


Superior agricultural human resource management for the achievement of food security in ngada district east Nusa Tenggara province

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Article Info	ABSTRACT
Keywords: Human Resource Management, Superior Agriculture, Food Security	Food security is a condition where the food needs of the entire population are met regularly, safely and sustainably. Food security can be achieved through various efforts, one of which is by managing superior agricultural human resources (HR). This research examines superior agricultural human resource management to achieve food security in Indonesia. This study used qualitative research methods. Data collection techniques in this research were carried out using literature study, observation and interviews. The data that has been collected is then analyzed using three stages, namely data reduction, data presentation, and conclusion. The research results show that managing superior agricultural human resources to achieve food security in Ngada Regency is important. Superior management of agricultural human resources can be done through several efforts, namely improving the quality of education and training, increasing motivation and welfare, empowering farmer organizations, and increasing cooperation between parties.
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INTRODUCTION

Every country, including Indonesia, strives to ensure the fulfillment of adequate and nutritious food needs for all its population. Food is included as a very important basic human need and is an integral part of every individual's human rights. Thus, every country, including Indonesia, is committed to meeting the food needs of its population by increasing various efforts to sustainably achieve food security and nutrition (Ariani & Suryana, 2023). Food security is a condition where household food needs are fulfilled by taking into account sufficient availability both in terms of quantity and level of quality, including aspects of food security, equitable distribution, and availability at affordable prices (Ministry of PUPR, 2011).

Efforts to realize food security are made by the mandate of Law Number 18 of 2012 concerning food, which stipulates that the government and local governments (Pemda) are responsible for food availability. The law also affirms the goal of realizing access to

affordable food for communities, households and individuals. It is responsible for increasing the amount and quality of people's food consumption (Articles 12, 46, and 59). These efforts are directed through the principle of independent and sovereign food. Food security can be achieved through various efforts, one of which is by managing superior agricultural human resources (HR).

The strategic role of the agricultural sector has become very significant because of its tangible contribution to economic development, both at the regional and national levels. The provision to improve agriculture and food in 2020-2024 continues the previous period, focusing on agricultural development towards an industrial agricultural model. This step aligns with the President's direction to make economic changes, moving from traditional agricultural systems to modern ones. The 2020-2024 RPJMN sets the agricultural sector as an integral part of the development agenda to increase economic resilience and achieve quality and equitable growth. The vision of "The Realization of an Advanced Indonesia that is Sovereign, Independent, and Personality Based on Gotong Royong" is defined in agricultural and food development, focusing on achieving advanced, independent, and modern agriculture. It is geared towards increasing economic development and prosperous farmers. Advanced agricultural achievements include improving the quality of agricultural Human Resources (HR) to increase farmers' work output and welfare (Saefudin, 2021).

Efforts to evaluate the level of food security in a region and its supporting elements can be made through an assessment system in the form of a Food Security Index (IKP), which refers to the meaning of food security and part of the system that contains a food security system. This system uses nine indicators derived from three main food security aspects: availability, affordability, and utilization. The selection of indicators in the IKP is based on the first evaluation of the global food security index, the second sensitivity in measuring the condition of food security and nutrition, the third covers aspects of the three pillars of food security and finally, the availability of regular data for a certain period (a year) involving all districts/cities and provinces. (National Food Agency, 2022).

Previous research by Wuli (2023) shows that one of the obstacles faced by the agricultural sector in Indonesia is the limited quality of human resources (HR) in agriculture. The low level of prosperity for farmers in Indonesia is due to their inadequate abilities, such as managerial skills, weak bargaining power, limited access to capital and information, and low education levels. There is a declining interest of young people in agriculture because there is an assumption that being a farmer, in addition to being less promising economically, is also considered a less prestigious job.

Another study by (Janti et al., 2016) shows that to strengthen regional food security, the Bantul District Government conducts spatial policy review, enforces spatial planning

laws, supports budget allocation, establishes Sustainable Food Agricultural Land Protection Bylaws to increase land productivity, and protects existing agricultural land. Although the food security situation of Bantul District is in the moderate category, the Regional Regulation on Sustainable Food Agricultural Land Protection must be implemented immediately.

The novelty of this research is from the object of his research, namely superior agricultural human resource management in Ngada Regency, East Nusa Tenggara Province, which has never been studied before. This research can significantly contribute to developing theories in human resource management in the agricultural sector. The study's results can help enrich the literature and theoretical understanding related to the factors that influence the success of HR management in the agricultural environment, especially in Ngada District. The purpose of this study is to examine the management of superior agricultural human resources for the achievement of food security in Indonesia.

METHODS

This study used qualitative research methods. Qualitative research methods are research methods that aim to obtain an understanding and explanation of an event through deep, complex, and contextual means. This method focuses more on interpreting meaning and understanding a particular context or situation (Sari et al., 2022). This research was conducted in Ngada Regency, East Nusa Tenggara Province. Data collection techniques in this study were carried out by literature study, observation and interviews. Data collection begins with a literature study that involves searching and analyzing various sources of information, such as scientific journals, books, and documents related to human resource management in agriculture and food security. At the same time, observation is used to collect data through direct observation of situations or activities related to human resource management in the agricultural sector of Ngada Regency. Interviews involved related parties, such as farmers, agricultural managers, workers in the agricultural sector, and other stakeholders. The data that has been collected is then analyzed using three stages, namely data reduction, data presentation and conclusions.

RESULT AND DISCUSSION

Food security is a very important global issue given the challenges faced by the world, such as population growth, climate change, and inequality of access to food. In addition, the decline of agricultural areas replaced by residential and industrial land is a serious threat and challenge for Indonesia to achieve independence in food security.

Food security is the ability of a country, region, or individual to provide sufficient food availability and accessibility, guaranteed security, nutrition, and balance for all its

population. Referring to FIVIMS (2005) which states the condition when every individual in time physically, socially, and economically can access sufficient, safe, and nutritious food according to their consumption needs and individual tastes, this aims to support an active and healthy life (Suharyanto, 2011). Meanwhile, Food Law No. 7 of 1996 states that the conditions for meeting household food needs are seen in the availability of sufficient food, both in quantity and quality, as well as safe, equitable, and affordable. Food security, which can guarantee food availability for the citizens of this country, is still a major issue in Indonesia.

According to the Speech of the Coordinating Minister for the Economy in 2015, the State of Indonesia, which has a very large population, has always faced food problems. Often, political tensions arise in response to food scarcity and rising prices. Therefore, food becomes not only an economic commodity but also a political commodity that brings broad social impacts (Ariani, 2007).

Food in Indonesia has a very significant position, especially food staples that can concern political, economic, social and cultural issues. The majority of the main food ingredients of the Indonesian population are serelia, which consists of rice, corn, and flour. Among them, rice became the most dominant as the main food of the population. Therefore, the issue of food security in Indonesia has an important meaning in maintaining stability in the political, economic, social, and cultural fields (Prabowo, 2010). The government is obliged to ensure food security for its population in every region in Indonesia, including in Ngada district, East Nusa Tenggara province.

Ngada Regency, as one of the districts in East Nusa Tenggara Province, stands out with great potential in the agricultural sector, especially in rural areas (Taus et al., 2021). In the vision and mission of Ngada Regency 2021–2024, the realization of a superior, independent, and cultured Ngada community with a focus on environmentally sound agriculture and tourism. One of the missions of Ngada Regency emphasizes regional economic development through key sectors, including agriculture, animal husbandry, fisheries, and tourism, by paying attention to the environment (Wuli, 2022), which means that the development of the agricultural sector is one of the factors in advancing the regional economy. This is supported by the area of Ngada Regency, which has an area of agricultural land, an abundance of natural resources and a climate that supports agriculture.

For example, South Golewa District in Ngada Regency has a significant role as a major contributor to the agricultural sector. Various villages in this region, such as Were III Village, Boba Village, and Takatunga Village, show superior potential in commodities such as rice paddy fields, corn, horticulture (bananas), and plantation crops (cocoa and

candlenut) (Taus et al., 2021). Another example of economic potential in Ngada Regency is the coffee industry, where the Regency is known as the best coffee producer in Flores, NTT. Bajawa coffee is a product that is very famous for its superior quality (Wuli et al., 2023). Although Ngada District has these potentials, food security in this region has still not reached optimal levels. One of the obstacles the agricultural sector faces is the limited quality of Human Resources (HR) in agriculture (Wuli, 2023).

Human Resources (HR) is a community that is ready, willing, and able to contribute to efforts to obtain organizational goals (Samsuni, 2017). HR, as one of the resources in the organization, has a crucial role in the success of achieving organizational goals. HR covers all aspects of the workforce, including the skills, knowledge, experience, attitudes, and abilities of individuals working within the organization. The success and failure of the organization depend on HR in implementing its duties and functions.

Excellent agricultural human resources are human resources who have the competencies, expertise, and attitudes needed to run an agricultural business according to their goals. Agricultural human resource management is important in realizing superior agriculture. This is because human resources who can understand can also manage and use technology and science in managing agricultural resources continuously, so the quality of human resources can determine the success of agricultural development (Supatminingsih, 2022). For this reason, a solution to deal with the achievement of food security in Ngada district, East Nusa Tenggara province, is to improve human resource management (HR) in superior agriculture.

Several strategies can be implemented to improve superior agricultural human resource management. First, improving the quality of education and training in agriculture must be emphasized. Furthermore, efforts to improve the motivation and welfare of farmers are also an important focus. In addition, empowering farmer organizations through education and extension is another strategic step. Finally, there is better cooperation between various parties in managing agricultural human resources.

The first step in efforts to manage superior human resources in agriculture is to improve the quality of education and training. As stated by Soekijo 1999 (Bariqi, 2018), education and training are very important to improve the quality of work-related abilities, thinking and expertise. Improving the quality of education and training is one of the main strategies to create superior agricultural human resource management. Agricultural education must produce agricultural human resources with the required competencies, namely knowledge, skills, and attitudes.

According to BP2SDMP 2019 (Tarigan, 2020), the mission of human resource development in the agricultural sector is the realization of competitive agriculture-oriented

education, strengthening the foundation of oriented training and certification of competitive agricultural skills, strengthening the foundation of integrated and sustainable extension services and strengthening the foundation of bureaucratic reform in supporting the increase in agricultural and competitive agricultural output. Here are some efforts that can be made to improve the quality of agricultural education:

1. To improve the agricultural education curriculum, it must be adapted to the needs of the growing agricultural industry. The curriculum should include materials relevant to the latest agricultural technology.
2. Improve the quality of lecturers and teaching staff. Lecturers and teaching staff of agricultural education must have adequate competence, namely the knowledge, skills, and attitudes needed to teach in agriculture. Lecturers and teaching staff must also be able to apply innovative and effective learning methods.
3. Improve agricultural education facilities and infrastructure, which must be adequate to support the learning process. Adequate facilities and infrastructure include laboratories, libraries, and other practicum facilities.

After obtaining a good level of education and skills, increasing the motivation and welfare of farmers becomes no less important. Motivation is a drive that arises in a person to act with a certain purpose. At the same time, welfare is a condition characterized by fulfilling basic human needs physically, mentally, and socially. According to research (Pratiwi & Firgiyani, 2021), there is a significant influence between motivation and well-being on morale and its impact on work results. This means that high motivation and well-being can have an impact on morale and performance results that are equally high. Farmers who have high motivation and welfare can produce quality agricultural products and have high competitiveness. In addition, farmers who have high motivation and welfare will also be more motivated to improve their knowledge and skills so that they can become superior agricultural human resources.

Increasing the motivation and welfare of farmers is an essential effort and must be prioritized. This is because farmers are one of the important pillars of a country's economy. With high motivation and welfare, farmers can become more productive and prosperous, contributing more to the country's economy. Here are some efforts that can be made to improve the motivation and welfare of farmers, such as:

1. Increased access to capital and technology
Farmers need capital to start and develop their agricultural businesses. In addition, farmers also need technology to increase productivity and business efficiency. The government must provide farmers with easy access to agricultural capital and technology.
2. Increased access to information and education

Farmers need to get adequate information and education about the latest agricultural developments. This information and education can help farmers improve their knowledge and skills to adapt to changes and challenges.

3. Increase in agricultural commodity prices

Farmers need to get a fair and profitable price for their production. The government needs to intervene to increase the price of agricultural commodities so that farmers can earn a decent income.

4. Increased social security

Farmers need adequate social security, such as health, old age, and death insurance. This social security can help farmers meet the needs of their lives and families, especially in difficult times.

These efforts need to be carried out in an integrated and sustainable manner. Increasing farmers' motivation and welfare is expected to create superior agricultural human resources and realize advanced, independent, modern agriculture. Efforts to increase motivation can be made through organizational empowerment. Empowering farmer organizations through education and training is another strategic step; in Law Number 19 of 2013, article 1, paragraph 2 briefly, states that farmer empowerment is all efforts to improve the ability of farmers to improve the effectiveness of farming businesses can be improved through education and training, counselling, and mentoring efforts. In addition, the development of systems and facilities in marketing agricultural products, consolidation and guarantee of agricultural land area, easy access to science and information technology, and capacity and institutional strengthening play an important role in supporting this.

Farmer empowerment is a form of improving the ability and skills of the community with a focus on improving the quality of human resources (HR). Farmer empowerment aims to create independent and highly competitive farmers. Independent farmers can meet their needs without depending on other people or parties. Highly competitive farmers can compete with other farmers in producing quality agricultural products. Farmer empowerment is carried out through agricultural extension from the central to rural levels and involves the participation and leadership of farmer organizations (Chrisyanto & Maluyu, 2021). Agricultural extension is a non-formal education process carried out systematically and planned, aiming to improve farmers' knowledge, skills, and attitudes in agriculture.

Agricultural extension has a role in supporting farmers to be independent in handling the problems they face well and satisfactorily so that there is an improvement in their standard of living. Based on this, the main principle adopted in extension services is empowerment to form farmers' independence (Sadono, 2008).

Empowering farmers through extension services is an important activity and needs to be carried out sustainably to realize superior agricultural human resources. However,

empowerment as well as education and training of farmers requires the role of the government and the private sector, so increasing cooperation between parties is important. Increased cooperation between parties is needed to realize the goals of superior agricultural human resource management. Cooperation between parties can be defined as cooperation between two or more parties in achieving common goals. In agricultural human resource management, parties can cooperate between the government, the private sector, and the community. Regional development, especially in remote or rural areas with most of the population as farmers requires special and planned efforts. One strategy can be done through Local Economic Development (PEL).

According to Munir & Risfan (Susanti, 2013), Local Economic Development (PEL) is a process that seeks to design development structures in an area, improve Human Resources (HR) skills to create quality products and manage industries and businesses at the local level. In other words, regional development is seen as a collaboration between local governments and communities to create economic opportunities that match the potential of human resources and optimize the use of natural resources and institutions locally.

The benefits of increased cooperation between parties in agricultural HR management can increase the effectiveness and efficiency of agricultural HR management. This is because each party can contribute according to their competencies and resources. Both cooperation between parties can improve the competitiveness of Indonesian agriculture. This is because agriculture can utilize existing resources optimally to produce quality and highly competitive agricultural products. Third, it can improve the welfare of farmers. This is because agriculture can be managed more professionally and efficiently to increase farmers' income.

Increasing cooperation between parties in agricultural HR management can be done through various ways, including the establishment of forums or cooperation institutions that can be a forum for various parties to coordinate and cooperate in agricultural HR management, the development of regulations and policies that support cooperation between parties can encourage increased cooperation in agricultural HR management, and increase awareness and understanding of the importance of cooperation between parties can encourage increased cooperation in agricultural HR management. Through increased collaboration between various parties, human resources (HR) management objectives are expected to be achieved so that the agricultural sector can develop optimally. The desired result is a progressive farm, self-reliant and based on modern technology.

Several strategies can be adopted to improve human resource management to create superior agriculture for the achievement of food security. First, it is necessary to emphasize improving the quality of education and training in agriculture. Furthermore, an important

focus is given to improving farmers' motivation and welfare. Another strategic step is the empowerment of farmer organizations through education and counseling. Finally, optimizing cooperation between various parties, including the government, private sector, and the community, is also crucial in improving agricultural human resource management.

Implementing integrated strategies is expected to achieve optimal food security, make agriculture the driving force of the economy, and improve the welfare of farmers. Increased cooperation between parties will ensure efficient utilization of resources, creating competitive, independent, and modern agriculture. Thus, sustainable food security development can be realized in Ngada District, East Nusa Tenggara Province.

CONCLUSION

Superior management of agricultural human resources (HR) is an important key to achieving food security in Ngada District; several strategic steps can be identified in efforts to achieve optimal human resource management in the agricultural sector. First, it is necessary to improve the quality of education and training for agricultural actors by increasing knowledge and skills so farmers and agricultural managers can be more effective in dealing with the dynamics of the agricultural environment. Furthermore, increasing the motivation and welfare of farmers is also crucial in managing superior agricultural human resources. High motivation and welfare can increase agricultural actors' enthusiasm and dedication to achieving better results. In addition, the empowerment of farmer organizations also needs to be strengthened to increase collective capacity and build synergies between them. Finally, increasing cooperation between parties, including the government, educational institutions, and the private sector, is an important factor in creating an environment supporting superior agricultural human resources management. Close collaboration between various parties can provide comprehensive support to achieve food security. By implementing these measures, it is hoped that Ngada District can build superior agricultural human resources, face challenges, and achieve sustainable food security.

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