

LETTER OF DUTY AFFIRMATION
No. 0470/K.6.4/ST/FEB/V/2017

To Whom It May Concern,

The Undersigned below, Dean of Economics and Business Faculty, of Soegijapranata Catholic University of Semarang, Indonesia hereby assigns:

N a m e : Dr. Rustina Untari, SE.,M.Si. NIDN : 0616096501

Occupation : Lecturer, Full Time Faculty Member of Economics and Business Faculty of Soegijapranata Catholic University (SCU). (Departement of Management)

Address : Jl. Pawiyatan Luhur IV / 1 Bendan Duwur, Semarang. 50234, Central Java, Indonesia.

Activity : Presenter in Oral Presentation on the Conference, entitled: Farmers maintain their supply of organic rice (Al Barokah Cluster Case) for the 8th International Conference And Fieldstudy.

Time and Place : On May 16, 2017, at the Universitas Gadjah Mada (UGM), Yogyakarta.

This letter is issued for whatever it might deem useful to her.

Semarang, May 12, 2017

Dean of Economics and Business Faculty

SENTOT SUCIARTO A, Ph.D

NPP: 058.1.1988.030



Surani Hasnati S.Si, M.Sc.
Organizing Secretary

8th P4P6 IC&FS +VE

CERTIFICATE

This is to certify that

Rustina Untari

has participated as a

PRESENTER

in The 8th Rural Research and Planning Group Conference

“Innovations of Rural Development for Implementing Sustainable Development Goals”

University Club Hotel, Universitas Gadjah Mada

Yogyakarta, Indonesia

May 16 - 17th 2017

Founder of RRPG

Prof. Dr. Ibrahim Ngah



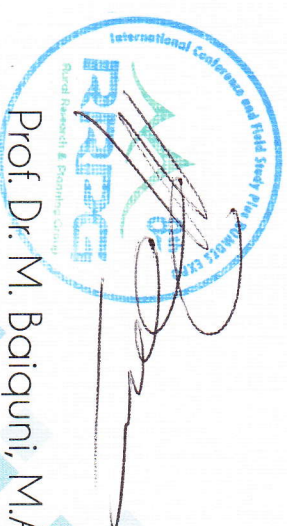
Vice Rector for Research and
Community Service UGM

Prof. Dr. Suratman, M.Sc.



Conference Chair of The 8th RRPG

Prof. Dr. M. Baiquni, M.A.





Farmers maintain their supply of organic rice (Al Barokah Cluster Case)

Rustina Untari*), Eva Maria Soekesi, Meniek Srining Prapti, Yohanes Sugiharto

*Management Program, Faculty of Business and Economics,
Soegijapranata Catholic University Semarang*

Sub-Theme: 1
Number and Sub-Theme

Abstract

The difficulties of agricultural products to meet Consumer Needs is Keeping their sustainability on the supply. It is because of the limitations of agricultural businesses: the season, area, the standardization of agriculture products. This research trying to find the answers how is Al Barokah success maintains their organic rice supply to serve market requirement.

The study was conducted by interviewing the chairman and group management, and field observations. We also do research on their agricultural standardization documents. Then we do a descriptive analysis to describe how to maintain the supply. Our analysis based on agriculture supply chain, organic agriculture (Morgera, Bullón Caro, & Marín Durán, 2012) and quality management.

The study found that the strategic way of farmers group Al Barokah to maintain their supply is obtain and maintain certified organic agricultural products (from the international certification body). Organic standard tightly applies to all members. Setting a high price so as to attract other farmers to join the group. Applying strict planting schedules. Planting schedule covers a land area, varieties of paddy are grown and time of planting

Keywords

Organic Rice, Farmer, international standard, quality management

INTRODUCTION

The development of organic farming is triggered by two sides, the first on the demand side where there is awareness of healthy living in the community. Healthy lifestyle including dietary intake side. Healthy life-style communities found to be healthy should consume healthy foods Among other criteria do not contain preservatives, pesticides, artificial fertilizers not food coloring, and others. The healthy living community is in desperate need of organic agricultural products.

Organic agriculture is a holistic farming system that supports and accelerates biodiversity, biological cycles and soil biological activity. Organic agriculture is also expected to play a major role in fighting against desertification, preserving biodiversity, contributing to sustainable development and promoting animal and plant health (Morgera et al., 2012). The resulting organic product certification, storage, processing, post-harvest and marketing must match the standard set by standardization bodies (IFOAM, 2008) in (Mayrowani, 2012). The organic farming movement in Indonesia started in 1984 through the establishment of Bina Sarana Bakti (BSB) Foundation as the center for organic agriculture development by Rev. Agatho Elsener. (Jahroh, 2010) and later spread to several regions in Indonesia. Increasingly recognized, the more demand for organic products, including rice which became the staple food of Indonesian society.

The difficulties of agricultural products to meet Consumer Needs is Keeping their sustainability on the supply. It is because of the limitations of agricultural businesses: the season, area, the standardization of agriculture products. This research trying to find the answers how is Al Barokah success maintains their organic rice supply to serve market requirement.

THEORITICAL REVIEW

Organic Rice Production

IFOAM (International Federation of Organic Agriculture Movements) describes organic agriculture is a holistic farming systems that support and accelerate biodiversity, biological cycles and soil biological activity. The resulting organic product certification, storage, processing, post-harvest and marketing must match the standard set by the standardization body. (Nurhidayati, Pujiwati, Solichah, Djuhari, & Basit, 2008). That definition applies to all commodities, including rice. Specifically Organic rice production system can be described as follows

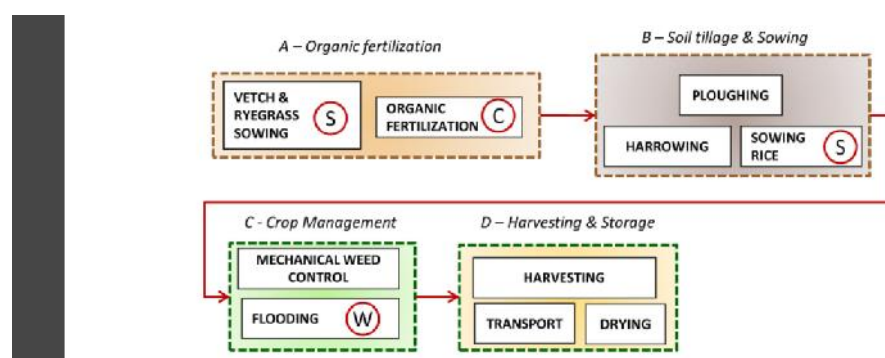


Fig 1. Organic Rice Production (ORP) System (S=Seeds, C=Compost, W=Water)
Source : (Bacenetti, Fusi, Negri, Bocchi, & Fiala, 2016)



Supply Chain Management

Definition of Supply chain management according to Global Supply Chain Forum (1984) is integration of business processes from end user through original supplier that provides products and services and also information that will give value to customer. (Lambert, Cooper, & Pagh, 1998).

Supply chain in agriculture is more complicated than other products because of the nature of the agricultural produce. (Sivaramane, N and Reddy, 2014) such as perishable goods.

Supply product that we discuss in this paper is primary stage of supply chain on organic rice c. (Sharma, Giri, & Shankar Rai, 2013)

Concept of Agricultural and Food Logistics has been under development as more effective and efficient management system is required for the food production planning, physical collection of primary produce from fields and homesteads, processing and storage at various levels, handling, packaging, and distribution of final products (Gebresenbet & Bosona, 2012)

METHODS

This research conduct by interview with the head of Al Barokah Organic Rice Cluster. We also did interview with farmers for validation of the data. We also get data from Al Barokah's documents. Data analysis

FINDING

AL Barokah Organic Rice Cluster

Al-Barokah established on 16 September 1989 by smallholders in Ketapang village, district. Susukan District, Regency Semarang. At its inception, the number of farmers 396 members (220 men, 176 women) were spread on 2 district (Susukan and Kaliwungu). At this time the agricultural area has spread in several districts as Semarang Regency. Some villages have been involved Among other things Kenteng village, the village of Ketapang, Koripan Village, Village Timpik, Sidoharjo village and some surrounding villages

The total land area is currently 138 ha, which has been certified organic and small area semi organic (2nd year the conversion) will switch to certified organic and the future will increase spread throughout Central Java province. This group is an integrated organic Farm (IOF) as shown in the picture.

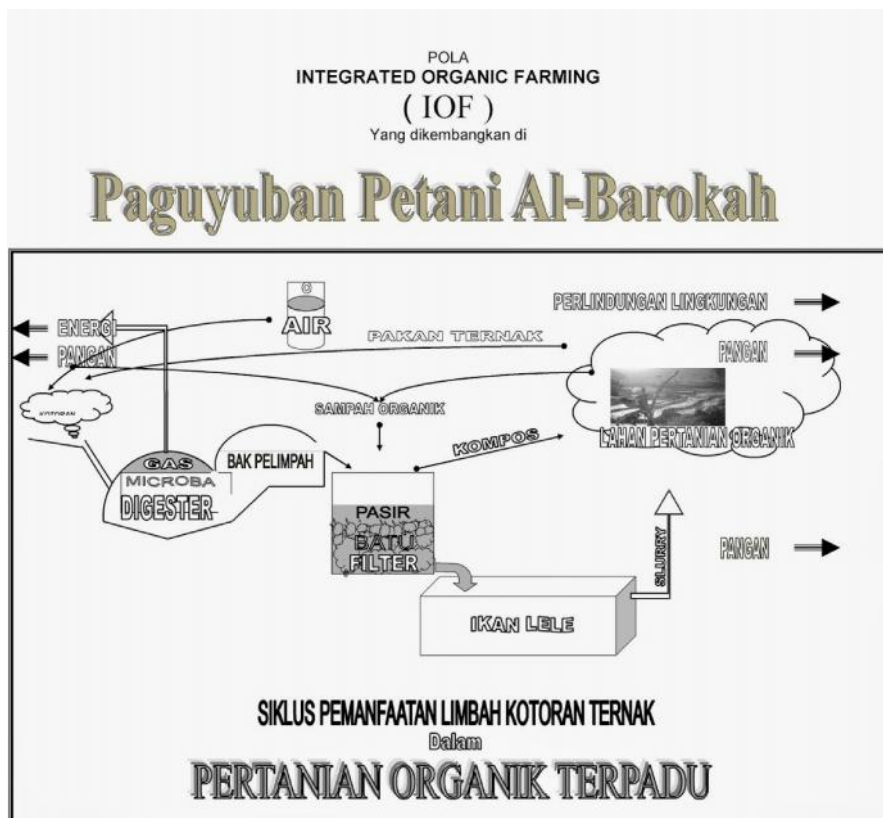


Fig 2. Al Barokah IOF

Source : albarokah.com

The group provides all purposes ranging from seedlings to farmers to millers. Farmers welcome to make their own fertilizer and pest repellent but should follow the standard operating procedures that have been established. By working in groups they can be more efficient.

They also facilitate implementation of internal control systems (ICS) to ensure quality management and reduction of certification costs through group certification. (Edwardson & Santacoloma, 2013). The location of Susukan District drawn below.

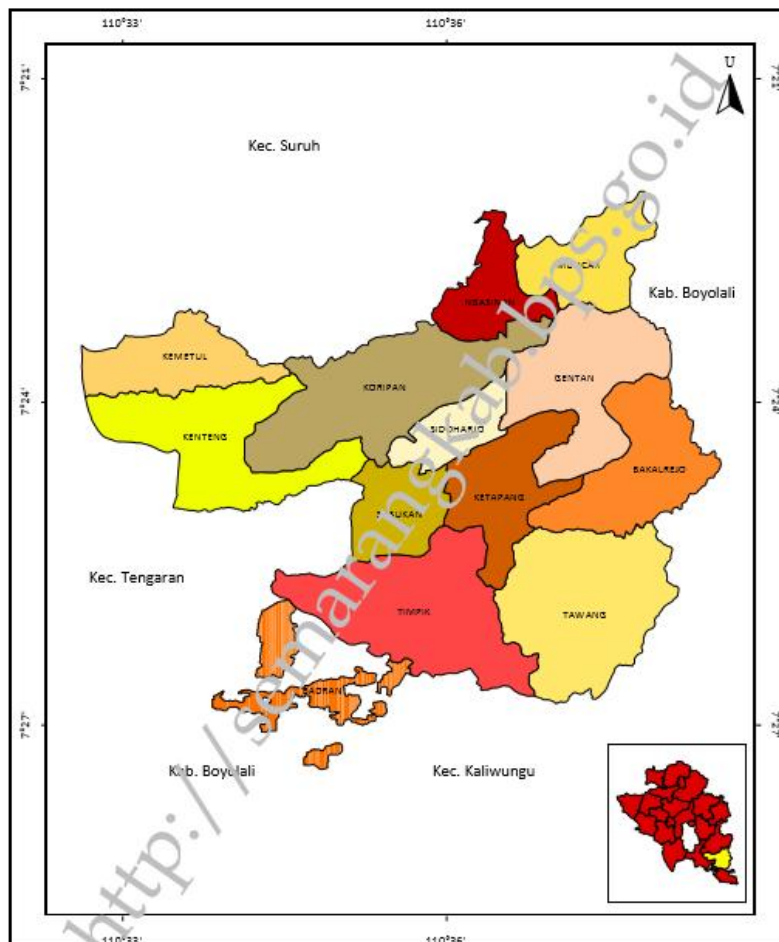


Fig 3. Susukan District

Source (*Kecamatan Susukan Dalam Angka 2016*, n.d.)

The production of AI Barokah are many variation organic rice , there are in the local name “Mentik Susu”, “Pandan Wangi”, “Merah (Red Rice)”, “Hitam (Black Rice)”, “C4”, “Ketan Hitam”, “Ketan Putih”, “Cisokan”. They have to produce many variation of organic rice to fulfil customer demand. Farmers include in groups of production to manage their production process.

The table of AI Barokah can see below



Table 1. Al Barokah Productions

Group productions	(ha)	PRODUCTIONS (tons)							
		MS	PW	Merah	Hitam	C4	Ktn H	Ktn P	Cisokan
Al-Barokah 1	5.09	38.96	16.222		19.7504		11.249		
Al-Barokah 2	12.202	82.462	27.52	20.7711	17.0384		18.845	11.021	15.352
Sunan Ampel	6.789	44.303	23.258			9.211	20.224	3.95	
Dewi Sri	14.483	167.02	73.8	138.085	55.4344	20.6	9.7162	20.574	26.8686
Ngudi Lestari	13.42	56.44	21.27	17.6	8.9046	75.89		37.02	0
Sumber Rejeki									
Mandiri	10.961	3.85	22.275	36.19	23.9048	43.89	11.978	9.24	12.32
Walisongo	11.758	40.875	39.761	13.8078	8.3906	17.38	8.264	35.52	18.7734
Al-Mazroah	10.08	105.23	10.78	22.0544	14.1892		9.5559	2.964	1.5423
Suko Maju	11.758								
Ngupoyo Upo	8.9		46.725	19.25	7.7	41.79	3.85	15.4	
Margo Makmur	8.805		30.908	50.05		54.4		1.771	1.716
Langgeng Tani	11.34		42.518	32.032	19.082	75.38	7.7	5.852	
Sehati									
Maju Lancar	12.194	57.046	31.193		5.3628	23.68	24.387	15.35	5.0676
Total (ton)	138 ha	596	386	349.8	179.8	362	126	159	81.64

Source : Al Barokah report 2016.

Certificate

Al Barokah Th 2007-2008 certified Green neet and Earneth Thailand in 2012 obtained organic certification INOFICE No: 062ILSPO-003-IDN / 10/15 which is applicable to the present. MAL certification in 2016 obtained the Quality Certification Number: 006 / LSPO / 002-IDN-ORG / 2015-2018. Value of Organic compliant ISO standard 6729-2013 (Nasional, 2013) and to Regulation No. 64-2013 and tested in the laboratory of Bio Chamlab Angler, Committed to the Global Standard, Independence Analytical Laboratory in Indonesia Certificate No. 133 815 2013.

Certificates owned by farmer groups Al Barokah shows that management is already having an adequate quality assurance system. The certificate can be used as an instrument for the people (consumers) that the entire production process of organic rice produced has a reliable management standard.

HOW TO MAINTAIN THE SUPPLY OF ORGANIC RICE

To get sustainability in their supply for their customer, Al Barokah have three key success factors:

1. Add capacity of Production



2. **Scheduling**
3. **Quality Assurance System.**

Farmer Recruiting to add capacity of production

In order to have an adequate supply of rice to meet the market demand, then there is no necessity to increase production capacity. The thing to do is to add group members, so that land become wider and production also increased. How that is done is to add members to the socialization of information about organic farming, clear to farmers around the village of Ketapang. These dissemination efforts are not easy, the main obstacle is the reluctance of farmers during the transition or conversion period. The transition period is a period of transition from conventional farming to the organic agriculture. This period lasted for two years and certainly the farmers will decline, which means decreased productivity also results they receive.

However, many farmers are interested to become a member of farmer group Al Barokah. The main thing that drives are a premium price that will be received if they produce and sell organic rice. Farmers will also receive a far greater margin than he sells conventional rice. This is because the production cost is very small. It is because many rice production means can produced / manufactured by themselves
Several reports have confirmed that small farmers who have shifted to organic production and marketing enjoy higher and more stable yields and incomes, thus enhancing their food security (IFAD, 2003, 2005; UNEP-UNCTAD, 2008a, 2008b). (Edwardson & Santacoloma, 2013)

The process to become a member of Al Barokah organic farmer groups is also not easy. The prospective member must follow some strict rules that organic quality standards owned Al Barokah is maintained. The Rules are :

1. Each member should make a statement. They have to signed on the stamp 6000 which stated willingness become a member and follow all of the rules
2. Rice Field that listed already is should not sale transferred / rent to others.
3. They have to follow the conversion period of 2 years. At this time under the guidance of prospective members of the ICS (Internal Control Standardization)
4. Follow all Standard Operating Procedure
5. After two years they have to meet all SOP, ICS can recommend that the land is considered to be organic and farmers can become full members.

Scheduling

Rice produced by the group consists of several varieties Barokah Among other things, Mentik fragrant, red, black, chitosan, "Pandan wangi", and so forth. All varieties have their own consumer enthusiasts. Therefore, to meet consumer demand throughout the year in large numbers, then Al barokah perform scheduling in planting. Note that overlays need to



be made of organic rice paddy blocks belonging to members. Scheduling made by making the provision of rice varieties grown, the number of blocks per varieties and time of planting. Scheduling has been prepared considering with inventory and also demand forecasting in the future.

All members of the group must comply with the planting schedule in order to meet all the requests in accordance with the variety and time of the request / needs of consumers.

Quality Assurance System.

An internal quality assurance system was developed by Al Barokah especially to ensure that all farmers who are members will adhere to the rice produced only too well preserved organic purity. Quality assurance systems also made in order to maintain organic certification has been accepted by the farmer groups. They have team Internal Control Standarization (ICS) wich operate and also responsible with Quality Assurance System in their Group.

For the purposes of quality assurance in the management of organic rice, have been developed various operating standard procedures (SOP) are needed, namely:

1. The procedure for site selection
2. The Procedure for land preparation
3. The Procedures for the preparation of seed
4. The procedures for making organic products
5. The procedure for planting
6. The Maintenance Procedure
7. The procedure for harvesting
8. The Procedure for drying
9. The Procedures for storage
10. The Procedure milling
11. The Procedure packaging
12. The Procedure varieties
13. The Procedures rodent control (pest)
14. The Procedure irrigation and filtration

While the outcome of the implementation of the system is the continuity of supply of organic rice for all the variants and the number and adequate time. So that the entire demand of consumers can be served. This can be achieved because of the scheduling system of rice cultivation that has been arranged for all variants, namely white rice, red, and black. With a land area of 138 hectares of the entire consumer demand for white rice, red and all black can always be met at all times in terms of both quantity and time provision. Fulfillment of the whole consumer demand is supported by an adequate distribution system to direct the target market can reach the end consumer. Even some trader, dealer has made a purchase directly to the site of the farmer groups Al Barokah with the system outright. The system's outright support smooth management of working capital for organic rice cultivation, so the need for production costs can be met.



DISCUSSION

1. Analysis on the fulfillment of organic rice supply has shown that this group of organic farmers has committed to the principles of modern management principles.
2. In a large organization which involving with many parties to achieving the goal, then obedience to the procedure and the commitment of all parties to abide by all the SOP be the key for such a big organization farmer group Al Barokah this.
3. Quality Assurance System created by Cluster Al Barokah can be rated as good and complete system can be compared with large companies.
4. It should be assessed if Al Barokah using MRP system for their scheduling

Acknowledgment

1. This paper is one part of a research cooperation between FEB Unika Soegijapranata and School of Business, University of San Carlos Cebu, Philippines
2. Acknowledgment is given to Organic Rice Farming Group Sususkan District of Semarang district

References

- Bacenetti, J., Fusi, A., Negri, M., Bocchi, S., & Fiala, M. (2016). Organic production systems: Sustainability assesment of rice in Italy. *Agriculture, Ecosystems and Environment*, 225(May), 33–44. <http://doi.org/10.1016/j.agee.2016.03.046>
- Edwardson, W., & Santacoloma, P. (2013). Organic Supply Chains for Small Farmer Income Generation in Developing Countries: Case Studies in India, Thailand, Brazil, Hungary and Africa. *FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS*, 62. Retrieved from <http://www.fao.org/docrep/017/i3122e/i3122e.pdf>
- Gebresenbet, G., & Bosona, T. (2012). Logistics and Supply Chains in Agriculture and Food. *Pathways to Supply ...*, (Chapter 8).
- Jahroh, S. (2010). Organic farming development in Indonesia : Lessons learned from organic farming in West Java and North Sumatra, 1–12.
- Kecamatan Susukan Dalam Angka 2016*. (n.d.) (Katalog BP). BPS Kabupaten Semarang. Retrieved from <https://semarangkab.bps.go.id/>
- Lambert, D. M., Cooper, M. C., & Pagh, J. D. (1998). Supply Chain Management: Implementation Issues and Research Opportunities. *International Journal of Logistics Management*. <http://doi.org/10.1108/09574099810805807>
- Morgera, E., Bullón Caro, C., & Marín Durán, G. (2012). Organic agriculture and the law. *FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS*.



- Nasional, B. S. (2013). SNI 6729: 2013 - Sistem Pertanian Organik. *Badan Standarisasi Nasional*. Retrieved from www.bsn.go.id
- Nurhidayati, Pujiwati, I., Solichah, A., Djuhari, & Basit, A. (2008). Suatu Kajian Sistem Pertanian Terpadu dan Berkelanjutan. *Pertanian Organik*, 1–182.
- Sharma, V., Giri, S., & Shankar Rai, S. (2013). Supply Chain Management Of Rice In India: A Rice Processing Company's Perspective. *International Journal of Managing Value and Supply Chains*, 4(1), 25–36. <http://doi.org/10.5121/ijmvsc.2013.4103>
- Sivaramane, N and Reddy, G. (2014). Supply Chain Management in Agriculture. *National Academy of Agricultural Research Management (NAARM) Rajendranagar, Hyderabad 500030, Telangana, India*, (September). Retrieved from https://www.researchgate.net/publication/275894292_Supply_Chain_Management_in_Agriculture