The development strategy of ruminant cattle slaughterhouse (rph-r) of Mopah, Merauke Regency

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Abstract. In order to improve the performance of the Merauke Mopah Ruminative Slaughterhouse, efforts need to be made for improvement and corrective actions and policy implementation. This research aimed (1) to describe the Standard Operation Procedure (SOP) and the implementation of the Basic Feasibility Standards in Merauke Mopah Ruminant Slaughterhouse: and (2) to formulate the Mopah RPH-R development strategy to meet the basic feasibility standards. The study used the qualitative descriptive approach and the 10 informants were chosen purposively. The research results indicated that the application of the Standard Operational Procedure and the implementation of the basic feasibility standards had not been maximized. Consequently, it had a negative impact on the assessment and acquisition of NKV Certificates. The constraints faced were more administrative and routine, so that it needed a sustainable routine handling. The four development strategies which were expected capable to increase the Standard Operational Procedure and the performance of RPH-R in meeting the basic feasibility standards of RPH-r were (1) the Increase of Supervision and Control and (2) the Increase of the Availability of Materials and instruments, (3) the Increase of the maintenance of facilities and infrastructures and (4) the Application of the Regulation consistently as well as the improvement of the management.

1. Introduction

Socio-cultural dynamics and increased awareness of consumer rights have resulted in changes in the pattern of demand for livestock products from commodity demand to product demand. Processional components in the global era tend to pay attention to the sensation, health, process and comfort attributes. To achieve the components of the globalization era, it is necessary to be supported by improving the quality of livestock products through the improvement and improvement of supporting facilities and infrastructure so that the results achieved can be sold and meet the quality standards for consumption.

Contamination of food products from animal origin is one of the dangers to public health that can be caused by the presence of microorganisms (bacteria, viruses, fungi, or parasites), the presence of chemicals or toxins from plants or animals [1][1]. Special contamination caused by bacteria will cause carcass products to be unhygienic and insecure, healthy, whole and halal (abbreviation in Indonesia is ASUH – Aman, Sehat, Utuh dan Halal).

Mopah Ruminant Animal Slaughterhouse (RPH-R), built by the Government with special design and construction that meets certain technical and hygienic requirements and is managed by the
Merauke Regency’s Food Security, Animal Husbandry and Animal Health Service, is aimed at providing ruminant animal slaughtering services. According to Tolistiawaty et al [2], that the guarantee of meat produced can start from the adoption of good breeding practices and good post-harvest handling practices, this includes cleanliness of equipment, good slaughtering practices so that the resulting meat products are safe and healthy for consumption. Based on the regulations that apply both by the central and regional governments, one of the objectives of the Mopah development is to produce meat products and its participation based on basic criteria, which are Safe, Healthy, Whole and Halal (ASUH), guaranteed continuity and avoiding interference. disease. And to guarantee the health and peace of the community, each food business unit of animal origin must meet the safety requirements of animal origin products, therefore it is necessary to meet the sanitation hygiene requirements of the animal product business unit, as valid written evidence for food business units that have met the sanitary hygiene requirements. This is a Veterinary Control Number Certificate (NKV) issued based on the results of a technical assessment (audit) of sanitary hygiene requirements by a competent NKV auditor team.

Mulyadi [3] said that public policy is a process of formulation, implementation and evaluation of policies that are continuous and interrelated by the government and stakeholders in managing and managing various public affairs, public problems and available resources for public benefit. A policy is needed so that implementation of the basic feasibility of slaughterhouses can be carried out properly. Rangkuti [4] argues that Strategy is a tool to achieve goals, Strategy at the corporate level is concluded as a basis and reference for developing strategies at a lower level then Salusu [5], that Strategy is an art using the skills and resources of an organization to achieve its goals through effective relationships with the environment in the most favorable conditions. This study aims to describe the Standard Operating Procedure (SOP) Basic Feasibility Standards and formulate a development strategy at the Mopah Slaughterhouse in Merauke Regency.

2. Methods

2.1. Research design
This research uses a qualitative descriptive approach with the type of case study research.

2.2. Research site and time
The research was carried out at the Mopah Ruminansia Slaughterhouse (RPH-R) of the Food, Animal Husbandry and Animal Health Service Office of Merauke Regency, Cikombong Road, Rimba Jaya Village, Merauke District and the Office of Food Security, Animal Husbandry and Animal Health of Merauke Regency, with a research period of 1 month.

2.3. Population and sample
To obtain information related to research needs, the researcher acts as the main instrument of research which functions to set the focus of research, select informants as resources, collect data, assess data quality, analyze data, interpret data and make conclusions. To support this research, 10 informants in this study were selected purposively.

2.4. Data collection method
Data collection used is a document review obtained from the Office and other sources both published and unpublished, as well as observations, interviews and questionnaires.

2.5. Data analysis
To answer the research problem, descriptive analysis is used, which is an analysis technique based on words that will be arranged in the form of narrative / text that is expanded based on data obtained from various aspects.
3. Results
There are four indicators of Veterinary Public Health Responsibility, where the veterinary indicators responsible for supervision in the field of veterinary public health and reports on the results of examinations and supervision in the field of veterinary public health have conformity weights below the expected weights. The lowest suitability weight lies in the inspection report and this is because based on the importance of handling, this indicator has not been seen as an important handling factor because it is administrative in nature and does not have a direct impact on cutting techniques for the availability of ASUH meat (table 1).

Table 1. Implementation of Basic Feasibility Standards for Responsible Veterinary Public Health

| No | Person in charge of Veterinary Public Health | Expected Weight | Conformity Weight | Suitability Level (%) |
|----|---------------------------------------------|-----------------|-------------------|-----------------------|
| 1  | Veterinarians as technical responsible for sanitation hygiene, ante-mortem inspection, post-mortem, animal welfare and supervision of productive female animal slaughter | 50              | 50                | 100                   |
| 2  | Veterinarians and / or veterinary paramedics who carry out ante-mortem and post-mortem examinations | 50              | 50                | 100                   |
| 3  | Veterinarians who are responsible for oversight of veterinary public health | 50              | 50                | 100                   |
| 4  | Reports on the results of ante-mortem and post-mortem examinations and supervision in the field of veterinary public health every day | 50              | 49                | 98                    |

Table 2 shows that there are 60 indicators in the category of Facilities, Hygiene and Sanitation Buildings which are then classified into 15 sections, where the weight of conformity in this eligibility standard illustrates that the Condition of Building Hygiene and Sanitation Facilities only meets the feasibility standard yet to the maximum.

Table 2. Implementation of Basic Feasibility Standards for Facilities, Hygiene and Sanitation Buildings

| No | Building Hygiene and Sanitation Facilities | Expected Weight | Conformity Weight | Suitability Level (%) |
|----|-------------------------------------------|-----------------|-------------------|-----------------------|
| 1  | Location of Business and Environmental Units | 50              | 44                | 88                    |
| 2  | Main Building Construction                | 50              | 33                | 66                    |
| 3  | Lighting                                 | 50              | 11                | 22                    |
| 4  | Ventilation                              | 50              | 28                | 56                    |
| 5  | Sewer                                    | 50              | 30                | 60                    |
| 6  | Clean Water Supply                       | 50              | 35                | 70                    |
| 7  | Electricity Supply                       | 50              | 50                | 100                   |
Electricity supply is the only indicator that has the same availability weight as expected weighting. The discrepancy between the location of the business unit and the environment lies in the storage of equipment, cleanliness and the disposal system of liquid waste which is still not seen as an important factor so that attention to this indicator is quite low.

Construction of the main building has a very high mismatch when compared to other indicators, and this is caused by indicators expected to be in accordance with basic eligibility standards not available either from the unavailability of the facility or because of the age and maintenance of the facility. Likewise, the Foot Dip facility and hand washing facilities have a very high level of nonconformance, and this is because the foot dip facility is not yet available, although it is seen as an important facility, hand washing facilities are available and are kept clean, but the availability of water and soap is not yet available. Maximally, the insect control program and Rodensia and the Cleaning and disinfection program have the same weight difference. due to administrative factors that are not yet available either the program or its SOP, however cleaning and disinfection activities are carried out routinely. This indicator is considered important. Waste Handling is an indicator that is considered important but the handling of waste and sewage has not been handled properly and the unavailability of garbage / sewage disposal in a closed process room.

Table 3 shows that the level of importance of the indicators on the basic eligibility standards of the Personal Hygiene category is seen as an important factor but this factor is not supported by its availability due to unexpected or unsupportive employee behavior. This is also influenced by the not yet maximally increasing employee understanding of personal hygiene.

**Table 3. Implementation of Basic Standards of Personal Hygiene**

| No | Higiene Personal                                                                 | Expected Weight | Conformity Weight | Suitability Level (%) |
|----|----------------------------------------------------------------------------------|-----------------|-------------------|-----------------------|
| 1  | Employees who deal directly with the product in good health                       | 50              | 46                | 46                    |
| 2  | Employees who deal directly with the product prevent the contamination of meat and offal carcasses from biological, chemical and / or physical hazards | 50              | 43                | 43                    |
| 3  | Employee behavior prevents silag contamination (not eating, spitting, smoking in the production room) | 50              | 14                | 14                    |
| 4  | Workers are getting enough training related to sanitation hygiene                | 50              | 36                | 36                    |
Table 4 shows that the Basic Feasibility Standards for Material Handling and Processing have a low suitability of Basic Feasibility Standards. The biggest discrepancy is on Stun indicator because this indicator is not available and is an insignificant factor. The freezing process has a conformity weight very far from what is expected. Even in the Packaging Indicator, the conformity weights are also low, this indicator is considered important, but facilities are not available. Stamps and Seals are indicators that are considered important and have been used or applied but are no longer available. The existence of SOPs Acceptance of live animals and handling of live animals based on aspects of animal welfare are factors that have an impact on the weight of conformity Acceptance of live animals that are below the expected weighting. Laboratory Testing is an indicator that has a conformity weight enough but still lower than expected.

| No | Handling and Processing Materials | Expected Weight | Conformity Weight | Suitability Level (%) |
|----|-----------------------------------|-----------------|-------------------|----------------------|
| 1  | Live Animal Reception             | 50              | 44                | 88                   |
| 2  | Stunning                          | 50              | 33                | 66                   |
| 3  | Handling in Slaughter Settlement   | 50              | 11                | 22                   |
| 4  | Stamp and Label                   | 50              | 28                | 56                   |
| 5  | Freezing Process                  | 50              | 30                | 60                   |
| 6  | Final Product Storage             | 50              | 35                | 70                   |
| 7  | The packaging                     | 50              | 50                | 100                  |
| 8  | Laboratory Testing                | 50              | 32                | 64                   |

Table 5 shows the basic eligibility standards for Animal Welfare are below the expected weights. The biggest discrepancy lies in the availability of places to eat and drink and the absence of separation of animals that are superior and inferior, as well as the availability of cages to protect livestock. These five indicators are seen as important factors.

| No | Animal Welfare                                      | Expected Weight | Conformity Weight | Suitability Level (%) |
|----|-----------------------------------------------------|-----------------|-------------------|----------------------|
| 1  | Availability of places for eat and drink            | 50              | 5                 | 10                   |
| 2  | Separating animals that are superior and animals that are inferior | 50              | 5                 | 10                   |
| 3  | There are loading and unloading facilities          | 50              | 45                | 90                   |
| 4  | Facilities and equipment do not hurt, injure and / or cause stress to animals | 50              | 34                | 68                   |
| 5  | Dirty cages, allowing animals to move freely, can protect animals from predators and intruders | 50              | 12                | 24                   |
4. Discussion
This study shows that the Veterinary Public Health Responsible Indicator, consisting of veterinarians responsible for supervision in the field of veterinary public health, and reports on the results of examinations and supervision in the field of veterinary public health have a low conformity weight. This is because this indicator has not been seen to require important handlers and does not have a direct impact on the cutting technique for meat availability.

Slaughterhouse is a building complex with special design and construction that meets certain technical and hygiene requirements and is used as a place to slaughter animals other than poultry for public consumption [6]. The category of Facilities, Hygiene and Sanitation Building is still below average as expected. Electricity supply is the only indicator that has the same availability weight as expected weighting. The discrepancy between the location of the business unit and the environment lies in the storage of equipment, cleanliness and liquid waste disposal system which is still not seen as an important factor so that attention to this indicator is quite low. The construction of the main building has a very high mismatch compared to other indicators, and this is because the indicators expected to be in accordance with basic eligibility standards are not available. Indicators Foot dip facilities and hand washing facilities have a very high level of non-conformity, because the facilities are not yet available, although they are considered to be quite important facilities, washing facilities are available and maintained, but the availability of water and soap is not yet available. The insect control program and Rodensia and the Cleaning and disinfection Program have the same weight mismatch. Waste Handling is an indicator that is considered important but the handling of waste and sewage has not been handled properly and the unavailability of garbage / sewage disposal.

Indicators on the basic eligibility standards for the Personal Hygiene category are seen as important factors, but these factors are not supported by their availability and this is due to unexpected or unsupported employee behavior and as seen in the implementation table. Maximally increasing employee understanding of personal hygiene.

The biggest standard of suitability for handling and processing of nonconformities is in the Stunning indicator, this is because this indicator cannot be applied in the Mopah RPH-R of Merauke Regency due to the consideration of Halal based on Islamic Sharia, so this indicator is not available and is an insignificant factor. The freezing process has a conformity weight that is very far from the expected weighting, although this indicator is seen as an important enough factor, but this facility at the time of this research was in a damaged condition. Even in the Packaging Indicator, the conformity weights are lower than expected weights, this indicator is considered important, but facilities are not available. Stamps and Seals are indicators that are considered important and have been used or applied but are no longer available. The absence of SOPs Acceptance of live animals and handling of live animals based on aspects of animal welfare are factors that have an impact on the weight of conformity Acceptance of live animals that are below the expected weighting. Laboratory Testing is an indicator that has a conformity weight enough but not yet reached the expected.

In the basic eligibility standards for Animal Welfare, the biggest discrepancy lies in the availability of places to eat and drink and the absence of separation of animals that are superior and inferior, as well as the availability of cages to protect livestock. These five indicators are seen as important factors.

From various indicators that describe the basic feasibility standards in Mopah RPH-R there are several driving and inhibiting factors. From HR are: 1) Knowledge and Skills. 2) Attention to the welfare of officers, while the inhibiting factors are 1) Number of Officers (the number of officers is sufficient if there is no obstacle to attendance of officers) 2) Behavior of officers (not working according to SOP) and 3) Supervision (Negligence of officers caused by low / weak supervision /control.

The driving factors of Infrastructure Facilities are 1) Procurement based on the design and stipulated requirements 2) Can change according to needs and inhibiting factors are 1) Maintenance of Infrastructure, 2) Availability of Equipment and Materials. This inhibiting factor has an impact on the low weight of the availability of facilities.
The driving factor of financing is the existence of budget allocations but budget management is not on target so that it becomes an inhibiting factor in terms of financing. Doing something (Implementation) is always more difficult than saying something will be formulated [7]. The driving factors of regulation are 1) Regulations that are clear and easy to understand, 2) Regulations have been informed while inhibiting factors are 1) Implementation of regulations (Managing Officers and Service Users have not implemented well the applicable regulations. 2) Control over the implementation of regulations.

Speaking of the control function which is a limiting factor in basic eligibility standards, this study is in line with the findings of Saputra et al [8] that the application and supervision of sanitation hygiene must be carried out consistently and RPH Management must always provide guidance, supervision to HR. Related to the feasibility standard on the Stunning indicator will burden the weight of the resulting feasibility standard because it becomes an insignificant factor and will not be available in the Mopah RPH-R and this is in line with the findings of Maharani et al [9], that there was a rejection of a number of service users about stunning because related to the halal meat. Aside from this, they also highlighted that the limited number and quality of workers, as well as workers who are not permanent, make many regulations difficult to implement, and this is in line with the findings discussed in the discussion on HR. Various conditions were also discovered by Rohyati et al [10] also they suggested improvements in facilities and management. Kuntoro et al [11] stated that the lack of supervision and awareness of employees had an impact on the application of sanitation in the RPH.

Based on the descriptions above, corrective actions are needed that are expected to increase the achievement of basic eligibility standards. The development strategies as corrective actions offered by this research are 1) Improving the maintenance of infrastructure, 2) Increasing the availability of materials and tools, 3) Managing the budget on target and 4) Increasing Supervision and control.

5. Conclusion and Recommendation

Thus concluded, the application of basic eligibility standards has not been maximized so that it has a negative impact on the assessment and acquisition of NKV Certificates. Constraints faced are more administrative and routine in nature so they require ongoing or ongoing routine handling. So this research suggests four development strategies that are expected to be able to improve the performance of the RPH-R in meeting the basic feasibility standard of the RPH-R, namely 1). Improvement of infrastructure maintenance, 2). Increasing the availability of materials and tools, 3). Budget management that is right on target and 4). Increased supervision and control.

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