Efficient Vol 2 (2) (2019): 469-477 DOI: https://doi.org/10.15294/efficient.v2i2.30806

EFFICIENT

Indonesian Journal of Development Economics

https://journal.unnes.ac.id/sju/index.php/efficient

Strategy for the Development of Salak Fruit Business

Unifah✉

Jurusan Ekonomi Pembangunan, Fakultas Ekonomi, Universitas Negeri Semarang

Permalink/DOI: https://doi.org/10.15294/efficient.v2i2.30806

Received: December 2018 ; Accepted: January 2019 ; Published: Juny 2019

Abstract

Agricultural value added can be increased through with off farm agribusiness, one of wich is horticultural commodities such as zalacca fruit to increase the price of the commodity. There are must be post harvest handling such as processing of zalacca juice by Women Farmer Group (KWT) Mekarsari in Kupangan Village of Wonosobo Regency. Some obstacles experienced by wire Mekarsari doing zalacca juice processing business include the skill of human resources that are have low skill, quality products are not durable and product marketing is still low. The purpose of this research is to establish priorities for the development strategy zalacca juice processing business in Kupangan Village Wonosobo Regency. This research uses Analytical Network Process (ANP) method with use Super Decision software. ANP can accommodate the interrelationship between criteria or between alternatives where there is a linkage in one element (inner dependence) and the interrelationship between different elements (outer dependence). ANP analysis results show there are three alternative business development processing of the zalacca juice of KWT Mekarsari produces aspects of product quality as the top priority and the right strategy to improve the quality of long lasting zalacca juice products. Recommendation strategy to improve product quality is the highest priority strategy, is 0.4764.

Keywords: Agribusiness, Analytical Network Process, Zalacca Juice, Development Strategy

Abstrak

Nilai tambah pertanian dapat ditingkatkan melalui agribisnis di luar pertanian, salah satunya adalah komoditas hortikultura seperti buah salak untuk meningkatkan harga komoditas tersebut. Harus ada penanganan pasca panen seperti pengolahan jus zalacca oleh Kelompok Tani Wanita (KWT) Mekarsari di Desa Kupangan, Kabupaten Wonosobo. Beberapa kendala yang dialami oleh kawat Mekarsari dalam melakukan bisnis pengolahan jus zakat antara lain keterampilan sumber daya manusia yang memiliki keterampilan rendah, produk berkualitas tidak tahan lama dan pemasaran produk masih rendah. Tujuan dari penelitian ini adalah menetapkan prioritas strategi pengembangan bisnis pengolahan jus zakat di Desa Kupangan Kabupaten Wonosobo. Penelitian ini menggunakan metode Analytical Network Process (ANP) dengan menggunakan perangkat lunak Super Decision. ANP dapat mengakomodasi keterkaitan antara kriteria atau antara alternatif di mana ada keterkaitan dalam satu elemen (ketergantungan dalam) dan keterkaitan antara elemen yang berbeda (ketergantungan luar). Hasil analisis ANP menunjukkan ada tiga alternatif pengembangan bisnis pengolahan jus zalak dari KWT Mekarsari menghasilkan aspek kualitas produk sebagai prioritas utama dan strategi yang tepat untuk meningkatkan kualitas produk jus zalacca yang tahan lama. Strategi rekomendasi untuk meningkatkan kualitas produk adalah strategi prioritas tertinggi, yaitu 0,4764.

Kata Kunci: Agribisnis, Proses Jaringan Analitik, Jus Zalacca, Strategi Pengembangan

How to Cite: Unifah, U. (2019). Strategy for the Development of Salak Fruit Business. EFFICIENT Indonesian Journal of Development Economics, 2(2), 469-477. https://doi.org/10.15294/efficient.v2i2.30806

✉ Alamat Korespondensi :
Alamat: Gedung L2 Lantai 2 FE Unnes
Kampus Sekaran, Gunungpati, Semarang, 50229
E-mail : unifah17@gmail.com

ISSN 2655-6197

INTRODUCTION

Indonesia is a country that is very rich in natural resources, one of which is agricultural resources. As it is known that some Indonesians work in agriculture. Agricultural development views two main pillars that are integrated with each other. One of these pillars is secondary agriculture (down-stream agriculture / agribusiness) as an activity to increase the added value of agricultural products (Baroroh, 2007).

According to Setiawan (2014), the agricultural sector is the main sector driving the economy in Indonesia, moreover there are many types of agricultural commodities that can be further processed into high-quality and high-value products, one of which is the horticultural commodity group. Where in it includes pondohzalacca fruit that can be carried out post-harvest handling given the nature of pondohzalacca fruit that cannot be stored for a long time and is easily damaged. In Indonesia, Central Java is the largest zalacca-producing region after Yogyakarta Special Region with a total production of 21,815,675 tons in 2016.

Table 1. Salak Fruit Production 9 Districts in Central Java Province in 2012-2016

Districts	2012	2013	2014	2015	2016
	Production(Kw)	Production (Kw)	Production (Kw)	Production (Kw)	Production (Kw)
Cilacap	1.534	2131	1.450	1.951	1.830
Banyumas	9.544	22.701	18.195	33.556	15.534
Purbalingga	8.954	6.878	7.947	12.484	5.246
Banjar-negara	3.910.674	3.790.840	3.647.494	3.356.368	3.603.561
Purworejo	4.034	16.962	5.091	2.694	2.067
Wonosobo	307.249	391.512	432.930	517.277	423.687
Magelang	49.599	145.335	338.977	417.567	600.211
Semarang	3.869	8.258	8.479	14.679	8.369
Temanggung	25.524	22.197	25.792	22.415	16.040

Source: BPS Prov. Jawa Tengah

Based on Table 1, Banjarnegara Regency is an area producing pondohsalak fruit where the distribution has reached Jakarta, Sumatra, Batam and even exported to Singapore. In addition, there are also 7 groups of SMEs processing pondohsalak products such as salak chips, dodolsalak, jenangsalak to salak syrup and candied zalacca which have been able to penetrate the center of souvenirs in Banjarnegara.

Wonosobo Regency as the center for producing the second largest zalacca fruit after Banjarnegara has not yet had many salak fruit processing businesses. This is very different when compared to Banjarnegara District which already has 7 SMEs processing salak fruit (Pemkab. Banjarnegara, 2017). In Wonosobo District there was only one processing of zalacca fruit in the form of the Mekarsari Farmer Women Group (KWT) which was located in SukoharjoSubdistrict. According to Prajanti and Setiawan (2012), women farmer groups are self-help groups that grow from, by and for the community. The number of KWT members usually ranges from 20-30 people or is adjusted to the conditions and area of group work and does not exceed the village administration limit. KWT Mekarsari was

established on May 15, 2002, since its inception until now the Mekarsari KWT has changed many business products ranging from dodolsalak, salak syrup, instant thiwul, and salak fruit juice.

Table 2. Types of Products and Total Processed Production of Salak KWT Mekarsari Fruit (2017)

Product	Total (Pack)	Labor
Keripiksalak	70	3
Dodolsalak	175	5
Sari buahsalak	370	12

Source: KWT Mekarsari (2017)

The existence of the processing of pondohzalacca fruit after harvest by KWT Mekarsari was able to increase the price of the pondohsalak fruit itself which was originally around Rp.2,500-Rp4,000 / kg to Rp40,000 / carton. In a more detailed scope the economic empowerment of the community can be done as an effort to change the economic growth of the higher society (Ihsannudin, 2016). Quoting Krishna P. Timsina et al (2016) research on achieving strategic fit in on seed supply chain. The purpose of this study was to analyze the functional strategy of the shallot supply chain in Nepal and identify the actors involved. The results of the study show that market players or shallot supply chains take high profits from the sale. To overcome this problem, there needs to be cooperation activities between supply chains and supply chain actors in the downstream sector. Strategies such as drying and storing the right seeds and increasing production of varieties favored by consumers.

For approximately 15 years since its establishment in 2002, the processing business of KWT Mekarsari fruit bark has not shown a significant economic development and impact on the progress of its business. This can be seen from the limited area of product marketing, mouth to mouth promotion methods and relatively high prices that are less competitive with candied carica. The lack of knowledge about business management and the low skills possessed by KWT Mekarsari members makes the quality of the zalacca juice products not last long and does not have a variety of packaging or taste.

Paying attention to the problems in the description, the research aimed at (1) knowing the main problems of processing the juice of the Mekarsari KWT zalacca fruit, (2) formulating a business development strategy for extracting the juice of the Mekarsari KWT zalacca, (3) knowing the priority sensitivity analysis of the fruit juice business development strategy salak KWT Mekarsari.

METHOD

This type of research is descriptive research using a mix methods approach, where the use of this method focuses on collecting, analyzing and mixing quantitative and qualitative data in a study. The data used in this study were primary data obtained through direct observation, interviews and questionnaires, while secondary data in the form of zalacca fruit production and the number of farmer groups were obtained from BPS and related agencies such as the Department of Agriculture and Food Crops.

In this study the sampling technique uses a non-probability sampling method, which is a non-random or intentional sampling. Where there are 9 keypreson that will be used as respondents who have expertise in their respective fields. The sample of expert experts (keyperson) in this study were: 1) Chairperson of the KWT Mekarsari, 2) Salak farmers in Kupangan Village, 3) Head of Kupangan Village, 4) Collector of Salak, 5) Self-employed / Gift Center, 6) DinasPertanianKab . Wonosobo, 7) Wonosobo Regency Cooperative

and SME Office, 8) District Office of Industry and Trade.Wonosobo, 9) Lecturer at the Faculty of EconomicsUnnes.

The data processing method used in this study is using the Analytic Network Process (ANP) method. As a method of development of the AHP method, ANP still uses the Pairwise Comparison Judgment Matrix (PCJM) method between similar elements. ANP contains interaction and feedback from elements in the cluster (inner dependence) and interactions between clusters (outer dependence). According to Rusydiana (2013), pairwise comparisons of ANP are carried out between elements in a component or cluster for each interaction in the network.

The basic principle of ANP is a problem structure in the form of a network where the relationship cycle of network clusters is able to accommodate reciprocal dependence. In addition, there is a reference component where the determination of the weight is carried out using pairwise comparison matrix with a ratio of 1 to 9. The stages in decision making using the ANP method are: 1) Arranging the structure of the problem and developing a model of linkage model, 2) Forming a comparison matrix pairing, 3) Calculating element weight, 4) Calculating consistency ratio, 5) Making Supermatriks.

RESULTS AND DISCUSSION

The business of processing the juice of the KWT Mekarsari fruit has its own characteristics, namely using natural ingredients and without preservatives. The raw material used was obtained from salak farmers in Kupangan Village. The KWT Mekarsari was established in 2002, chaired by Mrs. Subiyati with 20 members. Of the 20 KWT members, 60% of them are members with an elementary education level with an average age of 41-50 years. The initial capital of the KWarsMekarsari business was obtained from various parties such as assistance from the provincial government through the Food Security Office in the form of equipment and capital from the Village in the form of financial assistance.

For approximately 17 years operating a business processing juice of KWT Mekarsarisalak fruit has not shown optimal results, this is evidenced by several factors that influence the development of zalacca juice business. From the aspect of members / HR, most of them have low education and the lack of training followed makes the skills of members to be low. This has an effect on the quality of salak fruit extract which is produced where the product's storability is still low and there is no packaging or flavor variation. While from the aspect of product marketing, promotion is only carried out through mouth to mouth which is only carried out by the chairman of the KWT. The absence of cooperation with business partners and the government to be another cause of marketing salak fruit juice is still limited.

ANP Model Making

In the ANP network there are almost the same level of objectives, criteria, sub-criteria and alternatives as AHP. However, in ANP there is an influence in the cluster (inner dependence) which usually forms loops in one criterion and there is also the influence of nodes between clusters (outer dependence). According to Rusydiana (2005), the results of the influences on each criterion will be weighted by the level of importance of each node added to obtain the overall influence of each node / criterion. The following is a picture of the ANP method in determining the business development strategy of processing KWT Mekarsari fruit juice through Super Decisions software.

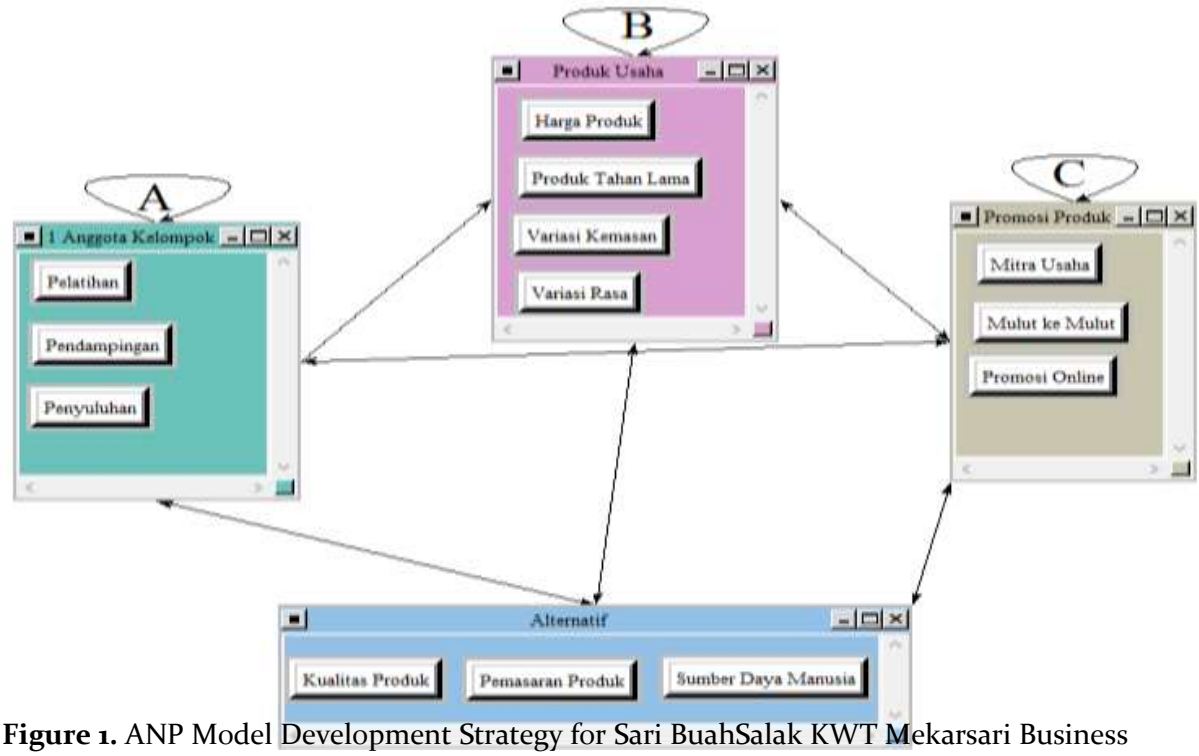

Figure 1. ANP Model Development Strategy for Sari BuahSalak KWT Mekarsari Business

The presence of alternating arrows indicates reciprocity or feedback which describes the influence of each cluster / criterion on other criteria or the influence of criteria on alternative aspects and vice versa. For example, there are influences between aspects of group member training on product quality and the influence between and there is a relationship between aspect A (group members) with alternative HR, aspect B (business products) with alternative product quality and aspect C (promotion) with alternative marketing. From the influence and relationship between each cluster and between clusters which will produce three main alternative priorities, the strategy is to develop the business of the KWT Mekarsari fruit extract.

Making Pairwise Comparison Matrix In Cluster (*Inner Dependence)*

Inner dependence pairwise comparisons are obtained from relationships between criteria in one aspect or one criterion that forms loops.

Aspects of Group Members

Members of the group's most important aspectin this study are related to efforts to develop the processing business of KWT Mekarsari fruit extract.

Table 3. Criteria of Group Members

Alternative	Value	Inconsistency
Training	0.60981	
accompaniment	0.22466	0.09040
Counseling	0.16553	

Source: Primary Data, Data Processed (2018)

Priority development in the first group member aspect is training with a percentage of 60.98%. The second priority is mentoring with a percentage of 22.46%, then counseling 16.55%. While the inconsistency ratio aspect of group members is 0.0904 <0.1 (maximum limit) which means that the results of the analysis are accepted.

Aspects Business of Products

Business products become the second aspect that is a priority in the development of the KWT Mekarsari fruit juice business.

Table 4. Criteria of Business Products

Alternative	Value	Inconsistency
Price of product	0.13335	
Durable product	0.54553	
Packaging variation	0.17684	0.03566
Flavor variation	0.14428	

Source: Primary Data, Data Processed (2018)

Based on Table 4 it can be seen that the priority of the first development strategy that can be done from the aspect of business products is a durable product with a percentage of 54.5%.

Promotion Aspects

Promotion becomes the last aspect that needs to be considered in an effort to develop the business of processing sekar sari bark juice extract. In the promotion aspect there are three alternative strategies offered as a ledge in development, namely business partnerships, word of mouth promotion and online promotions. Of the three alternatives, aspects of business partners become the first priority to develop the salak fruit juice business.

The existence of business partners will make it easier to recognize salak fruit juice products to the public / consumers.

Table 5. Criteria of Promotion Aspect

Alternative	Value	inconsistency
Business partner	0,49795	
Promotion mouth to mouth	0,13516	0,09040
Promotion online	0,36689	

Source: Primary Data, Data Processed (2018)

Pairwise Comparsion of Matrix Outer Dependence

The comparison of outer dependence pairs obtained based on the ANP model shows the relationship of the reciprocal arrows between aspect A (MemberGroup), B (Business Product) and aspect C (Product Promotion). Based on calculations using super decision software, it was found that of the three relationships between clusters, the promotion aspect had the greatest influence in the effort to develop salak fruit juice.

Table 6. Pairwise Comparsion of*Outer Dependence*

inconsistency	2 Promotion	3 Product
Memberof Group	3.03	3
Promotion		5

Source: Primary Data, Data Processed (2018)

Based on Table 5 it can be seen that in the aspect of promotion 3.03 is more important than the aspect of group members. This means that the development of zalacca juice business must intensify product promotion which can encourage group members to improve promotion skills. While for the aspect of business products is influenced by members of the group with a value of 3.00 aspects, this indicates that to develop a salak fruit juice business must

improve member skills to improve product quality.

Final Priority Determination

Priority is the weight of all elements and components, in priority there are limiting weights and normalized by cluster weights obtained through data processing using Super Decision soft ware. The determination of the final priority is obtained based on the influence of the model previously made in Figure 1, where there is a relationship / arrow that connects between clusters / criteria and the relationship between criteria and alternatives. Based on the data that has been obtained using the super decision from the influence of each criterion on the alternative aspects obtained the order of priority strategies as follows.

The order of the final priority of the results of normalization obtained by the product quality aspect is a priority that must be developed first, with a value of 0.476446. Product quality is the main aspect because with good quality it will be easy to enter the consumer market. In line with this, the keyperson Mr. Mukiran gave advice so that in the process of producing salak fruit sekarsari must pay attention to the element of product quality so that consumer demand increases.

The second priority is needs to be related to human resources or member of group KWT Mekarsari with a normalization 0.27464. human resources is an important element in a business because the quality of product depends on the human resources operating the business. The third development priority is the ability to market products withnormalization of 0.24892. Marketing aspects become one of the important aspects in a business because a business can be said to be successful if it can market its products to consumers.

Table 7. Final Priorities for the Selection of Salak Fruit Juice Business Development Strategies.

Alternative	Total	Normal	Ideal	Ranking
Quality of product	0.17812	0.47644	1.00000	1
Marketing	0.09306	0.24892	0.52245	3
Human resources	0.10267	0.27463	057641	2

Source: Primary Data, Data Processed (2018)

Sensitivity Analysis

Sensitivity is needed to determine an independent variable or a sensitivity graph. There is one line for each alternative in the sensitivity window. Inside the Super Decision software. Sensitivity analysis aims to see whether these changes change the order of alternatives or not. To find out the sensitivity analysis required alternative priority results that have been obtained previously.

In table 6 it can be seen that product quality is ranked first with a priority value of 0.4764, followed by human resources (HR) or group members in rank 2 and marketing products ranked 3 with respective priority values of 0.2746 and 0.2489. Based on the final priority value, a sensitivity analysis can be made, where the alternative priority is placed on the Y axis and the experiment is placed on the X axis. Then the sensitivity unit is carried out so that the following results are obtained.

Based on the sensitivity analysis in Figure 2 shows that regard of the alternative that priority ranking is the same , the first is quality

of product, the second is human resources and the third marketing aspect.

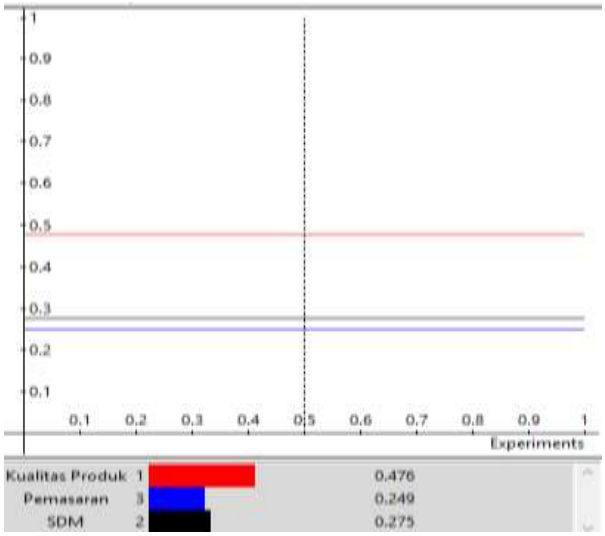

Figure 2. Sensitivity Analysis Strategy of The Development of Zalacca Juice

CONCLUSION

Based on the analysis that has been presented in the analysis of the discussion, it can be concluded: (1) the main problem faced by the salak fruit processing business of the Women Farmer Group (KWT) Mekarsari is, among others, from the HR aspect. Most group members still have low skills that affect the quality of the product from the salak fruit juice itself. The durability of the product which can only last two months often makes the packaging of the product damaged due to the acid reaction of the salak fruit juice. Word of mouth promotion carried out by the head of the KWT group and the absence of partnerships with large businesses is a constraint to the difficulty of marketing zalacca juice products, (2) the strategy of developing zalacca juice processing business that must be carried out based on the priority order of each criteria, namely 1) aspects of group members can be done through training 2) aspects of product promotion through collaboration with business partners 3) aspects of business products through long-lasting product quality. Whereas the final result of determining priorities for the development of zalacca juice business obtained three main priorities, namely 1) aspects of product quality 2) aspects of human resources or group members and 3) marketing aspects., (3) based on sensitivity analysis on business development strategies of salak fruit juice processing Mekarsari obtained stable results which did not change the order of alternative priorities, namely the first order of product quality aspects, both aspects of HR and the third aspect were product marketing.

As for some suggestions for improvements that can be made for the development of the processing business of the juice of the Mekarsari KWT zalacca are as follows: (1) There needs to be training for group members to be able to improve skills to improve product quality and the need for cooperation with partners to expand product promotion and marketing , (2) the need to prioritize the efforts in developing the first zalacca juice business through improving product quality, then improving the quality of human resources and training as well as improving strategies on product marketing aspects, (3) in accordance with sensitivity analysis in the development of fruit juice business The first order of priority that must be done is to improve product quality through long-lasting products, then increase human resources through training for KWT Mekarsari members and strategies on marketing aspects can be done by expanding the network by collaborating with business partners.

REFERENCES

Baroroh. 2007. Agribisnis. Banjarbaru: Universitas Lampung Mangkurat.

BPS Kabupaten Wonosobo. 2017. Produksi Buah Salak per Desa di Kecamatan Sukoharjo. www.bps.wonosobokab.go.id. Diakses pada tanggal 19 Desember 2017.

BPS ProvinsiJawa Tengah. 2017. ProduksiBuahSalak 9 Kabupaten di ProvinsiJawa Tengah Tahun 2012-

2016. www.bps.provjateng.go.id. Diaksespadatanggal 19 Desember 2017.

Ihsannudin, dkk. 2016. Strategi Pemberdayaan Ekonomi Petani Garam Melalui Pendayagunaan Aset Tanah Pegaraman. Economics Development Analysis Journal.Vol 5 (4): 395-409.

KWT Mekarsari. 2017. Jenisdan Jumlah Produkn Olahan yang dihasilkan Bulan Januari-Juni 2017.

Pemkab Kabupaten Banjarnegara. 2016. Potensi Tanaman Pangan. http://banjar-negarakab.go.id. Diakses pada tanggal 17 Januari 2018.

Prajanti, Sucihatiningsih DW danAvi Budi S. 2012. Ekonomi Pertanian: Sebuah Pendekatan Empiris. Semarang: UNNES Press.

Rusydiana, A.M. dan Devi Abrista. 2013. Analytic Network Process: Pengantar Teoridan Aplikasi. Bogor: Smart Publisher.

Saaty, Thomas L. 2005. Theory and Applications of the Analytic Network Process. Pittsburgh, PA: RWS Publications.

Setiawan, Avi Budi dan Fafurida. 2014. Strategi Pengembangan Usahatani Kedelai di Kabupaten Grobogan dengan Pendekatan AHP. JurnalI lmu Ekonomi dan Pembangunan.Vol 14 1): 12-22.

Sugiyono. 2011. Metode Peneitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta.

Timsina, Krishna P, dkk. 2016. Achieving Strategic Fit in Onion Seed Supply Chain. Journal of Agribusiness in Developing and Emerging Economies. Vol 6 (2): 127-149.