

AGRICULTURAL INSTITUTIONS IN COASTAL SANDY AREA IN BANTUL AND KULON PROGO REGENCY

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ABSTRACT

Institutions in the community have an essential role in agricultural development and the success of farming businesses. Governance of agricultural institutions is also important to support farming development. This research was done in Bantul and Kulon Progo Regency with the aims of (1) Describing the institutions of coastal sandy farming land area, (2) Knowing the relation between agricultural institutions and agricultural development, and (3) Comparing the governance of institutions on coastal sandy farming land for developing agricultural innovations. The method used in this research is descriptive, analytical approach, and comparison with the type of qualitative research. Informants in this study were administrators and members of the Farmers Group, Farmers Group Association and Auction Market in Sanden Sub-District, Bantul Regency and Panjatan Sub-District, Kulon Progo Regency. The result of this study indicates the fact that agricultural cultivation in Bantul Regency and Kulon Progo Regency has a relation to agricultural development by making existing institutions related to innovation. Institutions of coastal sandy farming land in Bantul Regency and Kulon Progo Regency are supported by institutional components, such as norms and regulations. There are several differences in institutional governance in Bantul Regency and Kulon Progo Regency in terms of some aspects namely transparency, independence, accountability, responsibility, and fairness.

Keywords: Agricultural institution, agricultural innovation, coastal sandy farming land, comparison.

INTRODUCTION

Productive land is one of the important factors in agricultural activities. Today, the availability of productive land in Indonesia is a national problem. The low access to productive land resources is due to agricultural land, especially in urban areas, which have changed the function of land for building construction. Even though the productive agricultural land is getting narrower, the community can take advantage of the coastal sand land located in the southern region of Yogyakarta Special Region as new agricultural land that has a lot of potential.

Along with the times, the community created various innovations to transform areas that previously could not be used as agricultural land into productive agricultural land. Currently, the sand fields in DI Yogyakarta have produced agricultural crops that have economic value, such as chilies, shallots, watermelons and so on. Sand land can be used as agricultural land by the community by implementing various innovations in agriculture. Agricultural technology innovations currently in Bantul and Kulon

Progo regency include sprayers, tractors, infusion technology, independent plastic mulch manufacture, and water machines or water pumps.

The condition of the beach sand land can change due to climate impacts. Changing sand land conditions have made farmers have to continue to develop agricultural innovations, both agricultural production facilities and agricultural machinery. As can be seen in the research of Subejo et al. (2018) which states that there have been developments in innovation from 1986 to 2018. The process of adoption and diffusion of innovation in society is generally carried out through institutions managed by the community, including farmer groups, farmer group associations, and auction market institutions. Agricultural innovation in sand land can be in the form of agricultural tools, methods and processes in agricultural activities.

The development of agricultural innovation in society can occur through institutions. Generally, the government provides assistance in the form of agricultural production facilities and agricultural machinery to farmers through institutions. In

addition, training and extension related to agriculture are also carried out through institutions. As written in the research of Raya & Untari (2015) which states that the process of developing agricultural innovation cannot be separated from the emergence of institutional innovations that regulate the process of adoption, diffusion, and sustainability of agricultural innovation in society.

Institutions in the community have an important role in agricultural development and the success of agricultural enterprises. This is in accordance with Anantanyu's (2011) statement that farmer institutions in rural areas contribute to the acceleration of farmers' socio-economic development; accessibility to agricultural information; accessibility to capital, infrastructure and markets; and adoption of agricultural innovations. In addition, the existence of a farmer institution can make it easier for the government and other stakeholders to facilitate and provide strengthening to farmers.

Therefore, agricultural institutions can support the development of agricultural innovation on sand land. Through agricultural institutional support, agricultural innovation can be more reliable and easier to introduce to farmers. Seeing these conditions, this study was conducted to analyze the institutionalization of sand farming in Bantul and Kulon Progo Regencies. The analysis is carried out by conducting institutional comparisons to be able to compare, to find out the strengths and weaknesses so that they can be used as material for institutional evaluation.

METHODS

The basic method used in this research is descriptive qualitative research method with comparisons. This research was conducted in Bantul and Kulon Progo Regencies. The location selection was in the marginal land area, namely the sand land of the south coast of DI Yogyakarta, which administratively belongs to the regencies of Bantul and Kulon Progo. Agricultural development areas in the area of coastal sand land are located in Srigading Village, Sanden Sub-District, Bantul Regency and Bugel Village, Panjatan Sub-District, Kulon Progo Regency. The two locations were chosen because they were the first areas to practice coastal sand land farming in DI Yogyakarta and until now it continues to grow.

The informants used in this study were members and institutional administrators (farmer groups, farmer group associations (Farmer group), and auction markets) of coastal sand land in Srigading Village, Sanden Sub-District, Bantul Regency and Bugel Village, Panjatan Sub-District, Kulon Progo Regency. Data were collected using the method of observation, interviews, note taking and literacy studies. Meanwhile, the data obtained are primary data and secondary data.

The data validity test conducted in this study is by triangulation. Triangulation is a data validity checking technique that utilizes something else for the purposes of checking or comparing the data obtained by checking through other sources (Moleong, 2017). This study uses two types of triangulation, namely triangulation of sources and methods.

According to Bogdan & Biklen cit. Moleong (2017), qualitative data analysis is an effort made by working with data, organizing data, sorting data into manageable units, synthesizing, looking for and finding patterns, finding something important and learned, and deciding what to tell people. other.

The data analysis process in this study consisted of three stages, namely data reduction, data presentation, and conclusion or verification (Sitoyo & Sodik, 2015). The data reduction process is carried out by summarizing, sorting out the main things, focusing on the things that are important, looking for themes and patterns and removing things that are not needed. Then, the presentation of the data is an arrangement of information that gives the possibility to draw conclusions. Furthermore, the conclusion is the final stage of the data analysis process. Conclusions are drawn to find the meaning of the data collected by looking for relationships, similarities, and differences in the data.

RESULTS AND DISCUSSION

Coastal Sand Farming Institution in Bantul Regency

The agricultural institutions for coastal sand land in Sanden Sub-District, Bantul Regency are the Manunggal Farmers Group, the Srigunting Farmer Group Association, and the Manunggal Auction Market. The organizational structure of the Manunggal Farmer Group can be seen in Figure 1, Combined Srigunting Farmer Group is seen in Figure 2, Manunggal Auction Market is seen in Figure 3.

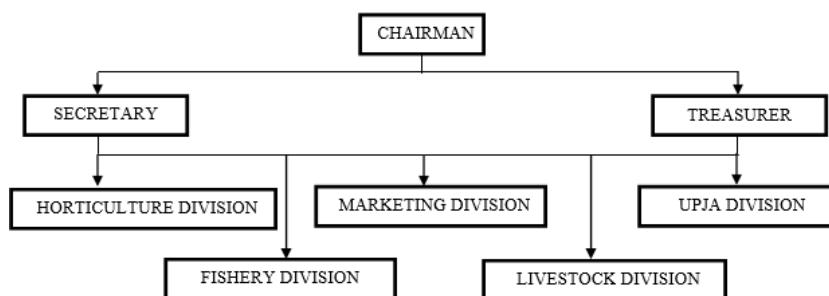


Figure 1. Manunggal Farmer Group Organizational Structure

Source: Memorandum of Association/Articles of Association of Manunggal Farmer Group

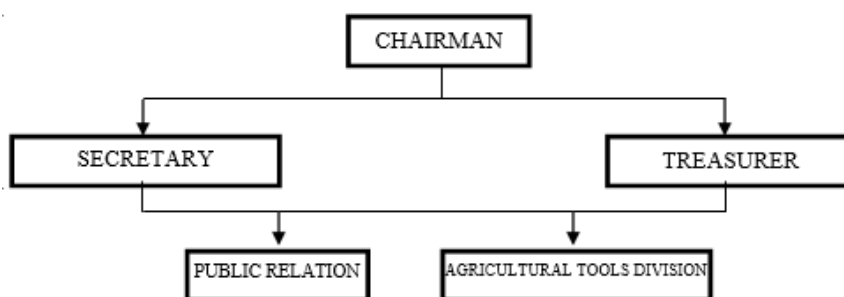


Figure 2. Chart of the Joint Organizational Structure of the Srigunting Farmer Group

Source: Primary Data Analysis, 2019

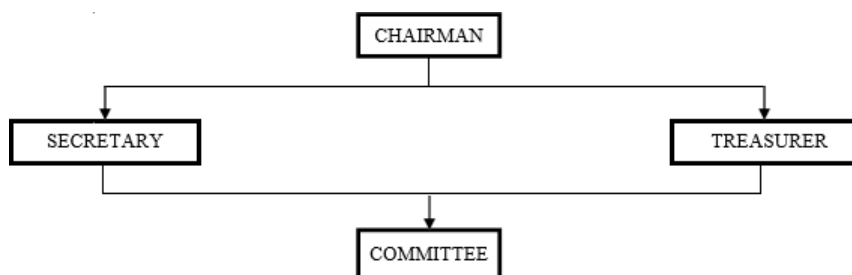


Figure 3. Organizational Structure of Manunggal Auction Market

Source: Primary Data Analysis, 2019

Table 1. Agricultural Institutional Relationship with Agricultural Innovation in Bantul Regency

No.	Inovation	Kelembagaan	
		Pranata	Organisasi
1.	Tractor	<ul style="list-style-type: none"> Rental regulations 	KT Manunggal
2.	Tractor	<ul style="list-style-type: none"> Rental regulations 	Farmer group Srigunting
3.	Auction	<ul style="list-style-type: none"> Regulations for the quality of chilies to be auctioned Rules of auction timing Auction payment regulations Cut rates regulations 	Manunggal Auction Market
4.	Hybrid seeds	<ul style="list-style-type: none"> Rules for borrowing seeds Regulations for returning seeds 	Manunggal Auction Market

Source: Primary Data Analysis, 2019

The agricultural institution of coastal sand land in Bantul Regency has a relationship with the development of agricultural innovation by making

regulations related to new innovations that are developing. Regulations related to agricultural innovation are needed to regulate the use or the

course of an agricultural innovation in society. In more detail, the relationship between coastal sand land agricultural institutions and the development of agricultural innovation can be seen in Table 1.

Based on Table 1, it can be seen that KT Manunggal, Farmer group Srigunting, and Manunggal Auction Market have a relationship with the development of agricultural innovation by forming regulations related to agricultural innovation. KT Manunggal and Farmer group Srigunting form lease regulations related to tractor borrowing. The lease regulations that are made are that every farmer who borrows a tractor is required to pay rent that is used for management and group cash.

The Manunggal Auction Market establishes regulations on the quality of chilies that are auctioned and the timing of the auction. The emergence of this regulation is necessary to regulate chili auction activities. The quality of chilies received for auction is that there are no

leaves, no rotten and ripe chilies, no water in the chilies, and no pesticide spray recently. In addition, regulations on auction timing were also formed, namely delivering chilies according to the time specified for later auction, auction payments must be 1x24 hours or already paid off before the next auction period, and cutting prices for cash and labor. The regulations on hybrid seeds are related to borrowing made by contacting the management and returning it according to a specified time.

Coastal Sand Farming Institution in Kulon Progo Regency Beach sand land farming institution in Sanden Sub-District, Bantul Regency is Manunggal Farmers Group, Srigunting Farmer Group Association, and Manunggal Auction Market. The organizational structure of the Manunggal Farmer Group can be seen in Figure 4, Association of Bumi Rahayu Farmer Groups seen in Figure 5, Gisik Pranaji Auction Market is seen in Figure 6.

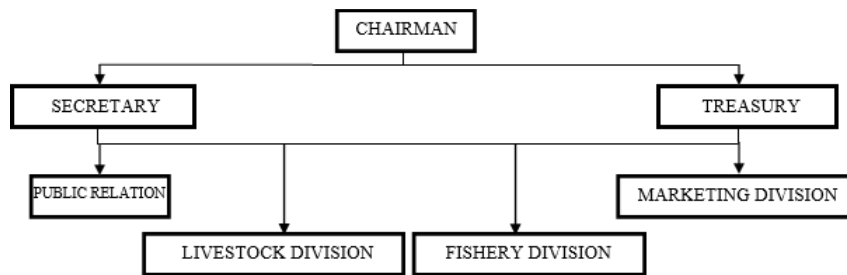


Figure 4. Gisik Pranaji Farmer Group Organizational Structure Chart

Source: Memorandum of Association/Articles of Association of Gisik Pranaji Farmer Group

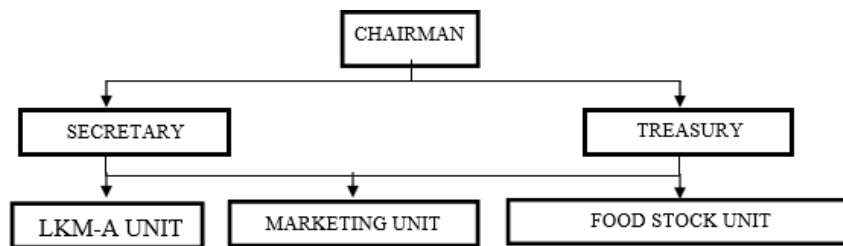


Figure 5. Bumi Rahayu Farmers Group Joint Organizational Structure

Source: Primary Data Analysis, 2019

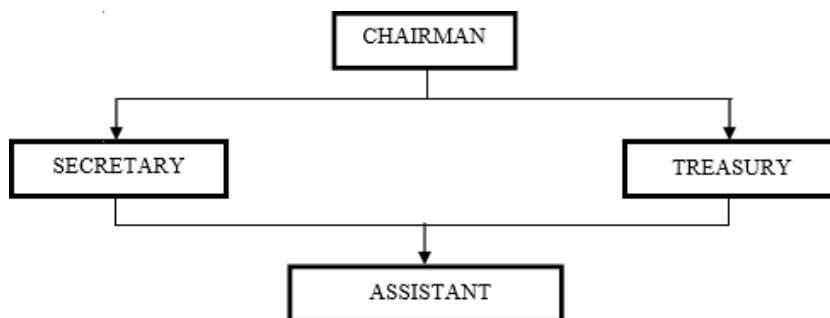


Figure 6. Organizational Structure of Gisik Pranaji Auction Market

Source: Primary Data Analysis, 2019

Table 2. Agricultural Institutional Relationship with Agricultural Innovation in Kulon Progo Regency

No.	Inovation	Kelembagaan	
		Pranata	Organisasi
1.	Tractor	<ul style="list-style-type: none"> ● Rental price regulations ● Care settings 	KT Gisik Pranaji
2.	Auction	<ul style="list-style-type: none"> ● Regulations for the quality of chilies to be auctioned ● Rules of auction timing ● Auction payment regulations ● Cut rates regulations 	Gisik Pranaji Auction Market
3.	Hybrid seeds	<ul style="list-style-type: none"> ● Rules for borrowing seeds ● Regulations for returning seeds 	Gisik Pranaji Auction Market

Source: Primary Data Analysis, 2019

Agricultural institutions have a relationship with the development of agricultural innovation by making regulations related to new innovations that are developing. Regulations related to agricultural innovation are needed to regulate the use or the course of an agricultural innovation in society. In more detail, the relationship of agricultural institutions in Kulon Progo Regency to the development of agricultural innovation can be seen in Table 2. Based on Table 2, it can be seen that KT Gisik Pranaji and Gisik Pranaji Auction Market have a relationship with the development of agricultural innovation by forming regulations related to agricultural innovation. The KT Gisik Pranaji institution established rental and maintenance regulations for the management of agricultural innovation in the form of tractors. The rental regulations that are applied are that every farmer who borrows a tractor is required to pay rent and refuel.

The Gisik Pranaji Auction Market institution establishes regulations for auction activities related to the quality of chilies received, auction time, and auction payments. The quality of chilies received for auction is that there are no leaves, no rotten and ripe chilies, no water in the chilies, and no pesticide spray recently. In addition, regulations on auction timing were also formed, namely delivering chilies according to the specified time for auction, auction payments must be made by traders within 1x24 hours, and cutting prices for cash and labor. The regulations related to hybrid seeds are the rules for borrowing and returning seeds. The borrowing of seeds is carried out by registering with the management, while for the return it is carried out according to the stipulated time.

Comparison of the institutional governance of coastal sand land in Bantul and Kulon Progo Regencies

a. The differences in farmer groups in Bantul and

Kulon Progo Regency include:

- 1) The aspect of openness of the HR component, namely in Bantul Regency there is a forum outside the meeting, while in Kulon Progo Regency there is no forum outside of meetings and inter-institutional coordination, namely in Bantul Regency all management and members are known, while in Kulon Progo Regency only the administrators and some members.
- 2) The independent aspect of the HR component, namely in Bantul Regency has an average income of IDR 40,125,000 and a small portion borrows from the bank, while in Kulon Progo Regency it has an average income of Rp 31,200,000 and many farmers borrow from banks, and the financing component namely in Bantul Regency cash and agricultural tools and machinery management funds, while in Kulon Progo Regency agricultural tools and machinery management funds and external funding.
- 3) The accountability aspect of the infrastructure component is that Bantul Regency has a UPJA section, while in Kulon Progo Regency it does not have a section that manages agricultural machinery.
 - b. The differences between Farmer group in Bantul and Kulon Progo Regency include:
 - 1) The aspect of transparency of the coordination component with other institutions, namely in Bantul Regency, the management and all members are aware of the cooperation, while in Kulon Progo Regency only the management and a few members know.
 - 2) The independent aspect of the financing component is in Bantul Regency from the APBD and management of agricultural tools and machinery, while in Kulon Progo Regency the initial contribution fund, management of agricultural machinery and managed aid funds.
 - 3) The accountability aspect of the infrastructure

- component, namely in Bantul Regency the division of tasks was clear, while in Kulon Progo Regency the division of tasks was not clear; the financing component in Bantul Regency did not have detailed records, while in Kulon Progo Regency it had detailed records; and the coordination component with other institutions, namely in Bantul Regency, the cooperation was delivered during the meeting, while in Kulon Progo Regency the cooperation was not delivered.
- 4) The infrastructure component accountability aspect is that in Bantul Regency it has a report, while in Kulon Progo Regency it does not have a report; the financing component, namely in Bantul Regency, did not have a detailed report, while in Kulon Progo Regency it had a detailed report.
- c. The differences in the auction market in Bantul and Kulon Progo Regency include:
- 1) The transparency aspect of the HR component is that in Bantul Regency the members know the duties of each manager, while in Kulon Progo Regency the members do not know the duties of each manager, and the financing component, namely in Bantul Regency, the use of discounted prices is conveyed, while in Kulon Progo Regency the use of discounts is not conveyed.
 - 2) The accountability aspect of the HR component, namely in Bantul Regency, the division of tasks per officer was clear, while in Kulon Progo Regency the division of tasks per officer was unclear.
 - 3) Responsibility aspect for infrastructure component, namely in Bantul Regency there were reports, while in Kulon Progo Regency there were no reports.

CONCLUSION AND SUGESION

Conclusion

Based on the results of the analysis and discussion, several important conclusions that can be obtained in this study include:

1. Sand land farming with chili commodities in Bantul and Kulon Progo Regency has three main institutions, namely farmer groups, farmer groups, and auction markets.
 - a. Farmers' groups, Farmer group and Pasarlelang institutions in Bantul and Kulon Progo Regency already have clear organizational structures and regulatory norms.
 - b. Institutions in Bantul and Kulon Progo Regencies have not changed management since the beginning, including farmer groups and auction markets in Bantul Regency, farmer groups, Farmer group, and auction markets in Kulon Progo Regency, while Farmer group in Bantul Regency

has made management changes several times.

c. The sand farm institutions in Bantul and Kulon Progo Regencies coordinate or work together to develop agriculture, especially chili commodities. Farmer groups and Farmer group often get assistance from the agriculture agency, government, and banks.

2. Sandland agricultural institutions, namely farmer groups in Bantul and Kulon Progo Regency, farmer group in Bantul Regency, and auction markets in Bantul and Kulon Progo Regency, have a relationship with the development of agricultural innovation by establishing regulations or institutions related to agricultural innovation. The determination of the institutions is mostly agreed upon through farmer groups because group members are directly related to the use of agricultural innovation, while Farmer group has institutions for farmer groups who are members. The auction market itself is an innovation in the marketing of agricultural products by means of auctions coordinated through auction market organizations with various institutions.

3. Comparison of institutional governance in Bantul and Kulon Progo Regency, there are several differences as follows:

a. The differences in farmer groups in Bantul and Kulon Progo Regency include:

- 1) Aspects of transparency of human resources components and inter-institutional coordination.
- 2) Aspects of independence of the HR component and the financing component.
- 3) Accountability aspects of infrastructure components.

b. The differences between Farmer group in Bantul and Kulon Progo Regency include:

- 1) The aspect of transparency of the component of coordination with other institutions.
- 2) Independent aspect of the financing component.
- 3) Accountability aspects of infrastructure components, components

financing and coordination components with other institutions.

4) Accountability aspect for infrastructure component and financing component.

c. The differences in the auction market in Bantul and Kulon Progo Regency include:

- 1) Aspects of transparency of the component of human resources and component of financing.
- 2) The aspect of accountability of the HR component.
- 3) Responsibility aspects of infrastructure components.

Suggestion

Based on the conclusion, several suggestions or strategies that can be proposed as important solutions in the institutionalization of sand farming include:

1. There needs to be a management refresh or

management regeneration to maintain the dynamics of the institution by utilizing the potential human resources in Srigading and Bugel Villages by deliberation and consensus.

2. Agricultural institutions in Bantul and Kulon Progo Regencies must coordinate and work together to exchange information and experiences related to the development of agricultural innovations that support coastal sand land as an agricultural business.

3. The existence of differences in institutional governance of sand farming in Bantul and Kulon Progo Regencies can be used as an institutional improvement by conducting inter-institutional comparative studies.

REFERENCES

- Anantayu, S. 2011. Kelembagaan petani: peran dan strategi pengembangan kapasitasnya. *Jurnal SEPA* 7: 102-109.
- Moleong, L. J. 2017. *Metodologi Penelitian Kualitatif*. PT Remaja Rosdakarya, Bandung.
- Raya, A. B. dan D. W. Untari. 2015. Model Inovasi Kelembagaan Petani Lahan Pasir Pantai di Kabupaten Kulon Progo Daerah Istimewa Yogyakarta. *Prosiding Seminar Nasional Perlindungan dan Pemberdayaan Pertanian dalam Rangka Pencapaian Kemandirian Pangan Nasional dan Peningkatan Kesejahteraan Petani*. IAARD Press, Jakarta.
- Siyoto, S. & M. A. Sodik. 2015. *Dasar Metodologi Penelitian*. LiterasiMedia Publishing, Yogyakarta.
- Subejo, R. Witjaksono, Harsoyo, A. B. Raya, R. Andiandi & A. A. Putri. 2018. *Kajian Model Inovasi dan Kelembagaan Pertanian Berbasis Pelestarian Lingkungan Berkelanjutan di Kawasan Lahan Pasir Pantai Daerah Istimewa Yogyakarta*. Hibah Penelitian Unggulan Dosen Fakultas Pertanian UGM, Yogyakarta.