. However, addressing regional disparities, overcoming infrastructure challenges, and raising awareness about the advantages of conventional agricultural products are essential for achieving balanced development and maximizing the potential benefits of conventional markets throughout the country.

Discussion and Conclusion	100 – 250 words

AES

The shift towards high-value commodities and commercialization in agricultural production in Indonesia, particularly in Java, is a positive development. It signifies a move away from subsistence farming towards market-driven practices, leading to better incomes for farmers. The adoption of market-based practices and diversification of agricultural commodities contribute to economic benefits and overall sector growth. The analysis also emphasizes the need for government support through policy measures, infrastructure development, and investment to stimulate economic growth, improve income opportunities, and enhance the well-being of agricultural communities. Additionally, the growth of non-agricultural employment in rural areas and the development of traditional, conventional, and retail markets have both opportunities and challenges that require attention. The concentration of road infrastructure and electricity development in certain regions indicates the need for connectivity and access to support rural economic development.

The shift towards high-value commodities and commercialization in agricultural production in Indonesia, particularly in Java, has significant implications for the economy and the well-being of farmers. This transition represents a positive step away from subsistence farming practices towards market-driven approaches, which can result in improved incomes for farmers. By focusing on high-value commodities, such as fruits, vegetables, and specialty crops, farmers have the potential to tap into lucrative markets and generate higher profits.

The adoption of market-based practices and the diversification of agricultural commodities have several economic benefits. Firstly, it enhances the competitiveness of Indonesian agriculture in the global market, as high-value commodities often fetch higher prices. This contributes to foreign exchange earnings and the country's overall economic growth. Secondly, it encourages innovation and technological advancements in farming techniques, leading to increased productivity and efficiency.