MAPPING THE LEADING LIVESTOCK SECTOR IN MUSI RAWAS REGENCY

Edy Humaidi^{1*)}, Rini Desfaryani¹⁾, I Putu Ajie Windu Kertayoga¹⁾

¹Politeknik Negeri Lampung

*Corresponding author: edyhumaidi145@polinela.ac.id

To cite this article:

Humaidi, E., Desfaryani, R., & Windu Kertayoga, I. (2022). Mapping the Leading Livestock Sector in Musi Rawas Regency. *JIA (Jurnal Ilmiah Agribisnis) : Jurnal Agribisnis dan Ilmu Sosial Ekonomi Pertanian*, 7(1), 9 - 12.
doi:<http://dx.doi.org/10.37149/jia.v7i1.22984>

Received: January 06, 2022; **Accepted:** January 17, 2022; **Published:** January 19, 2022

ABSTRACT

This research attempts to identify the livestock industry in Musi Rawas Regency that can be improved. The Location Quotient (LQ) approach assesses which livestock industry leads and which is not. Secondary data from the Central Statistics Agency and the Department of Agriculture and Livestock in Musi Rawas Regency in 2019 were combined with primary data from farmer interviews. The findings revealed that six were the most popular of the nine livestock sectors: beef cattle, buffalo, goats, sheep, native chickens, ducks/ducks, dairy cattle, pigs, and broilers. The other three, dairy cattle, pigs, and broilers, were non-seeded animals.

Keywords: featured cattle; location quotient (LQ); Musi Rawas Regency

INTRODUCTION

Various sectors support the National Economy. One of the critical sectors for the Indonesian economy is agriculture. Indonesia itself is currently enacting regional autonomy, where each region is given the freedom to regulate its respective areas. Therefore, regional potentials are mandatory for each part to know to formulate targeted and effective regional policies. Agriculture in general consists of several sub-sectors, including the livestock sub-sector, where this sub-sector is one of the strategic sub-sectors supporting the regional and national economy.

Livestock in Indonesia is generally still managed in a traditional way, where livestock is only a family business or as a side business (Abidin, Z, 2002). This sector has great potential to support farming families' economy, and it is necessary to develop livestock areas, especially smallholder farms. According to Amin, Z., Andry (2018), Ummah (2008), economic growth in a room can be encouraged through a development program in the form of regional development. With regional development programs, the welfare of the community will also increase. Indonesia has most of its territory as an agricultural area, where this sector is vital in supporting the national economy. The growth of the farm sector is a particular concern for the government.

The growth of the agricultural sector of a region is influenced by comparative and competitive advantages (Tarigan, 2017; Wicaksono, 2011). The leading industry in an area must be determined, the determination of the top sector can be done by analyzing the comparative advantage of a product, the decision of this leading sector is undoubtedly an obligation for the regional government. Furthermore, the top industry must have excellent opportunities to market outside the region and even export. According to Tarigan (2017), Several sectors are said to be in synergy if the growth of one industry will encourage other sectors to grow. And vice versa, there is a significant multiplier effect, accelerating regional economic development. They consider the potential that the initial step can be done by mapping the sector area in line with what Pearce, J., and Robinson (1998), Saragih, (2000) were one of the cornerstones of agricultural development policies develop leading sectors. Operationalization of system development and agribusiness should be carried out through regional development and sector-based growth centers, following the advantages of each region.

Musi Rawas is a Regency in South Sumatra Province with an IDR Gross Domestic Product (GDP). 17,499,935.80. The highest contribution came from the agricultural sector, which was 31.55 percent (Badan Pusat Statistik, 2020). Musi Rawas Regency is one of the livestock producers in

South Sumatra; for its own cattle population, it ranks fifth out of 17 regencies and cities in South Sumatra Province, with a population of 27,289 heads, so it can be said that this Regency is one of the livestock production centers. In South Sumatra Province, empirical studies show that no type of livestock has emerged as the leading sector. In addition, no research has ever been carried out to determine what livestock sector is the best in this district. Therefore, this study aims to map the leading livestock sector that can be developed in Musi Rawas Regency. It is expected to produce a sector that has a comparative advantage that can develop into a competitive advantage.

MATERIALS AND METHODS

The location of this research is in Musi Rawas Regency. Determination of this location is determined purposively (deliberately) with the following considerations: 1) has not yet determined the leading livestock sector in this area; and 2) Musi Rawas is a livestock producing area in South Sumatra Province (Badan Pusat Statistik., 2020).

Sources of data used in this study are primary data and secondary data. The preliminary data used in this study includes data from interviews with livestock groups and livestock business actors to support secondary data collection. The secondary data used is from Musi Rawas Regency in 2020 obtained from the Central Statistics Agency for Musi Rawas.

The quantity of livestock produced in each sub-district in Musi Rawas Regency is counted and evaluated using the Location Quotient (LQ) approach in Ms. Excel 2018 to determine the dominant livestock sector in Musi Rawas Regency. Location Quotient Analysis (LQ) is one of the indirect approaches used to determine whether an agricultural sector is a leading or non-seeding sector. (Amin, Z., Andry, A., & Humaidi, 2021; Bachrein S, 2003). The LQ value indicates a region's ability to produce superior sectors. The livestock sector in Musi Rawas Regency analyzed were beef cattle, dairy cattle, buffalo, goats, sheep, pigs, broilers, native chickens, ducks/mumps. Mathematically the LQ analysis model can be seen in the following equation:

$$LQ = \frac{E_{ij}/E_j}{E_{in}/E_n} \quad (1)$$

Where: E_{ij} = Number of livestock in the District, E_j = Total livestock in the District, E_{in} = Number of livestock Musi Rawas Regency, E_n = Total livestock in Musi Rawas Regency. If the LQ value is calculated, it will be obtained as follows If the LQ value of a sector > 1 , then the industry can be said to be a leading sector, If the LQ value of an industry < 1 , then the industry can be said to be a non-leading sector, If the LQ value of an industry $= 1$, then the industry can be said to be a sector that can only meet the needs of its region.

RESULTS AND DISCUSSION

Comparative advantage is a sector produced through the dominance of natural resource support (Hardison, 2003). The results of the LQ analysis show the ability of a region to make superior sectors (Hendayana, 2003). The results of the LQ analysis for the livestock sector in Musi Rawas Regency can be seen in Table 1 below.

Table 1. Results of LQ analysis of livestock sector in Musi Rawas District

Livestock	LQ Value	Description
Beef cattle	2,96	Superior
Dairy cows	0,37	Non Featured
Buffalo	3,91	Superior
Goat	5,39	Superior
Sheep	3,88	Superior
Pig	0,58	Non Featured
Broiler	0,29	Non Featured
Free-range Chicken	1,82	Superior
Duck	2,61	Superior

Source: Primary Data Processed, 2021

Table 1 shows that only six sectors show an $LQ > 1$. The sectors in question are beef cattle, buffalo, goats, sheep, native chickens, ducks, while the other three, namely dairy cattle, pigs, and broilers, have LQ values < 1 . This condition means that only six livestock sectors are featured in Musi

Rawas Regency. From the table above, it can also be seen that the highest LQ value is the goat sector, with a value of LQ5.39. This condition means that the number of livestock in Musi Rawas Regency can meet the needs of goats in other areas because they have been able to fulfill it for their space. This indicates that based on the findings of this research, there are nine superior livestock sectors, with goats being the most valuable. Of course, this is an advantage that this district should take advantage of and consider when creating policies connected to the growth of the livestock sector. This condition is in line with the opinion of Kristiantina, dkk, (2012). According to this theory, if a region already knows what commodities are its primary industries, the sector must be expanded promptly since it will overgrow.

Furthermore, the analysis will be detailed according to the sub-district area to explore the mapping study of the regional superior livestock sector. The results of the LQ analysis for nine livestock sectors in 14 districts are presented in Table 2

Table 2. Results of LQ analysis of the livestock sector in each District in Musi Rawas

Districts	LQ Values								
	Beef cattle	Dairy cows	Buffalo	Goat	Sheep	Pig	Broiler	Free-range Chicken	Duck
STL Ulu	0,09	-	0,16	0,05	0,02	-	1,53	0,14	0,15
Terawas									
Selangit	0,06	-	19,47	5,70	8,86	-	-	2,07	4,10
Sumber Harta	5,86	-	4,54	2,52	4,19	-	-	2,53	2,64
Tugumulyo	0,79	5,17	0,85	0,15	2,32	4,38	0,33	2,32	1,77
Purwodadi	2,70	-	1,96	0,27	-	0,46	0,35	1,62	3,80
Muara Beliti	1,13	-	1,27	3,55	1,86	2,58	1,16	0,42	1,23
TP. Kepungut	0,25	-	7,01	10,67	18,94	-	-	2,03	3,30
Jayaloka	2,19	-	7,58	5,02	2,19	-	-	2,47	2,77
Sukakarya	2,57	-	-	21,16	5,45	-	-	2,09	1,18
Muara Kelingi	12,60	-	5,99	1,89	2,36	-	-	2,28	2,99
BTS Ulu	3,73	-	4,84	4,59	8,18	-	-	2,23	3,48
Tuah Negeri	5,28	-	-	8,42	-	-	-	1,17	6,28
Muara Lakitan	1,92	-	0,26	10,81	-	-	-	2,34	2,25
Megang Sakti	2,27	-	0,81	0,67	-	0,72	0,73	1,71	0,61

Source: Primary Data Processed, 2021

Table 2 shows that the leading sectors of beef cattle ($LQ > 1$) are in Sumber Harta, Purwodadi, Muara Beliti, Jayaloka, Sukakarya, Muara Kelingi, Ulu BTS, Tuah Negeri, Muara Lakitan and Megang Sakti Sub-districts; The leading sector of dairy cattle is only in Tugumulyo District; The leading sectors of buffalo are located in Selangit District, Sumber Harta, Purwodadi, Muara Beliti, TP Kepungut, Jayaloka, Muara Kelingi, BTS Ulu; The leading sector of goat farming is in Selangit District, Sumber Harta, Muara Beliti, TP. Kepungut, Jayaloka, Sukakarya, Muara Kelingi, BTS Ulu, Tuah Negeri and Muara Lakitan; The leading sector of sheep is in Selangit District, Sumber Harta, Tugumulyo, Muara Beliti, TP. Kepungut, Jayaloka, Sukakarya, Muara Kelingi, BTS Ulu; The leading sectors of pigs are in the Districts of Tugumulyo and Muara Beliti; The leading sectors of broiler livestock are in the Districts of STL Ulu Terawas and Muara Beliti; The leading sector of domesticated chicken is in Selangit District, Sumber Harta, Tugumulyo, Purwodadi, TP. Kepungut, Jayaloka, Sukakarya, Muara Kelingi, BTS Ulu, Tuah Negeri, Muara Lakitan, Megang Sakti; The leading sector of duck/mentok livestock is in Selangit District, Sumber Harta, Tugumulyo, Purwodadi, Muara Beliti, TP. Kepungut, Jayaloka, Sukakarya, Muara Kelingi, BTS Ulu, Tuah Negeri, Muara Lakitan.

Based on the above description of the data, it is known that the leading livestock sector in almost all sub-districts, namely native chicken and duck, is superior in 12 sub-districts because the increased industry of native chicken and duck does not require a large area and small capital, and is bolstered by farmers' preferences for raising poultry over cattle/ruminants, as evidenced by the farmers' explanatory. As a result, it's intriguing to see how the free-range and duck livestock sectors might grow and become more powerful. Competitiveness and make this area a production entry for domesticated chicken and ducks, as (Humaidi et al., 2020; Ropingi, 2004; B Saragih, 2001) argued that one of the directions for agribusiness development is to develop a comparatively superior sector into a competitive industry.

CONCLUSIONS AND SUGGESTIONS

The results showed that of the nine livestock sectors, six were the leading sectors, namely beef cattle, buffalo, goats, sheep, native chickens, ducks, with the highest LQ value in goats. From the results of this study, it is necessary to develop a superior regional sector where the results of this study become a reference in compiling the excellent livestock sector in each region in Musi Rawas Regency.

REFERENCES

- [BPS] Badan Pusat Statistik. (2020). *Musi Rawas dalam Angka 2019*. Badan Pusat Statistik Kabupaten Musi Rawas dan Badan Perencana Daerah Kabupaten Musi Rawas. BPS Musi Rawas.
- Amin, Z., Andry, A., & Humaidi, E. (2021). Pemetaan Sektor Agribisnis Pangan Unggulan di Kabupaten Musi Rawas. *Jurnal Penelitian Pertanian Terapan*, 21(1), 1–8.
- Amin, Z., Andry, and E. H. (2018). Pengembangan Agribisnis Beras Organik. *Prosiding Seminar Nasional Pembangunan Pertanian Berkelanjutan Berbasis Sumberdaya Lokal, Fakultas Pertanian Universitas Jambi*, ISBN: 978-602-97051-7-1. 616-633.
- Bachrein S. (2003). *Penetapan Komoditas Unggulan Provinsi*. BP2TP Working Paper. Bogor. Balai Pengkajian dan Pengembangan Teknologi Pertanian 38 (2): 350-257.
- Hardison. (2003). *Analisis Strategi Pengembangan Komoditas Unggulan di Kabupaten Siak Provinsi Riau*. [Tesis]. IPB.
- Hendayana, R. (2003). Aplikasi Metode Location Quotient (LQ) dalam Penentuan Komoditas Unggulan Nasional. *Jurnal Informatika Pertanian*.
- Humaidi, E., Unteawati, B., & Analianasari, A. (2020). Pemetaan Komoditas Sayur Unggulan Di Provinsi Lampung. *Jurnal Agribisnis Indonesia*, 8(2), 106–114. <https://doi.org/10.29244/jai.2020.8.2.106-114>
- Kristiantina, Dyah Elyta., Sarwono., Haryono, and B. S. (2012). Analisis Kebijakan Pemerintah Kota Blitar Dalam Mengembangkan Potensi Daerah Sebagai Upaya Meningkatkan Daya Saing Daerah. *Jurnal Administrasi Publik (JAP)*, Vol.1, No.
- Pearce, J. and Robinson, R. (1998). *Strategic Management*. Irwin McGraw Hill/Irwin.
- Robinson Tarigan. (2017). *Ekonomi Regional: Teori dan Aplikasi, Edisi Revisi*. Bumi Aksara.
- Ropingi. (2004). Peranan Sektor Pertanian dalam Pembangunan Wilayah Kabupaten Boyolali Berdasarkan Teori Basis Ekonomi. *SEPA Jurnal Sosial Ekonomi Pertanian, Volume 1*.
- Saragih, B. (2001). *Suara dari Bogor Membangun Sistem Agribisnis* (P. W. M.-P. T. L. G. G. Sarana (ed.)).
- Saragih, Bungaran. (2000). Agribisnis sebagai landasan pembangunan ekonomi Indonesia dalam era milenium baru. *Jurnal Studi Pembangunan, Kemasyarakatan Dan Lingkungan*, 2(1), 1–9.
- Ummah, M. (2008). Variabel Internal Yang Mempengaruhi Kesenjangan Ekonomi Wilayah di Gerbang kertokusila. *Institut Teknologi Sepuluh Nopember*.
- Wicaksono, I. A. (2011). Analisis Location Quotient Sektor dan Subsektor Pertanian Pada Kecamatan di Kabupaten Purworejo. *Jurnal Ilmu Pertanian*, 7(2), 11–18.
- Zaini, A. (2002). *Penggemukan Peternakan Sapi*. PT. Agro Media Pustaka.