

Strategic Planning to Control Halal Risk in Indonesian Beef Supply Chain

¹Ujang Maman, ¹Akhmad Mahbubi and ²Ferry Jie

¹Faculty of Science and Technology, State Islamic University, 15402 Jakarta, Indonesia

²School of Business and Law, Edith Cowan University, Perth, Western Australia

Abstract: The need of halal foods get inflating in line with society religiosity awareness but to produce halal meat gets many critical points, especially in abattoir process. The research aims to plan actions to control probability of halal risk. In the light of literature review, depth interview and FGD with halal auditors during July-November 2015, the research identified qualitatively probable event and agent of halal risk and proposed action to control the halal risk. Based on severity event and occurrence agent of halal risk and its impact to the coming of halal risk in Likert scale, the research revealed the need to control eleven agents of halal risk. Following house of risk frame analysis, the research proved five actions plan that should be prioritized.

Key words: Event of halal risk, agent of halal risk and action plan to control the halal risk, research revealed, prioritized, riskframe analysis

INTRODUCTION

The increasing of halal awareness within societies has been inflating halal market. The economic times estimated \$4.3 trillion of total halal market in the world. For more detail, it included 36% of Islamic financial products, 33% food and beverages, 14% of pharmaceutical products, 6.3% of personal care and 10.7% of other products (fashion, tourism and hotel). The market value of world halal food products amounted to USD 700 billion. The 63% of global halal products is spent in Asian market, 23.8% in Africa, 10.2% in Europe and the rest in America and Oceania. By country, Indonesia is the largest halal food market, USD 124 billion. The big number of halal market potential leads Indonesia to be expressed as the world halal food center.

The huge number of Indonesian halal food market as a halal food center emerges a challenge to provide halal food products. The halal meat and its derive is one of the important commodities. The halal meat in Indonesia comes from Islamic permitted livestock: cattle, buffaloes, goats, sheep, chickens and ducks. The Indonesian Ministry of Agriculture reported, the meat consumption level for Indonesian society is by 8 kg/capita/year, 30% of which is beef consumption. The report indicated, the total consumption of Indonesian halal beef is estimated to reach 0.5 million tons with USD 3.5 billion market value.

The supply of beef in Indonesia generally come from local farmers and it covers 65% of national beef demand. The deficiency is met by imported beef from various countries. Beef supply chain process from the feedlot to consumers needs to meet halal requirements and many

critical points as a stone corner to analyze and fulfill the halal standard which consist of halal animal, animal welfare, stunning, knife, slaughter person, slaughter method, invocation, packaging, labeling and halal beef outlet (Riaz and Chaudry, 2004). The majority of halal critical point probably occurs in beef processing and of course it needs a strategic planning to control the halal risk in beef supply chain process.

Supply chain process consisted the number of entities, in which it interact each pattern of interaction and form the supply chain structure. The more entities involved in other through a typical pattern of interaction and form the supply chain structure. The more entities involved in supply chain process affects the structure and supply chain complexity. These entities interact each other to achieve the ultimate goal: the consumer. This illustrates the characteristics of supply chain and confirms that it is an integrated system (Zhou and Benton, 2007). For beef supply chain, it includes four echelons of management: growers, processors, retailers/wholesalers and end consumer (Jie, 2008). The experience of Guina and Giraldi's research in case of Brazilian overseas image building indicated the importance of logistic strategies and food quality assurance in supply chain stages to satisfy the increasing demand of consumers and to meet food safety regulations (Lu and Bowles, 2013).

Halal supply chain, according to Omar *et al.* (2012) is a concept of product flow, from farmers to consumers which regards the halal and toyyib status along the products supply chain. Unlike the conventional supply chain, each stage of halal supply chain should meet the halal criteria (Bahrudin *et al.*, 2011).

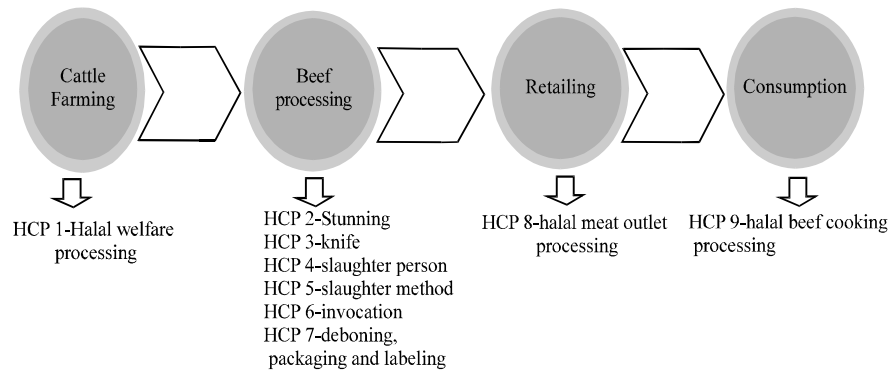


Fig. 1: The halal control points in the Indonesian halal beef supply chain

Tieman (2011) the particular type of halal supply chain is unpermitted for halal food tainted by filth material or even contact with haram ingredient. Correspondingly, the halal food supply chain is a food material in supply chain process that takes into account the halal elements from foodstuff raw material to the final product (Tieman, 2011; Zulfakar *et al.*, 2012). Specifically, Karijin Bonne and Wim Verbeke (2007) explain halal meat supply chain is a quality assurance system in the halal meat chain. Bonne *et al.* (2008) described the existence of positive attitude toward halal meat which predicted to increase the intention to consume halal meat among Muslims. The research of Yaakop *et al.* (2016) revealed the availability of halal food gives an impact significantly to the consumer satisfaction and behavior intention.

The risk is probably occurs in supply chain process because of the uncertainty and the impact of an event (Sinha *et al.*, 2004). One of the fundamental critical issue in the global food agribusiness is to consider the environment of risk increase and uncertainty to come and it needs strong decision (Boehleje *et al.*, 2011). Analysis of supply chain risk is a part of supply chain management that must be done to reduce business failure under the conditions of uncertainty (Marimin and Maghfiroh, 2011). Schoenher *et al.* (2008) identified the type of risk that probably emerges in supply chain process in which it consist of: standardization complaints including halal standards, product quality, production cost, competition, demand, supply fulfillment, storage, shipping timeliness, accuracy of budget delivery, delivery fulfillment, order fulfillment, partner error, distance, suppliers, supplier management, engineering and innovation, transport, disaster and foreign products.

The halal risk is the absence or at least the lack of halal consciousness. Referring to Halal Assurance System (HAS) designed by assessment institute for food, drug

and cosmetics, the Indonesian council of Ulama as the recognized Indonesian halal standard, halal status is a yield of awareness. It means that, the absence of halal consciousness and difficult to form the halal awareness within the involve people in the production process is a risk. By the lake of halal awareness the product is probably contaminated by unlawful meat, element, material or animal derive. Based on the requirement, all the food elements should have to be easily traced and easy to form the halal awareness. Halal certification which describes the halal awareness of all level of management is the most important attribute to guarantee the halal food product (Mohyidin and Kamarulzaman, 2014). The facts and condition lead us to prepare a strategic planning to control the halal risk in each stage of beef supply chain process.

Research objective: Based on the theory and facts, the research purpose is mainly to formulate a strategic planning to control the halal risk to guarantee the halal meat status.

Literature review: The framework of research to formulate the planning follows the beef supply chain process, in which it is divided into four stages: cattle farming, beef processing, retailing and consumption (Fig. 1).

The analysis of feedlot focused on people who feeds and fattens the cattle; the process of cattle feeding and fattening and the place where the cattle is fed and fattened up. The formulation of Halal Control Point (HCP) in the feedlot process can be done through three approaches, the people, the process of feeding and feedlot and the place where people handle the feedlot activities. The feedlot process has close relationship to animal welfare. However, the animal welfare is not directly related to beef halal status but the quality of beef which in the Islamic teaching is called thoyyib is one of

required things to get healthy meat. The word of “halal” in Al-Qur’an is not separated from the word “thoyyib.” For this reason, the animal welfare in the feedlot process is part of HCP to get status of halal and thoyyib beef.

The next stage of beef supply chain is abattoir’s process. Riaz and Chaudry (2004) suggested the abattoir collected at least six HCPs: stunning, knife butcher, slaughter methods, invocation, deboning and packaging. Referring to Assessment Institute for Food, Drug and Cosmetics-Indonesian Council of Ulama the abattoir is an important stage to produce halal beef and the abattoir location should prevent the halal meat from probable contamination by non-halal meat or filthy material.

The meat retailing is also an important stage to deliver the healthy and halal meat to end consumers. The retailer in Indonesia is divided into two big parts, the supermarket and traditional market. The modern market is predicted to have the exact Standard Operating Procedure (SOP) to handle meat processing to prevent the non-halal meat contamination. But the traditional market is suspected not to have an exact SOP that leads the halal meat is probably blended by non-halal meat or contaminated by filthy material. Therefore, it should be careful to formulate the HCP as well as the indicator of halal meat, especially for the traditional market.

By four stages of beef supply chain, it does not complete the process of halal beef. The awareness of consumers is one thing to consider. The consumer probably uses a non-halal spices and ripe flavor in cooking process and dishing. By the facts, the halal meat issues are the matter of people’s awareness. Therefore, the enabling process which it means to support the awareness of halal for all sides involved in each stage of halal beef supply chain is the matter which could not be left to get a halal and thoyyib meat.

But for all the way, the LPPOM-MUI has formulated HAS 23103 specialized for abattoir in which it means that abattoir has an important role to get a halal meat in beef supply chain process. Therefore, the abattoir has to adopt the HAS 23103. Based on the fact and theory, the research mainly focused on the abattoir process and the level of awareness of involved people in beef manufacturing.

MATERIALS AND METHODS

Research approach and sample: The research uses the supply chain approach from feedlot to meat retailers but primary focused on beef manufacturing in abattoir process. Therefore, the sample is abattoir officers purposively who perform stunning practice. In

Indonesia context, the stunning abattoir is limited, merely in around Jakarta, popularly called Jabodetabek (Jakarta-Bogor-Tangerang-Bekasi). In Jabodetabek area, the research found four stunning abattoirs, owned by local government as well as private company.

Research stages: The research, methodologically, has two main stages, mapping the halal risk needs to mitigate and formulating strategic planning to control the agents of halal risk the facts or the condition induced the coming of halal risk. To map the halal risk, the research adopts the Pujawan and Geraldin (2009)’s house of risk logic and formula as following:

$$ARP_j = O_j \sum_i S_i R_{ij}$$

Where:

AHRP_j = Aggregate halal risk potential

O_j = The occurrence level of halal risk agent

S_i = Severity level of halal risk event

R_{ij} = The correlation of risk agent_i to the risk event_j

Data collection and measurement: Based on the formula, from July to November 2015, the research qualitatively identified the event and the agent of halal risk potential referring to HAS 23103 and Riaz and Chaudry (2004). Furthermore, in the way of in-depth interview and FGD with abattoir’s practitioners and LPPOM-MUI’s halal auditors, the research measured severity level of halal risk event (S_i) with keyword “difficulty” in Likert scale. According to HAS 23103, it should be easy to implement the halal requirement for example, easy to trace the food ingredient, easy to separate the halal meat from the non-halal meat and so on. The more difficulty to perform, the degree of halal risk is higher.

Following the logic of the above equation by the same way, the research measured the occurrence level of agent of halal risk (O_j) with the keyword “common” and the impact of the risk agent to the emergence of halal risk event (R_{ij}) both in Likert scale. On the basis of the technique, the research comes to a mapping of risk agent and its contribution to the coming of event of halal risk in the form of Aggregate of Halal Risk Potential (AHRP_j) in which it is presented in Table 1.

Data analysis: The next stage as the main aim of the research is to decide the rank priority of action to control the agent of risk. The 1st step for that purpose is to count the total effectiveness of each action of mitigation (TE_k) by adopting Pujawan and Geraldine’s 2nd stage of the house of risk logic and formula as following:

Table 1: Process of planning to control agent of halal risk

HRMS/HRA	HRA	Proposed plan of action (P)/the impact of action plan to prevent the agent of halal risk in Likert scale																	
		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	AHRP _j
Abattoir location, stunning and slaughter person	A3	3	3	1	1	3													419
	A4		3	3	3	3			1										575
	A5	1			1	3			3	1									282
	A6					1	3	3		1									255
	A7					1	1			3	9								668
	A8					1						9							186
	A9					1	1						3			3	3	1	970
	A10					1	1						3	9	9	3		1	413
Knife and slaughter methods	A11					1	1					3		1		1	1	165	
	A13					1						1			3	3	3	491	
	A15											1					1	168	
	A17											3		3	1	1	3	183	
	Total effectiveness of action k (Tek)		1.5	2.9	2.1	2.4	6.9	2.9	7.6	1.4	4.0	6.0	1.67	5.68	3.71	4.43	5.80	4.72	3.56
	Degree of difficulty		4	5	5	5	5	4	4	4	5	5	4	5	4	4	5	4	4
	Effectiveness to difficulty ratio		35	63	42	48	1.3	68	17	32	80	1.20	394	1.13	1.06	1.18	1.29	1.11	892
Rank of priority		15	11	13	12	1	10	17	16	9	3	14	5	7	4	2	6	8	

The figure is modified from house of risk model analysis (Pujawan and Geraldine, 2009): A3: Damage of stunning device; A4: Less skill of stunning operator; A5: Absence of manual to maintain stunning equipment; A6: Inadequate facilities of archives to store stunning result; A7: Scarcity of Moslems slaughterer; A8: Irregularly of butcher's healthy check, A9: Ineffectiveness of halal supervisor staffs; A10: Less number of halal butcher; A11: Less corporate's halal awareness; A12: Ineffectiveness of halal policy socialization A13: Irregularly of halal training; P1: Indispensable of Routine calibration of stunning device; P2: Prohibition of using expired stunning equipment; P3: Indispensable of a stunning officer certification referring to the vendor; P4: Proposed to vendor to train the use and maintain the stunning device; P5: Proposed to vendor for issuing a written manual of stunning instrument; P6: Indispensable of special training before stunning practice; P7: Importance to facilitate a document keeper of stunning record; P8: Importance for the company to get equipped with halal internal auditor; P9: Importance of training of halal slaughtering; P10: Proposed to abattoir to certify halal butcher teams; P11: Required a routine medical check up for halal slaughterer; P12: Required a guideline for halal slaughtering practice; P13: Required to increase halal slaughterer; P14: Required to define a standard number of halal slaughterer; P15: Need for internal halal auditor; P16: Need to rearrange a training schedule; P17: Need to socialize halal policy

$$TE_k = \sum_j ARP_j E_{jk} v_k$$

Where:

TE_k = Total effectiveness of each action of mitigation

AHRP_j = Aggregate of halal risk potential

E_{jk} = The impact of mitigation strategy to prevent the agent of risk

The TE_k and D_k is a raw material to get ETD_k (the effectiveness to difficulty ratio) which is designed by following equation:

$$ETD_k = \frac{TE_k}{D_k}$$

Where:

ETD_k = Effectiveness to difficulty ratio

TE_k = Total effectiveness of each mitigation strategy

D_k = Degree of difficulty to perform the action of mitigation

Complying with the equation, the research qualitatively identified the probable strategic planning to control the agent of halal risk. Referring to the HAS 23103, FGD and depth interview with the previous sources, the research measured the degree of difficulty to implement the action (D_k) and the impact of the mitigation strategy to control the agent of halal risk (E_{jk}) in Likert scale and finally comes to strategic planning to control the agent of halal risk.

RESULTS AND DISCUSSION

The Event of Halal Risk (EHR): The first step to formulate the strategic planning is to know properly the potential EHR as a problem. Referring to LPPOM MUI the halal risk is a condition, event or difficulty that probably causes the risk of halal. The increasing of the difficulty to avoid, the halal risk has higher probability to happen. Based on house of risk framework analysis (Pujawan and Geraldine, 2009) the research explored the probable EHR. In the stunning practice and slaughter person, referring to LPOM-MUI the research identified eight halal risks that might occur. However, based on FGD with halal auditors, guided interview and direct observation, the rest of halal risk potential is six items.

For more detail, in stunning practice, the research identified three probabilities of halal risks, consisted of difficulty to: prove the stunning effect to the cattle agony; to record and store a stunning impact for each slaughtered cattle and to identify the stunning human error causes the lack of halal criteria. The rest of halal risks in the slaughter person related to the personal butcher. In this context, the research showed difficulties to get religiosity-pious butcher to meet a halal requirement that a butcher should own medical record, halal certificate and identity from Islamic Institution as a halal butcher.

In the field of slaughter methods, knife and invocation, elaborated from LPPOM-MUI the research

identified eleven halal risks that potentially occur. However, based on the FGD, direct observation and guided interview, the research pointed out the rest of six halal risks. The difficulty to prove by naked eye that slaughtering has been successful to cut three channel (vascular, respiratory and the food channel) is the serious threat for the halal status of meat. The other challenge to get a halal beef is uneasy to develop halal awareness that butcher's knife is unpermitted to lift unless it has properly cut three channels located in cattle's neck.

In this context, it should be emphasized that halal status is a yield of awareness. The lack of awareness consequently will arouse the risk of halal. But unfortunately, the research revealed that the abattoir is rudimentary to develop the halal awareness that the butcher should not be too exhausted to avoid the slaughtering error. The butcher consciousness that slaughter process must be performed quickly and precisely without knife-lifting is also inappropriate.

The Agent of Halal Risk (AHR): The second important step to decide the planning is to identify properly the agent encourages the emergence of halal risk. Referring to LPPOM-MUI strengthened by in-depth interview, the research got succeeded to identify at least twenty six agents that probably give impact to the coming of halal risk. The eight agents related to the butchers and stunning practice and the nine agents related to the slaughtering way, knife and invocation. In stunning field, the probable agents are the broken of stunning device, the less skill of stunning operator, the absence of manual to maintain stunning device and the inadequate file's amenities to store stunning record for each slaughtered cattle. Relating to the butcher, the research identified two agents related to personal butcher: the rarely of devout Muslim butcher and the absence of butcher's medical record because of the irregular medical check-up.

Concerning the slaughter way, invocation and knife, the research pointed out nine agents. The two of them are the ineffectiveness of halal supervisor and the less number of Muslim butchers which lead them too exhausted. The other issues related to a halal corporate culture and halal awareness development where the company gets unsuccessful to place halal consciousness as a habit of company; the irregularity of halal training; and the existence of assumptions that halal butcher criteria are too complicated. Finally, many company's stakeholders assume that halal requirement is merely a formality.

Mapping of halal risk: It is the third step and it is very important to sharpen the planning. Basically, the mapping of halal risk is to answer the question of how many

percent of each agent contributed to the emergence of event of halal risk. Following the logic of house of risk (Pujawan and Geraldin, 2009) the questions require us to map the agent in the form of Aggregate of Halal Risk Potential (AHRP) in which the AHRP is a result of occurrence level of agent, the severity of event of halal risk and the impact of agent to the event. The formula is the $AHRP_j = O_j \sum_i S_i R_{ij}$ which means that O_j is the probability of occurrence of agent j , S_i is the severity of event of halal risk i and R_{ij} is the impact of agent j to E_i . In the logical flow of HOR (Pujawan and Geraldin, 2009) the AHRP should be visualized in Pareto Diagram.

The data processing based on the above equation proved twelve agents which accumulated 80% totally of agent of halal risks (Fig. 2).

The detail of each agent's contribution is following. The ineffectiveness of halal supervisor staffs is the main issue that contributes more than 16% to the probability of the emergence of EHR. The other major problem is the rarely of actual devout Muslim to be a team of halal butcher in which it contributes about eleven percent to EHR severity. Other main agents are the less proficient of stunning operator; irregularity of halal training and the broken of stunning device. The three agents contributes to EHR sequentially 9.63, 8.22 and 7.012%.

Identifying the above agents of risk and its consequential is very essential. In the logical flow of Ajupop *et al.* (2016) acquiring the detail of risk, qualitatively as well as quantitatively will get easily to formulate risk management model and the decision of detail activity based on the purpose of risk management to control the risk. Relevant with the flow of logic, Slamet *et al.* (2017) emphasized the importance of risk factor and sub factor identification entirely with each weight impact to determine the of priority of action to restrain the risk.

In this context as visualized in pareto diagram (Fig. 2) the research listed not only the halal risk but the agent of halal risk by the rank of its weight 15 Agents majorly induce the coming of halal risk event and it should be sequentially treated. The 15 Agents include: the ineffective of halal supervisor staffs; the rare of devout Moslems butcher; the less skill of stunning operator; the irregularly of halal training; the shortage of halal butcher; the absence of manual to maintain the stunning equipment; the inadequate of file's amenities to store a stunning record; the irregular healthy check of butcher; the thought of company's stakeholders that the halal requirement is merely formality; the assumption that halal slaughtering criteria is too complicated; the halal awareness has not become corporate's culture; the lack of

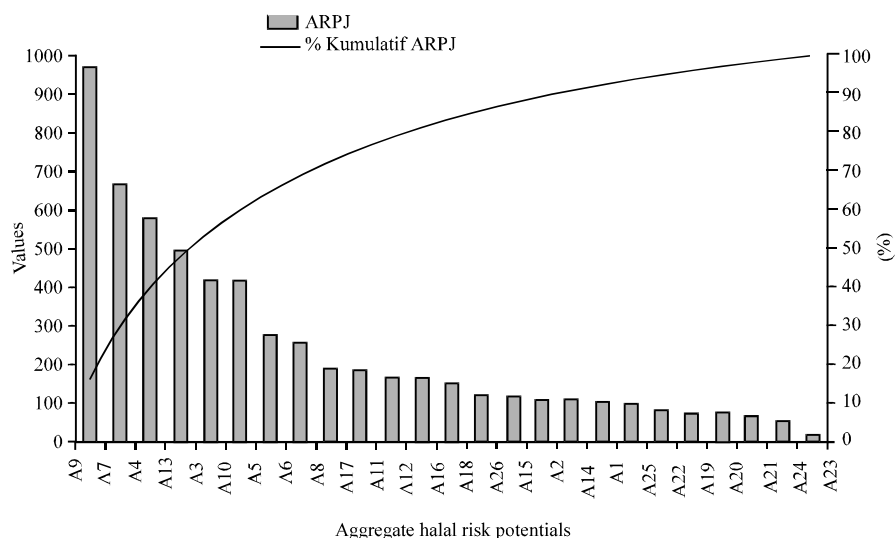


Fig. 2: Pareto diagram of Aggregate Halal Risk Potentials (AHRP); A1:Insignificant result of halal training; A2: Unculibrated stunning instrument; A3: Broken of stunning device; A4: Less skill of stunning operator; A5: Absence of manual to maintain stunning tool; A6: Inadequate facilities of archives to store stunning result; A7: Scarcity of Moslems butcher; A8: Irregularly of butcher’s healthy check; A9: Ineffectiveness of halal supervisor staffs; A10: Less number of halal butcher; A11: The lack of corporate’s halal awareness; A12: Ineffectiveness of halal policy socialization; A13: Irregularly of halal training; A14: Assumption of unimportance of halal policy; A15: Supposition of too complicated of halal butcher criteria; A16: Presumption of unimportance of halal status; A17: Assumption that halal requirement is merely formality; A18: Opinion that halal policy is to obtain the market only; A19: Lack socialization of halal policy in deboning practice; A20: Unsuccessful policy to develop halal as a corporate culture; A21: Unsuccessful result of halal training; A22: Irregular halal training for deboning clerk; A23: Less halal reference for deboning officers; A24: Disinterest of stakeholder to the halal policies; A25: Inadequate of deboning facility (to separate halal and non-halal meat); A26: Stakeholder’s opinion that halal requirement in deboning is too complicated

corporate’s halal awareness; ineffectiveness of halal policy socialization; assumption of unimportance of halal status; opinion that halal policy is to obtain the market only.

Strategic planning to control halal risk: The series of discussion finally came to a fundamental question and strategic about what the series of action that should be done to control the seventeen AHRs. Following the logic of Ajupop *et al.* (2016) the information of risk is essential and the measured program is needed as a strategic planning and the program is to reduce the risk to the level of quality with the acquired knowledge of risk.

Based on the above logic but regarding several limitations, it is impossible to restrain the entire agents of risk. The ability to control 80% of halal risk agents is excellence. Therefore, from the 15 items of agent, the twelve of them should be more prioritized. It is worthy that controlling of twelve AHRs will prevent 80% of probability of emergence of EHRs and will guarantee to get a halal meat in the process of halal beef supply chain, especially in Indonesian abattoir process.

However, it is tickly questioned about the action that should be conducted to treat the seventeen agents. Qualitatively, referring to LPPOM MUI FGD and in depth interview with abattoir practitioner, the research collected seventeen actions that could be strategically planned. To determine the level of priority, the research considered the rank of $AHRP_{ij}$, the degree of difficulty to perform the action and effectiveness to difficulty ratio. By the process, the research has categorized the seventeen proposed actions by the rank of total effectiveness of the action (Table 1). The first categories are the main priorities as the most urgent action based on the assumption that the stunning is lawful to produce the halal meat. The most urgent actions include five items of action in which it is: Mandatory for stunning equipment maker to issue a written manual of stunning device maintenance. The necessary for the abattoir to be equipped with internal halal auditor. The abattoir needs to certify the slaughter team as halal butchers. Mandatory for abattoir to determine standard number of halal butcher and Issue halal guideline for halal butcher.

The written manual of stunning tool is felt very important because the Indonesian ulama (Islamic scholar) gathered in ICU (Indonesian Council of Ulama) or Majelis Ulama Indonesia (MUI) published the edicts about the lawful of stunning with some requirements. Of course, it needs an inside edge to see many sides of stunning effect. The internal halal auditor is decisively needed to watch and witness the fulfillment of halal requirement. The certification of halal butcher is one of the important things related to the existence of halal internal auditor. The standard number of halal slaughterer is one of the requirements for halal certification and it takes an important place in halal process. The halal guideline for the slaughtering process is very important and will be one of halal requirements for halal certification.

Sequentially, the second category of the action plan in which it is more urgent priorities also consisted of five items include: need to reschedule of the regular halal training; urgently to increase the halal butcher teams; need to socialize the halal policy to entire management hierarchy of the abattoir; indispensable to execute the halal slaughtering training and finally it is required to conduct a special training for stunning operator before practice.

Indeed, this second group of proposed action plan is very essential. However, the research assigns it as more urgent priorities based on the fact that many abattoirs have performed it as the internal annual program and many of them has been executed. The argument for the No. 1 of planning is because almost all abattoirs have the training schedule for halal process. The No. 2 of proposed action should have to be done in a very closed time but many abattoirs have had a planning to recruit the new halal butcher and would follow the internal scheduled training. The socialization of halal policy as proposed action in No. 3 is very important but many abattoirs have done it based on their awareness to get a halal meat. About the training proposed in No. 4 and 5 is also very important but commonly has been listed in the file book of annual program.

Finally, the rest of seven proposed action plan in which it is categorized as less urgent planning include: against using an expired stunning equipment; obligation for vendor to train the use and maintenance stunning device and the need of: stunning officer certification with refer to the vendor; routine medical check-up for halal butcher; routine calibration of stunning tool; internal halal auditor and need to facilitate a document keeper of stunning record.

For the last seven proposed action, many abattoirs feel it unimportant or at least they have implemented the proposed action in their routine program. But basically,

many of proposed action are strongly urgent. For example, the existence of internal halal auditor is one of the requirements demanded by LPPOM-MUI to issue a halal certificate. Therefore, the halal certified abattoir has had the internal halal auditor. The condition leads them to assume that the proposed action is unimportant. About the stunning requirements as proposed action, many abattoirs which performed the stunning practice have got a training before practice and also they got the manual book of stunning practices. About the routine medical check-up for the halal butcher, many abattoirs have conducted a close cooperation with local health center.

CONCLUSION

The halal meat processing needs a strong awareness motivated a responsibility to yield a high quality food lawful by Islamic teaching. Practically, the priority of action for that purpose is: the vendor is required to publish a written guidance of stunning tool; the abattoir should be completed with internal halal auditor; compulsory for abattoir to certify halal butcher teams; the urgency for abattoir to divine standard number of halal butcher and the need to issue halal guideline for the halal butcher.

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