


# 学位論文要旨

専攻名 資源循環学専攻

氏名 Rendi Febrianda 

Empirical Study on the Innovation and Diffusion System by Mushroom Enterprise as a New Agricultural Development Strategy in Indonesia  
(インドネシアにおける新たな農業振興戦略としてのキノコ生産企業による開発・普及システムに関する実証的研究)

題 目

Indonesia holds plentiful bio-natural resources and after putting into industrial process, these resources likewise generate byproducts. Rather than wasted, evidently some of the byproducts could be utilized to be more valuable resources. Mushroom farming applied the biotechnological development by transforming the byproduct into its cultivation medium. Furthermore, mushroom farming has become an attractive agricultural business especially in Indonesia due to its simplicity and flexibility. The people awareness towards edible mushroom as a nutritious food that have healthy impact on human body helps to promote mushroom consumption and escalates its demand. Nevertheless, several evidences have argued that the issues have still appeared in improving the yield production of the farming to fulfill the demand. Mastery of technology and proper farming practice also arise as classical issues.

The general objective of this study pursuits an idea of mutual development in order to improve the yield production of the farming to fulfill the demand. The objectives are divided into two main objectives. First, it aims to learn a unique strategy and innovation of a mushroom enterprise for improving its business performance. Using technological (innovation) approach and qualitative method, it concluded that there are two types of its strategies, one related to the technological part, and the other related to the organization part. The technological focuses on attracting market and enhancing the yield productivity. The organization part focuses on developing the capacity to fulfill the demand by making a contract agreement or a partnership with local society. The partnership was claimed could empower the local society through a new simple farming with no apprehensive to market access and production problems.

Within the partnership, the local society are indeed able to resolve their falter caused by these obstacles. Our suggestion that the partnership between an enterprise which has both technical capabilities and market access and rural society can serve as an alternative new strategy for dealing with the obstacles. However, some questions emerge concerning the effectiveness of partnerships on their implementation. Responses of the adopters of the partnership (the mushroom farmers) are also needed for reviewing the effectiveness of the partnership and supporting the consideration of the partnership as an alternative strategy. Therefore, the second objective of this study aims to learning the adoption of this partnership and gaining more understanding about its strength and its weakness for further better use. It discusses the experience of an informal partnership case between a mushroom enterprise and farmers using qualitative and non-parametric quantitative approach framed by Rogers's innovation decision process. The

result shows that the partnership is truly recommended especially for rural society in certain conditions. The partnership is obviously able to improve the yield production of mushroom and to empower the adopters. However, several limitations of the partnership were found, and suggestions are given for improvement.

This type of the partnership admittedly contains limitations, however it still delivers much benefits to both the enterprise and the adopters. This partnership could be implemented successfully as mushroom farming possesses several superiorities. This type of the partnership may be possibly used by other agribusiness provided that these criteria are followed such as affordable capital, easy to practice, short harvesting time.