

Implementation of Livestock Slaughter Standard in Malang Slaughtering House

Qomarudin El Hami^{1,2*} Suyadi³ Imam Hanafi⁴

- 1. Office of Tanjung Selor Sub-district. North Borneo, Indonesia
- 2. Environmental Resources Management Graduate Program, University of Brawijaya, Indonesia
 - 3. Faculty of Animal Husbandry, University of Brawijaya, Indonesia
 - 4. Faculty of Administrative Sciences, University of Brawijaya, Indonesia
 - * E-mail of the corresponding author: elhami.2262@gmail.com

Abstract

The purpose of this study is to determine suitability of livestock slaughter standard implementation in accordance to regulation number 18/2009 on Animal Husbandry and Animal's Health in Local Company of Slaughtering House in Malang, East Java. The implementation standard refers to the Safe, Healthy, Intact, and Kosher characteristics that involve operational procedure, product safety, health, and treatment. The result showed inappropriate policies in the slaughtering house implementation of livestock treatment before and after the process of slaughtering. The obstructing factor of implementing the livestock slaughtering standard was the lack of top-down control and monitoring. The process of livestock slaughtering is still using traditional way due to the limited available facilities, infrastructure and human resources. The problems can be solved by controlling the supervising and discipline. In the middle of August 2013, Malang slaughtering house began to introduce stunning technique to increase the operational work and minimize violence toward the livestock. Activity of slaughtering house was assisted by Department of Animal Husbandry and Department of Health. Both department help in solving health problems, product safety and its waste, to provide standardized livestock slaughtering based on the regulation number 18/2009.

Keywords: Slaughtering house, livestock slaughtering standard, Indonesian Law number 18-2009

1. Introduction

Livestock slaughter still conducted outside the slaughtering house and even for productive female ruminants. The distribution of meat is all over traditional markets. The meat cannot be guaranteed to have fulfilled the standard. Standard distribution of meat has been stated in the article 66 of law number 18/2009; livestock meat that is distributed to public should be slaughtered in slaughtering house and the slaughtering procedure should fulfill the principle of *Kesmavet* (veterinary public health) and animal welfare. It also should meet the Ministry of Agriculture regulation number 13/2010 – the rule of slaughtering house requirements, ruminant livestock and Meat Cutting Plant.

Violation on the procedure of ruminant livestock slaughter regulated in the article 18, verse 1 and 2 that considering the livestock population. Article 2 verse 1 also explain a related point on the sustainability problem of animal husbandry which can enhance welfare and prosperity of local people by preserving the living environment function and caring the social and culture condition. Likewise, article 8 verse 1 stated about genetic resources preservation. Slaughtering house should fulfill the operational procedure standard of livestock and concern to the principles decided by the government. In this case, the principles were decided by Department of Agriculture. The principles are aimed to provide a *safe*, *health*, *intact and kosher* (*SHIK*) food from livestock. To get such livestock come from slaughtering house, the slaughtering house should fulfill the operational standard procedure as a basis in implementing slaughtering house function: a place to cut, excorticate, wither, and distributing meat supply to the consumer.

Dyta (2012) explain the standardization of slaughtering house and livestock procedure in Indonesia from WHO data that 70% problems of people's health come from unhealthy foods including meat and its manufactured products because the meat has been polluted. This problem is related to slaughtering house as the determination of meat product safety that sold to public via modern and traditional markets. Regarding this case, we conducted observation in Local Company of Slaughtering House of Malang, East Java. This research aimed to know the implementation of livestock slaughter standard based on the existed regulation and analyzed factors that obstruct the implementation of the regulation. The significance of this study is especially to expand the study of regulation implementation and evaluating the implementation of slaughtering house. Further expectation is that



slaughtering house can enhance and develop using the up to date technology. We hope to give recommendation to the implementation of slaughtering house, in sustainable development of slaughtering house industry.

2. Materials and Methods

This research used descriptive qualitative method by observation, semi-structured interview and document evaluation in Local Company of Slaughtering House in Malang, East Java. Descriptive research is a research to find certain problem and original phenomenon so that the research only presents the facts and not to test hypothesis (Faisal, 1995). We describe the implementation of the livestock slaughter standard based on regulation number 18/2009 that regulates animal husbandry and livestock health. This research dominantly refers to that regulation related to the research object of livestock slaughter standard mentioned as follow:

- 1) Livestock health is regulated in article 39 54
- 2) Water use in slaughtering house is regulated in article 56 65
- 3) Society health is regulated in article 66 and 67
- 4) Human resources is regulated in article 78
- 5) Sanction of violation is regulated in article 86 91

2.1 Study Area

Local Company of Malang Slaughtering House is located in Kolonel Sugiono street, No. 176, Ciptomulyo Village, Sukun Sub district, Malang on 1,1 ha area. Malang Slaughtering House is a Local Company directly under Malang Local Government. Previously the slaughter was conducted traditionally while recently use stunning technique. Malang Slaughtering House has main buildings that consisted of cow slaughter room, carcass service room, meat room and property room. The additional rooms are laboratory, office, innards wash room, storage room, official house, canteen, waste water treatment plant, security room and *Mushola* (Muslim pray room). The slaughtering house is surrounded by storage building and 3m fence to secure the border of slaughtering house. Pig stall is also surrounded by storage - separated from other livestock.

2.2 Data Collection

Data collection was conducted by observing the empirical data, in depth-interview to the informants in the slaughtering house and evaluates the documents. We tried to be responsive and accommodative in collecting data toward surround environment and attempted to establish positive interaction among individuals and society. We used interactive model to positively interact with the existing subjects. Some instruments used in this research are: Regulation instrument; Human resources instrument; Behavior instrument; Law and Rule of Agriculture Ministry instrument; and Theory instrument. The five instruments are the basis of livestock slaughter implementation based on the Law number 18, 2009 in Malang Slaughtering House.

3. Result and Discussion

3.1 Existing Condition

Observation result of the condition in Local Company of Malang Slaughtering House presented in Table 1. Condition of pig stall, inner room of slaughtering house and the roof should be repaired; certain parts especially pig stall need renovation and rearrangement. In addition, treatment, discipline, monitoring, number of officers and slaughter process should be enhanced to get a better result.



Table 1. Condition of Malang Slaughtering House

No.	Parameter	Condition
1.	Service	moderate
2.	Officers	Needs improvement
3.	Cattle stall	Good
4.	Pig stall	Narrow, dirty
5.	Product Safety	moderate
6.	Health	moderate
7.	Roof	Needs repair
8.	Treatment	Needs guiding
9.	Discipline	Needs monitoring
10	Ante mortem	moderate
11.	Post mortem	moderate
12.	Facility	moderate
13.	Monitoring	poor
14.	Water supply	moderate
15.	Slaughter process	fair
16.	Number of officers	lack

Related to the requirement of slaughtering house, Ruminant and Meat Cutting Plant have been regulated by Ministry of Agriculture, regulation number 13/Permentan/OT.140/2010 about: General Remark; Requirements of slaughtering house in article 1 and 2; Requirements of facility and infrastructure; Requirements of Meat Cutting Plant; Requirements of hygiene and sanitation; Supervising kesmavet – veterinary public health; Permits on slaughtering house building and livestock slaughter; and Human resources.

The services provided in Local Company of Malang Slaughtering House are service of livestock slaughter, service of facility and infrastructure repairing, and service for students. Requirements of administration service in Malang Slaughtering House are based on Mayor Rule of Malang number 14/2013 – in the form of payment rate (Table 2).

Table 2. Services Payment Rate of Malang Slaughtering House

No	Services	Cost (Rupiah)	Unit per
1.	Cattle slaughter	49.500,00	head
2.	Emergency cattle slaughter	60.500,00	head
3.	Cattle care	10.000,00	cabin day ⁻¹
4.	Goat slaughter	7.500,00	head
5.	Emergency goat slaughter	12.100,00	head
6.	Pig slaughter	60.500,00	head
7.	Emergency pig slaughter	71.500,00	head
8.	Pig care	1.300,00	m² day -1
9.	Facility and infrastructure repair	No charges	-
10.	Students - practice or research	No charges	-

Procedure of cow/horse/buffalo and goat/sheep for customer are as follows:

- 1) Before entering the stall, the livestock should be enrolled first in check point
- 2) After enrolled, livestock should be put into the stall and let it rest for about eight hours. Next, *ante mortem* examined in the stall and a mark is given according to the result safe to proceed or need health care. Unhealthy livestock should be healed first, but if it contaminated, it should be removed.
- 3) Paying slaughter cost.
- 4) The slaughter process should be Islamic with saying *Basmalah* and facing *Qibla*. The slaughterer was pointed and must not be any torturing.
- 5) Excorticate process should be conducted only if the animal has been confirmed died and this should be done on the *scradel* (iron holder).
- 6) After excorticate, the carcass should be hung out; it should not be placed on the floor and the innards should be put on the innards trolley.



7) The *post mortem* is examined to determine the meat quality. Good quality meat sealed and allowed to be distributed in the market. If the result is bad meat quality, it must be thrown away or exhumed.

Slaughter process is conducted to get meat which is safe-consumed, healthy, intact, and kosher. To produce high qualified meat and fulfill such characteristics above, the slaughter process is conducted in Islamic procedure supervised by a vet or *Keurmaster* Officer (Fig. 1).



Figure 1. The Procedure of Livestock Slaughter in Malang Slaughtering House (Source: research documentation)

3.2 Slaughter by Stunning Technique

Malang Slaughtering House socialized and trained the officers about Stunning Technique Slaughter which is directly guided by an Australian technician in August 2013. This program is equipped with complete facility, infrastructure and stunning slaughter technique requirements. Stunning technique is a common procedure in the slaughtering house and has been legalized by the world authority of animal's welfare and accreditation institution (kosher-Indonesian Ulema Council). The tool used in stunning technique is displayed in Fig. 2.

The use of kosher stunning tool can reduced livestocks' stress and pain before slaughtered. Stunning system is conducted without breaking the skull and it guarantees the kosher and animal welfare requirement. Mushroom head shape of the slab in this tool will prevent fatal or excessive damage to the livestock's skull. The various capacity of power load is based on the cow's size, whether it is small, fair, or big. By using kosher stunning tool, the quality and the profit of meat can be enhanced. Stunning technique is illustrated in fig. 3. Stunning box is a place for entering the cow (3a). The officer demonstrated the use of stunning tool (3c). From the top of the stairs, he pressed the cow head using stunning in the determined spot (3d). Stunning box was slowly opened and the cow immediately slaughtered (3e). The stunning process needs \pm five minutes.



Figure 2. Stunning tool (Source: Malang Slaughtering House)





Figure 3. Procedure of Stunning Technique (Source: Research documentation)

3.3 Service Standard

The service standard in Malang Slaughtering House provides service for butchers and public to do and learn activities in Malang Slaughtering House. The duration to accomplish the standard service is listed in Table 2. The competence of each officer is related to the services processes. Vet is responsible to the feasibility of meat. The Staff provide properties and facilities to slaughter livestock. *Modin/butcher* conducts slaughter in Islam procedure. Sanitation/cleaning staff of slaughtering house clean up the room after the slaughter process is finished.

Table 3. Service Standard Duration

Service	Duration
Ante mortem examination	5 minutes
Slaughtering process (11 pm to 6 am)	20 minutes/head
Post mortem examination	5 minutes
TOTAL	7 hours

3.4 Violation on Slaughtering House Regulation

Violations were done by some workers that disobeyed the existing provision, even it has been stamped on the wall of the slaughtering room (Fig. 4). First violation is taking the livestock's blood waste from the slaughtering room, which placed the blood in a plastic basket (Fig. 5a) to sell later in traditional market. Second violation is the workers slaughtered the livestock without proper uniform, used only sandal or barefoot (5b). They also smoked while working and ignored the hygiene factor (5c). It shows that the supervisors are lack of readiness to respond such violations. They even seem let the cases happen.

This violation can be one reason why meat product from Malang Slaughtering House has not entered modern market/supermarket yet. Modern markets/supermarkets supply the meat from Jakarta. Regarding this case, there should be enhancement in staff awareness toward cleanness and discipline in slaughtering work performance. Malang Slaughtering House needs to improve the behavior and perception of officers and workers on the significance of health and maintain a clean work environment. The ones who break the rules should be warned and subsequently given a sanction if they remain doing the violation.

The pig stall in Malang Slaughtering House is narrow and dirty (Fig. 6). Surround residents, especially who are close to the back part of the pig stall complained the bad smell from pig stall. Regarding this case, there should be repairing, rearrangement, reordering and expanding the pig stall and regulating the discipline and cleanness inside and outside the pig stall. Mainly, there should be an effort to reduce the bad smell.





Figure 4. Warning Banner in Malang Slaughtering House (Source: Research documentation)

It wrote: "ATTENTION: Whoever took the blood of slaughtered livestock without written permission from Director may be subject to the applicable provisions".



Figure 5. Violation on Malang Slaughtering House Regulation (Source: Research documentation)



Figure 6. Pig stall. a) inside; b) backside (Source: Research documentation)

3.5 Policy Effectiveness

The effectiveness of policy implementation runs well if it is always under a stable control. Everything that has been planned should be implemented optimally based on each main duty and function. Implementation should avoid careless actions that are often done by slaughterer who are lack of responsibility to their work, especially in Malang Slaughtering House. Policy implementation is also aimed to develop communication with the media that refers to society empowerment. By empowering the element of the existing organization structure such as Supervisors of Malang Slaughtering House that were chosen directly by the local government. Their main duty and function is deciding general policy, guiding, supervising and controlling the local company based on the legal rule. Grindle (1980) explained the process of effective policy begun if the goals and targets that are initially general been detailed into planned programs and the costs been allocated to reach the goals and targets.

In this case, Malang Slaughtering House should have systematical and controlled management related to the operational procedure and it is done based on the available budget. According to Islamy (2002), a state policy is effective if the implementation give positive impact to the public society. The success of policy implementation depends on the interest and advantage of the policy. Regarding this, Islamy (2002) delivers some people's reasons in following certain policy.

- 1) Respect of society members toward authority and decisions of government
- 2) The awareness to agree with the policy
- 3) The trust that the policy is made legally, constitutionally and arranged by the government with a proper procedure
- 4) Private concerns and profit in obeying certain policy
- 5) The existing sanctions if the policy is not implemented



6) The matter of time in understanding the significance of policy that should be conducted by society since it is considered being controversy in previous policy.

Malang Slaughtering House should run the management system well, especially the operational procedure that is closely related to controlling/supervising all activities. Nowadays, Malang Slaughtering House has additional facility, i.e. stunning technique. Waste water treatment plant facility and infrastructures are considered proper. However, the implementation is less effective so it should be repaired soon. Interview with informants on this matter were summarized in below explanations.

The meat in modern market/supermarket is supplied from Jakarta. This fathomed due to the supporting factors of professionals slaughtering process with sufficient facility, infrastructure, discipline, human resource, responsibility and controlled supervising. The workers that indiscipline is hardly led. They need to be warned and sanctioned if they still indiscipline. Similarly to the workers who are reluctant to put the facility into the proper place; they should be reminded. Basically, all activities in the Malang Slaughtering House should be evaluated and supervised.

3.6 Supporting Factors

The process of policy implementation in Malang Slaughtering House should refer and act to the determined goals in certain decision. The actions are supervising, guiding, socializing or giving sanction to the rule violation based on the legal regulation to achieved significant change in Malang Slaughtering House, like what has previously been expected. The implementation should within the attempt to understand a post-program provision. According to Edwards (1980), the implementation of public policy is type of stage in public policy, between the process of making the policy and the consequences toward society.

Support from government has been stated in the Local Regulation and Ministry Decision related to each framework and a moral and material assistance from inside and outside the country. In principle, government support the establishment of every positive aspect and in line with UUD 1945 (basic Indonesian constitution), for realizing prosperity and intellectual of nation life. For example, Malang Slaughtering House gets support from Australia, which gives some tools and trainings on stunning technique. This activity is also supported by Department of Animal Husbandry and Department of Environmental Services in managing the solid waste. Other supporting factors are the available of facility and infrastructure in Malang Slaughtering House that is completed with regulation refers to the law (Table 3).

Table 4. Regulation, the Legal Supporting Factors for Malang Slaughtering House

No.	Policy	Regulation
1.	Requirements of Slaughter House and -Business -	Ministry of Agriculture Decree Number 555/Kpts/TN.240/9/1986 Regulation Draft on Animal Husbandry and Livestock Health, 2009, chapter 1 article 1 verse 15; and chapter 4 article 62.
2.	Standard Operational Procedure of Cow Slaughter is a process to produce safe, healthy, intact and kosher meat from cow, by using both modern and traditional tools	Law of Animal Husbandry and Animal's Health, 2009, chapter 1 article 1 verse 40; and chapter 4 part 3 article 24 verse 1.
3.	Treatment toward livestock and the mechanism of slaughtering	Law of Animal Husbandry and Animal's Health, 2009 ✓ chapter 1 article 1 verse 42 ✓ chapter 2 article 3.a, ✓ chapter 4 part 1 article 18 verse 1 and 2 ✓ chapter 4 part 4 article 34 ✓ chapter 6 part 1 article 56, 58 and 61 ✓ chapter 6 part 2 article 66 and 67
4.	Firm sanction for the ones who violates the law	Law of Animal husbandry and Animal's Health, 2009, chapter 12 article 85; and chapter 13 article 86.



According to Lester and Stewart (2000), implementation is a complex phenomenon that can be understood as a process or an output or as impact/outcome. It is like the conceptualization of implementation as a process or a sequence of decisions/acts to be accepted by legislative institution.

3.7 Obstructing Factors

There are some factors that influence the success of policy implementation, i.e. social, economy, politic environments, people's support and culture of population in certain place. An implemented policy influences the success of public policy. It is also affected by socio-economy condition of developed society, stable and democratic politic system, constitution and government supports and culture of society. According to Anderson (1979), factors that cause people disobey certain policy is due to the inappropriate law/government purpose, tendency to reach immediate profit, the contra with people's aspiration.

The main obstructing factor in implementing the policy of Malang Slaughtering House is the lack of supervising toward violation on all activities in Malang Slaughtering House. It is related to the lack of firmness, discipline, human resource and professionalism.

- 1) The lack of customer's awareness toward cleanliness, discipline and rule.
- 2) Coordination and supervision should be enhanced.
- 3) The limited skilled human resources.
- 4) There is no CCTV to supervise and control the activities.
- 5) There is no harmony relationship between officers and customers, so it is difficult to overcome.
- 6) The lack of problems socialization that happen in Malang Slaughtering House.
- 7) The lack of facility and infrastructure.

According to Soenarko (2000), the implementation of certain policy not successful might be caused by inappropriate basic theory, ineffective and inappropriate chosen facility, bias on content of the policy, the uncertainty of intern and extern factors, and the lack concern on technical problems. While Wahab (1997) explained that implementation of the policy is similar to a process in applying the decision of the policy – in the form of law, government rule and president decree. Policy implementation stage is a post stage after making the policy and it is important in achieving the goal successfully.

5. Conclusion

There has been inappropriateness of certain policy implementation in Malang Slaughtering House, especially in slaughtering process – related to the standard of livestock slaughter. It is also relates to the matter of discipline and responsibility in work. These factors obstruct the implementation of livestock slaughter standard and become the indicators that show the lack implementation of supervising in Malang Slaughtering House toward the existing problems.

The implementation of the existing policy tends to inconsistent. This depends not only to the operational mechanism of the policy in an organization but also to the decision making on a conflict or problem to create the solution. The process of livestock slaughter in Malang Slaughtering House initially used traditional procedure, yet today it also use the stunning technique to enhance the operational work and minimize the harshness to the livestock. The violation of law is has not been solved yet. To realize the standard of livestock slaughter which has been stated in the Regulation number 18/2009, Malang Slaughtering House should be supported by Department of Animal Husbandry and Department of Environmental Services.

6. Recommendation

To reach the goal, Malang Slaughtering House needs a strategy and cooperation in implementing the policy. The strategy is consisted of selecting the goal, targeting the appropriate policy to support the program related to the vision and mission of Malang Slaughtering House. In addition, there should be active role of Malang Slaughtering House Director that has main duty to lead, supervise and control all operational activities in Malang Slaughtering House.

The stakeholders should be able to make a synergy, coordinating the work among the department in Malang Slaughtering House so that the policy run in professional and responsible way. Related to the effectiveness on implementation of policy, there should be auditory management that improving the less well-run system and



evaluating the company. Evaluation should be conducted in terms of discipline, accountability, treatment, enhancing facility and infrastructure. Therefore, it is highly recommended to put CCTV to supervise and control all activities inside and outside the company.

7. Acknowledgement

The author is respectively gratitude to Prof. Dr. Agr. Sc. Ir. Suyadi, MS. And Dr. Imam Hanafi, S.Sos, MS, as the first and second promoter, Director of Malang Slaughtering House and the staffs, Local Government of North Borneo that gave me the chance to study in Environmental Resource Management Graduate Program, University of Brawijaya, Malang.

References

Anderson. (1979), "Public Policy Making", Rinegarrt and Wiston, New York: Holt.

Directorat of Animal's health. (1987), "The Law of Animal's Health, 3rd Edition", Department of Agriculture, Jakarta.

Dyta, C.O. (2012), "Standardization of SH and Managing Procedure of Livestock in Indonesia".

Fasial, S. (1995), "Social Research and Format, 4th Edition", Raja Grafindo Persada, Jakarta.

Grindle, M.S. (1980), "Politics and Policy Implementation in the Third World", Princeton University Press, New Jersey.

Islamy, M.I. (1997), "Principles of Formulating Public Policy", Bumi Aksara, Jakarta.

Law number 18. (2009), on Animal Husbandry and Animal's Health.

Lester, J.P. & Stewart, J. (2000), "Public Policy: An Evolutionary Approach, 2nd Edition", Wadsworth, Australia.

Local Rule number 10, 1993 on Slaughtering House.

Mayor of Malang Rule. (2013), Number 14 on Payment Rate of Livestock Slaughter.

Ministry of Agriculture Rule. (2010), Number 13 on requirement of Slaughtering House, Ruminant livestock and Meat Cutting Plant.

Ministry of Agriculture. (1993), "Manual *Kesmavet*, Requirements and How to Slaughter Livestock", Decision letter of Agriculture Ministry No.413/Kpts/TN.310/7/1992.

Soenarko, S.D. (2000). "Public Policy: Main Tool to Understand and Analyse Government Policy", Airlangga University Press, Jakarta.

Wahab, A. (1997), "Analysis of Public Policy: from Formulation toward Implementation of State Policy", Bumi Aksara, Jakarta.