

The potential of North Kalimantan's livestock sector as a buffer for the capital city of nusantara

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Abstract

The potential of the livestock sector in North Kalimantan as a buffer for the capital of the Nusantara is interesting to be identified. Regional development and growing and sustainable business strategies in the livestock production sector have become complex and competitive between regions and business actors. Understanding the condition and potential of superior livestock and the economic life of workers in the livestock sector is crucial. Furthermore, it is a basis for developing and integrating policies that help livestock sector workers increase their production. This study aims to identify the leading commodities of the regency/city livestock sector in North Kalimantan to provide information to related parties and investors who are interested in the sector. North Kalimantan is one of the strategic provinces in Indonesia because it is located in the border area and is adjacent to the capital of the Nusantara. This study utilizes livestock data available from the North Kalimantan statistics for 2020 and 2021. Data analysis was carried out using the static location quotient. The results of data analysis explains that districts/cities in North Kalimantan have various types of superior livestock. Malinau regency has the leading livestock Pig (SLQ 2.03). Bulungan regency has superior livestock Beef cattle (SLQ 1.19) and Goats (SLQ 2.30). Nunukan regency has superior Beef cattle (SLQ 1.98), livestock Buffalo (SLQ 4.28) and Goat (SLQ 1.4). Tana Tidung regency and Tarakan city do not have superior livestock. North Kalimantan has the potential to support the capital of the Nusantara through the livestock sector.

Key words: Livestock; location quotient; north kalimantan; capital of the Nusantara

INTRODUCTION

Request to production cattle will growing in East Kalimantan after there is the capital of the Nusantara. Potency request cattle becomes opportunity and challenge workers in the sector farm for offer the cattle good from inside and outside area in East Kalimantan. North Kalimantan has potential as buffer the main capital of the Nusantara in the sector farm. Production sector farms in North Kalimantan for Fulfill Request from in North Kalimantan and exported to neighboring Malaysia. Challenge especially main farmers in North Kalimantan are reduce cost delivery to East Kalimantan. Sector market potential farm interesting for investors and become focus government increase well-being workers in the sector farm.

Superiority competitive needed workers in the sector farms in North Kalimantan for could Fulfill Request cattle. Cattle that become superior in North Kalimantan need get encouragement big (big push) of government center and area. urge The big push is in the form of helpful policies increase well-being house ladder farm. The condition is marked with increase amount production farm. Identify cattle that have superiority comparative and competitive need conducted as base make policy for push productivity house ladder farm.

According to Todaro & Smith (2020) growth something sector concentrated spatial in a area because proximity helpful geography perpetrator effort more competitive for produce overflow innovation. overflow innovation impact on efficiency production and reduce cost production. Areas that can Becomes specialization development sector certain have potency more fast develop (agglomeration theory). On the other hand, development various sectors in a area push more many overflow innovation because company accept new ideas and more good from companies that work in many similar sector insomething area. Growth different sectors area depends on supply and demand (externalities theory). Difference Among agglomeration theory and externality theory in explain growth something sector in the region certain interesting for explained in a number of different examples. Government must determine choice on some sector given priority encouragement big (big push). Meanwhile, sector other no get encouragement big (big push).

Districts/cities in North Kalimantan have the potential Becomes center growth (growth pole) production a number of type cattle that have superiority comparative and competitive. growth center start from fact that growth no occurs in various area in same time, but only happened in some a place called center growth with intensity different. Activity economy in a area tend agglomerate in the area certain who have superiority local (growth pole theory). Industry crutch production farms in North Kalimantan will experience growth in the end. First for Fulfill demand in North Kalimantan. Second for Fulfill Request from outside North Kalimantan.

Understand cattle superior in North Kalimantan is important for investors and governments. Study comprehensive and focused explain potency cattle North Kalimantan's flagship is not there is. Required evidence that explains potency sector North Kalimantan farm as supporting the capital of the archipelago. Study this aim for identify cattle superior in North Kalimantan. The information is useful for explain cattle featured who became specialization and despecialization to government as base in develop and integrate helpful policies house ladder sector farm increase production by sustainable. Information cattle North Kalimantan flagship helps interested investors invest in sector farm. Next develop analytical models sector superior farm.

METHOD

Study this conducted with approach descriptive quantitative in solving problem research. Destination from analysis descriptive is reviewing the number data production meat livestock and quantity population cattle. Description of data on research utilise data availability. Study this identify cattle featured in North Kalimantan which includes Malinau regency, Bulungan regency, Nunukan regency, Tana Tidung regency, and the city of Tarakan. Study this using aggregated data from regencies/cities in the province of North Kalimantan.

Source of data used in study this is population data sourced livestock from Directorate general animal husbandry and health animal Ministry agriculture, while amount cutting cattle is results survey report cutting cattle. Cutting data collection cattle conducted by complete every quarterly across house cut animals (RPH) and places cutting animals in North Kalimantan. Range time data used is 2020 and 2021 selected based on data availability.

Data analysis techniques used in study this use tool analysis location quotient (LQ). Location quotient (LQ) is size used for measure sectors and subsectors featured (Morrissey, 2014). Commodity superior is commodity something area that has Request from in area and export. Non preferred Commodities is commodity in a area that has local market share (Bendavid-Val, 1991). Li et al., (2022) On study this Location quotient (LQ) for explain the sub- sector farm or type cattle featured. By simple, according Kuncoro (2017) also known LQ as index static location quotient (SLQ). Static location quotient (SLQ) is measured with formulation as following.

$$SLQ = \frac{q_i / q_r}{Q_i / Q_n}$$

Description

q_i : The total population of livestock i in the regencies/city

q_r : The total population of livestock in the regencies/city

Q_i : The total population of livestock i in the province of North Kalimantan

Q_n : The total livestock population in the province of North Kalimantan

Indicator assessment

1. $SLQ > 1$: The total population of livestock i is superior livestock in the regencies/city

2. $SLQ < 1$: The total population of livestock i is not superior livestock in the regencies/city

RESULTS AND DISCUSSION

Farm data regencies/cities in the province of North Kalimantan

Table 1.

Livestock production by regencies/city in North Kalimantan province (kg) 2021

Type cattle	Malinau	Bulungan	Tana Tidung	Nunukan	Tarakan	North Kalimantan
Cow cut	62,574.00	162.169.00	27,028.00	117,122.00	338,589.00	707,482.00
Buffalo	-	-	-	8,916.00	1,189.00	10,104.00
Horse	-	-	-	-	-	-
Goat	4,035.00	22,580.00	1556.00	10,411.00	61454.00	100,036.00
Sheep	-	-	-	-	-	-
Pig	158,226.00	125,822.00	12,640.00	28,727.00	155.813	481.226.00

Based on the data in Table 1 production Pork in North Kalimantan province in 2021 will reach 481,226 kg, meat Cow of 707,482 kg, and meat Goat reach 100,036 kg. Interesting data explain production meat Buffalo in District Nunukan of 9,916.00 kg. Not there is production meat Sheep and Horses in North Kalimantan. Production meat Cow of 338,589 kg and Goat of 61,454.00 kg, the largest in North Kalimantan is in Tarakan City. Regency Malinau with production Pork the largest in North Kalimantan reached 158,226.00 kg. Production Horse and Lamb meat no in North Kalimantan in 2021.

Table 2.

Population cattle according to regencies/cities in the province of North Kalimantan (tail) 2021

Type cattle	Malinau	Bulungan	Tana Tidung	Nunukan	Tarakan	North Kalimantan
Cow milk	-	-	-	-	4	4
Cow cut	2,059	6,200	1,279	10,300	2,884	22.722
Buffalo	49	20	1	3.990	23	4.083
Horse	-	-	-	9	1	10
Goat	361	7,500	500	4.650	1,270	14,281
Sheep	-	-	-	2	4	6
Pig	13,591	5,400	650	4.115	5.530	29,286

Based on the data in Table 2 there are three type cattle with population cattle the most in North Kalimantan province in 2021. Three type The livestock are pigs (29,286 heads), cows cut (22,722 head), and Goat (14,281 head). Population Cow Dairy, Horse and Sheep in North Kalimantan is limited. Nunukan regency with population cattle Buffalo (3,990 head) and livestock Beef (10,300 heads) cut largest in the province of North Kalimantan. Malinau regency with population The largest pig herd in North Kalimantan is 13,591 heads. A number of type cattle with population low in North Kalimantan is

Cow Dairy (4), Sheep (30) and Horse (4). Bulungan regency with population cattle Goat the largest in North Kalimantan, reaching 7,500 individuals .

RESULTS OF DATA ANALYSIS

Indicator evaluation cattle superior is cattle that have score static location quotient (SLQ) > 1 . Next , indicator evaluation cattle that don't superior is cattle who has score static location quotient (SLQ) < 1 . Results of data analysis using static location quotient (SLQ) is obtained proof following.

Malinau regency

Following is results analysis static location quotient (SLQ) for explain cattle featured in the Malinau regency.

Table 3.
Malinau regency

Type cattle	SLQ 2020	SLQ 2021
Cow Milk	-	-
Cow Cut	0.31	0.39
Buffalo	0.03	0.05
Horse	-	-
Goat	0.07	0.11
Sheep	-	-
Pig	1.63	2.03

Table 3 on the 2021 SLQ explains cattle superior Malinau regency is Pig (SLQ 2.03). Pigs are specialization sector farms in the Malinau regency. Challenge interesting faced for permanent maintain Pig cattle as cattle superior sector farm Malinau regency. Livestock in the Malinau regency who doesn't superior is Cow milk, cow cut, Buffalo, Horse, Sheep and Goat. Regencies/cities in North Kalimantan which have cattle superior can make Malinau regency as destination export. Regency Malinau potential as exporter Pig cattle for Fulfill demand in North Kalimantan and the Capital of the Nusantara.

Bulungan regency

Here are the results of the static location analysis quote (SLQ) for explain cattle featured in the Bulungan regency.

Table 4.
Bulungan regency

Type cattle	SLQ 2020	SLQ 2021
Cow milk	-	-
Cow cut	1.00	1.19
Buffalo	0.01	0.02
Horse	-	-
Goat	1.94	2.30
Sheep	-	-
Pig	0.68	0.80

Table 4 on the 2021 SLQ explains cattle superior Bulungan regency is Cow cut (SLQ 1.19) and Goat (SLQ 2.30). Cattle Cow cut and Goat is specialization sector farm Bulungan regency. Challenge interesting faced for permanent maintain cattle Cow cut and Goat as cattle superior sector farm Bulungan regency. Livestock in the Bulungan regency that is not superior is Cow Dairy, Buffalo, Horse, Sheep and Pig. Growth Request consumption cattle in the Bulungan regency pushed Request from mother city North Kalimantan province. Regencies/cities in North Kalimantan which have cattle superior can make Bulungan regency as goal export. Bulungan regency potential as exporter cattle Cow cut and Goat for Fulfill demand in North Kalimantan and the Capital of the Nusantara.

Tana Tidung regency

Here are the results of the static location analysis quote (SLQ) for explain cattle superior in Tana Tidung regency.

Table 5.

Tana Tidung regency		
Type cattle	SLQ 2020	SLQ 2021
Cow milk	-	-
Cow cut	-	0.24
Buffalo	0.00	0.00
Horse	-	-
Goat	0.12	0.15
Sheep	-	-
Pig	0.08	0.09

Table 5 SLQ 2021 explains no there is cattle superior Tana Tidung regency. Regencies/cities in North Kalimantan which have cattle superior can make Tana Tidung regency as aim export. Challenge first encountered is Fulfill Request cattle from production in area Tana Tidung regency. Challenge second is push is production cattle selected for Becomes cattle superior Tana Tidung regency. Tana Tidung regency no have cattle superior that can be exported for Fulfill demand in North Kalimantan and the Capital of the Nusantara.

Nunukan regency

Here are the results of the static location analysis quote (SLQ) for explain cattle featured in the Nunukan regency.

Table 6.

Nunukan regency		
Type cattle	SLQ 2020	SLQ 2021
Cow milk	-	-
Cow cut	1.65	1.98
Buffalo	3.57	4.28
Horse	3.23	3.94
Goat	1.20	1.42
Sheep	3.36	0.29
Pig	0.52	0.61

Table 6 on the 2021 SLQ explains cattle superior Nunukan regency is Cow Cut (SLQ 1.98), Buffalo (SLQ 4.28), and Goat (SLQ 1.4). Producing area cattle Buffalo in Nunukan regency is Krayan. Interesting facts explain population Horse cattle in the Nunukan regency total 9 tails not concluded Becomes cattle featured in the Nunukan regency. Furthermore, population cattle Sheep in the Nunukan regency total of 6 not concluded Becomes cattle featured in the Nunukan regency. Challenge interesting faced for permanent maintain cattle Cow Cut, Goat and Buffalo as cattle superior sector farm Nunukan regency. Cattle Buffalo and Goat is sector farm Nunukan regency. Livestock in the Nunukan regency that doesn't superior is Cow milk and pork. Regencies/cities in North Kalimantan which have cattle superior can make districts Nunukan as destination export. Nunukan regency potential as exporter cattle Cow cut, Buffalo, and Goat for Fulfill Request from various areas in North Kalimantan and the capital of the Nusantara.

Tarakan city

Here are the results of the static location analysis quote (SLQ) for explain cattle featured in the city of Tarakan.

Table 7.

Tarakan city		
Type cattle	SLQ 2020	SLQ 2021
Cow milk	3.64	4.38
Cow cut	0.46	0.55
Buffalo	0.01	0.02
Horse	0.40	0.43
Goat	0.30	0.38
Sheep	3.64	0.58
Pig	0.70	0.82

Table 7 on the 2021 SLQ explains cattle superior Tarakan city is Cow milk (SLQ 4.3). Interesting facts explain population cattle Cow There are 4 dairy cows in Tarakan city, so that no can be concluded Becomes cattle superior Tarakan city. Tarakan City is not have cattle featured. Cattle in the city of Tarakan that are not superior is Cow Cut, Buffalo, Horse, Goat, Sheep, and Pig. The results explain for Fulfill Request cattle Tarakan city imports from other areas. Open opportunity for other areas, especially in North Kalimantan for offer the cattle to Tarakan city.

CONCLUSION

Regencies/cities in North Kalimantan have type cattle various highlights. Malinau regency have cattle featured Pig (SLQ 2.03). Bulungan regency have cattle superior Cow cut (SLQ 1.19) and Goat (SLQ 2.30). Nunukan regency have cattle superior Cow cut (1, 98), Buffalo (SLQ 4.28), and Goat (SLQ 1.4). Tana Tidung regency and Tarakan city are not have cattle featured. Cattle featured in a area Becomes specialization the area. Challenge first faced area that has cattle superior for sustainable and growth in offer the cattle for Fulfill Request from area in North Kalimantan. Challenge both faced areas that are not have cattle superior for could Fulfill market demand in the area.

Government could for focus give encouragement big (big push) development cattle that have superiority comparative and competitive. Investors can invest in livestock featured. Areas in North Kalimantan that have cattle superior have need Becomes buffer the capital of the Nusantara through sector farm.

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