IMPROVEMENT OF MANGOSTEEN FARMING AND POSTHARVEST HANDLING STRATEGIES BASED ON GLOBAL GAP STANDARD AT KIARA PEDES, PURWAKARTA DISTRICT

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ABSTRACT

The objectives of this research were (1) to determine the value chain of mangosteen at Kiara Pedes Sub district, Purwakarta District, (2) to identify the gap between actual condition at Kiara Pedes and Global GAP standard, (3) to identify internal and external factors that can affect the implementation strategy of Global GAP standards, and (4) to develop alternative strategies that can be applied to improve the system of mangosteen cultivation and post harvest handling based on Global GAP standards. The analytical tools being used in this study were value chain analysis, gap analysis, internal and external factor evaluation (IFE, EFE, IE matrix), SWOT analysis, and quantitative strategic planning matrix (QSPM). Identified primary actors in mangosteen value chain were farmers, middlemen, suppliers, exporters, and local and overseas retailers. Based on IE Matrix and SWOT analysis, the strategies to implement Global GAP standards were (a) to increase mangosteen productivity and improve its quality by using developed cultivation and postharvest technology, (b) to increase productivity, and improve quality and transportation network in accordance with Global GAP standard, (c) to improve clean water and post-harvest infrastructure through cooperation with exporters and financial institutions, and (d) to improve warehouse and supporting facilities such as packaging and sanitation according to the Global GAP standard for minimizing the environmental constraints. The most priority strategies from the QSPM analysis were improving clean water and post-harvest infrastructure through cooperation with exporters and financial institutions, followed by using the developed cultivation and postharvest technology to increase mangosteen productivity and improve its quality.

Keywords: Mangosteen, Global GAP Standard, Value Chain, Improvement Strategies, Farming and Postharvest Handling Practices

ABSTRAK

Tujuan penelitian ini adalah (1) untuk menentukan rantai nilai manggis di Kiara Pedes Kecamatan, Kabupaten Purwakarta, (2) untuk mengidentifikasi kesenjangan antara kondisi aktual di Kiara Pedes dan standar GAP Global, (3) untuk mengidentifikasi internal dan faktor eksternal yang dapat mempengaruhi strategi penerapan standar GAP global, dan (4) untuk mengembangkan strategi alternatif yang dapat diterapkan untuk memperbaiki sistem budidaya manggis dan penanganan pasca panen berdasarkan standar GAP global. Metode analisis yang digunakan dalam penelitian ini adalah analisis rantai pasok, analisis GAP, evaluasi internal dan eksternal faktor (IFE, EFE, matriks IE), analisis SWOT, dan kuantitatif perencanaan strategis matriks (QSPM). Faktor utama yang diidentifikasi dalam rantai pasok manggis adalah petani, perantara, pemasok, eksportir, dan pengecer lokal dan luar negeri. Berdasarkan IE Matrix dan analisis SWOT, strategi untuk menerapkan standar GAP global adalah (a) untuk meningkatkan produktivitas manggis dan meningkatkan kualitasnya dengan menggunakan dikembangkan budidaya dan teknologi pasca panen, (b) untuk meningkatkan produktivitas, dan meningkatkan kualitas dan jaringan transportasi sesuai dengan standar GAP global, (c) untuk meningkatkan air bersih dan pasca panen infrastruktur melalui kerjasama dengan eksportir dan lembaga keuangan, dan (d) untuk meningkatkan gudang dan fasilitas pendukung seperti kemasan dan sanitasi sesuai dengan standar GAP global untuk meminimalkan kendala lingkungan. Strategi yang paling prioritas dari analisis QSPM mengembangkan infrastruktur air bersih dan pasca panen melalui kerjasama dengan eksportir dan lembaga keuangan, diikuti dengan dikembangkan budidaya dan teknologi pasca panen untuk meningkatkan produktivitas manggis dan meningkatkan kualitasnya.

Kata Kunci: Manggis, Standar GAP Global, Rantai Nilai, Perbaikan Strategi, Pertanian dan Praktek Penanganan Pascapanen

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INTRODUCTION

Background

Agriculture is the second major contribution to Indonesian GDP after manufacturing industry (BPS, 2009). Out of agricultural commodities, the contribution of horticultural products has been increasing at the rate of 7,5%. So far, the value of mangosteen export has been the largest among other fruit products reaching 7,2 Million USD in 2009 (Deptan, 2012). The major mangosteen export destination was China (57%), Hongkong (24 %), and Uni Emirat Arab (9 %). Indonesia also exported mangosteen to Europe with a volume of 3%, but the price was doubled over the one exported to Asia and Middle East. Indonesian competitors in mangosteen world market, among others, are Thailand and Malaysia. In European retail market (ITC, 2009), Indonesian mangosteen was sometimes priced at the same value with Thai mangosteen, i.e., Eu 7,9/kg in Sweden, but sometimes Thai mangosteen was priced higher at Eu 8,7/kg in Denmark.

European market is still open to Indonesian mangosteen provided that the fruits meet the Global GAP standard applied to any agricultural product coming in to the market. Thus, to increase the export to the European market, the state of the art of mangosteen farming and postharvest handling in Indonesia should be analyzed as well as the strategies to improve the current condition in efforts to meet the Global GAP standard.

Mangosteen production is spread all over Indonesia with major locations are in North Sumatera, West Sumatera, Lampung, West Java, South Sulawesi, West Nusa Tenggara, and Bali provinces. West Java is the major producer contributing to 38% of the total production with the mangosteen centers at Purwakarta, Tasikmalaya, Sukabumi, and Bogor districts. The well known mangosteen cultivar for export is Wanayasa from Purwakarta.

Research Objectives

This study aimed to identify the gap between the current mangosteen farming and postharvest handling practices, and the Global GAP standard, and to recommend the improvement strategies to meet the standard with the following specific objectives.

1. Identify mangosteen value chain at Kiara Pedes, Purwakarta district.
2. Identify the gap between current mangosteen farming and postharvest handling practices at the farmer groups, and the Global GAP standard.
3. Analyze internal and external factors that influence the strategies to implement the Global GAP standard.
4. Develop the alternative strategies to improve the mangosteen farming and postharvest handling practices in meeting the Global GAP standard.

Research Outcome

Strategies in mangosteen farming and postharvest handling practices to meet Global GAP standard are ready to be implemented when farmers and other actors of the mangosteen value chain reach decision to extend their market to Eupean region to gaining higher income.

LITERATURE STUDY

Mangosteen And SNI Quality Standard

Mangosteen (Garcinia Mangostana L.) is a fruit tree originally comes from tropical rain forest in the Southeast Asia region like Indonesia and Malaysia. From Southeast Asia, the plant spreaded out to Central America and other tropical countries such as Srilanka, Malagasi, Caribean, Hawaii, and North Australia. The local name of mangosteen in Indonesia varies from province to province, for examples, manggu in West Java, manggus in Lampung, manggusto in North Sulawesi, and manggista in West Sumatera. Mangosteen is also called as Queen of fruits due to their exotic taste which is a mixture of sweet, sour, and astringent. The plant needs high rain precipitation (above 1200 mm/ year) evenly distributed along the year, temperature ranges from 25-35 ^{0}C, and high humidity (Osman and Milan,2006).

Indonesian Quality Standard (SNI) for mangosteen has been initially established in 1992 under No. 01-3211-1992, and renewed in 2008. The standard covers the quality based on the fruit size, appearances, and their tolerancy. It also contains the packaging, labeling and hygienic conditions. The standard applies to commercial varieties of mangosteen in the Guttiferae family for fresh table fruits. Processed fruits are not covered by this standard. The standard classifies mangosteen fruits into three following categories.

1. Super : free from all defects on the fruit surfaces. Transluscent pulp and or yellow gum not higher than 5%.

2. A : allows a few defects on surfaces such as mechanical scratches, and abnormality in physical form with a total defect area not higher than 10% out of total surface area. The defect is not allowed to interfering into the pulp. Transluscent pulp and or yellow gum not higher than 10%.
3. B : allows a few defects on surfaces such as mechanical scratches, and abnormality in physical form with a total defect area not higher than 10% out of total surface area. The defect is not allowed to interfering into the pulp. Transluscent pulp and or yellow gum not higher than 20%.

Global Good Agricultural Practices (Gap) Standard

Global GAP was first known as EurepGAP or European GAP. EurepGAP was a general standard for agricultural practice management launched in 1997 by several supermarket chains in Europe and their major suppliers. The standard was developed focusing on Hazard Analysis and Critical Control Points (HACCP) referring to FAO manual, and regulated by ISO Guide 65 for the certification scheme. The farmers would be accredited by the third party who was independent but licensed by the EurepGAP Secretariat who hired the auditors for the process (Boselie, 2011).

Boselie (2011) further described the Global GAP standard as follows.

1. Implementation of Good Agricultural Practices standard to global agricultural products.
2. Global GAP standard provides certificate which starts from on farm activities including agricultural inputs such as feed , and seed manufacturing until the products leave the farm to the market. The Global GAP puts label from business to business so it does not directly appeared to the consumers.
3. Global GAP certification is carried out by more than 100 independent certification institutions in more than 100 countries.
4. Global GAP covers annual inspection on producers and other additional inspections without notice.
5. Global GAP contains a set of document consists of general regulations, control points, compliance criteria, and check list.

Value Chain

Schmitz (2005) defined value chain as secquential activities required to manufacture products or services. While Porter (1985) described it as the whole activities that linked one another in an integrated business to manufacture products or services, starting from planning, production, marketing, distribution, and their supporting activities. Gereffi *et al.* (2005) stated that value chain is a series of business activity related on the functions to providing specific inputs for specific primary products, transforming, until finally marketing to specific consumers.

Activities in a value chain do not necessarily carried out by only one company, and can be done by several companies located at different countries. In this light, it is called global value chain. Global value chain covers integrated multi national production and marketing, and makes it possible the establishment of new production plants or research and development center in other countries. The global value chain also allows the coordination of products from other companies in developing countries (Giulliani *et al.*, 2005).

RESEARCH METHODS

Research Design

This study used desciptive research method with data collected from observation on real condition at the selected mangosteen farmer group, Saluyu Mandiri Mukti, at Garokgek village, Kiarapedes, Purwakarta District. The selection was based on the characteristics of the farmer group who was the most progressive one, and assuming the leadership of the farmer group association in the subdistrict. In observing the farming and postharvest handling practices of the farmer group, the Global GAP Standard was used for benchmarking. Gap between the current practices and the standard was identified, and the strategies were formulated to improve them to meet the Global GAP Standard.

Primary data was gained through in depth interview with ten respondents out of the farmer group members, selected by purposive sampling under the criteria of 0,25 ha minimum production area, and 100 kg fruits per tree for minimum productivity. Secondary data was collected from, among others, Regional Office of Agriculture, Central Bureau of Statistics, farmer group, and articles in scientific journals, and forum.

Data Analysis

In the value chain anlysis, market map was first developed containing three components of value chain actor, enabling environment, and service provider, followed up by the identification and analysis of the

value chain actors. Further analysis used were gap analysis, internal and external factor evaluation (IFE, EFE, IE matrix), SWOT analysis, and quantitative strategic planning matrix (QSPM) following David (2005).

RESULTS AND DISCUSSIONS

General Agricultural Practices Of Farmer Group

The selected farmer group had 28 members, with a total production area of 14,5 ha covering 2100 tree plants with the age ranked from 20-150 years. The average of productivity was 96 kg/tree plant, thus, a total production of 201,6 tons which mostly was grade super with 5-6 fruits/kg. Mangosteen farming has been a heritage from generation to generation. Regional government has lately encouraged the farmers to plant new trees. The farmer group had been also receiving guidance towards GAP from the Regional Office of Agriculture.

Farmers commonly harvest the fruits at 104-108 days after anthesis which is considered best for export with a maturity of index 2-4. Harvesting is done manually by climbing the trees, picking up the fruits by hand, and then putting them into a bag made from cloth material carried on the farmers' shoulders. The fruits are moved into small plastic crates with a capacity of 6-8 kg, and transported home by walking or motor cycle.

Posthavest handling is done in packaging room by the collecting traders and exporter suppliers . Fruits are cleaned and trimmed, then sorted into various export grades, packed inside bigger crates of 12 kg each, and lined by paper. Re-grading and packaging may be carried out in the packaging house of the exporters.

Mangosteen Value Chain

Mapping on the mangosteen value chain (Figure 1) resulted in the identification of the following actors.

1. Farmers. Farmers commonly sold the fruits in bulk to collecting traders. The price ranged from Rp 9.000/kg for super and Rp 4.000 for low grade, averaging at Rp 6.000/kg.
2. Collecting traders. Collecting traders were also members of the farmer group. They did pre-sortation based on the present of defects on the surfaces, and sent the fruits without defects (70%) to the exporter suppliers, and the fruits with defects (30%) to the local retailers. The profit of the collecting traders varied from Rp 500 – 2.000/kg with an average of Rp 1.000/kg.
3. Exporter Suppliers. Exporter suppliers usually were hired by the exporters to collect mangosteen fruits from the farm. Initial grading was carried out based on the export grades, and the price and balance of world market demand compared to internal supermarket demand. The results of sortation were i) 56% fruits suitable for export, ii) 10% fruits to supply internal supermarkets with qualities similar for export, and iii) 4% reject fruit grade for local retailers.
4. Exporter suppliers took about Rp 5.000 margin/kg from the exporters, and supermarkets, and Rp 2.000/kg margin from the local retailers to gain profit, and cover the sortation and transportation cost. Exporter suppliers might advance down payment to the farmers through the collecting traders in effort to guarantee the fruit supply.
5. Exporters. Several exporters were competing to purchase the fruits through their exporter suppliers. Some did re-grading and re-packaging to ensure the prime export quality in their packaging house, some sent their officers to the farmer groups, or collecting traders to do sortation at on-farm packing room to cut the cost and the delay time for mangosteen fruits to reach market destination from the farm. Exporters were estimated to pocket around Rp 14.000 profit/kg fluctuating based on the world market price.
6. Export grades consist of three classifications : AAA with 6-8 fruits/kg, AA with 9-10 fruits/kg, and A with 11-12 fruits/kg. There was also another classification specifically for export to the Middle East called Super Falcon with 15-16 fruits/kg. All fruits had to have smooth surfaces and maturity index 2- 4.
7. Local Retailers. Local retailers were the actors who sold reject fruit grades in the traditional market or on the street shops. The margin gained by local retailers was around Rp 3.000/kg, however it had not yet taken the considerations of losses during the fruit shelf life prior to bought by the consumers.
8. Local Supermarkets. Local supermarkets sold higher quality than local retailers, sometimes, export quality. The estimated margin was high about Rp 14.000/kg, however the cost of maintaining cold and convenient atmosphere, and the risk of losses were also high.
9. Overseas Retailers. Overseas retailers spread over a wide range of actors such as food and fruit shops, supermarkets, and airport stores. Estimation of margin was difficult since the price was fluctuated and decreasing along with the longer exposure time to surroundings.

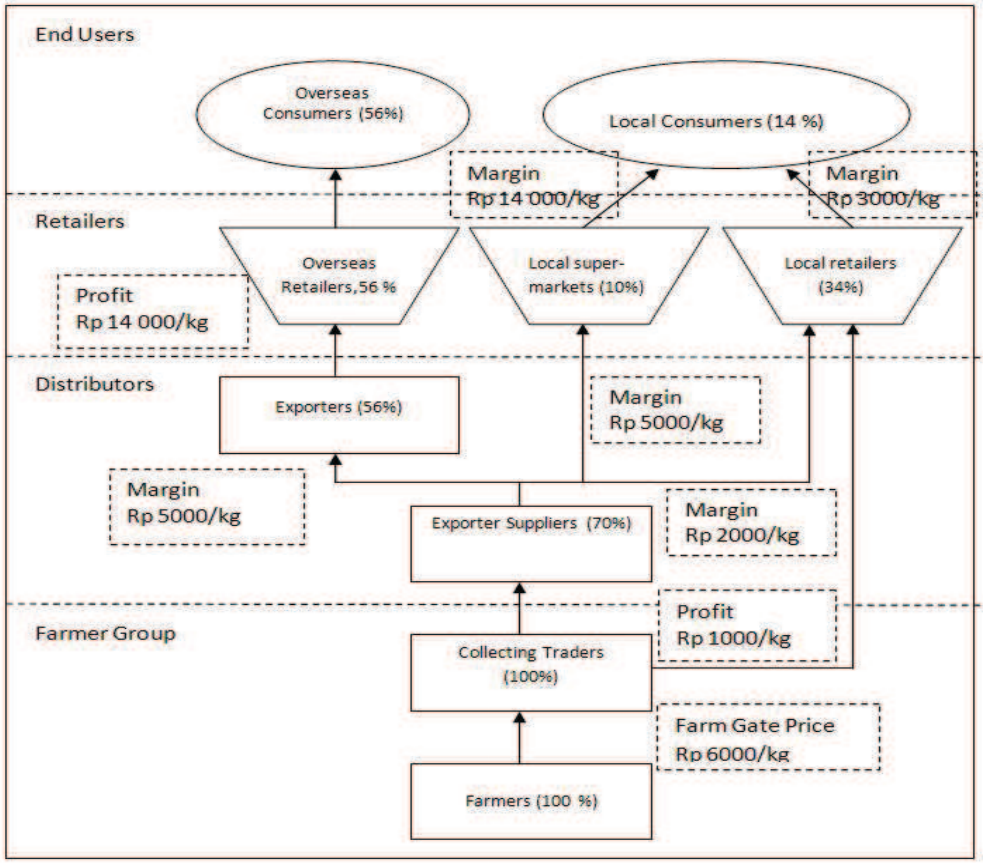

Figure 1. Mangosteen Value Chain at Farmer Group Saluyu Mandiri Mukti, Kiara Pedes, Purwakarta District

10. Consumers. The end users were both local and overseas consumers.

Gap Analysis

The results of gap analysis between current agricultural practices adopted by the farmer group and the Global GAP Standard were listed in Table 1. All control points still demonstrated quite large gap with postharvest handling the highest (88%), followed by the use of chemicals (80%), harvesting (74%), and farming (55%). However, there were several factors that indicated less than 50% gap, such as the implementation of organic fertilizer which only 30% in farming practice, hygienic and sanitation of the workers, equipment, container, packaging and transportation vehicles in harvesting, and hygienic of the workers during postharvest handling.

Analysis Of Internal And External Factors

Internal factors from inside the farmer group that influenced farming and postharvest handling performances related to the Global GAP Standard were tabulated under the strengths and weaknesses in Table 2. The strengths included the product quality and capacity, the farmers' ability, sanitary of production area, and transportation system, while the weaknesses covered storage, farmers' welfare, farmer institution, and availability of clean water for agricultural practices usage.

Table 2 showed that the highest score for internal strength was product quality and sanitary of production area at 0,391. These factors also became the competitiveness advantage to other farmer groups in the region. Product quality was mainly support by the type of the cultivar (Wanayasa) which has specific characteristics compared to others. Sanitary of production area had been maintained since the farmer group followed the program provided by the agricultural regional office. The major weakness was the availability of clean water for agricultural usage which scored the highest 0,111. In contradiction, farmers did not feel this as the priority problem to be resolved, ranking it as number 1 (lowest priority). The case might be caused by the difficulty to find clean water resources in the area, and the topographical condition of the production area that could hinder the construction of the water infrastructure.

External factors from outside the farmer group were viewed as opportunities to be used for, and threats to be responded. The presence of financial institutions in the area scored the highest (0,114), followed by the access to exporters (0,108).

Table 1. Current Agricultural Practices Of The Farmer Group That Indicated Less Than 50 % Gap To Global Gap Standard at Each Control Point.

Control Point	Gap	Factor
A. Substrate (Including Use Of Chemicals)	80%	
B. Pre-Harvest Handling (Farming)	55%	
B.1. Implementation Of Organic Fertilizer	30%	Farming
C. Harvesting	74%	
C.1. Training On Hygienic Condition Of Farm Workers	40%	Hygienic
C.2. Sanitation Of Harvesting Equipment And Container	40%	Sanitary
C.3. Sanitation Of Transportation Vehicles	40%	Sanitary
C.4. Specific Container For Products	40%	Handling
C.5. Packaging To Protect Product From Contamination	40%	Hygienic
D. Product Handling (Postharvest)	88%	
D.1. Specific Training For Workers On Their Personal Hygien	40%	Farmer's Ability
Total Average	81%	

The third external factor which was the national economic growth also marked as increasing the community capability to purchase the mangosteen fruits. This provided the farmers with an alternative when the exporter failed to offer good price, as well as increasing the bargaining position of farmers towards the exporters.

The most critical threat was pests and diseases scored at 0,411, but the ranking of 4 indicated that this had been regarded as the first priority, and had been handled by the farmers using the benefit in collaboration with research institutes and universities such as Research Center for Tropical Fruits, IPB, and ACIAR, even though the results had not been fully successful.

I/E Matrix

From the results of IFE and EFE analysis in Table 2, I/E ratio was 2.406/3.131 putting the situation in quadrant II which according to David (2005) was in grow and build condition. The case indicated that the performances of the farmer group was still in the average, so efforts should be launched to improve the conditon to above average (strong) by using the strengths to overcome the weaknesses, and using the opportunities to make responses towards the threats.

SWOT Matrix

From the results of IFE and EFE, a SWOT matrix and alternative strategies towards the improvement of mangosteen production based on Global GAP Standard were then formulated as illustrated in Table 3.

a. SO strategy
   This strategy was selected based on managing the strengths the farmer group had to make use of the opportunities. The selected strategy was to improve the product quality and to increase the product capacity by adoption of developed farming and postharvest handling technology.
b. ST Strategy
   In the anticipation of threats, the farmer group could use their strengths in putting out the strategy of increasing the product capacity, and improving the product quality and transportation network complying to the Global GAP Standard.
c. WO Strategy
   By making use of the opportunities to overcome the weaknesses, a strategy was develop to improve the clean water and postharvest handling infrastructure through collaboration with exporters and financial institutions.
d. WT Strategy
   To overcome the weaknesses in facing the threats, farmer group was recommended to take the strategy of improving the storage and supporting facility for packaging and sanitation following regulations stated at the Global GAP Standard to minimize the environmental constrains.

Quantitative Strategic Planning Matrix (QSPM) Analysis

The results of QSPM on all the mentioned strategies found out that the highest Total Attractiveness Score (TAS) at 5,878 was the WO strategy which was the improvement of clean water and postharvest handling infrastructure through the collaboration with exporters and financial institutions (Table 4). Hence, it was the

Table 2. Evaluation Results Of Internal And External Factors (Ife, Efe) At The Farmer Group Saluyu Mandiri Mukti, Kiara Pedes, Purwakarta District

Internal Strategic Factors	Weight	Ranking	Score
Strenghts			
1 Product Quality	0,098	4	0,391
2 Production Capacity	0,103	3	0,308
3 Farmers' Ability	0,103	3	0,308
4 Sanitary Of Production Area	0,098	4	0,391
5 Transportation System	0,098	3	0,293
Total Strengths	**0,499**		**1,692**
Weaknesses			
1 Storage	0,085	1	0,085
2 Farmers' Welfare	0,108	2	0,216
3 Farmer Institution	0,105	2	0,211
4 Packaging Facility	0,093	1	0,093
5 Availability Of Clean Water	0,111	1	0,111
Total Weaknesses	**0,501**		**0,715**
Total Internal Factors	**1,000**		**2,406**

External Strategic Factors	Weight	Ranking	Score
Opportunities			
1 Presence Of Financial Institutions	0,111	4	0,456
2 Access To Exporters	0,108	4	0,433
3 World Population Growth	0,097	3	0,291
4 National Economic Growth	0,103	4	0,410
5 Technology Development	0,094	2	0,188
Total Opportunities	**0,499**		**0,516**
Threats			
1 International Quality Standard Regulation	0,108	3	0,325
2 Market Price	0,117	3	0,350
3 Global Warming	0,111	2	0,222
4 Pests And Disesases	0,103	4	0,410
5 Competition From Other Countries	0,046	1	0,046
Total Threats	**0,484**		**1,353**
Total External Factors	**1,00**		**3,131**

first priority to be carried out by the farmer group. The second priority with TAS at 5,682 was to improve the product quality and to increase the product capacity by adopting the farming and postharvest handling technology, followed up by the third priority with 5,429 TAS in improving the storage and supporting facility for packaging and sanitation to comply with regulations stated at the Global GAP Standard. The last priority fell, with 5,115 TAS, fell on the strategy of increasing the product capacity, and improving the product quality and transportation network suitable to the Global GAP Standard.

MANAGERIAL IMPLICATION

Farmer group is recommended to make decision together with the exporters whether they would like to export their products to the European market in order to gain higher income, but requires the Global GAP Standard to be implemented in the whole mangosteen value chain. Once, the decision was made, both farmer group and the exporters should take actions following the alternatives strategies recommended from the results of this study. By the guarantee of the exporters, for instant, the farmer group may approach the financial insitutions to apply for the investment credit. Exporters, as well, could contribute in making the investment since they are involved in the business, and will also gain higher profit if the effort is successful.

Technology resources institutions such as universities and research institutes should be accessed to adopt the appropriate technology for the improvement of farming and postharvest handling, and the improvement of storage, and supporting facility for packaging and sanitation. Ministry of Agriculture through the regional office has star program to improve the agricultural commodity standard towards the Global GAP. The farmer group is suggested to approach the regional office of agriculture to be able to follow this program.

Table 3. Formulation of Alternative Strategies in SWOT Matrix Based on Internal and External Factors

	Strengths	**Weaknesses**
	1. Good Product Quality 2. Sufficient Production Capacity 3. Farming Capability Of Farmers 4. Good Sanitary Of Production Area 5. Fast Transportation System	1. Storage Does Not Meet Global Gap Standard 2. Low Farmers' Welfare 3. Low Capability Of Farmer Institution 4. Packaging Facility Is Not Available 5. Unavailability Of Clean Water For Agricultural Practices Usage
Opportunities	**SO Strategies**	**WO Strategies**
1. Presence Of Financial Institutions In The Area. 2. Accessibility To Exporters 3. World Population Growth 4. National Economic Growth 5. Development Of Farming And Postharvest Handling Technology	To Further Improve The Product Quality And Increase The Production Capacity Through The Adoption Of The Developed Farming And Postharvest Handling Technology (S1, S2, S3, O5)	Improve The Clean Water And Postharvest Handling Infrastructure In Collaboration With Exporters And Financial Institution Support (W1, W3, W4, W5, O1, O2)
Threats	**ST Strategies**	**WT Strategies**
1. International Quality Standard Regulation 2. Fluctuating Market Price 3. Weather Canghes Due To Global Warming 4. Pests And Diseases	To Increase The Product Quality In Accordance With The International Standard, E.G., Global Gap Standard (S1, S2, S4, S5, T1)	To Improve Storage And Supporting Facilities For Packaging, And Sanitation In Accordance With International Regulations To Minimize Environmental Constrains

Table 4. Priority for Alternative Strategies to Improve Mangosteen Farming and Postharvest Handling at Farmer Group Saluyu Mandiri Mukti, Kiarapedes, Purwakarta District

	Alternative Strategies	Tas	Priority
WO	Improvement Of Clean Water And Postharvest Handling Infrastructure Through Collaboration With Exporters And Financial Institutions	5,878	1
SO	Improving Product Quality And Increasing Product Capacity By Adoption Of Developed Farming And Postharvest Handling Technology	5,682	2
WT	Improving Storage, And Supporting Facility For Packaging And Sanitation Following Regulations Stated At The Global Gap Standard	5,429	3
ST	Increasing Product Capacity, And Improving Product Quality And Transportation Network In Complying To Global Gap Standard	5,115	4

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