

Performance Analysis of Organic Vegetables Farming in Central Java Province

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Abstract

The purpose of this study was to analyze the performance of organic vegetable farming in Central Java Province. This study took samples in Batang Regency and Semarang Regency with purposive sampling. The data collected was analyzed using descriptive statistics. The results showed that some respondents perceived that the institutional performance of organic vegetable farming was still low. This shows that there are still opportunities to improve the development of organic vegetable farming in terms of institutional performance. Therefore an effort is needed to increase the institutional capacity of organic vegetable farming in the research area.

Key words: Performance, institutional, vegetable, organic, Central Java.

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INTRODUCTION

Indonesia, as one of the organic food producers, has the potential and opportunity to play an active role in the supply of food in the world. Because natural resources, especially land for production processes support this. The Indonesian government through the Ministry of Agriculture has sought to develop an organic farming program with GO ORGANIK's vision for 2010. But until now the program has not been accommodated by all regions in Indonesia. The program is still centralized in Java. So far, the agricultural development paradigm is oriented towards increasing agricultural productivity without seeing its impact on the welfare of farmers [1]. The low productivity of farming will lead to low income and weak financial position of farmers in supporting their economic activities. From the demand side, with increasing population, the demand for food is increasing. Thus there will be a gap between the amount of production and demand. Organic vegetables are foods derived from an organic farming system that implements management practices that aim to maintain ecosystems to achieve sustainable productivity. Besides that we also control weeds, pests and diseases through various methods such as recycling of residues [2]. Made Astawan [3], states that organic food is all foodstuffs produced with little or no chemical elements (fertilizers, pesticides, hormones and drugs).

The sustainability of organic agriculture cannot be separated from the economic dimension,

other than the environmental dimension and the social dimension. Organic farming is not only limited to eliminating the use of synthetic inputs, but also the sustainable use of natural resources, the production of healthy food and saving energy. Economic aspects can be sustainable if the agricultural production is able to meet the needs and provide sufficient income for farmers. But, often economic motivation becomes the steering wheel that drives the direction of the development of organic agriculture. Awareness of the dangers posed by the use of synthetic chemicals in agriculture makes organic agriculture attract attention at both the producer and consumer levels. Most consumers will choose food that is safe for health and environmentally friendly, thus increasing the demand for organic products [4]. The organic vegetable production process provides several benefits in the health and environmental fields. In the health sector, the organic vegetable production process will produce vegetables with higher nutritional content, create a safe and healthy work environment and minimize pollution. Viewed from the environment, the process of producing organic vegetables will maintain soil quality and save energy [2, 5]. To produce organic vegetables and market them using organic labels, it requires a certification process in accordance with SNI and the applicable provisions. The organic certification process also requires a long time, so the development of the harvest area is limited. This is evidenced by the relatively slow development of organic vegetable land in Central Java as in Table 1.

Table-1: Development of Land Area (Ha) in Central Java

No	Location	2010	2011	2012	2013	2014
1	Regency of Semarang	16	26	96	96	96
2	Regency of Boyolali	0	0	10	20	25
3	Regency of Batang	0	0	0	0	10

Source: TPH Department of Central Java Province (2015)

According to the agribusiness development paradigm, the success of agribusiness, including organic vegetable agribusiness, is very dependent on the progress achieved in each subsystem [6]. The agribusiness system will run well if there is no interference with one of the subsystems. Each subsystem will be interrelated with one another and their performance affects each other. The performance of farming production as a subsystem in agribusiness is strongly influenced by the support of other subsystems. The problem of the inefficient procurement of production facilities, superior seeds and fertilizers that are not on time, conventional cultivation technology, less hygienic processing technology, and less supportive roles of farmer and marketing institutions greatly influence farm production performance [7]. Law Number 19 of 2013 concerning Protection and Empowerment of Farmers, farmer institutions act as educational vehicles that mobilize local resources, including labor, capital, knowledge and information in order to be able to develop sustainable farming and independent farmer institutions, fighting for the interests of members in developing business partnerships, accommodating and channeling aspirations of members related to farming including communication media between farmers and the government, and helping to solve members' problems in farming. The institution will play an optimal role if it grows from the awareness of farmers, the management comes from farmers who are selected periodically, have formal institutional strength, and are participatory in nature. In addition, the formation of agricultural institutions is adjusted to the local wisdom and character of group members so as to capture the potential and needs of group members. Saleh *et al.* [8] say that institutions are an important factor in regulating relationships between individuals for mastering rare production factors. Institutional has a strategic role, but according to Soekartawi [9] institutional aspects, both formal and informal, are actually prominent aspects that can hinder agricultural development in developing countries. This is because many institutions in developing countries, including Indonesia, are still not optimal. The main problem of farmers is the still weak bargaining position of farmers in the agricultural business system [1]. Likewise what happened to organic vegetable farming in Central Java Province. most farmers do organic vegetable farming on limited land and without the support of sufficient knowledge and information about production management and farmers' limitations in terms of price negotiations due to limited market information so farmers are only a price

taker. Therefore, efforts need to be made to improve the bargaining position of farmers through improving the performance of organic vegetable farmers in the research area.

RESEARCH METHODS

The study was conducted using descriptive methods, a method of examining the status of a group of humans, an object, a system of conditions, a system of thought, or a class of events in the present [10]. Descriptive research can be used a quantitative approach in the form of collecting and measuring data in the form of numbers or qualitative approaches in the form of depicting narrative conditions (words) as they are [11]. This research was conducted in Central Java with sampling of organic vegetables in Semarang and Batang regencies. The definition of performance according to the Big Indonesian Dictionary [12] is a noun which means: (1). something achieved; (2). achievements shown; (3). work ability. Bestina *et al.* [13] Define performance as the level of achievement of results.

RESULTS AND DISCUSSION

Agribusiness (some call it agribusiness) is another way to see agriculture as a business system consisting of several subsystems that are related to each other. In agribusiness, the concept of agribusiness as a system is known and agribusiness as a business (company). A complete agribusiness system is an industrial cluster consisting of four subsystems, namely (1) a system of upstream agribusiness, namely all industries that produce and trade primary agricultural production facilities, such as the nursery/hatchery industry, industry agro-chemical, agro-automotive industry, agri-mechanics, etc.; (2) farming/farming agribusiness subsystem (on-farm agribusiness), namely activities that use production facilities to produce primary agricultural commodities (farm products); (3) downstream agribusiness subsystems, namely industries that process primary industries into processed products and their trading activities; and (4) supporting service subsystems, namely activities that provide services for the three subsystems above such as infrastructure, transportation (physical, normative), credit, research and development, training education, government policy, and others. In simple terms, the agribusiness system can be seen in Figure 1.

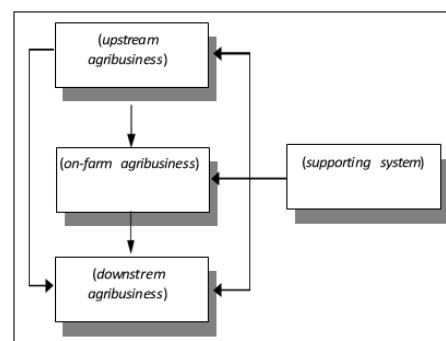


Fig-1: Linkages in the Agribist System

Institutional Performance of Organic Vegetable Agribusiness

Institutional organic vegetable agribusiness includes supporting institutions, upstream agribusiness institutions, farming institutions (on farm) and downstream agribusiness institutions (post-harvest/agro-industry and marketing). The relationship between agribusiness institutions is an institutional model as shown in Figure 5.6.

Based on Figure 5.6, it is known that organic vegetable agribusiness institutions consist of 4 institutions, namely supporting institutions, upstream agribusiness institutions, farming institutions and downstream agribusiness institutions. Each institution has implementers who in their implementation need to always coordinate and work together. The performance of each organic vegetable agribusiness institution can be detailed as follows:

Supporting Institutional Performance

Supporting institutions consist of BPP, P3A, financial institutions and research and service institutions. In practice, support for organic vegetable farming mainly originates from the BPP by allocating 1 agricultural instructor. Thus the supporting institutional performance in organic farming is still relatively low, because from 4 parts only 1 provides intensive assistance.

Institutional Performance of Upstream Agribusiness

Upstream agribusiness institutions, carried out by the community, are gathered in farmer groups. Although the role of farmer groups in the provision of infrastructure (seeds, fertilizers and pesticides) in organic vegetable farming has not been maximized, it has been able to meet the needs of each group. For seeds there are hatcheries themselves, but some buy seeds that have been labeled / certified. The needs of fertilizers and pesticides are generally fulfilled from their own groups, because there are rarely kiosks of production facilities that provide organic fertilizers and pesticides. If there are kiosks for production facilities, it is still rare for prices that are not affordable to farmers.

Institutional Performance of Farming

Institution of farming (on farm) for organic vegetable farming is carried out in accordance with the standards and there is assistance from extension agents and farmer group administrators. In general, the types of plants planted are very diverse from spinach, kale, cabbage, broccoli, carrots, tomatoes and others. The planting system also uses a intercropping system, so harvesting can be arranged and can be carried out continuously. Farmer group performance, if based on production, is relatively high. In addition, the management of the farmer group also helped with the problems often faced by organic vegetable farmers, especially capital and marketing issues.

Institutional Performance of Downstream Agribusiness

The institution of downstream agribusiness includes agro-industry and marketing. For the performance of organic vegetable agroindustry institutions is still relatively low, because not many companies, both government, private and organic vegetable farmer associations are actively participating in the post-harvest process.

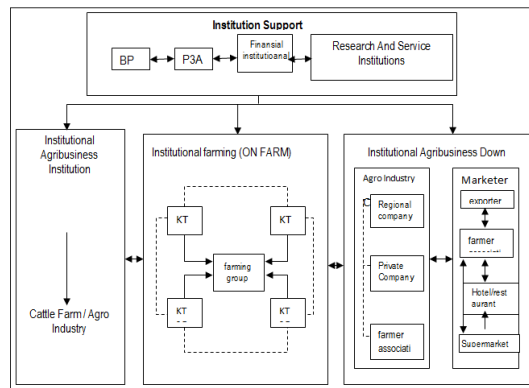


Fig-5.6: Organic Vegetable Institution Model

Remarks Figure 5.6: KT = Farmer group SO = Organic vegetables GAPOKTAN = Combined farmer groups PERUS = company

CONCLUSION

Based on the results of the research and discussion can be concluded several things as follows

- Institutional organic vegetable agribusiness consists of: supporting institutions, upstream agribusiness institutions, farming institutions and downstream agribusiness institutions
- The institutional performance of organic vegetable agribusiness is generally still relatively low, especially in supporting and downstream agribusiness.
- To improve institutional performance, intensive participation and assistance are needed so that in the end it can increase the production and productivity of organic vegetables in Central Java

REFERENCES

1. Wahyuni, S., & Ginting, M. (2017). The impact of product quality, price and distribution on purchasing decision on the Astra motor products in Jakarta. *Arthatama: Journal of Business Management and Accounting*, 1(1), 18.
2. Yong, Q. K. M. X., & Shao-sai, L. I. (2007). Jian (Key Laboratory for Sustainable Utilization of Marine Fisheries Resources, Ministry of Agriculture, Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Qingdao 266071); Acute toxic effects of nitrite and non-ion ammonia on turbot (*Scophthalmus*

- maximus) at different DO levels [J]. *Marine Fisheries Research*, 4.
3. Astawan, M. (2011). Pangan Organik Pangan Masa Depan. *Diunduh dari harian kompas Kamis*, 27.
 4. Lesmana, T., & Hidayat, A. S. (2008). National Study on Organic Agriculture.
 5. Parlyna, R., & Munawaroh, M. (2011). Konsumsi pangan organik: meningkatkan kesehatan konsumen?. *Jurnal Ilmiah Econosains*, 9(2), 157-165.
 6. Arifin, B., Dharmawan, H. C. B., & Verdiansyah, C. (2004). *Analisis ekonomi pertanian Indonesia*. Penerbit Buku Kompas.
 7. Yuhono, J. T. (2015). Analisis Pendapatan Usahatani dan Pemasaran Gambir. *Buletin Penelitian Tanaman Rempah dan Obat*, 15(2), 9-21.
 8. Pertanian, D. (2007). Road Map Pengembangan Pertanian Organik 2008-2015. Internet.[Artikel Online].
 9. Flor, A. G. (2001). Soekartawi. 2001. *Knowlegde networking as a tool for regional higher education: The SEAMEO-SEARCA initiative*.
 10. Nazir, M. (1998). *Metode Penelitian*. Ghalia Indonesia. Jakarta
 11. Sukmadinata, N. S.(2011). *Metode Penelitian Pendidikan*.
 12. Adriani, M., & Croft, W. B. (1997). The effectiveness of a dictionary-based technique for Indonesian-English cross-language text retrieval.
 13. Hartono, S., & Syam, A. (2014). Kinerja Penyuluh Pertanian dalam Pengembangan Agribisnis Nenas di Kecamatan Tambang, Kabupaten Kampar. *Jurnal Pengkajian dan Pengembangan Teknologi Pertanian*, 8(2).