

# ISBN: 978-979-1215-37-4 PROCEEDING

The 8<sup>th</sup> International Seminar on Tropical Animal Production

"Prospects and Challenges for Sustainable Tropical **Animal Production Systems**" 

The 8° International Seminar on Tropical Animal Production

MTERNATIONA,

GU.

23-25 September 2019 Yogyakarta, Indonesia



UNIVERSITAS GADJAH MADA FACULTY OF ANIMAL SCIENCE

Organized by:



#### **PROCEEDINGS** The 8<sup>th</sup> ISTAP International Seminar on Tropical Animal Production

September 23-25, 2019, Yogyakarta, Indonesia

"Prospects and Challenges for Sustainable Tropical Animal Production Systems"

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Address	: Faculty of Animal Science, Universitas Gadjah Mada Jl. Fauna 3, Kampus UGM, Bulaksumur, Yogyakarta 55281, Indonesia
Phone	: +62-274-513363/+62-274-560868
Fax	: +62-274-521578
Email	: istap@ugm.ac.id
Website	: www.istap.ugm.ac.id

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#### PREFACE

On behalf of Faculty of Animal Science, Universitas Gadjah Mada, I am pleased to present you the 8<sup>th</sup> International Seminar on Tropical Animal Production (ISTAP) held on September 23-25, 2019 at Royal Ambarrukmo Hotel, Yogyakarta. Under the main theme "Prospects and Challenges for Sustainable Tropical Animal Production Systems", we expect that information and ideas on animal production systems in the tropics and its related problems will be shared among participants, thus we can elaborate an integrated approach in developing sustainable tropical animal production. I believe, this vision can be achieved since more than 280 animal scientists, researchers, students, and producers from more than 11 countries joined this seminar.

In this moment, I have to address my great thanks to all people who have contributed for the success of this seminar. First, to all participants, thank you for your contributions, time, and efforts in participating in all sessions in this seminar. We also would like to extend our gratitude to the reviewers and editors for dedicating their expertise and precious time in reviewing and editing the papers. I deeply appreciate the hard work of all members of the Steering Committee, Organizing Committee, and students of the Faculty of Animal Science UGM for making this seminar achieved a great success!

I hope all of you enjoyed the seminar and Jogja as well!

Ir. Tri Satya Mastuti Widi, S.Pt., M.P., M.Sc., Ph.D., IPM., ASEAN, Eng. Editor in Chief

#### **REPORT FROM ORGANIZING COMMITTEE**

Dear all scientists, delegates, participants, ladies and gentlemen,

Praise to The Almighty for His Merciful and Beneficent to gather us in this memorable moment of scientists and delegates from all over the world who are interested in Tropical Animal Production field can meet up together.

On behalf of the Board of Committee, it is my great pleasure and honor to thank all participants who have attended the 8<sup>th</sup> ISTAP in Yogyakarta, the city where nature, culture and people live in harmony.

As a chair in this seminar, let me report that, we have distinguished participants from all over the continents in the world to present their paper with the theme of "Prospects and Challenges for Sustainable Tropical Animal Production Systems". There are around 280 scientists, delegates, and graduate students from 11 countries attending the seminar; and more than 221 research papers were presented during these three days seminar. The great enthusiasm of all participants to share their research-based valuable information and knowledge on livestock production development in tropical areas as well as to contribute on developing human prosperity all over the world is expressed.

The 8<sup>th</sup> ISTAP programs are rich of scientific programs as well as social and cultural activities. The scientific programs offer eight plenary sessions, nine parallel sessions (both oral and poster presentation) each day, and rural field trip. The social and cultural programs of the 8<sup>th</sup> ISTAP are also important as the scientific programs since the scientists' interaction, intercultural exchange, friendship and future scientific or research collaboration were also central to this seminar. In the evening, participants attended a warm invitation from the Dean of Faculty of Animal Science UGM in a Welcome Dinner that gave you the most impressive moment to attend. Rural field trip activity offered a wonderful experience to the rural livelihood surrounded by the spectacular natural landmark, Ancient Volcano in Yogyakarta where many smallholder farmers live in harmony.

During the seminar, the 8<sup>th</sup> ISTAP committee also created a competitive atmosphere among all participants by granting awards for those who have outstanding paper and poster. Participants are encouraged to share their precious works in research and knowledge dissemination in an attractive way. The awards were given to the outstanding participants immediately after the last session of parallel presentations where the closing ceremony held on September 24<sup>th</sup>, 2019 afternoon. I wish all of the participants enjoyed activities that we have organized.

Finally, on behalf of 8<sup>th</sup> ISTAP Committee, let me express the high appreciation and acknowledgement to the Rector of Universitas Gadjah Mada and Dean of Faculty of Animal Science UGM for the advice and suggestion in organizing this international seminar. Recognition should go to the Steering Committee, Scientific Committee, Reviewers and Editorial Boards and All Technical Committee members who have worked extremely hard for the details of important aspects of the seminar programs.

*Terima kasih* (Thank you).

Sincerely Yours,

Ir. Nafiatul Umami, S.Pt., M.P., Ph.D., IPM., ASEAN Eng. Chairman of the Organizing Committee of the 8<sup>th</sup> ISTAP

#### **REMARKS FROM THE DEAN**

Selamat pagi, Good morning, and Assalamu'alaikum Wr. Wb.

The honorable rector Universitas Gadjah Mada (UGM), invited speakers, all of delegates, distinguished guests, participants, ladies and gentlemen.

First of all, it is our great pleasure and honor to extend a sincere gratitude to all of you at the 8<sup>th</sup> International Seminar on Tropical Animal Production (ISTAP), which was held on September 23 - 25, 2019 at Royal Ambarrukmo. This seminar was proudly organized by the Faculty of Animal Science UGM, every 4 years since 1994. But, since last four years (2015) ISTAP has been conducting for every two years in collaboration with the Indonesian Society for Sustainable Tropical Animal Production (ISSTAP) due to the rapid development of science and technology in animal production and also the need for exchange knowledge and experiences among the stakeholders.

The contribution of this seminar to the development of national food security is truly significant for introducing of new scientific knowledge and equipment that is much needed in Indonesia to maintain a safe and secure environment and to look at more effective ways to meet and anticipate the future challenges. We can see great enthusiasm of the entire participant to present their latest research finding as well as to share valuable information and knowledge for human prosperity all over the world.

In these 2 days of seminar, we have invited some important distinguished speakers for the plenary session and invited papers relevant to the sustainable animal production systems for sharing their valuable information and knowledge. Other participants from over 10 different countries and from research institute and/or universities can deliver their precious research through oral and poster presentations at concurrent sessions.

At this opportunity, we would like to express our special thank you to the steering committee, scientific committee, reviewers and editorial boards for their great contribution to make the seminar a great success. Also, we would like to congratulate and deliver high appreciation to the organizing committee as the organizer for their great contribution and generous efforts to make the seminar successfully organized. We are really indebted to your valuable time, effort, and sacrifice to the success of this seminar.

To all of the participants, I do hope this seminar have enriched you with the new perspective of recent knowledge and of course with new friends for possible future partnership and collaboration in fostering the advancement of animal science. Also, I wish to all of the participants had a great achievement of success and fulfilled the expectation as well as enjoying the interaction with all participants. Surely, with all of our hospitality, we have been trying our best to make your brief visit to our country become a wonderful and memorable moments. We are looking forward to meet you in the future event.

Finally, we wish you all a very pleasant and most enjoyable stay in Yogyakarta, Indonesia, beside your scientific journeys.

Thank you very much for your attention, *Terima kasih, Wassalamu'alaikum Wr. Wb.* 

Yogyakarta, 28 Oktober 2019 Sincerely yours,

Prof. Dr. Ir. Ali Agus, DAA., DEA., IPU, ASEAN Eng. Dean of Faculty of Animal Science UGM

#### **REMARKS FROM THE RECTOR**

Dear all Scientists, distinguished guests, delegates, participants, Ladies and Gentlemen,

On behalf of Universitas Gadjah Mada, I am happy to have welcomed you and present a high appreciation for your participation in joining the 8th International Seminar on Tropical Animal Production hosted by the Faculty of Animal Science UGM in Yogyakarta from 23 – 25 September 2019.

Under the theme of "Prospects and Challenges for Sustainable Tropical Animal Production Systems", we do hope that this seminar concludes with shared ideas and best practices, technology, and global networks that are required to increase animal production. The increase of animal production as one source of food is crucial to feed the world given that the population is expected to increase from 6 billion to about 8.3 billion in 2030. According to FAO (2008, 2009), the consumption of animal food increased from 10 kg/per annum in 1960, 26 kg/per annum in 200, and it is expected to be 37 kg/per annum. Animal production is an integral part of food production and contributing for the quality of human food supply. Animal and agricultural production is an important component in the integrated farming systems in developing countries as this produces high quality foods, provides job opportunities in rural areas, as well as enriching livelihood.

As a tropical country with high animal biodiversity, Indonesia and other tropical countries, have a variety number of indigenous and local animal genetic resources and germ plasm. This variety of animal germ plasm could be explored and developed not only for animal and food production but also for animal conservation. Apart from being exploited as food resources, it is therefore important to consider animal conservation. Conservation will protect the genetic potency of local bred and their family, and the domesticated animal bred, and this would secure our future food resources.

In these 3 days of seminar, we believe those aforementioned issues have been discussed, and technical solution as well as recommendation were provided to solve the existing problems in tropical animal production.

Finally, on behalf of Universitas Gadjah Mada, we would like to congratulate and thanks to the Faculty of Animal Science UGM as the organizer for their great efforts to make the seminar successfully organized. To all of participants, I wish all of you had a great discussion and interaction with other scientists participating in the seminar as well as enjoying your time in Yogyakarta.

Thank you

Prof. Ir. Panut Mulyono, M.Eng., D.Eng., ASEAN Eng. Rector of Universitas Gadjah Mada

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#### **Community Perception in Korong Padang Mantuang Nagari Kayutanam on Dairy Cattle Existence**

#### A A Alianta, A Anas, B Basyar, Ediset, E Heryanto, M Afdal

Department of Social-Economy of Animal Science, Faculty of Animal Science, Universitas Andalas, Kampus Limau Manis, Pauh District, Padang, West Sumatera, 25163.

Corresponding author: adityaalqamal@ansci.unand.ac.id

Abstract. This study was aimed to assess the community perception in Korong Padang Mantuang Nagari Kayu Tanam, 2x11 Kayutanam District, Padang Pariaman Regency, West Sumatera Indonesia, on dairy farm existence. Community perception is indicated by the benefit and the negative impact that occur because of dairy farm existence in residential. It could be used as a reference to develop and the continuity of dairy cattle activities in Korong Padang Mantuang Nagari Kayutanam, 2x11Kayutanam District. This study was conducted using survey method and the respondents were determined purposively , which is 160 respondents who live nearby dairy cattle farm sampled with Slovin's Formula, determined 32 respondents to assess their perceptions about dairy cattle existence and the data that obtain was analyse descriptively. The result showed that community perception of negative impact on dairy cattle existence especially faeces of cattle in Korong Padang Mantuang, Nagari Kayutanam was in low category (46.35%) or it could be described as the existence of dairy cattle was not disturbing daily life in Korong Padang Mantuang Nagari Kayutanam. In another side, 79.68% community perception on dairy cattle existence.

#### 1. Introduction

Milk consumption in Indonesia is still covered by imports. Of the 4.45 million tons of Indonesian production, it can only fulfil 18-20% of national needs, so 852 thousand tons per year are needed to fulfil that national milk consumption [1,2]. For this reason, it is necessary to develop a dairy farming business in Indonesia to be ably fulfiling national milk needs without imports.

The development of dairy farming business has an impact as a place to create jobs and as additional income, it also has prospective opportunities and something that has future benefits. Nagari Korong Padang Mantuang is one of the villages which is used as a centre for dairy farming in 2x11 Kayutanam District, Padang Pariaman Regency, West Sumatera, Indonesia. The dairy farming business in Korong Padang Mantuang was established by the Talago Sakato Farmer Group which established on November 10, 2013, with 11 members. This group have received aids from the Animal Husbandry Office of West Sumatra (Dinas Peternakan Provinsi Sumatra Barat) in 2013 with 25 dairy cows Holstein Friesian cattle. In 2019 the population of dairy cows increased to 40 so that the dairy farming business keeps growing. But, in other hands, the location of the Talago Sakato dairy farm is close to community settlements which are only 10 meters away.

This is not in accordance with the Dirjenak Decree (Director General of Animal Husbandry) No.776/KPTS/DGT/Deptan/1982 Article 1 which states that if the dairy business is opened, dairy cattle entrepreneurs must pay attention to distances that may not be close to the house at least 250 meters from

the residential area. Lestari *et al.* [3] argued that the distance of enclosures should be far enough from the distance of residential areas in order to avoid noise or disturbance, air and water for residents living in houses, buildings or other centres of activity.

Perception is a process of evaluating a particular object. Suharto [4] stated that perception is a process that involves sensory activities, transferring, integrating and giving judgments to physical objects and social objects. The sensory process depends on stimuli (physical stimuli and social stimuli) that exist in the environment. Stimuli that arise from the environment are processed together with something that has been studied before such as values, attitudes, memories and others. Slamet [5] adds that perception is a process that involves the entry of messages or information into the human brain, which continuously engages in interaction with the environment. This interaction is carried out through the senses, called the sense of sight, listener, touch, feeling, and smell.

Humans as social beings who are also individual beings at the same time have different perceptions between individuals with one another. This difference is the reason why someone likes an object and other people are not happy about an object. In this case, the research of an object depends on how the individual's perception responds to the object because in reality most attitudes, behaviour and adjustments are determined by perception. The existence of a perception process from someone's personality is then required to provide an assessment of an object. These assessments can be either positive or negative, like or dislike, happy or unhappy and so on. Based on the description above, it is necessary to conduct a study that examines the Community Perception of the Existence of Dairy Farming in Korong Padang Mantuang Nagari Kayutanam.

#### 2. Material and Methods

#### 2.1 Population and Samples

The population involved in this study was the people who lived adjacent to the dairy farming business in Korong Padang Mantuang, Nagari Kayutanam, 2x11 Kayutanam district. The total population of the people in Korong Padang Mantuang is 357 people (Based on recapitulation of family in 2015), but the number of populations adjacent to the dairy farm is 0–250 m as many as 160 people, to find the total number of respondents who live adjacent to the location of dairy farms is used the Slovin Formula [6]. The results of Slovin Formulas obtained 32 respondents. The selection of 32 respondents was carried out by convenience sampling based on cardinal direction: north, south, east, and west from the position of the farm. The distance indicators are also a consideration in taking respondents including close distance (0-100 meters) selected 17 respondents, medium distance (101-200 meters) selected 9 respondents and long-distance (201-250 meters) selected 6 respondents.

#### 2.2 Place and Time

This research was conducted in Korong Padang Mantuang, Nagari Kayutanam District 2x11 Kayutanam in March-November 2018.

#### 2.3 Variable

The variable of this research is the public perception of the disturbing aspects and the usefulness of the existence of a dairy farm in Korong Padang Mantuang. The disturbance aspect is measured by two indicators, odour indicators (odour that is not easily lost, stinging odour, and fishy odour) and water pollution indicators (polluted water, cloudy and smelly watercolour, and non-current drains). The benefits aspect is measured by providing employment indicators (employment opportunities and additional income) and social assistance indicators (social assistance in event activities, social assistance to the community).

#### 2.4 Methods

**General.** The method of this study is survey method and data collection were obtained by questionnaires, observations, interviews and data documents to solve problems. [7]. The answers to the questionnaire were then clustered into three classes, namely low, medium and high with the following equation:

$$Categories Interval = \frac{Maximum Score - Minimum Score}{Number of Categories} [8]$$

Based on equation above  $\leq 52\%$  was categorised as Low (do not disturbing, not beneficial) 53%-76% were categorised medium (quite disturbing, quite beneficial), and >76% were categorised High (disturbing, beneficial).

**Data Analysis.** The data were analysis uses descriptive analysis, and uses a grouping, simplification, and presentation models such as frequency distribution tables and measurements using the Likert scale.

#### 3. Results and Discussion

Talago Sakato Farmer Group is a farmer group engaged in dairy farming which established on November 10, 2013, by Mr Afriadi as the head of a farmer group with 11 members. This group have received an aids from the Animal Husbandry Office of West Sumatra (Dinas Peternakan Provinsi Sumatra Barat) in 2013 with 25 dairy cows Holstein Friesian cattle also funding for the cost of maintenance, grass chopping machines, vehicles, freezers. The land used was Mr Afriadi's parents with a 2-year contract system.

Odour	55.90%	Quite Disturbing
Water Pollution	36.80%	Did not Disturbing
Average Disturbing	46.35%	<b>Did not Disturbing</b>
Employment	86.45%	Usefull
Social Assistances	72.91%	Quite Usefull
Average Usefulness	79.68%	Usefull

Tabel 1. The Percentage of respondents' answers

Community perceptions of the odour aspect that arises from dairy farming activities can be seen from 55.90% of respondents indicating that the odour generated by farm waste is in the medium category. This medium category is categorised as quite disturbing. This has happened to the smell that arises when the wind blows, and the distance of the pen was close to the residents' houses. According to Labodu [9], the odour would not easily be lost when the rain falls, the wind blows hard. It was not really disturbing because the people who have occupied their homes close to the farm can adapt to the smell. The location of the pen should at 250 meters from the residential [3].

This business activity can provide an opportunity for pollution in the event of irregular waste treatment which will cause various problems such as air and water pollution. According to Ardhana [10] water pollution is a change in the properties of water and a lack of normal water content. Polluted water is caused by anaerobic waste so that clean water becomes smelly and unhealthy again for the growth of microorganisms in the flora and fauna of the water.

The results showed that 36.80% of water pollution produced by dairy farm waste was in a low category, it means that the waste did not interfere with community water sources. The community feels that the water sources that usually used were not polluted, because the farmers can organize the waste with the treatment such as the drain the wastewater to the rice paddy field around the farm so that the fields around the farms are directly fertilized. Mukhtar [11] states that if manure were properly processed that would not cause problems and it could be used for various needs such as organic fertilizers, compost, energy and etc.

Based on the explanation above, it can be concluded that 46.35% of community perceptions were at a low level or did not disturbing categories. This means that respondents feel that the waste produced by dairy cattle is not disturbing because the dairy farm waste can be processed and used as fertilizer, only the people who live really close to the pen of dairy cows (100 meters) feel the direct impact of dairy farm waste mostly the odour. According to the people who live around the farm, they accept the existence of a dairy cattle farming, because they have good relations between the owners and the community, despite the odour produced but the community, can adapt and get used to the smell, so they feel it uninterrupted.

The perceptions of respondents in terms of providing a job aspect by dairy farming existence were in the high level or useful category (86.45%). This is because respondents who live around dairy farms get the benefit from the opportunity to work and get income from dairy farming. The existence of a business in an area on a large scale business or small business will have an impact and bring changes to the socio-economic conditions of the surrounding community. The job vacancies in business in large or small scale can provide new opportunities, both those directly caused by the business itself (new employment opportunities, for the surrounding community) and other direct consequences such as opportunities in new businesses [12].

Based on the data obtained community perceptions on social assistance indicator which provided to the community at 72.91%. It means it categorized in a medium level or quite useful. The community got the benefits of the existence of a dairy farm that provides social assistance in the form of financial donations for the activities located in the community area. The assistance also provided goods delivered to the community as a form of care and contribution from the community in improving the quality and quantity of the business, as well as the sustainability of their business.

Based on the explanation above, community perceptions in terms of usefulness aspects are in the high or useful category (79.68%). Anwar [13] states that actually dairy farming has so many benefits especially in increasing income when they are able to process them well and the utilization of manure as a source of long-distance is very supportive of agricultural business.

#### 4. Conclusion

It can be concluded that the public perception of the existence of a dairy farm in Korong Padang Mantuang received a good response. This certainly affects the sustainability of livestock business in an effort to increase milk consumption in the area which can continue to be developed. However, it should be considered that the location of the dairy farm should be at least 250 meters from the residential area to avoid negative impacts on the surrounding community.

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**The 8th International Seminar on Tropical Animal Production (ISTAP)** "Prospects and Challenges for Sustainable Tropical Animal Production Systems" 23 – 25 September 2019, Yogyakarta, Indonesia



Reff: 020/ISTAP VIII/2019Subject: Letter of Invitation

10 September 2019

Dear : Aditya Alianta

On behalf of the 8<sup>th</sup> International Seminar on Tropical Animal Production (ISTAP 2019) Organizing Committee, it is our great honor and pleasure to inform you that the Faculty of Animal Science, Universitas Gadjah Mada will organize The 8<sup>th</sup> ISTAP during September 23 - 25, 2019 at Royal Ambarrukmo Hotel. You are cordially invited to participate in this 8<sup>th</sup> ISTAP to discuss and exchange information and experience with scientists from different regions of the world, which is a good environment to build up friendship between nations.

Further information is available on the conference website: www.istap.ugm.ac.id. Any query you may have, please contact us via email: istap@ugm.ac.id. We look forward to welcoming you in Yogyakarta, the most heritage home of Indonesia.



Dr. Nafiatul Umami Chairman of Organizing Committee



**The 8<sup>th</sup> International Seminar on Tropical Animal Production (ISTAP)** "Prospects and Challenges for Sustainable Tropical Animal Production Systems" 23 – 25 September 2019, Yogyakarta, Indonesia



#### Attachment: Schedule of ISTAP 2019

Monday, September 23, 2019			
Time	Activities	Note	
07.30 - 08.30	Registration	Voyer of Kasultanan Ballroom, 2 <sup>nd</sup> floor Royal	
	Registration	Ambarrukmo Hotel, Yogyakarta	
08.30 - 09.00	Opening Ceremony	Kasultanan Ballroom II, Royal Ambarrukmo Hotel,	
00.50 - 09.00	Opening Ceremony	Yogyakarta	
	Welcome Speech from		
	Organizing Committee	Kasultanan Ballroom II, Royal Ambarrukmo Hotel,	
09.00 - 09.15	and Dean Faculty of	Yogyakarta	
	Animal Science	rogyukurtu	
	Universitas Gadjah Mada		
	Opening Speech by	Kasultanan Ballroom II, Royal Ambarrukmo Hotel,	
09.15 - 09.30	Rector of Universitas	Yogyakarta	
	Gadjah Mada		
09.30 - 09.40	Foto Session	Kasultanan Ballroom II, Royal Ambarrukmo Hotel,	
09.20 09.10		Yogyakarta	
09.40 - 10.00	Coffee Break	Voyer of Kasultanan Ballroom, Royal Ambarrukmo	
09.10 10.00		Hotel, Yogyakarta	
	Plenary Session I		
		Kasultanan Ballroom II, Royal Ambarrukmo Hotel, Yogyakarta	
	Plenary Speaker 1		
	Prof. Sang Jip Oh		
10.00 10.00			
10.00 - 12.00	Plenary Speaker 2		
	Prof. Loh Teck Chwen		
	Dianamy Smaaltan 2		
	Plenary Speaker 3		
	Prof. Ryo Akashi		
		Voyer of Kasultanan Ballroom, Royal Ambarrukmo	
12.00 - 13.00	Lunch	Hotel, Yogyakarta	
12.00 14.00		Balcony Kasultanan Ballroom, 2 <sup>nd</sup> floor Royal	
13.00 - 14.00	Poster presentation	Ambarrukmo Hotel, Yogyakarta	
		2 <sup>nd</sup> floor Royal Ambarrukmo Hotel, Yogyakarta	
	Oral presentation:	Rooms:	
14.00 - 15.30	Concurrent Session I	Kasultanan Ballroom I, Kasultanan Ballroom II	
	Soncarrent Session 1	Kasultanan Ballroom III, Kencana Room	





	Trajumas Room I, Trajumas Room II, Pasewakan			
		Room I, Pasewakan Room II		
15.30 - 15.45	Coffee Break	2 <sup>nd</sup> floor Royal Ambarrukmo Hotel, Yogyakarta (In front of each presentation rooms)		
15.45 – 17.15	Oral presentation: Concurrent Session II	2 <sup>nd</sup> floor Royal Ambarrukmo Hotel, Yogyakarta. Rooms: Kasultanan Ballroom I, Kasultanan Ballroom II Kasultanan Ballroom III, Kencana Room Trajumas Room I, Trajumas Room II Pasewakan Room I, Pasewakan Room II		
18.30 - 21.00	Gala Dinner	Pendopo Agung, 1 <sup>st</sup> floor Royal Ambarrukmo Hotel , Yogyakarta		
Tuesday, September 24, 2019				
08.15 - 08.30	Opening	Kasultanan Ballroom II, Royal Ambarrukmo Hotel, Yogyakarta		
08.30 – 10.00	Plenary Session II Plenary Speaker 1 Dr. Bambang Suhartanto Plenary Speaker 2 Liza G. Battad, Ph.D.	Kasultanan Ballroom II, Royal Ambarrukmo Hotel, Yogyakarta		
10.00 - 10.15	Coffee Break	Voyer of Kasultanan Ballroom, Royal Ambarrukmo Hotel, Yogyakarta		
10.15 – 12.00	Plenary Session IIIPlenary Speaker 1Dr. Abdulameer AlsaffarPlenary Speaker 2Prof. Nizamuddin KhanPlenary Speaker 3Dr. Zhen Liu	Kasultanan Ballroom II, Royal Ambarrukmo Hotel, Yogyakarta		
12.00 - 13.00	Lunch	Voyer of Kasultanan Ballroom, Royal Ambarrukmo Hotel, Yogyakarta		

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13.00 - 14.00	Poster presentation	Balcony Kasultanan Ballroom, 2 <sup>nd</sup> floor Royal			
		Ambarrukmo Hotel, Yogyakarta			
	Oral presentation: Concurrent Session III	2 <sup>nd</sup> floor Royal Ambarrukmo Hotel, Yogyakarta.			
		Rooms:			
		Kasultanan Ballroom I, Kasultanan Ballroom II			
14.00 - 15.30		Kasultanan Ballroom III, Kencana Room			
		Trajumas Room I, Trajumas Room II			
		Pasewakan Room I, Pasewakan Room II			
15.30 - 15.45	Coffee Break	2 <sup>nd</sup> floor Royal Ambarrukmo Hotel, Yogyakarta (In			
15.50 - 15.45		front of each presentation rooms)			
	15.45 – 17.15 <b>Oral presentation:</b> <b>Concurrent Session IV</b>	Kasultanan Ballroom, Royal Ambarrukmo Hotel,			
		Yogyakarta			
		Rooms:			
15.45 - 17.15		Kasultanan Ballroom I, Kasultanan Ballroom II			
		Kasultanan Ballroom III, Kencana Room			
		Trajumas Room I, Trajumas Room II			
		Pasewakan Room I, Pasewakan Room II			
17.15 - 18.00	Closing Ceremony	Kasultanan Ballroom II, Royal Ambarrukmo Hotel,			
		Yogyakarta			
	Wednesday, September 25, 2019				
06.30 – end	Field Trip	(Mount Merapi Lava Tour, Bhumi Nararya Farm,			
		Mirota Batik)			



The 8<sup>TH</sup> INTERNATIONAL SEMINAR ON TROPICAL ANIMAL PRODUCTION (ISTAP) "Prospects and Challenges for Sustainable Tropical Animal Production Systems" 23 – 25 September 2019, Yogyakarta, Indonesia



#### Letter of Acceptance

#### The 8<sup>th</sup> International Seminar on Tropical Animal Production (ISTAP)

#### Dear Aditya Alqamal Alianta, Amrizal Anas, Basril Basyar, M. Afdal

We take the pleasure to inform you that your abstract entitled "COMMUNITY PERCEPTION IN KORONG PADANG MANTUANG NAGARI KAYUTANAM ON DAIRY CATTLE EXISTENCE" was accepted by the review committee of The 8<sup>th</sup> International Seminar on Tropical Animal Production (ISTAP 2019) for Oral Presentation

Please make payment registration by bank transfer to bank account:

Bank Account Number	: 9888812014111673
Bank Account Name/Beneficiary	: UGM-FPT-ISTAP Registrations
Bank Name	: BANK NEGARA INDONESIA
SWIFT/BIC	: BNINIDJA

Cheque, bank draft, travel cheque or anything similar are not available as payment methods. After performing the payment please send a copy of the transaction in PDF/JPEG through email (<u>istap@ugm.ac.id</u>) for us to trace and verify. Please due the payment before **July 31, 2019** and add remark to your payment (ISTAP 2019, Name of Participants).

Those who apply for publication in the IOP publishing, accredited Journal, or ISTAP proceedings, should submit the full paper manuscript which match with format and follow the guidelines as posted at our website before **June 22**, **2019**. Please note that the final decision for publication media will be based on the selection by the board of reviewer.

We are delighted to acknowledge your registration for the conference and are looking forward to your participation. For full paper submission please **re-register** your account through this link : <u>http://epaper.uasc.ugm.ac.id/users/login.</u> Please note that we use new submission system (ePaper UGM). More information is available on our conference website: <u>http://www.istap.ugm.ac.id/</u>. However, if you have any questions, please feel free to contact us



Nafiatul Umami, Ph.D. Chairman of the Organizing Committee The 8<sup>th</sup> ISTAP



# Community Perception in Korong Padang Mantuang Nagari 2X11 Kayutanam on Dairy Cattle Existence

### by:

# Aditya Alqamal Alianta, Amrizal Anas, Basril Basyar, Ediset, Edwin Heryanto, M. Afdal

Universitas Andalas 2019



The dairy farming business in Korong Padang Mantuang was established by the Talago Sakato Farmer Group which was established on November 10, 2013 with 11 members.

> Until 2019 the number of dairy cows increased to 40 so that the dairy farming business keep growing.

Nagari Korong Padang Mantuang is one of the villages which is used as a center for dairy farming in 2x11 Kayutanam District, Padang Pariaman Regency, West Sumatera, Indonesia.

This group have received an aids from the Animal Husbandry Office of West Sumatra (Dinas Peternakan Provinsi Sumatra Barat) in 2013 with 25 dairy cows Holstein Friesian cattle.





Talago Sakato Farmer Group's Pen were place 10 km from residential



3

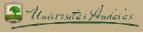
This is not in accordance to Director General of Animal Husbandry Decree No.776/KPTS/DGT/Deptan/1982  $\rightarrow$  the distances of pen may not be close to the residential at least 250 meters.

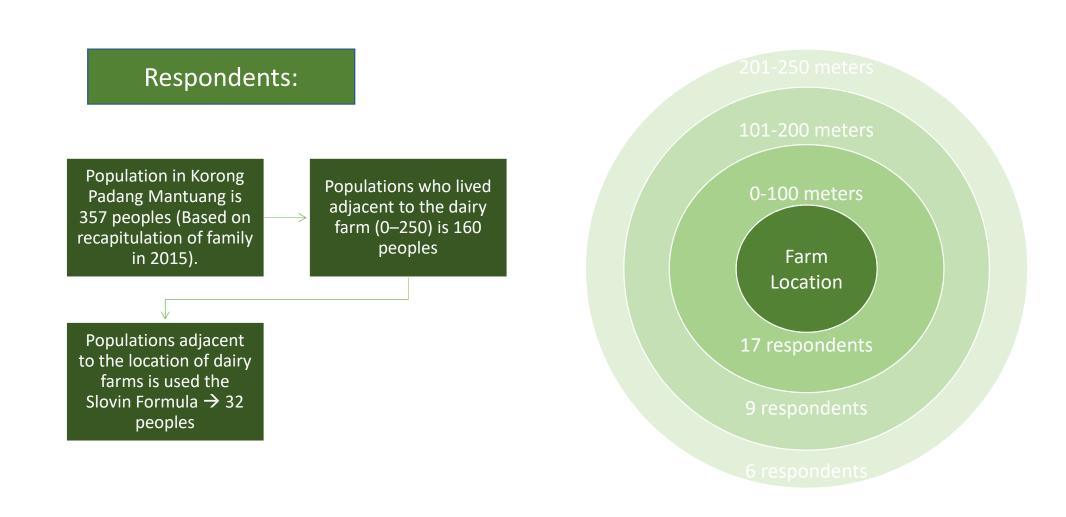


In order to avoid noise or disturbance, air and water for residents living in houses, buildings or other centers of activity.

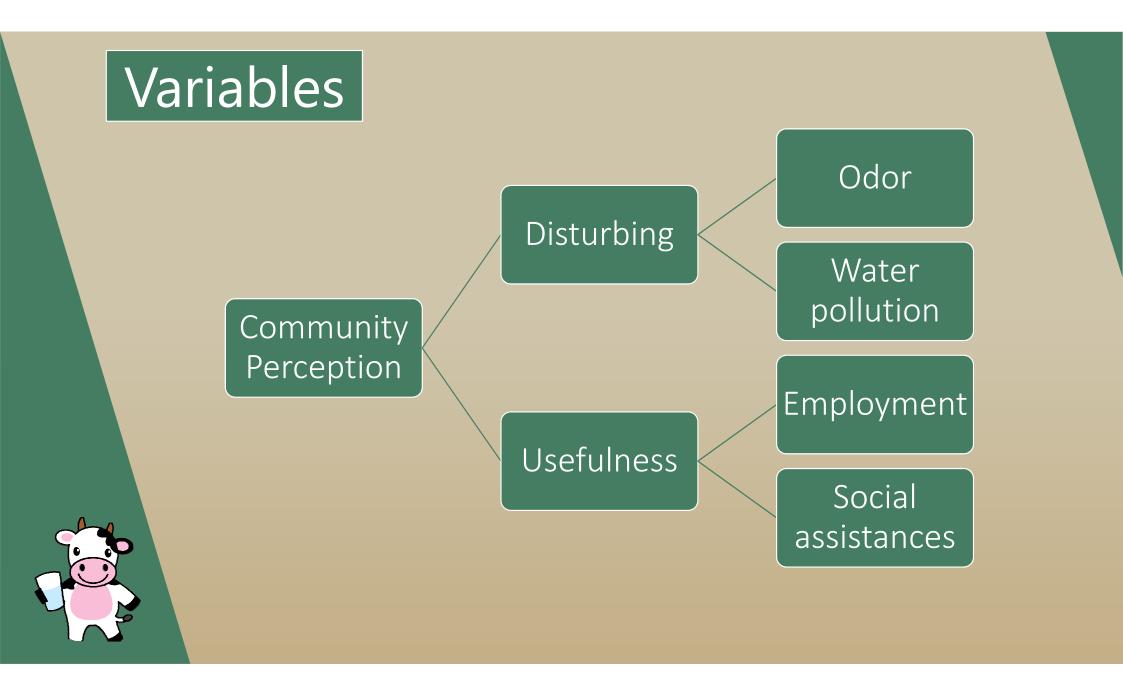


It is need to measure the perceptions of the community perception regarding the existence of dairy cattle farms in Nagari Korong Padang Mantuang

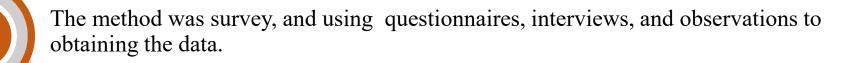








## **INSTRUMENTS**



The answer of questionaire was categories  $\rightarrow$  low, medium, and high

Categories Interval =  $\frac{\text{Maximum Score} - \text{Minimum Score}}{\text{Number of Categories}}$ 

Categories	Comunity Perception		
Categories	Disturbing	Usefulness	
Low (≤ 52%)	Do not disturbing	Do not useful	
Medium (53-76%)	Quite disturbing	Quite useful	
High (>76%)	Disturbing	Useful	

The data were analysis used descriptive analysis



RESULTS

Variables	Scores	Categories
Odor	55.90%	Quite Disturbing
Water Pollution	36.80%	Did not Disturbing
Average Disturbing	46.35%	Did not Disturbing
Employment	86.45%	Usefull
Social Assistances	72.91%	Quite Usefull
Average Usefulness	79.68%	Usefull



#### Conclusion

It can be concluded that the public perception of the existence of a dairy farm in Korong Padang Mantuang received a good response. This certainly affects the sustainability of livestock business in an effort to increase milk consumption in the area which can continue to be developed.

However, it should be considered that the location of the dairy farm should be at least 250 meters from the residential area to avoid negative impacts on the surrounding community.





# Untuk Kedjajaan Bangsa

# 





#### This is to certify that the following paper entitled

Community Perception in Korong Padang Mantuang Nagari Kayutanam on Dairy Cattle Existence

written by

Aditya Alqamal Alianta, Amrizal Anas, Basril Basyar, Ediset, Edwin Heryanto and M. Afdal

had been presented at The 8<sup>th</sup> International Seminar on Tropical Animal Production held in Yogyakarta, Indonesia on September 23 - 25, 2019

**Certified by** 

Dean Faculty of Animal Science Universitas Gadjah Mada



Prof. Dr. Ali Agus

Chairman Organizing Committee



Nafiatul Umami, Ph.D