

## INCREASING THE ADDED VALUE OF SALAK FRUIT FARMING THROUGH THE IMPLEMENTATION OF MARKETING MIX IN ENREKANG REGENCY

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### Abstract

Enrekang Regency is one of the largest producers of horticultural crops, especially salak fruit farming in South Sulawesi. It is also expected to increase the income of salak fruit farming which is one of the horticultural crops being developed, especially in Enrekang Regency, South Sulawesi Province. The development of a good production and distribution channel system is one of the keys to success in increasing the income of salak fruit farmers, especially in Enrekang Regency. This research is a survey research, the sample in this study used purposive random sampling in three villages namely Kambiolangi Village, Mata Allo Village, and Sumilang Village in Alla District. The analysis tool used the method of relative advantage analysis (Benefit Cost Ratio Analysis) and margin analysis. Thus it can be said that the use of marketing mix strategy can provide added value to the income of salak fruit farmers. Margin analysis and marketing efficiency show that marketing activities of salak fruit in Alla District, Enrekang Regency through three marketing channels provide different results. Marketing efficiency will be created when using short marketing channels.

**Keywords:** Income, Value Added, Marketing Mix, Salak Farming.

### INTRODUCTION

The agricultural sector has a great degree of urgency to be raised in urging development in the region considering that most of the population has a livelihood in the agricultural sector<sup>[1]</sup>. In most countries, the agricultural sector is at the forefront of economic development. As a tropical country, Indonesia has many opportunities to develop horticultural crops, especially salak fruit crops that can be consumed directly and processed as ingredients.

The government continues to assist salak farmers to improve the production and quality of their salak fruit<sup>[2,3]</sup>. With good management and adequate support, it is expected that the salak fruit crop in Indonesia will grow well. To increase the income and welfare of the community, especially the farming community<sup>[4,5]</sup>.

South Sulawesi is a province where the majority of the population works in the agricultural sector and relies on agricultural products as the largest source of regional income. Enrekang Regency, one of the largest salak-producing areas in South Sulawesi, has a lot of potential to be improved in terms of production quality, which is expected to increase the income of salak farmers<sup>[6]</sup>.

There are three types of salak products in Enrekang Regency including salak gula-gula, brown bark, and black bark. The focus of this paper is an effort to improve the welfare of farmers by increasing their income<sup>[7,8]</sup>. It is expected that the community will directly and actively participate in cultivating all the land they have, including yard land, to grow crops that generate high income<sup>[9]</sup>.

This study was conducted in Alla District, Enrekang Regency. The main objectives of this study were to determine (a) the amount of salak farming income for farmers who use the marketing mix, and (b) the amount of margin and marketing efficiency in each salak marketing channel in Makassar. Salak is one type of fruit found in various provinces in Indonesia and generally has a name according to the producing area. Some salak cultivars are well known and favored, including salak Bali, Pondoh, Suwara, Madura, Banjarnegara, Tasimalaya, Condet, Padangsidempuan, and Salak Enrekang<sup>[10]</sup>.

The agricultural sector is development strategy aims to improve product quality and post-harvest handling. Problems that arise in handling the agribusiness sector in Indonesia include a) Limited land ownership of farmers, b) The nature of the products produced is easily damaged, c) Commodity prices are very cheap when the harvest is abundant, d) Post-harvest handling is still traditional, e) The profits received by intermediary traders are greater than the farmers themselves<sup>[11]</sup>.

The development of the agribusiness sector is the main support for overcoming the constraints still inherent in the sector. The agricultural sector continues to be improved to increase production to meet food and industrial needs, increase farmers' income, expand employment opportunities, encourage business opportunities, and support regional development<sup>[12]</sup>. To achieve the above objectives, the Government of South Sulawesi decided that the commodity sector is an economic development policy in South Sulawesi.

The goal is to realize development in agriculture in a directed and integrated manner, and the optimal use of natural resources is essentially an effort to increase the income of the agricultural sector, especially salak fruit crops<sup>[13]</sup>.

One type of horticultural crop developed includes salak, which is needed by humans because it can increase the nutritional value of food by providing vitamins, minerals, and vegetable protein. Then, increased production is achieved through post-harvest improvement, utilization of appropriate technology, increased farming guidance, utilization of adequate facilities and infrastructure, better price policies for farms and consumers, and land expansion and utilization<sup>[14]</sup>.

However, it must be remembered that salak products made by farmers are not durable and spoil quickly. As a result, the quality of the product decreases, which impacts the price. To overcome this problem, quick distribution should be done to prevent the price of salak products from falling from the ushatani in the study area<sup>[15]</sup>.

The marketing mix consists of four components: product, price, promotion, and distribution<sup>[16]</sup>. All of these components can have a major impact on the value-added of horticultural crop businesses. Here are some of the impacts of the marketing mix on the value-added of horticultural crop businesses: Products: Innovative and high-quality products can increase the value-added income of horticultural crop enterprises; these products can also improve the company's reputation and give consumers a reason to choose their products<sup>[17]</sup>.

Marketing mix variables are almost always related to marketing decision-making. Processing, sorting, grading, and packaging are therefore necessary activities in the marketing mix, especially for salak products. The costs incurred by farmers during the post-harvest processing process are included in the agricultural products and measured by comparing them with the income that salak farmers will receive. The dominant variables for salak products can be further explained by looking at the marketing mix<sup>[18]</sup>.

Increasing salak fruit farming income requires implementing a marketing mix that refers to the combination and achievement of business objectives. There are four main elements of the marketing mix, namely product, price, distribution, and promotion<sup>[19]</sup>. Product, price, promotion, and distribution are the four components that make up the marketing mix. Each of these components can greatly affect the added value or value of a horticultural business<sup>[20]</sup>.

Product Policy is an effort to improve quality, it is necessary to hold the first sorting or selection, the aim is to select good, fresh, undamaged salak fruit and at the same time clean it from stalks and other impurities, Secondly do grading or classification which has objectives such as getting uniform results both in size and quality, facilitate the preparation in containers that can provide added value to the product. Food that is fruit in nature including salak fruit is said to be of good quality if it has criteria including; 1) has good sensory properties (taste, aroma, color, texture), 2) nutritional value, 3) safe for consumption.

Price Policy is an effort to increase prices through processing activities which include sorting, grading, and packaging, so that producers can determine the price level according to the class of goods<sup>[21]</sup>. Distribution Policy is an activity at various levels of the marketing channel which is a combination of marketing institutions consisting of intermediary traders, large traders, inter-island traders, and retailers to consumers.

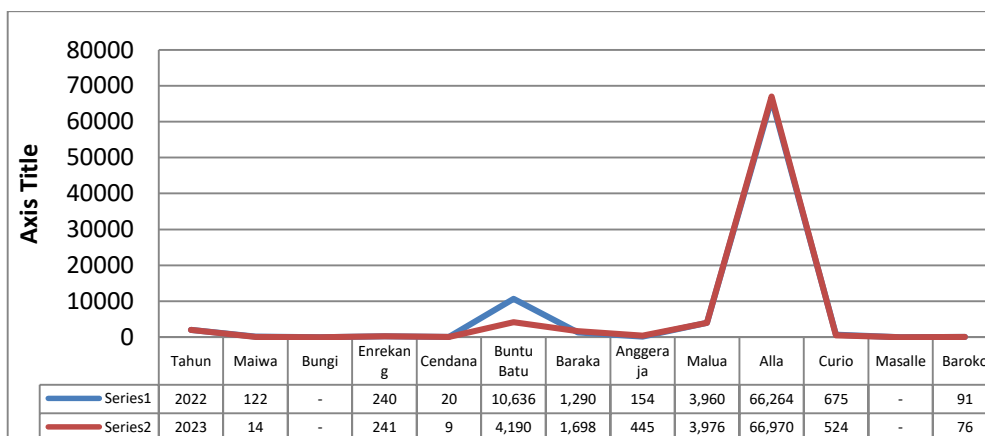
The main purpose of farmers producing and marketing salak fruit commodities is to meet their needs and improve their family's standard of living. For this reason, in snake fruit marketing there is a series of interrelated marketing systems that act as a link between producers and consumers<sup>[22]</sup>.

While the marketing process of salak fruit can be done through such as (producers-local collectors-village traders-retailers-consumers) so that the channel becomes long, there are also marketing channels that only involve one marketing institution such as (producers-retailers-consumers) and there are even direct marketing channels such as (producers-consumers). Related to the description of salak production in each Sub-district in Enrekang Regency as follows:

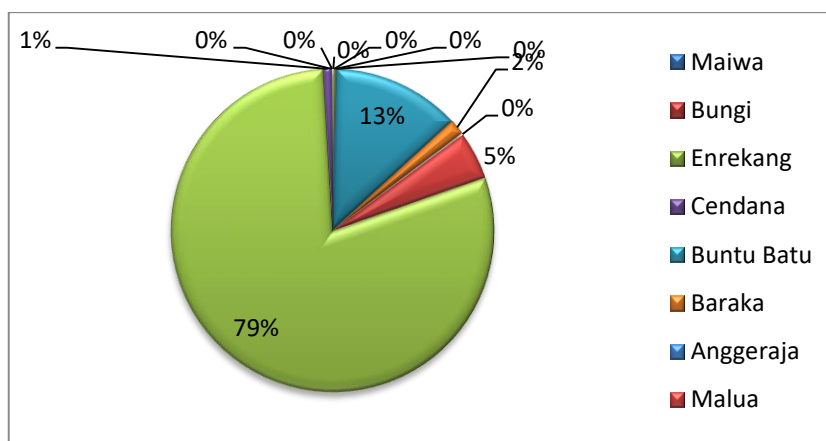
**Table 1: Production of Fruits by Subdistrict and Type of Plant  
Enrekang Regency (quintal) Year 2022-2023**

Region	2022	2023
Maiwa	122	14
Bungin	-	-
Enrekang	240	240
Cendana	20	9
Buntu Batu	10.636	4.190
Baraka	1.290	1.689
Anggeraja	154	445
Malua	3.960	3.976
<b>Alla</b>	<b>66.264</b>	<b>66970</b>
Curio	675	524
Masalle	-	-
Baroko	91	76
Kabupaten Enrekang	<b>83.452</b>	<b>78.142</b>

Source of data BPS Enrekang Regency 2023.



**Figure 1: Salak Production Chart for 2022-2023**



**Figure 2: Percentage of Salak Production in Each Sub-district in Enrekang Regency**

Enrekang Regency has 12 sub-districts, of which Alla sub-district was selected as the center of salak production and has a lot of potential to be developed. All eight villages in the Alla Sub-district were selected purportedly, three of which are Kambiolangi Mata Allo and Sumillan villages, with the following considerations: 1. That using the benefit-cost ratio analysis can be seen from the potential side of salak farming development 2. Improvements during post-harvest by sorting, grading, and packaging to maintain product quality 3. Using the product distribution system can be done by direct and indirect marketing to accelerate the distribution of products about reducing the level of risk that farmers will face<sup>[23]</sup>.

## RESEARCH METHODS

The research method used is the survey method. By conducting research on part of the population or conducting research on samples in the study are farmers who work on horticultural crops (salak) and traders involved in marketing activities. The research area is Alla Sub-district of Enrekang Regency consisting of eight villages and three villages were selected purportedly Kambiolangi Village, Mata Allo Village, and Sumillan Village with considerations such as; 1) The three selected villages (Kambiolangi Village, Mata Allo Village and Sumillan Village) are potential salak producing areas, 2) The marketing institutions both at the sub-district level (small traders), district level (large traders) are generally located in the research area with the selected marketing target being Makassar City.

Marketing institutions both at the sub-district level (small traders), and district (large traders) are generally located in the research area with the selected marketing target being Makassar City. Sampling was done by simple random sampling. Respondents selected were salak farmers who conducted post-harvest processing and had a land area between 0.5 - 1 ha, 10 people each in each village. Collecting traders 15 people, and retailers 20 people, large traders 5 people and traders in Makassar city 5 people did the enumeration.

### Data Collection Method

The data collected in this study include primary and secondary data. Primary data were collected through direct observation and interviews with salak farmers and marketing intermediary institutions which include: (a) the area of land cultivated, (b) the type of fertilizer and labor used, (c) the amount of production obtained by farmers in one harvest season, (d) where to sell salak commodities to consumers, (e) post-harvest and marketing costs, and (f) farmers' sales proceeds. Secondary data were obtained from relevant agencies such as the Agriculture Office in the form of fruit production data, and the Central Bureau of Statistics (BPS) Office in the form of data on area, population, harvest area and salak production for each sub-district in Enrekang Regency.

### Analysis Method

To test the benefits of the marketing mix, a relative profit analysis (Benefit Cost Ratio Analysis) is used with the formula<sup>9)</sup>

$$\text{Benefit Cost Ratio} = \frac{B_s - B}{\sum_{i=1}^n C_i}$$

Where:

B / C ratio = To see the amount of benefits received by salak farmers after implementing the marketing mix

BS = Total benefits of salak farming after using the marketing mix

B = Total farm business benefits before using the marketing mix

Ci = The amount of additional costs incurred by farmers due to the application of the marketing mix

To determine the size of the margin and the level of marketing efficiency, margin analysis and marketing efficiency are used.

Marketing margins are analyzed as follows:

$$M = H_p - H_b$$

Where:

M = Marketing margin

H<sub>p</sub> = Sales margin

H<sub>b</sub> = Purchase margin

And then the marketing efficiency analysis is used as follows

$$EP = \frac{\text{Marketing Cost}}{\text{Value of product marketed}} \times 100\%$$

## RESULTS AND DISCUSSION

### Profit and Cost Analysis (B/C ratio analysis)

In order to find out to what extent the level of success achieved by salak farmers who carry out the marketing mix, and the benefits obtained compared to the marketing costs incurred by farmers in post-harvest in the research location. Furthermore, to see the activities of each marketing mix before and after implementation can be described as follows: Activities before the application of marketing mix, purchase of manure, pruning, cleaning of pests and diseases, weeding, pollination, picking, packaging in the form of bunches made from salak leaves themselves and activities after the application of marketing mix are the purchase of manure, pruning, cleaning of pests and diseases, weeding, pollination, picking, sorting and grading, packaging of plastic bags and crates. This activity is the added value obtained by salak farmers who apply the marketing mix with the B/R ratio is:

**Table 2: Benefits of Marketing Mix Implementation Detailed by Village in Alla Sub-district**

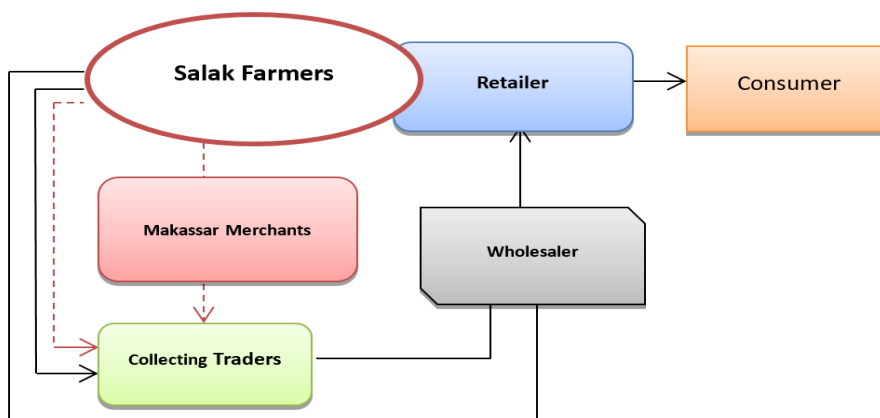
Description	Kambiolangi Village (IDR/ha)	Mata Allo Village (IDR/ha)	Sumilang Village (IDR/ha)
Before Marketing Mix Implementation	31.027.500	32.805.000	31.950.000
After Marketing Mix Implementation	33.762.000	36.261.000	32.715.000
Total Cost Before Marketing Mix (I)	29.357.500	30.157.000	28.750.000
Total Cost After Marketing Mix (II)	31.004.300	35.558.000	29.755.000
Cost (II-I)	1.646.800	5.401.000	1.005.000
Revenue	2.734.500	3.456.000	765.000
<b>B/C ratio</b>	<b>1,66</b>	<b>1,56</b>	<b>1,31</b>

Data Source: After processing 2023

The results of the calculation of table 2, show that the income earned by farmers before the application of the marketing mix is smaller than after the application of the marketing mix or in other words, that farmers get added value to the income earned after implementing the marketing mix. The added value of income obtained by salak farmers before the application of the marketing mix and after the application of the marketing mix the added value obtained by the B / C Ratio is greater after implementing the marketing mix (Kambiolangi Village, Mata Allo Village and Sumilang Village).

### Marketing Margin and Efficiency

There is several marketing actors involved in salak marketing, starting from the farm level to the consumer level, where each marketing actor incurs costs according to the treatment of the salak commodity, the existence of different cost expenditures, and the sales price also varies. The price of salak produced before applying the marketing mix averaged IDR.7,500/kg in the form of bunches that still used the simple expansion of salak leaves. Furthermore, after applying the marketing mix by incurring the costs of processing, selection, packaging, and taking into account the shrinkage due to bunches removed and other impurities, the price also increased on average around IDR.8,500/kg in the research village.



**Figure 3: Product Distribution Scheme**



The price of salak fruit is IDR 7,500/kg in the form of bunches that still use simple packaging, which is wrapped using leaf fronds from the fruit itself. Furthermore, after farmers carry out the marketing mix by incurring costs for processing, selection, packaging, sorting, grading and taking into account depreciation due to discarded bunches and other impurities, the price of salak fruit also increases on average to IDR 12,500/Kg.

Figure 3, some alternative marketing channels according to the marketing location objectives as follows:

- A. Farmers ---> Retailers ---> Consumers
- B. Farmers ---> Wholesalers ---> Retailers ---> Consumers
- C. Farmers ---> Gatherers ---> Wholesalers ---> Retailers ---> Consumers

The calculation of margins and marketing efficiency based on three alternative marketing channels can be seen in Table 3 below:

**Table 3: Marketing Margins and Efficiency Detailed by Marketing Channel to Makassar**

Description	Marketing Channel		
	I	II	III
Farmer Price (IDR/kg)	7.500	7.500	7.500
Collector Price (IDR/kg)	-	-	7.750
Wholesaler Price (IDR/kg)	-	8.000	8.000
Retailer Price (IDR/kg)	12.500	12.500	12.500
Total Cost (IDR/kg)	2.750	2.775	2.875
Total Profit (IDR/kg)	4.750	4.725	4.625
Total Marketing Margin (IDR/kg)	7.500	7.500	7.500
Marketing Efficiency (%)	22	22,2	23

Data Source: After Processing 2023

The results of the calculation of table 3, show that each marketing channel has differences in marketing efficiency due to the different marketing institutions involved in each marketing channel. This results in costs and profits at each different marketing institution. Although there are similarities, namely prices from farmers, selling prices at retailers, and total marketing margins for each marketing channel that occurs. In marketing channel I, only farmers and retailers are involved with costs incurred of IDR.2,750/kg and the profit obtained for retailers is IDR.4,750/kg. The high profit obtained by retailers because the purchase price from farmers is only IDR.7,500/kg by taking into account the level of risk of damage and time of sale, resulting in a high selling price to consumers of IDR. 12,500/kg. The total marketing margin is IDR.7,500/kg with a marketing efficiency level of 22% which can be said to be less efficient. For marketing channel II, farmers, wholesalers and retailers are involved with the additional marketing institutions, of course accompanied by additional costs resulting in reduced profits obtained by each marketing institution. The total marketing margin on marketing channel II is IDR.7,500/kg with a marketing efficiency of 22.2%, this shows that with the addition of marketing institutions, the marketing efficiency can be said to be efficient. Furthermore,



marketing channel III where those involved are farmers, intermediary traders, wholesalers and retailers, this means that all marketing institutions are involved in the process, so that costs will increase and consequently profits decrease according to variations in the activities of existing marketing institutions. The total marketing margin in marketing channel III is IDR.7,500/kg with a marketing efficiency level of 23% which indicates inefficiency. The conclusion that if the price from farmers is the same IDR7,500/kg and the selling price of retailers is also the same IDR.12,500/kg the total marketing margin will be the same in various combinations of marketing channels. Then for marketing efficiency in each marketing channel is different due to the combination of marketing institutions in various marketing channels. This shows that the indirect marketing channel is more efficient.

## CONCLUSION

1. The application of the marketing mix, the salak farmers in Alla Subdistrict marketing their products can get benefits which include the price received increases, so that the income of salak farming also increases and get additional knowledge in terms of marketing their products, both about the selection and packaging and the price level obtained.
2. The results of the analysis using the B/C ratio in the three case villages are, that each village obtained a B/C of 1.66, 1.56, and 1.31. Thus it can be said that the use of a standardized marketing mix can provide additional benefits for salak farmers.
3. Analysis of marketing margins shows that salak marketing activities in Alla District through several combinations of marketing channels, the marketing margins of each marketing institution vary in each marketing channel. Likewise, the marketing efficiency varies in each marketing channel and this is that the level of efficiency in the second marketing channel.

## Literature

- 1) Habir Hamid, Yetty, Said Mala, Abdurahman Senuk. (2023). Analisis Pendapatan Dan Kelayakan Usaha Tani Salak Di Kelurahan Bobo Kecamatan Tidore Utara Kota Tidore Kepulauan. *INNOVATIVE: Journal Of Social Science Research*, Volume 3 Nomor 2, Page 9583-9590. <https://j-innovative.org/index.php/Innovative>
- 2) Andi Nuddin, Dedy Putra Wahyudi, Bunga Dara Amin, Rayhana Jafar. (2023). Promoting Indigenous Agricultural Systems through Strategy, Design to Restore the Popularity of Salak Lasape, *INDIGENOUS AGRICULTURE*, Vol 1 No 1, DOI: <https://doi.org/10.20956/ia>
- 3) Mawadda, Jumadi, Muhammad Saleh Madjid (2018). Petani Salak Di Dusun Banca Kecamatan Baraka Kabupaten Enrekang, *JURNAL PATTINGALLOANG* , Vol 5 No.1, 1-11
- 4) Raja Hardiansyah. (2018). Pengaruh Bauran Pemasaran (Product, Price, Place, Promotion) Terhadap Penjualan Produk Hasil Produksi Petani Pada Pasar Tani Mekar Jaya Kelurahan Toapaya Asri, *Urnalmanajerial Dan Bisnis Tanjung Pinang* , Vol. 2 , No.1: 4 0 - 5 5
- 5) Soekartawi. (2000). Prinsip Dasar Manajemen Pemasaran Hasil-hasil Petanian Teori dan Aplikasi, Rajawali Pers, Jakarta.
- 6) Malelak, S. L., Setiawan, B., Maulidah, S. (2021). Analysis of Marketing Mix on Customer Satisfaction: Empirical Study of Purchasing Decision of East Nusa Tenggara Local Product, Volume 21, Number 4 ,285-292, DOI: <http://dx.doi.org/10.21776/ub , 021.4.4>.

- 7) Trisnawati Wayan, Mery Alam Tina Siaga, Nyoman Ngurah Arya 2001, Penanganan Pasca Panen dan Pengolahan Buah Salak Bali. Balai Pengkajian Teknologi Pertanian Bali. Balitbang Pertanian. Departemen Pertanian.
- 8) Nembah F, Hartimbul Ginting. (2011). Manajemen Pemasaran, Cetakan 1, Penerbit CV. Yrama Widya Bandung.
- 9) Wiratna Sujarweni. (2019). Akuntansi Biaya Teori dan Penerapannya, Penerbit Pustaka Baru Press Yogyakarta.
- 10) Parida, N. (1986). Pemasaran Produk Pertanian. Fakultas Pertanian Unhas, Ujung Pandang
- 11) Andi Musrifah, Hasanuddin Remmang, Muhammad Idris. (2019). Implications of Marketing Mix on Salak Farming Enterprises (Study on Horticultural Commodity Farming in Enrekang Regency), IOSR Journal of Business and Management (IOSR-JBM), Volume 21, Issue 10. Series. V, DOI: 10.9790/487X-2110056469, www.iosrjournals.org 64
- 12) Kuntoro Boga Andri dan Y. Shiratake. (2007). Evaluasi Sistem Pertanian Kontrak antara Petani Kecil Budidaya Sayuran dan Perusahaan Agribisnis di Jawa Timur, Indonesia, Review of Agricultural Economics, Journal Edited by Kyushu Society of Agricultural Economics Vol.57, No.2 , 2007, hal.13-28
- 13) Abubakar, Herminawaty. (2016). Effectiveness of Marketing Strategy on the Implementation of the Theory STP (Segmentation, Targeting, Positioning) Silver Craft in Business Makassar. Proceeding Tadulako Internasional
- 14) Pusat Statistik Kabupaten Enrekang, Kabupaten Enrekang Dalam Angka 2022,
- 15) Khalid Suidan Al Badi. (2018). The Impact of Marketing Mix on the Competitive Advantage of the SME Sector in the Al Buraimi Governorate in Oman. SAGE Open Research Paper. pp: 1–10
- 16) Dr. B.R. Londhea. (2014). Marketing Mix for Next Generation Marketing. Symbiosis Institute of Management Studies Annual Research Conference (SIMSARC13). Procedia Economics and Finance 11. ScienceDirect. pp. 335 – 340
- 17) Margarita Işoraitè. (2016). Marketing Mix Theoretical Aspects. International Journal of Research – Granthaalayah, Vol. 4, No. 6 pp: 25-37.
- 18) Rajeev Kumar Panda. (2012). Marketing Channel Choice and Marketing Efficiency Assessment in Agribusiness. Journal of International Food & Agribusiness Marketing Volume 24
- 19) Shofia Salsabila, Dwi Haryono, Yanuar Aviati Syarief. (2019). Analisis Pendapatan dan Nilai Tambah Agroindustri Keripik Pisang di Desa Sungai Langka Kecamatan Gedong Tataan Kabupaten Pesawaran. Jurnal Ilmu Ilmu Agribisnis. JIIAm Volume 7 Nomor 1, Februari 2019, pp 68-74
- 20) Mawaddah, Jumadi, Madjid Majid. (2018). Petani Salak di Dusun Banca Kecamatan Baraka Kabupaten Enrekang 1960-2016. Patingalloang Jurnal Pemikiran Pendidikan dan Penelitian Kesejarahan Vol. 5 No. 4. hlm. 1-8
- 21) Ruslan, M., Karim, A., & Haris, A. (2023). Model for Strengthening Micro-, Small, and Medium-Sized Enterprises in Supporting Sustainable Economic Enterprises. *Nongye Jixie Xuebao/Transactions of the Chinese Society of Agricultural Machinery*, 54(10).
- 22) Karim, A., & Syamsuddin, I. (2024). Realization of Village Funds in Regional Economic Growth at Enrekang Regency. *The Seybold Report*. 19 (3), 820 – 834. DOI: 10.5281/zenodo.10934652
- 23) Mardjuni, S., & Karim, A. (2024). Improving The Performance Of State Civil Apparatus Through Work Effectiveness At Makassar Regional Human Resources Development Center. *Educational Administration: Theory and Practice*, 30(4), 2831-2840. <https://doi.org/10.53555/kuey.v30i4.1690>