Institutional Design In Collaboration To Strengthen Food Fortification In Consumption Salt SMEs In Pati Regency

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ABSTRACT

Fortifying salt with iodine is one of the government's strategies to achieve food and nutritional security. Iodine deficiency can hinder mental and intelligence development, affecting the quality of Human Resources. Pati Regency can contribute to strengthening food fortification with the potential of its salt-consumption SMEs. However, the test results stated that 40.70% of the salt consumption of SMEs in Pati needed to meet standards. The fortification program is implemented and integrated into the government and private sectors. Successful fulfillment of product quality by SMEs requires effective collaboration between development institutions and business actors and good coordination between the development institutions. Institutional design contributes to the collaboration process that occurs. This research aims to analyze the institutional design and problems in collaboration with development actors to develop consumer salt SMEs in the Pati Regency. The research uses qualitative methods, collecting data through observation, in-depth interviews, document studies, and FGDs. The development of consumer salt SMEs in Pati Regency involves government institutions at the district level, namely the Ministry of Trade and Industry and Bappeda, at the provincial level, namely the Ministry of Industry and Trade and BBPOM in Semarang, as well as non-government organizations, namely the NGOs Nutrition International Indonesia and APROGAKOB.

Introduction

Iodine intake in the body has an impact on productivity and resource quality (Wang et al., 2018). BPMI Setpres (2019) stated that quality human resources (HR) are the first step to become a developed country in order to realize the Golden Indonesia Vision 2045. Disorders Due to Iodine Deficiency (GAKY) can cause significant losses so that attention to this nutritional issue cannot be ignored. Iodine fortification in salt is one of the government's long-term strategies to overcome the problem. World Health
Organization (WHO) states that in some countries, iodization of salt is an effective way to maintain adequate iodine in the body, and this step has succeeded in improving people's nutritional status. (Leyvraz et al., 2018; Osendarp et al., 2018).

Efforts to improve nutritional status with iodine are part of nutritional interventions in integrated stunting prevention. The government establishes the National Strategy for the Acceleration of Stunting Prevention in Presidential Regulation Number 72 of 2021, which includes five pillars, namely (1) leadership commitment and vision; (2) communication of behavior change and community empowerment; (3) convergence of Specific Interventions and Sensitive Interventions; (4) food security and nutrition at the individual, family, and community levels; and (5) strengthening and developing systems, data, information, research, and innovation. Strengthening food fortification is part of the fourth pillar as a policy to meet needs and increase access to nutrition. Salt is a common consumption ingredient, considered an effective medium for the addition of iodine fortification as a nutritionally sensitive intervention.

Pati Regency has great potential in providing salt consumption in Indonesia, so that it can contribute to strengthening food fortification. Based on data from the Trade and Industry Office, there are 92 consumption salt SMIs in Pati, which is the largest number of salt business actors in Central Java (Figure 1). However, some of the consumption salt produced by Central Java still cannot meet government standards. The quality of salt from Pati Regency is still not optimal, so it is less competitive (Suroso, 2015).

![Figure 1. Distribution of Salt Consumption SMIs in Central Java](Source: BBPOM in Semarang, 2023)

The government sets standards as a protectionist measure for businesses and consumers (Sunoko, Saefuddin, Syarief, & Zulbainarni, 2022). This should be a motivation for SMEs to improve production quality. Although there have been efforts to foster and socialize to business actors, awareness of fortification practices still needs to
be improved. Administrative discrepancies in the licensing process as well as unqualified levels of forcientiation can hamper the continuity of the program. The lack of standards indicates the need for more comprehensive information to business actors. Limited access to information needs to be minimized through technical and non-technical guidance as well as more effective communication on standardization to salt consumption SMEs.

The implementation of salt fortification in Indonesia involves industry as a private sector, especially small and medium industries (IKM). The responsibility for fortification practices is not only on the company, but the government also has a role to play in creating a supportive environment by setting appropriate requirements. The involvement of all stakeholders, including the private sector, and the community, is critical to the success of this program.

Regional Regulation of Pati Regency Number 9 of 2008 has regulated the quality standards of salt consumption, the implementation of which requires support and coordination across related sectors. The existence of this regulation can guarantee the quality and quality of salt produced by collaboration in the process of coaching, supervising, and controlling fortification involving district, provincial, and non-governmental organizations (NGOs). Communication for development and social change is needed in reaching agreement for the interests, needs, and capacities of all parties through knowledge development (Servaes & Lie, 2008). Institutional design is needed to direct and create a climate that supports development programs. In the process of collaboration, institutional design becomes fundamental as a protocol and basic rules (Andriani & Islamy, 2021).

This study aims to analyze institutional design and its problems in stakeholder collaboration as an effort to foster salt consumption SMEs in Pati Regency. Dimensions in institutional design include ground rules, participation, exclusive forums, and transparency (Ansell & Gash, 2008).

Research Methods

This research uses qualitative methods, with data collection methods through observation, interviews, document studies, and FGDs. The research was carried out in Pati Regency which has the largest pond land and the most salt SMIs in Central Java, so that it has the potential to strengthen iodine fortification programs in food. The informants in this study amounted to 15 people, who were selected based on background, knowledge, and experience related to collaboration between institutions in strengthening the fortification of salt consumption SMIs in Pati Regency. The informants came from IKM development agencies in Pati Regency, namely: the Regional Development Planning Agency (Bappeda), the Marine and Fisheries Service (DKP), the Trade and Industry Office, the Health Office, and the Cooperative and MSME Office. Informants from supervisory agencies at the Central Java Province level are: Bappeda, DKP, the Department of Industry and Trade, and the POM Center (BBPOM) in Semarang. Informants also came from the NGO Nutrition International Indonesia, APROGAKOB (Association of Iodized Consumption Salt Producers), as well as representatives of consumption salt SMIs. Data analysis is carried out until credible data is obtained including the process of data condensation, data presentation, and conclusion or verification, which is focused on the formulation and problem of research (Miles et al., 2014).
Results and Discussion

The salt consumption IKM development element in Pati Regency monitors the flow of salt production starting from the stages in farmers, producers (IKM), distributors, to consumers. This is done so that the quality of raw materials, production processes, and fortification materials can meet the established standards. The guidance involves local level government agencies of Pati Regency, namely Bappeda, the Marine and Fisheries Office, the Trade and Industry Office, the Cooperative and MSME Office, and the Health Office. The Central Java Provincial Government that participated in the development process was the Department of Industry and Trade, the Marine and Fisheries Office, and BBPOM in Semarang. The guidance also involves non-governmental organizations, namely the NGO *Nutrition International Indonesia* and the Consumer Development and Protection Institute (LP2K). The multisectoral supervision implemented can be seen in Figure 1.

![Multisectoral Supervision of Iodized Salt Consumption in Pati District](source)

The involvement of several agencies in the development and supervision of consumption salt SMIs has not been able to guarantee the stability and continuity of the consumption salt produced. The level of iodine fortification (KIO3) in the salt produced, based on samples taken by the POM Center in Semarang, the Regional Government of Pati Regency, and the NGO *Nutrition International Indonesia* showed a discrepancy at 48.84% in 2021, while in 2022 the non-conformity reached 36.49%. In 2023, nonconformities will increase at 40.70%. Business actors have not been consistent in maintaining product quality, so it is necessary to increase awareness in internal supervision of their own products in order to produce quality products consistently. The results of the fortification level examination are presented in Figure 3.
Development policy in the salt consumption fortification program involves various related sectors. The cooperation of several parties in the implementation, development, and overcoming of problems in a development program can be realized through the concept of collaboration. Relationships between stakeholders are formed in a network through institutional design. Dimensions in institutional design include elements of ground rules, participation, exclusive forums, and transparency.

**Basic Rules**

The guidance and supervision of salt consumption SMIs in Pati Regency is based on regulations whose escort involves various government agencies so that cross-sector cooperation is needed. These regulations include Regional Regulation of Pati Regency Number 9 of 2008 concerning Iodized Consumption Salt, SNI 3556 of 2016, and Regulation of the Head of the POM RI Number 23 of 2023 concerning Registration of Processed Food. In addition, the network in coaching and supervising salt consumption SMIs is run through the team responsible for Iodine Deficiency Disorders (GAKY). The formation of the GAKY Team was based on a decree that included elements of the government, associations, and NGO institutions. GAKY team members consist of stakeholders related to the production, distribution, and consumption of iodized salt. The coordination team and working group for GAKY mitigation of Central Java Province were formed through the Decree of the Governor of Central Java Number: 444.5/72 of 2018. At the local government level of Pati Regency, a coordination team and implementation team for GAKY countermeasures were formed based on the Decree of the Regent of Pati Number: 050/482 of 2017.

The decree stipulates the tasks of the working group team which includes policies, integration of activities, facilitation of human resource development of apparatus for capacity and capacity building, as well as support in achieving goals. In addition, the GAKY team's tasks include continuous planning, surveillance, and evaluation. The working group of the GAKY Team includes coaching and empowering iodized salt production, which is responsible for facilitating producer capacity building, monitoring, and quality evaluation, providing technical guidance, coordination, providing guidelines, coaching, supervising, consulting, and monitoring and evaluation for iodized salt.
consumption SMIs and their marketing networks. Partnership development as an effort to overcome GAKY is also included in the role of the working group.

The Pati Regency GAKY Team was formed on March 7, 2017, where some terms or positions listed in it are no longer appropriate due to changes in the regulations underlying the decree. Regional Regulation of Pati Regency Number 13 of 2016 concerning the Establishment and Arrangement of Regional Apparatus has been revised with Regional Regulation of Pati Regency Number 7 of 2019. This statement is in line with information submitted by staff of the Government and Human Development Division (PPM) of Bappeda Pati Regency.

"It should not be valid (SK GAKY), so now the position has changed all according to SOTK. There used to be sub-districts, now it's not, now it's all functional." (G, Bappeda of Pati Regency).

The decree for the formation of the GAKY Team for Central Java Province was issued on March 25, 2018. Presidential Regulation Number 42 of 2013 concerning the National Movement for Nutrition Improvement which underlies the formation of the Central Java Province GAKY Team Decree has been revoked with the issuance of Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction. Based on the statement of the Industrial Coach for Standardization and Consumer Protection of the Central Java Province Disperindag, this regulation change weakens the coaching role of GAKY members.

"SK GAKY, some who are members of the team actually question its coturiousness. Since 2021, as I recall, there have been new regulations focused on handling stunting, but they don't lead to salt anymore. So rich lost the program for his top cantolan. Automatically, if the regulations above it change, which becomes the legal basis for the implementation of the team, it will eventually not be able to continue." (F, Disperindag Central Java Province)

The formation of the GAKY Team is an organized network involving district, provincial, NGO governments, business actors as private elements, and the community. The decision letter is the basis for regulating activities in the team, establishing authority, and authority respectively according to their main duties and functions. The formation of the team through a decision letter provides a basis and guidelines for the organization and continuity of activities. This is in line with Ansell and Gash (2008), which states that institutional design should pay attention to ground rules as supporting collaboration for procedural legitimacy. Despite doubts regarding the sustainability and validity of the GAKY Decree from its members, collaboration continues because guidance on consumption salt SMEs must still be carried out as support for the regional economy.

Participation

Government entities that are members of the GAKY Team are not all involved and hold responsibilities related to the coaching and supervision process on salt consumption SMIs. This is due to the diverse focus of stakeholder attention, which is not all focused on salt consumption SMEs. At the provincial level, the institutions that play a role are Bappeda as coordinator, and the Department of Industry and Trade and BBPOM in Semarang which has technical responsibility in fostering and supervising salt consumption SMIs. At the district level, Bappedda acts as coordinator, while the technical guidance function is carried out by the Trade and Industry Office.
The Head of the Nutrition Team of the Pati District Health Office stated that the government's attention to GAKY has indeed shifted to other nutrition improvement strategies, because Pati has been declared free of GAKY endemic.

"We are because it is not a GAKY endemic area anymore, yes, for reports that are not included in the province or at the center, they are indicator reports that must be prioritized. What comes in is only monitoring household salt consumption, if others have not. Because it is no longer endemic". (E, Pati District Health Office)

Monitoring of iodized salt consumption at the household level conducted by the Pati District Health Office is stated to have achieved more than 90%. This has caused attention to GAKY to decrease. Fortification and GAKY are part of the National Strategy for Stunting Acceleration so that their existence cannot be separated. Strengthening food fortification is a strategy to achieve food security and nutrition which is one of the pillars of the program. The complexity of health problems should not ignore nutritional issues related to GAKY, given the serious impacts that can be caused (Ministry of Health, 2022).

In the period 2020 to 2023, guidance and supervision of salt consumption SMEs will be less than optimal due to budget reallocation for handling Covid-19. Coaching activities cannot be carried out by one of the technical agencies at the district level due to the unavailability of supervision budgets. Currently, supervision is still carried out by the NGO Nutrition International Indonesia. Lack of participation from one party can lead to non-optimal coaching and supervision as a whole.

The great potential of salt SMEs in Pati requires continuity of cross-sectoral collaboration in its development efforts. Institutional design can affect participation levels. Institutional weaknesses in collaboration cause the empowerment of business actors to be less than optimal due to the lack of entities (institutions) and systems (networks). (Mardikanto & Soebiato, 2013).

**Exclusive Forum**

Collaboration in coaching and supervising salt consumption SMIs does not have a scheduled agenda to coordinate. This is not in line with Ansell and Gash (2008) which states that in the institutional dimension a cross-sector collaboration requires an organized and orderly exclusive forum. The coordination forum for coaching actors was initiated by government and non-government institutions that have programs in the current year.

In addition, coordination is also carried out incidentally when problems arise related to SMEs in the field. In October 2023, the GAKY Team held a meeting and went down together in the field due to complaints related to the circulation of unqualified consumption salt (Figure 4). Problems with SMIs as the target of development make related institutions participate in collaboration, under the coordination of the Pati Regency Bappeda. Coordination through meetings or by conducting joint supervision will trigger member involvement for the next coaching step (Islamy, 2018).
Transparency
a. Institutional design in collaboration with the development of consumption salt SMIs involves government, non-government, NGO and associations that oversee consumption salt SMIs. APROGAKOB (Association of Iodized Consumption Salt Producers) is a mediator who bridges communication between SMEs and coaching agencies. Associations of business actors with the same product and market demand representation of interests and voices from members and are prone to personal interests and groups. In the coaching process that occurs, there are still suspicions from members regarding differences in treatment due to personal factors. This indicates an increase in trust so that participation will increase and the representation of SMEs in consultation becomes more even.

Conclusion
The collaboration of actors in fostering salt consumption SMIs involves elements of government, non-government, and the community. Institutional design that contains basic rules, participation, exclusive forums, and transparency analyzed through the collaboration process that occurs is still not optimal. Dimensions in institutional design are intertwined with each other to support collaboration. The basic rules in the form of the GAKY decree that should strengthen participation can weaken the role because of doubts about its sustainability. Optimal participation can be done with adequate resources in addition to strong institutional design in the form of rules underlying collaboration. An exclusive scheduled forum is needed so that coordination can be carried out in an organized manner. Transparency in the process will increase member participation, and increase the trust of salt consumption SMEs to the coaching actors. This will encourage awareness of the importance of fortification that can support the health sector. The potential of salt consumption SMIs in Pati Regency requires continuity of coaching collaboration in order to support the regional economic sector.
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