An Organic Sertification of Organic Salak Pondoh (Salacca zalacca var. pondoh) : South Sumatera Experience

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Abstract— Because of Salak Pondoh in Pagar Alam City of South Sumatera Province was cultivated organically, so they need to follow the organic certification program conducted by the Department of Agriculture Food Crops and Horticulture South Sumatra Province to get a quality assurance of food safety certificate. The aims of an organic certification programs are to protect consumers from quality fraud; protect producers that has implemented of organic food systems from others who also claim to be a producer of organic products; and to preserve the natural environment. The organic certification comprises several stages namely an identification of land certification process in conformance document quality system, internal inspections, external inspection of West Sumatra Organic Certification Agency and technical committee meeting for approval of acquisition of organic certification. As much as 14 ha of farm proposed by farmer groups of Salak Dempo, only 5.25 Ha which obtain organic sertification. Land that is not certified organic due to the land have not yet implement 100 % of organic cultivation, such as the flow of water used is still contaminated farm land which are planted with carrots and potatoes; there is no barrier between Salak crops and conventional vegetable crops; and the presence of herbicide spray cans around the sites. Certification organic is expected to build the image of Indonesia as well as organic products to make that the Indonesian government as a “Kitchen Organic Food” in the world and go organic in 2015.

Keywords— Salak Pondoh (Salacca zalacca var. pondoh); Cultivated; Organic Sertification.

I. INTRODUCTION

Salak pondoh (Salacca zalacca var. Pondoh) Pagar Alam (as shown in Figure 1) is one of South Sumatra horticultural crops developed in Pagar Alam city. The government of South Sumatera tried to develop Salak Pondok who are cultivated organically in Pagar Alam city because their land morphology have potential vegetation of Salak plants. Pagar Alam city have combination of two types of soils namely latosol and andosol, so that have a hight level of soil fertility. Salak Pondok belong to Dempo’s farmer group in Pagar Alam first time harvested in 2006. Harvesting done twice a month about 300 – 500 kg per ha. In 2007, its production increased to 600 – 700 kg per ha.

Organic farming is an integrated and holistic agricultural production systems to optimize the health and productivity of agro-ecosystems, biodiversity, biological cycles, and soil biological activity naturally, so that resulting in a high quality and sustainable food [1]. Organic farming is one of program of agriculture sustainable. Sustainability refer to: the use of resources, the quality and quantity of production, as well as the environment. Sustainable agricultural production process will be directed to the use of biological products that are friendly to the environment [2]

Fig. 1. Salak Pondoh (Salacca zalacca var. Pondoh) Pagar Alam

The aims of an organic certification process are to protect consumers from quality fraud; protect producers that has implemented of organic food systems from others who also claim to be a producer of organic products; to preserve the
natural environment; and to harmonize in the regulation of the production system [3]. Organic farming uses natural ingredients to avoid the uses of pesticides, chemical fertilizers, and hormones substances chemically grown.

Reference [4], divided definition of organic farming into two i.e : first, absolute organic farming systems is a system of using organic fertilizer inputs are allowed (factory product); second, rational organic systems is a system of using organic fertilizer with pesticide and herbicide applications are rational and selective. Based on rules of organic food, organic fertilizers and biological agents were produced by factory have to get licensing and marketing authorization by the Ministry of Agriculture Republic of Indonesia. Internationally, organic farming should having some attributes of quality assurance safe consumption (food safety attributes), guarantees a high nutrient content (nutritional attributes), and guarantee of environmentally-friendly products (eco labeling attributes).

In Indonesia, the quality assurance of organic food set in the Indonesian National Standard (SNI) which is compiled by the National Standardization Agency (BSN), which refers to the IFOAM basic standards i.e ISO 6729 in 2010. Organic food standardization appreciated in the form of a certificate of legality organic products. The certificate is a written assurance given by the institutions/laboratories have been accredited by National Accreditation Committee to the state that goods, services, processes, systems or personnel have met required standard.

Organic certification is a series activities in publishing a certificate, as a written assurance given by the certification organization that has been accredited for the claim that these products meet the Indonesian National Standard (SNI) on Organic Food Systems. According [5], organic certification is the process to get recognition that crops production process was done organically comprises land management, acquisition of seeds, planting method, fertilization, pest control, harvesting and marketing. All of that process based on the standards and regulations set by BSN. Refer to section 62 of Consumer Protection Regulation that organic products are not certified will be subject to the sanctions namely imprisonment for 5 years or a fine of 2 billion rupiahs. Problems that occur at this time, that not all organic farming businesses are able to certify organic farming, because of the high cost of organic certification process.

Based on data of consumers needs of organic food products from the Ministry of Trade Republic of Indonesia in 2012 [6], consumer demand for organic food products is increasing, which is 12% per year. Therefore, Ministry of Agriculture Republic of Indonesia release a policy on organic food safety quality. The policy are followed by the Government of South Sumatra Province by doing organic certification process to Salak pondoh in Pagar Alam city. Actually, an organic farming program in South Sumatra Province started since 2004, however, the application of organic certification process began in 2012 and will be keep going as the efforts of South Sumatra government in meeting consumers needs about to organic food products and also in order to succeed sustainable agriculture which is a renewable resource.

Organic certification process for Salak Pondoh of Pagar Alam city are facilitated by Directorat General of Processing and Marketing of Agricultural Products and executed by Department of Agriculture Food Crops and Horticulture South Sumatra Province. Hopefully, through organic certification, the role of government as facilitator and adviser organic farming can help farmers and organic farming businesses in getting the legality of the organic product. Development of organic agriculture in Pagar Alam is expected to become a center of organic agriculture in South Sumatra province. Thus, Pagar Alam as Dempo Mountains tourist town also became one of the agro-tourism in Indonesia who enliven the tourism based on organic farming.

II. ORGANIC SERTIFICATION METHOD

There are five stages in organic certification of Salak pondoh (Salacca zalacca var. Pondoh) in Pagar Alam city, namely : (1) identification of areas that have been fostered and implemented appropriate organic farming system; (2) forming of Internal Control System/SKI team of farmer groups of salak and each their task; (3) preparation of quality system documents which comprises as following : preparation of Standard Operating Process (SOP) of cultivation Salak Pondoh in Pagar Alam city; determination of the critical point of cultivation of Salak Pondoh organic in Pagar Alam, assessment procedures for internal audit, internal audit schedule determination and preparation of internal sanctions for internal violations; (4) Verification and validation documents; and (5) submission certification to the Certification Organic Agency/LSO (LSO West Sumatera). At fifth stages consist of : (a) LSO appoint inspection team; (b) team of inspection do adequacy audit, (c) field audit and sampling to the applicant certification; (d) team of inspectors present the results of its audit to the LSO; (e) LSO present the results of the audit to the technical committee to discuss the technical committee and make recommendations; (f) technical commission recommendations to LSO; (g) LSO present the results of the assessment, whether the applicant submission can be certified or not. Organic certification stages is shown in Figure 2.

![Organic certification stages of Salak Pondoh in Pagar Alam city](image-url)
As much of 14 farmers (14 blocks of Salak farm) from Salak Dempo’s farmers group which proposed where located in Dempo Makmur district, Pagar Alam Utara village, Pagar Alam city. Certification process done during March until November in 2012.

III. RESULTS AND DISCUSSION

A. Identification Organic Farming Area

There are four spots organic farming area in South Sumatera Province, namely : district of Banyuasin, Ogan Komering Ulu Timur, Muara Enim and city of Pagar Alam. Then, Pagar Alam is selected as region which implement organic farming system because Salak Dempo’s farmers group is an horticulture farmers organisation who has got logo certification “Prima III” from Regional Food Safety Competent Authority (OKKPD) of South Sumatra Province.

B. Forming of Internal Control System/SKI team

Department of Agriculture Food Crops and Horticulture South Sumatra Province will give advance coaching to Salak Dempo’s farmers group about required things for organic farming such as : farming area, seed, cultivation, and stages of organic certification. Furthermore, formation of SKI team in Salak Dempo farmer group aims to improve the function of the organization to be more self-sufficient organic, able to apply risk management starting stages of cultivation, harvest, transport, and sales. SKI team can minimize the risks that have been identified from several critical points of production stages.

C. Preparation of Quality System Documents

Preparation of the quality system documents farmer group Salak Dempo as a primary reference for assessment by LSO of West Sumatera. The document contains the Standard Operational Procedure (SOP) of cultivation Salak Pondoh Pagar Alam, several critical point of production and distribution stages. SOP cultivation documents are the main point of LSO assessment. The cultivation of Salak Pondoh belong to Salak Dempo farmer group can be seen in Fig. 3.

Critical control point for organic Salak Pondoh cultivation are condition of farming area, seed condition, crop pest control, pruning, and postharvest handling. Seed for Salak Pondoh organic should an organic ones. Resolving crop pest of Salak Pondoh such as wild pig and rat, can be use pest trap as common. Sickle use when farmer will prune Salak Pondoh crops. It do not allowed to use basket which get chemical contaminant to collect harvested Salak Pondoh.

SKI team also do self assessment to assess member of Salak Dempo’s farmer group that has done organic farming, whether it meets the requirements or not. In early assessment, from Among 14 farmers of Salak Dempo’s farmer group who was audited internally, there are 8 farmers of them that has meets requirement organic (as shown in TABLE 1). SKI coordinator determine next internal audit schedule in July in 2012.

TABLE 1
RESULTS OF INTERNAL AUDIT IN SALAK DEMPO FARMERS GROUP

<table>
<thead>
<tr>
<th>No</th>
<th>Farmers's name</th>
<th>Farm blok name</th>
<th>Land area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Endang effendi</td>
<td>A1 and A2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Sutriem</td>
<td>B</td>
<td>0.5</td>
</tr>
<tr>
<td>3</td>
<td>Sukirman</td>
<td>C</td>
<td>0.25</td>
</tr>
<tr>
<td>4</td>
<td>Legiman</td>
<td>D</td>
<td>0.5</td>
</tr>
<tr>
<td>5</td>
<td>Dayat</td>
<td>E</td>
<td>0.25</td>
</tr>
<tr>
<td>6</td>
<td>Edy</td>
<td>F</td>
<td>0.25</td>
</tr>
<tr>
<td>7</td>
<td>Deni</td>
<td>G</td>
<td>0.5</td>
</tr>
<tr>
<td>8</td>
<td>Ngadiman</td>
<td>H</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>6.75</td>
</tr>
</tbody>
</table>

Preparation of internal sanctions for internal violations, aims to determine the the suitability of land, seed, livestock, soil fertility management, fertilizer, harvesting, weeds, crop pest, and many others organic regulation. An example of organik violation to land and seed presented as in TABLE 2.

TABLE 2
AN ORGANIK VIOLATION TO LAND AND SEED

<table>
<thead>
<tr>
<th>No</th>
<th>Kind of violation</th>
<th>Kind of sanction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Land</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>gardens are listed in the organic certification but do not have certificates or proof of ownership.</td>
<td>excluded from organic certification programs</td>
</tr>
<tr>
<td>2</td>
<td>there is no barrier between the organic and inorganic soil</td>
<td>requiring organic farmers to make guardrail within 1 week</td>
</tr>
<tr>
<td>3</td>
<td>non-organic land which are managed organically</td>
<td>should follow organic farming conversion rules (about within 3 years)</td>
</tr>
<tr>
<td>4</td>
<td>Sloping land that is not managed according land conservation rules</td>
<td>Should implement appropriate land conservation</td>
</tr>
<tr>
<td>B.</td>
<td>Seed</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>using non organic seed</td>
<td>should use organic seed within 3 years consecutively of conversion period</td>
</tr>
</tbody>
</table>

D. Verification and Validation Documents

Verification and validation of quality system documents of Salak Dempo’s farmer group was done by quality assessor team from Department of Agriculture Food Crops and Horticulture South Sumatra Province. The verification process done in supporting documents and its attachments as a condition of the certification of organic. All verified documents will be validated by chairman of inspection team.
E. Submission Certification to LSO

After chairman of Salak Dempo farmer group submit the organic documents to LSO in West Sumatera, then chairman of LSO of West Sumatera determine inspection team in order to assess the suitability of its proposed land, field audits and sampling at Salak pondoh farmer group Dempo. On initial inspection, the inspection team still find several discrepancies contained in the documents (garden notes, garden historical, land maps) and land (water flow from conventional land to organic land has been no barrier, there is still garbage cans and inorganic ones). At that step, also was reduced number of group member who have not meet entry requirements of organic certification. they are comprise of farmer who has land which block number A1, A2, B, C, D as much as 5.25 ha, overall. The farmers should fix and get solve all mismatched documents within 1 month from initial inspection time.

After one month from initial inspection, inspection team conduct advanced inspection to re-audit the discrepancy in the initial inspection. The end result of advanced inspection is about 5.25 ha has been declared eligible getting an organic certification. The committee LSO West Sumatra evaluate inspection result through reports and presentations inspection team. Evaluation of inspection results adjusted to ISO 6729 in 2010. Finally, the committee LSO West Sumatra decided deliver organic sertification to Salak Dempo’s farmer group. Coincides with the month of the quality of agricultural products in Jakarta, at 28th of November in 2012, sertificate of organic is awarded by Ministry of Agriculture Republic of Indonesia to Mr. Endang Effendi as a chairman of Salak Dempo's farmer group. The organic certificate valid for 3 years, where each year will conducted surveillance intended to audit land farming of Salak Pondoh Dempo. It aims to assess whether Salak Pondoh Dempo can maintain the integrity of their organic status. Some pictures of organic certification process can be seen in Figure 4.

Fig. 4. An organic certification process: (a) inspection of land; (b) inspection of cultivation; (c) inspection of crop pest; (d) meeting of documents preparation

IV. CONCLUSIONS

As much of 5.25 ha Salak Pondoh land area of Salak Dempo’s farmers group in Pagar Alam city which has certified by Organic Sertification Agency of West Sumatera (West Sumatera LSO) are entitled using logo of organic farming from the Ministry of Agriculture Republic of Indonesia. Thus, organic product status for Salak Dempo is expected to increase the added value and competitiveness of its products and also able to build the image of organic products in Indonesia in order to support of Indonesian government program as a “Kitchen Organic Food” in the world.

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REFERENCES