

The development of model and strategy of micro and small enterprises empowerment for ensuring street food safety for elementary school children in Indonesia

Arief Safari¹, Machfud², Eriyatno³, Heny K Daryanto⁴

¹ (Business School, Bogor Agricultural University, Indonesia)

^{2,3,4} (Business School, Bogor Agricultural University, Indonesia)

Abstract: To fulfill the need of safe food for school children, the government assistance is needed to empower Micro and Small Enterprises (MSEs) in producing safe Street Food for Schools Children (PJAS). The aim of this study is to design the Purposeful Activity Model (PAM) of MSEs empowerment and also to develop some alternatives of strategic initiatives and its priorities so that it can guarantee the PJAS safety effectively and efficiently. The design of this study was done through the stages of policy analysis, development of PAM of MSEs empowerment, as well as analysis of strategy priority through survey of experts panel. The result showed that the built PAM have the activities of coaching, mentoring and facilitation. The alternative strategy of strengthening sanitation facilities and infrastructure of production and the cleanliness and decent place to sell PJAS was chosen as the most effective and efficient strategy based on the final results of AHP analysis. Based on the the SAST analysis, the strategic assumptions in the form of active participation and the support of government, the active role of MSEs and the school's awareness toward MSEs' business condition categorize as certain planning region that make them as pre-requisite to the strategy implementation.

Keywords: Food Safety, Model, MSEs, PJAS

I. Introduction

Food Safety problems due to food borne illness continues to become a global issue which occurred about 76 million cases in the US and about 70 thousand cases happened in the UK each year (Fielding *et al.*, 2011). The food safety issue aside of many cases of food borne illness, also because of the lack of food safety knowledge and the manufacturer responsibility as well as the low consumer awareness in food quality and safety.

According to Indonesian Act No. 7 of 1996 amended by Act No. 18 of 2012 on Food stated that everyone involved in the food chain shall control the risk of food hazard derived from materials, equipment, production facilities, as well as from individuals in a way that food safety is assured. Thus, Micro and Small Enterprises (MSEs) producing Street Food for School Children (PJAS) was obliged to fulfill it.

Small and Medium Enterprises (SMEs) as well as MSEs food industries should have a food safety management system that is capable in guaranteeing the consistency of quality and safety of the products in accordance with food safety regulations. In the previous research done by Ball *et al.* (2009) found that the factors of organizational characteristics, characteristic factors of employees and production system factors affecting the successful implementation of food safety management system. In addition, factors of production systems affected facilities/production equipment, process and product characteristics. But in the case of SMEs, Yapp and Fairman (2006) found that three central obstacles inter related, namely; lack of knowledge and understanding, a lack of confidence in the food safety legislation and lack of motivation. SMEs have the sore knowledge and understanding on the food safety legislation. This will affect the opinion that food safety legislation become irrelevant to food safety business, causing distrust of the regulation. This mistrust will create motivation SMEs in fulfilling food safety legislation to be reduced. Therefore, awareness and understanding of food safety knowledge is crucial in SMEs.

Based on the survey results of SMEs in Europe by Dora *et al.* (2013) showed that the application of Food Quality Management such as Hazard Analysis and Critical Control Point (HACCP), International Food Standards (IFS) and ISO 9001, although not in its whole package, definitely provides benefits. The benefits include a decrease in costs and customers complaints as well as an increase in productivity and profits. Safari *et al.* (2016) obtained that the most effective and efficient food safety management model to be applied to MSEs producing PJAS is the model of Five Keys to Safer Food developed by WHO. This Five Keys to Safer Food model is consist of 5 keys principles which are keep clean, separate raw and cooked, cook thoroughly, keep food at safe temperatures and use safe water and raw materials (WHO 2006). Nevertheless, the survey results of Yapp and Fairman (2006) and Syarief in Ainuri (2009) revealed that SMEs have various limitations including limited number of employees, limited capital, have no clear business planning and management, using simple

production equipment, lack of business commitment and ethics, high degree of dependency and lack of access to information that lead to the obstacles in applying food safety management. Therefore, SMEs especially MSEs need to be empowered to let them able to ensure the safety of their produced food. So, the problem is what kind of empowerment model and strategy that effectively made MSEs are able to produce safe food. MSEs can not be left alone and needs an integrated empowerment strategy from the government so that MSEs producing PJAS can be empowered and able to implement the food safety management model effectively.

The empowerment strategy of MSEs involve many stakeholders, not only the local government, as stated in the provisions of Government Regulations No. 28 of 2004, but also National Agency of Drugs and Foods Controls (BPOM) as supervisors, Technical Ministries such as Ministry of Cooperatives and Small & Medium Enterprises, Ministry of Health, Ministry of Education as well as Schools including the teachers, students and their parents. Taking into account that the problems faced by MSEs in guaranteeing its food safety is not only very complex, but also it involves various stakeholders. Therefore, designing the MSEs' empowerment activity model aiming to ensure its food safety needs a comprehensive and systematic approach. The purpose of this research, aside of designing Purposeful Activity Model (PAM) of MSEs empowerment, it is also aims to develop the strategic initiatives for the MSEs' empowerment strategy and its priority in a way that be able to guarantee food safety effectively and efficiently. This study will formulate the MSEs' empowerment model and strategy to ensure street food safety for elementary school children in Indonesia. This study has significance different compare to the previous study in term of the way, the strategy to empower MSEs to be able to produce safety food rather than study on enabler factors to implement food safety management.

The content of this paper has been divided into 5 section where introduction section explain the background of the research, research methodology section explain the scientific method how the research was conducted, situational analysis section explain the implementation of PJAS safety situation. In the result and discussion section, it divided into four sub sections where activity model subsection explain the development of MSEs empowerment activity model using seven stages of Checkland's Soft System Methodology, policy analysis section explain the textual analysis on law and regulation related to food safety, priority of strategic alternatives section explain the process in prioritizing alternatives strategies and strategic assumptions section explain the analysis of strategic assumptions surfacing and testing. In the last section, conclusion of the paper will be provided.

II. Research methodology

The study designed through the stages of situational analysis, PAM development of MSEs empowerment, policy analysis and define strategic priorities as well as identification of strategic assumptions (Fig. 1). The stage of situational analysis is to analyze the implementation of PJAS safety situation. The PAM on MSEs empowerment was developed by taking into account the implementation of the Food Hygiene and Sanitation conception, represented by Model of Five Keys to Safer Food, in MSEs. Stage of policy analysis is a textual analysis of the applied laws and regulations. The next stage is to analyze the development of alternatives strategies and their priorities as well as the strategic assumptions used.

The situational analysis is based on the study of Safari *et al.* (2016). The research of the PAM development is done by using Soft System Methodology (SSM) approach. According to Checkland in Jackson (1991), SSM includes 7 steps or stages of a process. These 7 steps that used in designing model of empowering MSEs in ensuring the safety of PJAS are to enter situation considered problematical, express the problem situation, formulate root definition of relevant systems of purposeful activity, build conceptual models of the systems named in the root definition, compare model with real-word action, define possible changes which are both desirable and feasible and take action to improve the problem situation. But, this study is only up to the stage of conceptual model development. To analyze PJAS safety policy, Policy Process Analysis (PPA) is used to analyze the laws and regulations in force, using textual analysis to formulate policy gaps facing the current food safety system. Analysis tool used in determining the priority of the MSEs empowerment strategy is the Analytical Hierarchy Process (AHP). While to analyze strategic assumptions, Strategic Assumption Surfacing and Testing (SAST) is used.

The data processing analysis results is presented including the results of the prioritization of its MSEs empowerment alternative strategies obtained from AHP analysis as well as strategic assumptions obtained from SAST through expert surveys.

The study was conducted in the 2nd quarter to the 3rd quarter of 2015 through the literature study and expert surveys.

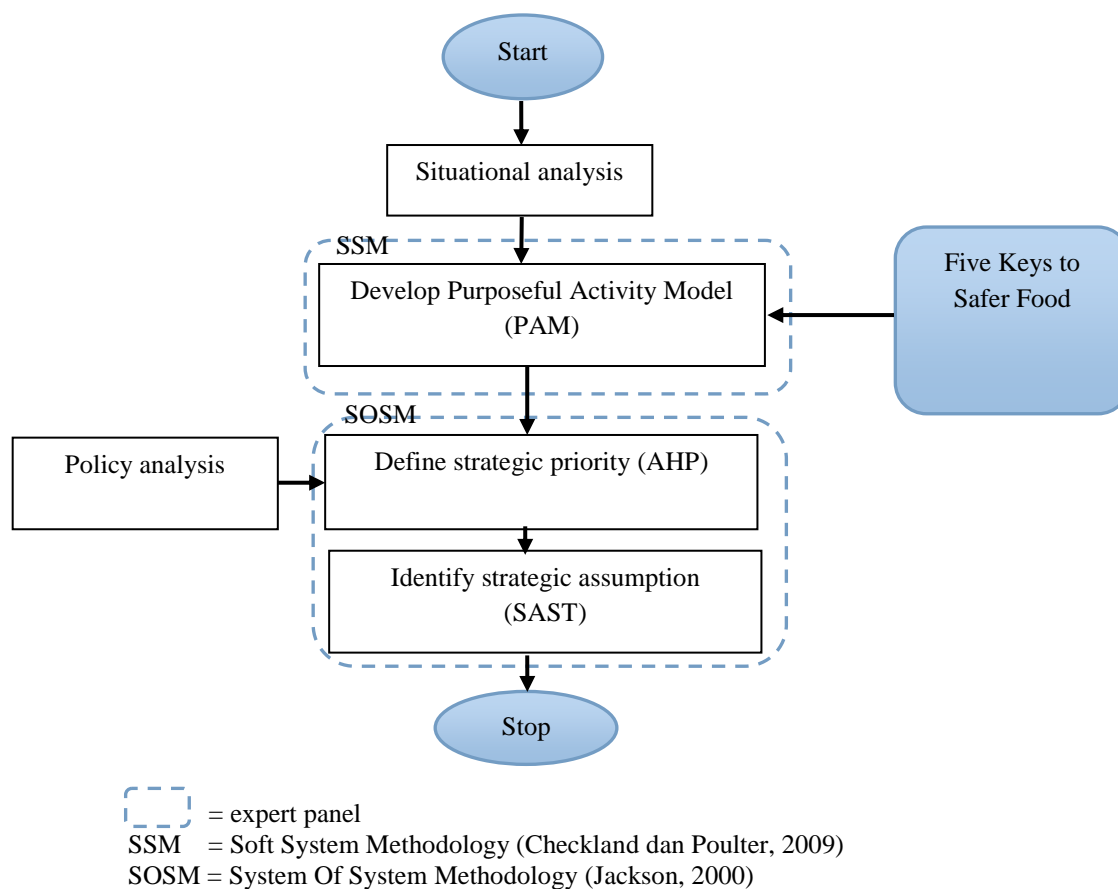


Figure 1. Research methodology

III. Situational analysis

Step 1 in seven stages of Checkland's SSM is to enter situation considered problematical. In a study conducted by Safari *et al.* (2016), the result of PJAS safety situational analysis describes that 91% of respondents of school children have experienced health problems after consuming PJAS, but only 41% of respondents report their health problems to their parents, and only 13% of them report it to their teacher. It also revealed that the health problems might due to hygiene and sanitation of food is inadequate in which 62% of MSE respondents using water from nearby well as a source of water for its PJAS production and 100% of MSE respondents never wear a mask nor gloves in the production process of PJAS. In addition, 93 % of MSEs never get socialization nor coaching on how to produce a healthy and safe PJAS. Furthermore, 86 % of MSEs' respondent mentioned that they use food additives (BTP) where 62% of them using it as food flavor enhancer. As many as 93 % of MSEs' respondent produce PJAS by themselves.

IV. Results and discussion

4.1 Activity model

Based on the situational analysis conducted by Safari *et al.* (2016) in which the models of Five Keys to Safer Food was selected as the most effective and efficient food safety management model applied in MSEs, the step 2 in seven stages of Checkland's SSM is carried out. In addition, Government Regulation No. 28 of 2004 on Food Safety, Quality and Nutrition that BPOM served as national controller of food safety, and local government as inspectors as well as coacher of PJAS safety in their jurisdiction and technical ministries as policy makers in order to foster the implementation of norms, standards, procedures and criteria for food safety. In accordance with the results of situational analysis on the implementation of PJAS safety in previous studies, a Rich Picture (RP) to express the problematic situation of PJAS safety today is drafted as depicted in Fig. 2.

Furthermore, Safari *et al.* (2016) in their research mentioned that 62 % MSEs used water from nearby well, never wear mask nor gloves in the manufacturing process of PJAS. According to Sujaya *et al.* (2010), the use of nearby well as a water source in producing PJAS might caused diarrhea. In addition, 86 % MSEs used

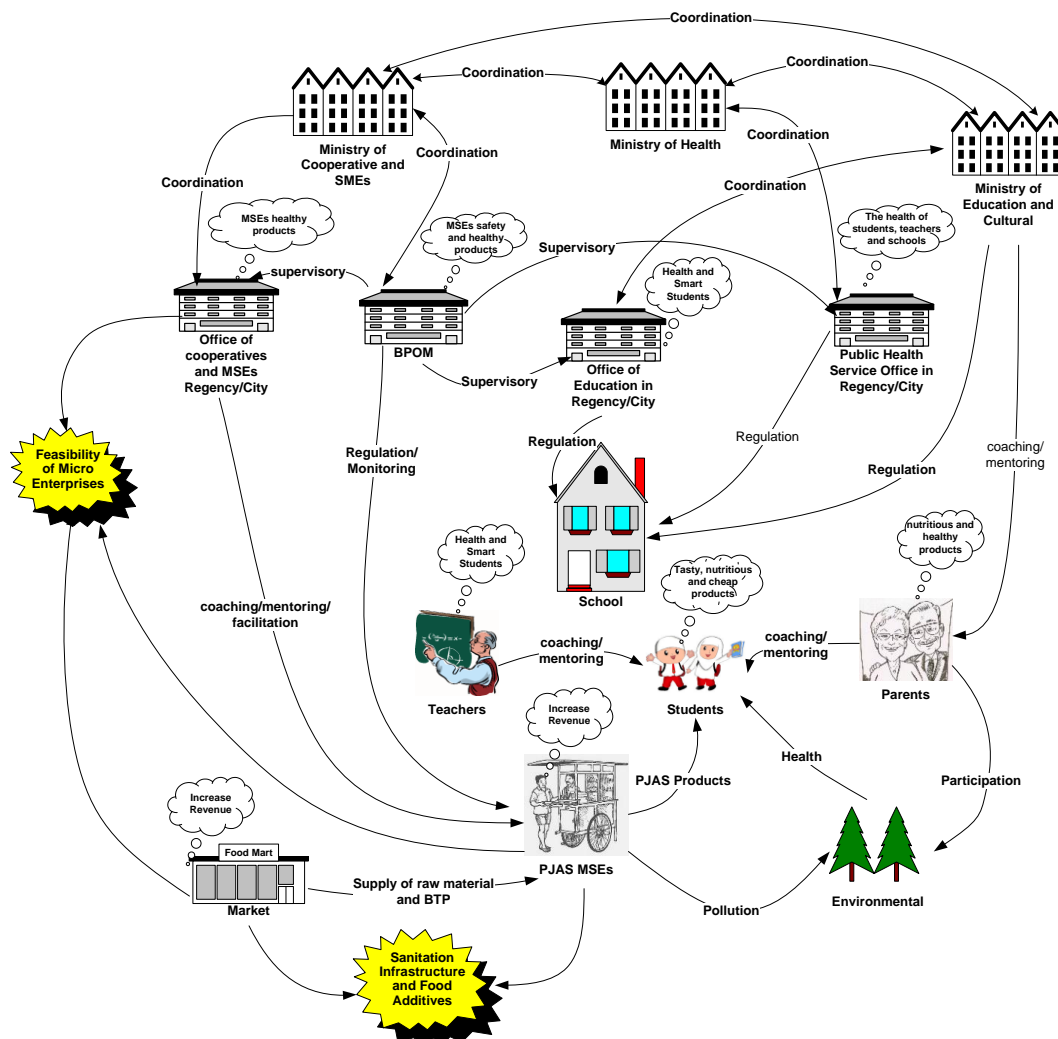


Figure 2. Rich Picture of problematic situation of current PJAS safety

food additives (BTP), meanwhile majority of them (93%) never got socialization nor coaching on how to produce a healthy and safe PJAS, it might caused the excessive use of BTP over the maximum threshold use allowed by regulation. According to Syarif in Ainuri (2009), the Small Medium Enterprises in Indonesia has lack of business ethic; therefore, they might not care with the regulation as long as their PJAS is sellable. Therefore, the lack of sanitation infrastructure and the usage of allowable BTP were become main problem faced by MSEs as depicted by RP in Fig. 2. This finding also in line with the research of Syah *et al.* (2015) which mentioned that the major problems of the food safety in PJAS such as meatball (*bakso*), noodles and snack are high microbiological contamination and the incompliance of non-food grade dyes and hazardous chemicals used as food coloring or preservatives. But if the MSEs should meet the requirements of sanitation infrastructure and BTP according to the PJAS safety requirement then it will increase the production cost and affect the feasibility of their business. These problems are increasingly complex with MSEs' limitations as stated in Yapp and Fairman (2006) and Syarif in Ainuri (2009); therefore, MSEs should be empowered to be able to produce safe PJAS. Rappaport (1995) confirmed that definition of empowerment by Cornell University Empowerment Group is "...an intentional, on-going process centered in the local community, involving mutual respect, critical reflection, caring and group participation, through which people lacking an equal share of valued resources gain greater access to and control over those resources." So, the aim of empowerment is to increase the power of disadvantages, which is MSEs (Ife, 2009). Therefore, it required an integrated MSEs empowerment strategy.

Step 3 in seven stages of Checkland's SSM is to formulate the root definition of relevant systems of purposeful activity. In order to improve the MSEs empowerment strategy, to create a better PJAS safety, a statement which show a system of purposeful activity that being modeled shall be developed (Checkland and Poulter 2009). Such statement shall be compiled in a Root Definition (RD) over the transformation plan of the

relevant future MSEs empowerment strategy. However, PQR formula which is a logical explanation on transformation in the form of model P by doing Q to produce R, have to be arranged in advance. The model built (P) is a model of MSEs empowerment to ensure safe PJAS production. While the process to be performed (Q) is through MSEs empowerment related to hygiene and sanitation of PJAS production processes and the use of safe BTP with the gradual and integrated application of the Five Keys to Safer Food in MSEs. The achieved result (R) is to improve the safety of PJAS. Based on the PQR analysis, analysis for Client, Actor, Transformation, Worldview, Owner and Environment (CATWOE) were conducted to determine the role of stakeholders and their views and limitations on the model to be built. Client (C) in this model is elementary school children who like eating street food in school. Actor (A) in this model is the MSEs as PJAS maker, BPOM, Public Health Service Office in Regency/City, Office of Education in Regency/City, Office of cooperatives and MSEs Regency/City, technical ministry as well as Schools including elementary students, parents and teachers. While transformation (T) to be done is to provide coaching/mentoring/facilitation for MSEs in the application of food safety model in an integrated manner to produce PJAS that is safe to consume. Various general view (Worldview/W) is that MSEs have limited funds and lack of expertise and knowledge in implementing food safety. The owner (O) of the model that will be built is the Regent/Mayor, where appropriate based on Government Regulation (PP) No. 28/2004, that they are authorized to assist, inspect and provide administrative actions including stopping the perpetrator PJAS. Based on the analysis, there are some environmental conditions (Environment) on the MSE empowerment today, that are:

- Budget and capability of government agencies is limited so that the guidance and supervision of MSEs program is still inadequate,
- Awareness of MSEs towards food security is still low,
- Limitations of information on food safety,
- Limitations of food additives' alternatives which safe and affordable.

The process of testing its feasibility is to use EEE namely Efficacy, Efficiency and Effectiveness (Checkland and Poulter 2009). In testing the Efficacy, the model must be proven to improve food safety assurance of MSEs engaged in PJAS, whereas the Efficiency of testing, MSEs empowerment' funds spent should be lower than the cost due to the occurrence of cases of food borne illness. As for the Effectiveness of testing, the model must be shown to decrease the number of cases of food borne illness in Elementary Schools.

By considering Rich Pictures, PQR, CATWOE and EEE test, objective verifiable Root Definition was set as: "Model of MSEs empowerment through gradual and integrated coaching/mentoring/facilitating the implementation of Five Keys to Safer Food by the Office of Regency/City, BPOM, Technical Ministry and Schools taking into account the limited funds and capabilities, resulting in increased compliance sanitary production processes and the use of BTP affecting the decrease in the number of cases of food borne illness in elementary schools."

Step 4 in seven stages of Checkland's SSM is to build conceptual models of the systems named in the root definition. In carrying out the activities related to the transformation of the MSEs empowerment in accordance with the Root Definition, a PAM is built.

In the PAM as depicted in Fig. 3, various activities carried out by MSEs in order to produce and sell PJAS, such as business innovation, selection of PJAS products to be produced, the selection of the location where to sell, procurement of capital and technology that is used to produce it. In order to ensure PJAS produced by MSE is safe, it is necessary to have MSE empowerment activities were done, represented by the activities of coaching, mentoring and facilitation. The coaching activities may include socialization and training. The mentoring activities may include counseling, advisory activities at site or via electronic communication media while facilitating activities may include the provision of assistance or facilities in the form of funding or in the form of goods as well as other facilities provided to MSEs. Given MSEs empowerment, awareness/concern of MSEs for PJAS safety will increase and this will have an impact on PJAS production activities and the better use of the food additives. This condition will improve the quality of PJAS and will definitely improve secured PJAS sales activity and improve the healthiness of school children. Furthermore this would increase the MSEs' revenue.

PJAS production activity and its development should be monitored with clear food safety indicators such as the level of food contamination, the suitability of the BTP usage and other food safety indicators. If deviations are found from the indicators that have been defined, the control activity needs to be conducted to take corrective action so that the safe PJAS produced and sold is increasing from time to time.

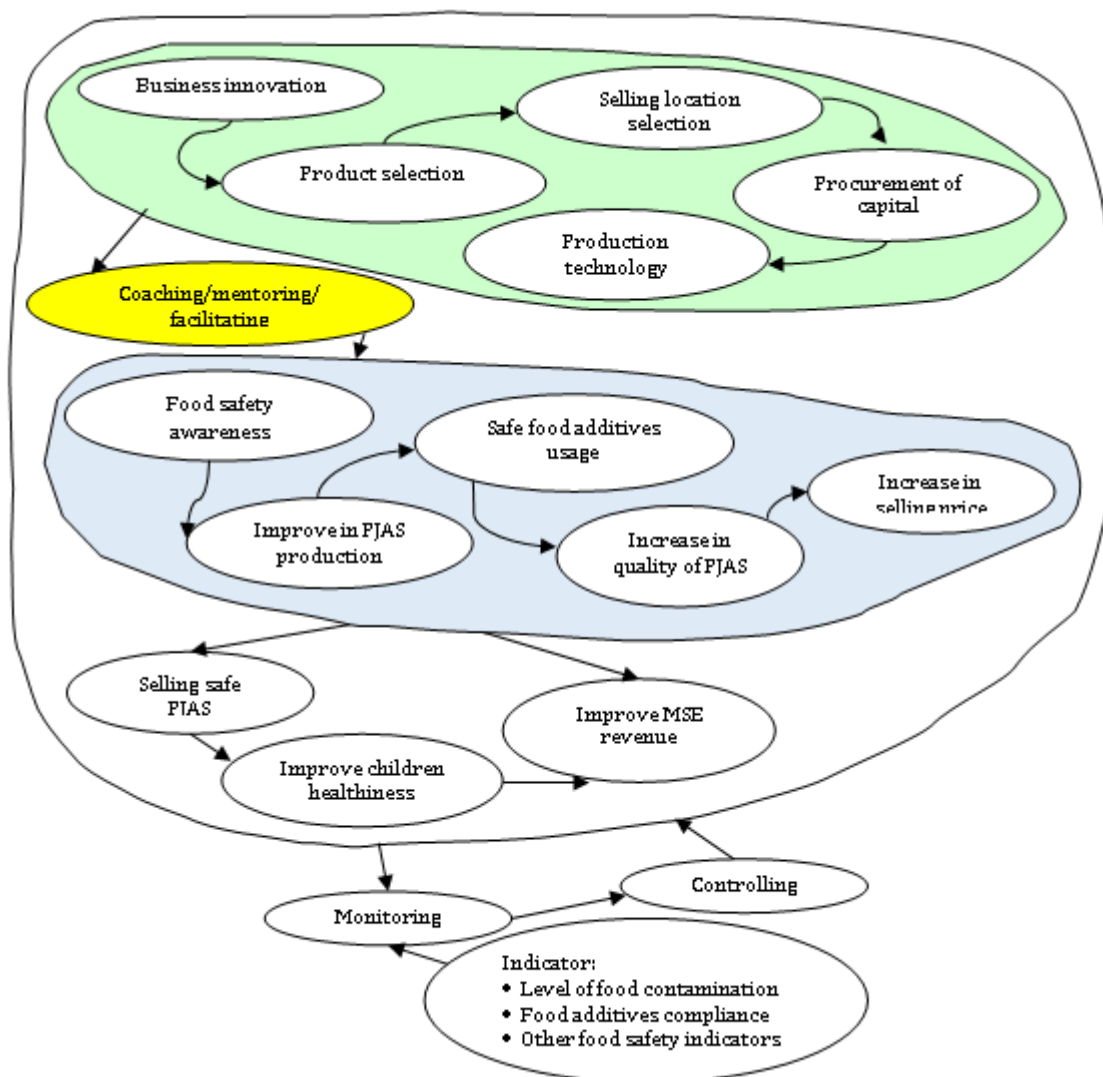


Figure 3. Purposeful Activity Model (PAM) of MSEs empowerment

4.2 Policy analysis

Referring to the existing PJAS safety situation, PJAS safety-related policies has to be analyzed as a basis for developing MSEs empowerment strategy in PJAS safety assurance. In Indonesia, the strategic value of quality, nutrition and food safety have become the government's attention for a long period of time, this is indicated by the Law on Food, namely Act No. 7 in 1996 and amended by Act No. 18 in 2012. With the increasing population in Indonesia, the food needs for the fulfillment of human rights will be greater. Indonesian national food systems should be developed to follow the development of the human population and various demands. Indonesian food system, not only required to provide the supply of food products in quantity and adequate nutrition, but also safe for consumption (Hariyadi, 2007).

According to Act No. 18 of 2012, it states that:

- a. Food is defined as anything that comes from biological sources of agricultural products, plantation, forestry, fisheries, livestock, waters and water, whether treated or untreated designated as a food or beverage for human consumption, including food additives (BTP), food raw materials, and other materials used in the preparation, processing, and/or manufacture of foods or beverages.
- b. Everyone involved in the food chain compulsory to control food hazards, both derived from materials, equipment, production facilities, as well as from individuals in such a way that food safety is assured. In addition, any person who organizes the activities or process of production, storage, transportation, and/or distribution of food must comply with the requirements of sanitation and food safety assurance and/or human safety.

- c. Every person who organize activity or process of production, storage, transportation, and/or distribution of food that does not meet sanitary requirements of food shall be punished with 2 (two) years imprisonment or a fine of not more than Rp4.000.000.000,00 (four billion Rupiahs).
- d. Every person who undertakes the production of food for distribution that is deliberately using the food additives (BTP) exceeded the stipulated maximum threshold or the prohibited materials used as BTP shall be punished by five (5) years imprisonment or a fine of maximum Rp 10,000,000,000, 00 (ten billion Rupiahs). If the criminal act resulting in a severe injury or endanger the lives of people, the perpetrator shall be punished with 7 (seven) years imprisonment or a fine of not more than Rp 14,000,000,000.00 (fourteen billion Rupiahs). However, if it caused the death of people, the perpetrator shall be punished with ten (10) years imprisonment or a fine of maximum Rp20.000.000.000,00 (twenty billion Rupiahs).
- e. The government and/or local government shall develop and oversee the implementation of food safety norms, standards, procedures and criteria. Thus, the Government, in this case is the technical ministry, is in charge to foster the implementation of food safety norms, standards, procedures and criteria.
- f. In the case of food borne illness incidents, the aforementioned coordination and handling of food borne illness Extraordinary Events (KLB) is regulated in detail and also the board in charge at each stage.

Referring to the results of policy analysis above, it seems that Act No. 18 in 2012 as an integrated policy in guaranteeing food safety is adequate and no policy gap that should be addressed. However, based on the results of regular PJAS monitoring conducted by BPOM, found levels of non compliance snacks (TMS) ranged from 40-44% in the period 2008-2010 (BPOM 2011). This shows that the existing policy is still not able to reduce the number of TMS level, so it is necessary to learn the caused. Pang and Toh (2008) studied the food hawker in Malaysia and found that even though the government of Malaysia has issued the regulation and guidance on food safety, 80 % of food hawker never read it. Even, 50 % of them who read the regulation/guidance mentioned that the regulation/guidance is not practicable. Therefore, one of the possibility of the above mentioned problem is that the pursued strategy is not effective yet in carrying out the policy.

Further research on the empowerment system needs to be implemented by the government, to enable MSEs can apply the policy due to the fact that the increased knowledge of food safety does not necessarily guarantee the success of the implementation. Although, improving knowledge and understanding of food safety can be enhanced through training with the support of training materials in the form of training booklets, view presentations, videos and practical demonstrations (Soon and Baines 2012). However, using the Theory of Planned Behavior proved that knowledge of food safety owned does not necessarily change the behavior of the management of food safety. This is due to the factors of attitude, subjective norm, and perceived behavioral control that affect the purposes of a behavior, then it will affect its behavior.

4.3 Priority of strategic alternatives

Based on the policy analysis and effort to carry out the PAM especially related with coaching/mentoring/ facilitation activities as depicted in Fig. 3, the alternatives MSE empowerment strategies have been developed through focus group discussion, as follows:

1. Increased awareness, knowledge and dissemination of PJAS safety to MSEs,
2. Development of MSEs' access to information about food safety,
3. Strengthening sanitation facilities and infrastructure of production and the cleanliness and decent place to sell PJAS,
4. Strengthening the availability of food additives (BTP) that is safe and affordable in traditional markets,
5. Strengthening the capital MSEs,
6. Strengthening regulatory on PJAS and its socialization,
7. Strengthening food safety culture.

The analysis results using AHP to prioritize the strategic alternatives can be seen in the structure of the AHP as showed in Fig. 4. The inconsistency ratio value of the AHP analysis result is below 10%. Thus the preference comparison results are consistent (Eriyatno and Larasati 2013).

In improving the assurance of the PJAS safety through the effective and efficient MSEs empowerment strategy implementation, BPOM has more role than the other actor's like parents, local government agencies, technical ministries, teacher/school and others with the values of 0.277.

By considering the factors involved, the availability of funds for MSEs empowerment program from the government is become the most important factor to be considered in which the analysis results value reached 0.454. The availability of funds for MSEs empowerment program from the government beat other factors such as limited human resources, funding, knowledge, infrastructure of MSEs (0.229), surveillance and control of food additives (BTP) and PJAS contamination by the government (0.196), the use food additives (BTP) outside of the provisions of BPOM (0.072) and the factor of the level of microbiological contamination outside the provisions of BPOM (0.049).

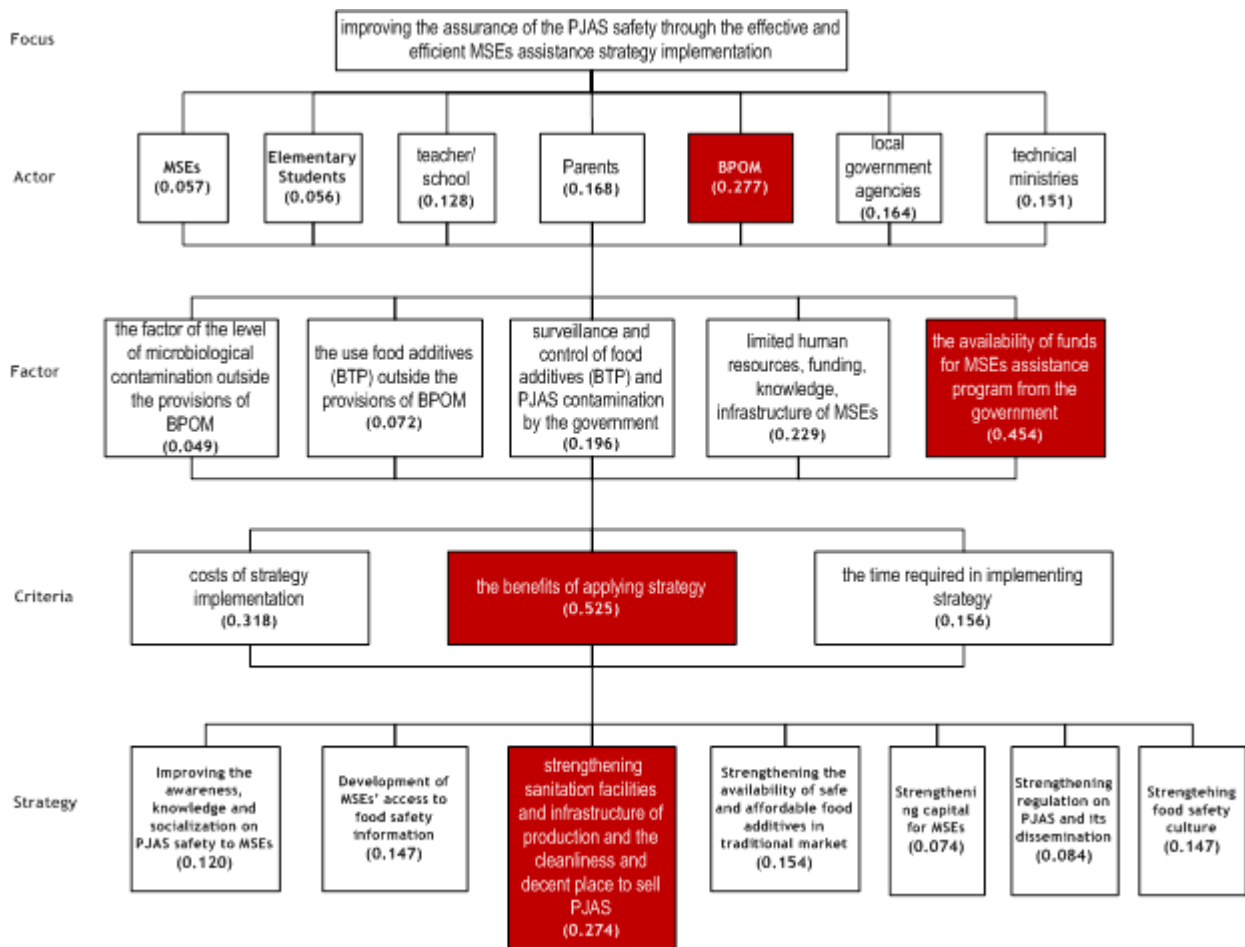


Figure 4. Analysis of AHP on alternatives strategy prioritization

By considering existing criteria, the benefits of applying strategic alternatives is become the most important criteria to be considered with the value of 0.525. Other criteria such as costs of implementing strategic alternatives only have a value of 0.318, meanwhile the time required in implementing the strategic alternatives only value for 0.156.

The final result of AHP analysis through a survey of panel experts in order to improve PJAS safety assurance by considering the actors, factors and criteria, the strategy of strengthening sanitation facilities and infrastructure of production and the cleanliness and decent place to sell PJAS is selected as the top priority and the most effective and efficient of strategic alternatives to be considered and reached the acquisition value of 0.274.

Referring to the results of AHP above, it is necessary to develop a model to suit the MSEs empowerment strategy to be able to implement the model of Five Keys to Safer Food in MSEs producing PJAS and its supporting programs that focus on strengthening sanitation facilities and infrastructure of production and the cleanliness and decent sales counter considering the benefits of its application, the availability of government funding for MSEs empowerment programs and the optimization on role of BPOM as the change actor.

4.4 Strategic assumptions

In order to pursue optimum strategy implementation of the strengthening sanitation facilities and infrastructure of production and the cleanliness and decent sales counter mentioned above, critical assumptions should be revealed (Mason and Mitroff 1981 in Eriyatno and Larasati 2013). The revelation of critical assumption should be carried on to enable the identification of stakeholders' component impacted and interested by the strategy or in a position to influence or challenge the strategy implementation (Eriyatno and

Larasati 2013). The strategic assumptions developed through focus group discussion has been used in accordance with the alternatives to the top priority strategic initiatives using SAST technique are as follows:

1. The active role of government support,
2. The active role of MSEs producing PJAS,
3. The coordination between the parties involved in the provision of BTP that is safe, easy and affordable,
4. Parents' awareness towards PJAS safety,
5. School's awareness towards business condition of MSEs,
6. Communication and coordination between the school and parents regarding PJAS that is safe and healthy,
7. Coordination between the school, BPOM and others to oversee PJAS safety,
8. The availability of PJAS safety labelling/certification system to ensure its safety to consume,
9. The availability of information on the safe and healthy PJAS,
10. Monitoring and evaluation on a regular basis by the BPOM PJAS,
11. The presence of the marker (such as label or certificate) for a safe and healthy PJAS issued by BPOM,
12. Socialization product safety sold by MSEs to teachers and parents,

The results of the existing strategic assumptions analysis using SAST depicted in Fig. 5. In order to optimize the implementation of the strategy, we have to focus on the strategic assumptions that is important and certain which categorize as certain planning region (quadrant II). It is shown in quadrant II, the strategic assumptions of active role of the government and the active role of MSEs producing PJAS have high importance (most important) and little degree of certainty. While the school's awareness towards condition of MSEs, although located in Quadrant II, has only a degree of certainty that is somewhat certain but its importance is medium.

This is in accordance with the opinion of DiMaggio and Powell (1983) in which the forces outside the organization may lead to three institutional formations that are isomorphism, which is: (1) coercive isomorphism shows that the organization can make adoption to other organizations due to formal or non formal pressures which can be regarded as a force, persuasion or an invitation to join another organization, be it a state, organization or wider society, (2) mimetic isomorphism, which is an adoption of a model or the shape resembles another organization because of the pressure of uncertainty and (3) normative isomorphism, which is an alteration shape due to pressure in the form of professional demands. In this case the active participation and support from the government as well as the school's awareness toward condition of MSEs producing PJAS can become a source of power for the coercive isomorphism formation. In addition, encouraging the active role MSEs can become a source of power for the formation of mimetic isomorphism. Therefore, these three strategic

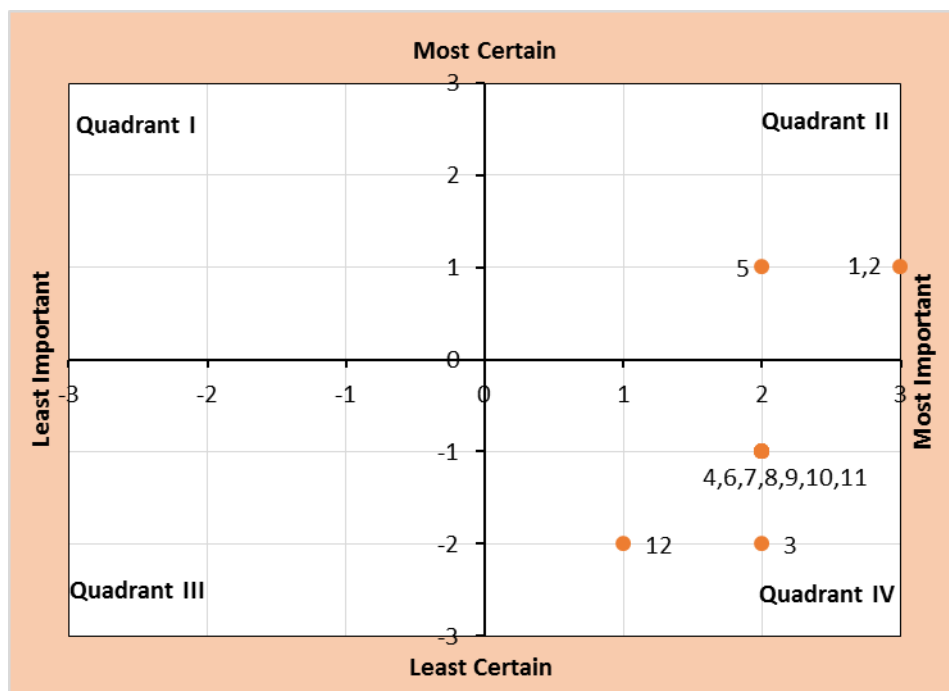


Figure 5. Analysis of SAST on strategic assumptions

assumptions should become a pre-requisite in the MSEs empowerment strategy implementation in order to optimize the result.

V. Conclusion

To fulfill the need of safe street food for school children, a Root Definition in ensuring safe street food for school children should be developed as a model of MSEs empowerment through gradual and integrated coaching/mentoring/facilitating the implementation of Five Keys to Safer Food by the Office of Regency/City, BPOM, the Technical Ministry and Schools considering the limited funds and capabilities resulting in increased compliance of sanitary production processes and the use BTP affecting a decrease in the number of cases of food borne illness in elementary schools.

According to Root Definition, a PAM of MSE empowerment should be done through the activities of coaching, mentoring and facilitation. The coaching activities may include socialization and training. The mentoring activities may include counseling, advisory activities at site or via electronic communication media while facilitating activities may include the provision of assistance or facilities in the form of funding or in the form of goods as well as other facilities provided to MSEs.

In carrying out the PAM, strengthening sanitation facilities and infrastructure of production and the cleanliness and decent place to sell PJAS were chosen as strategic alternative top priority to be seriously taken into account.

To optimize the result of MSEs empowerment strategy implementation, the strategic assumptions in the form of active role and support from the government, the active role of the MSEs producing PJAS and the school's attention toward the condition of MSEs should be put as pre-requisites to the strategy implementation.

Model of MSEs empowerment needs to be developed to be able to implement Five Keys to Safer Food in MSEs producing PJAS, as well as supporting programs that rests on strengthening the infrastructure of production and sales counter sanitation considering the benefits of its application, the availability of government funding for MSEs empowerment and optimizing BPOM role as actors for change.

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