



# Training And Human Resource Development Model To Improve Farmer Group Performance In Tegallega Village, Ciampel District, Karawang Regency

Solehudin Solehudin 

Universitas Singaperbangsa Karawang, Karawang, West Java, Indonesia  
solehudin@unsika.ac.id

**Abstract:** This research aims to determine the effectiveness of the human resource training and development model in improving the performance of farmer groups in Tegallega Village, Ciampel District, Karawang Regency. The model aims to enhance farmers' knowledge and technical skills, facilitate access to the latest agricultural information, and develop effective agricultural management skills. Through a six-month training program, farmer group participants in Tegallega Village were involved in various learning activities and discussions. Data were collected through structured questionnaires and in-depth interviews with the training participants. The research results indicate that the human resource training and development model effectively improves farmers' knowledge and technical skills, facilitates access to the latest agricultural information, and develops agricultural management skills. This improvement enhances the farmer groups' performance, as reflected in increased harvest yields and income. Therefore, the human resource training and development model can be an effective strategy to improve the performance of farmer groups in Tegallega Village, Ciampel District, Karawang Regency.

**Keywords:** Training model, human resource development, farmer group performance.

## 1 Introduction

Agriculture is vital to the Indonesian economy, particularly in rural areas <sup>1-3</sup>. Karawang Regency, located in West Java, is one of the regions highly reliant on the agricultural sector to meet food needs and improve community income <sup>4-6</sup>. In Tegallega Village, Ciampel District, Karawang Regency, farmer groups have a strategic role in the agricultural sector. These farmer groups consist of local farmers who collaborate in managing farmland and producing various food crops <sup>7-9</sup>.

Despite the significant potential of farmer groups in enhancing agricultural productivity and welfare in the area, several challenges still impede their progress <sup>10</sup>. One of the main challenges farmer groups face is the lack of knowledge and technical skills required in modern agricultural practices <sup>11-13</sup>. Farmers often lack adequate access to up-to-date agricultural information and technology, which can assist them in improving production, reducing losses, and enhancing efficiency in agricultural activities <sup>14</sup>.

Another challenge farmer groups face is the lack of effective planning and management in agricultural activities <sup>15-17</sup>. Farmers often lack sufficient knowledge in crop planning, land management, proper fertilizer and pesticide use, and pest and disease control <sup>18</sup>. Deficiencies in these management aspects can hinder the achievement of optimal agricultural outcomes <sup>19</sup>.

Therefore, developing an appropriate training model and human resource development (HRD) becomes crucial in improving the performance of farmer groups in Tegallega Village. This model should provide farmers with the necessary knowledge and technical skills to enhance their agricultural productivity, increase income, and achieve sustainability in farming. Furthermore, the model should also address effective agricultural management aspects, enabling farmers to plan and manage their agricultural activities more efficiently and sustainably <sup>20</sup>.

By addressing these challenges through the development of an appropriate training model and human resource development, it is expected that the farmer groups in Tegallega Village can achieve improved performance and make a more significant contribution to the agricultural sector, ultimately leading to enhanced welfare for the local community <sup>21</sup>.

The main issues faced by the farmer groups in Tegallega Village, Ciampel District, Karawang Regency are as follows: Lack of knowledge and technical skills: Farmers often face limitations regarding the knowledge and technical skills required in modern agricultural practices. This includes knowledge about optimal crop cultivation techniques, proper fertilizer and pesticide use, efficient land management, and pest and disease control techniques. This lack of knowledge can impact the productivity and quality of agricultural outcomes <sup>22</sup>.

Lack of access to agricultural information and technology: Farmer groups in Tegallega Village may face limitations in accessing up-to-date agricultural information and technology. In this modern era, current agricultural information and the

latest technology can provide farmers with access to more efficient and innovative farming practices. This lack of access can hinder the ability of farmer groups to enhance productivity and effectively address agricultural challenges<sup>23,24</sup>.

**Lack of effective planning and management:** The aspects of effective planning and management in agricultural activities are often overlooked. Farmers may lack understanding of the importance of thorough planning, good organization, effective supervision, and regular evaluation in agricultural operations. The lack of effective planning and management can result in inefficient resource utilization, uncertainty in decision-making, and difficulties in achieving optimal agricultural outcomes.

In this context, developing an appropriate training model and human resource development (HRD) will help address these issues. This model will provide training to enhance knowledge and technical skills, facilitate access to up-to-date agricultural information and technology, and assist in developing effective management and planning skills<sup>25,26</sup>. By addressing these issues, the farmer groups in Tegallega Village are expected to significantly improve their agricultural activities.

This research aims to develop and implement an effective training model and human resource development (HRD) to enhance the performance of farmer groups in Tegallega Village, Ciampel District, Karawang Regency. The model will focus on improving knowledge, technical skills, access to agricultural information and technology, and effective agricultural management.

## **2 Materials and Methods**

This research adopts a qualitative approach. The researcher conducted an initial survey to understand the existing conditions of the farmer groups, the challenges they face, and the human resource development needs. This survey involved the members of the farmer groups, group leaders, and relevant stakeholders such as the local agricultural department. Based on the survey results, an appropriate training model and human resource development program were designed and implemented.

## **3. Results**

Research Findings:

This research aims to evaluate the effectiveness of the training model and human resource development (HRD) in enhancing the performance of farmer groups in Tegallega Village, Ciampel District, Karawang Regency. The model is designed to improve farmers' knowledge and technical skills, facilitate access to up-to-date agricultural information, and develop effective agricultural management skills. This study involved the participation of farmer groups in Tegallega Village in a six-month training program.

Improvement in Knowledge and Technical Skills:

The research findings indicate a significant improvement in farmers' knowledge and technical skills after participating in the training program. Training participants reported an enhanced understanding of optimal crop cultivation techniques, proper fertilizer and pesticide use, and pest and disease control techniques. They also reported improved farming skills and utilizing the latest agricultural technology.

Improvement in Access to Agricultural Information:

The training model and human resource development program improved farmer groups' access to up-to-date agricultural information. Through the training, farmers were introduced to accessible sources of information such as agricultural websites, mobile applications, and other online resources. Farmers reported that this improved access to information helped them make better decisions regarding agricultural practices, crop variety selection, and risk management.

#### Development of Agricultural Management Skills:

The training program also placed significant emphasis on the development of agricultural management skills. Farmers were engaged in training sessions focused on crop planning, organizing agricultural activities, monitoring farm operations, and evaluating agricultural outcomes. It was found that understanding and skills in agricultural management significantly contributed to improving the efficiency and productivity of the farmer groups.

#### 4 Discussion

##### Improvement in Knowledge and Technical Skills:

The research findings indicate that the training model and human resource development program effectively enhance farmers' knowledge and technical skills. The training provided to the farmer groups in Tegallega Village helped them understand optimal crop cultivation techniques, proper fertilizer and pesticide use, and pest and disease control techniques. This knowledge and skills enable farmers to adopt more efficient and productive agricultural practices, potentially leading to increased crop yields and income for the farmer groups <sup>27</sup>.

##### Improvement in Access to Agricultural Information:

The training model and human resource development program also successfully increased the farmer groups' access to up-to-date agricultural information. By introducing accessible sources of information such as agricultural websites, mobile applications, and other online resources, farmers in Tegallega Village can obtain the latest information on agricultural practices, crop variety selection, and risk management. Access to this information enables farmers to make better decisions and adopt innovations in their agricultural activities, which, in turn, can enhance efficiency and productivity <sup>28-30</sup>.

##### Development of Agricultural Management Skills:

A critical aspect of the training model and human resource development is the development of agricultural management skills. In this research, the training program involved the farmer groups in learning and discussions related to crop planning, organizing agricultural activities, monitoring farm operations, and evaluating agricultural outcomes. Through developing agricultural management skills, farmers in Tegallega Village can enhance resource utilization efficiency, optimize land management, and engage in better planning to achieve optimal crop yields.

##### Impact on Farmer Group Performance:

Implementing this training model and human resource development program has positively impacted the performance of farmer groups in Tegallega Village. The improvement in knowledge and technical skills, access to agricultural information, and development of agricultural management skills collectively contribute to increased efficiency and productivity of the farmer groups. This is reflected in higher crop yields and income for the farmer groups. With this enhanced performance, the farmer groups become more empowered and capable of facing challenges that come their way <sup>31</sup>.

#### 5 Conclusion

Based on the findings of this research, it can be concluded that the training model and human resource development program are effective in improving the performance of farmer groups in Tegallega Village, Ciampel District, Karawang Regency. The model successfully enhances farmers' knowledge and technical skills, facilitates access to up-to-date agricultural information, and develops effective agricultural management skills. The implication of this research is the need for the long-term sustainability of the training and human resource development program to promote the growth and success of the agricultural sector in this region.

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