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DESIGN OF INSTITUTIONAL AND IMPLEMENTATION BARRIERS MODELS OF FUEL SUBSIDY POLICY FOR FISHERIES SECTOR WITH INTERPRETIVE STRUCTURAL MODELING METHOD

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ABSTRACT

The fisheries sector is one of the consumer users in the fuel subsidy policy with custody transfer point in the Fuel Retail Station. The problem that arises in the fisheries sector is the actual price received by fisherman above the price that has been set by the Government due to lack of fuel Retail Station for fishery and other constraints. In addition, there are many institutions involved in the fuel subsidy policy of the fisheries sector. Interpretive Structural Modeling method is used to produce a model of structural institutionalstrategic relationship which mutually supports on fulfillment of fuel subsidies for fishermen for decision making through policy formulation and acknowledge theobstacles that are considered to be a major factor in the implementation of the fuel subsidy policy to the fisheries sector through structured interview and questionaire with 5 experts. This research resulted in structural model of institutions with the 7 institutions that are considered to be a major factor in the preparation and implementation of fuel subsidy policy for fisheries sector. There are 3 barriers that are considered to be the major factors in implementing the fuel policy subsidy to the fisheries sector; one price policy, regulation and licensing and also distribution of fuel retail station, especially for fisheries sector.

Keywords: interpretive structural modeling, strategic management, decision science, energy subsidy.

1. INTRODUCTION

Indonesia is an archipelago that became one of the world's largest manufacturers of catching fish after China and Peru (FAO, 2014). To support the fisheries sector, the Indonesian government providesdifferent types of subsidies. One of the types of the subsidies provided is the fuel subsidy to the fisheries sector. The fuel subsidy is provided in the form of domestic fuel pricing below the market price and the delivery of subsidized fuel is carried out in the fuel station. But in fact 70% of fishermen have never bought Diesel fuel types according to the Government retail subsidies price (retail price above the Government price)(UNPAD, 2015). Based on various national and regional news sources, when the price of Diesel subsidy of Rp7, 500 per liter, then the actual price received by the Fishermen fuel varies in each region.

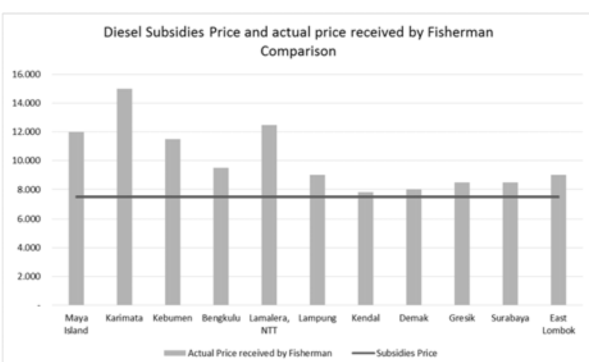

Figure-1. Variations in fuel prices for fisherman in various regions.

Seeing the problems of fuel subsidies distribution for fishermen in Indonesia, where the actual price received by fishermen in various regions varies and is not in accordance with the price set by the Government as well as in the preparation and implementation of fuel subsidy policy for fisheries required the involvement of various institutions so that the needs of the fuel subsidy for fisheries sector established in accordance with policy set, this research will focus on the analysis of obstacles and institutions involved in the preparation, organization and implementation of fuel subsidy policy for the fisheries sector decision-making.

The previous researches that have been conducted so far have discussed about the estimation of volume and value of fuel subsidies as well as the analysis of the impact of policy changes in fuel subsidies in the fisheries sector, but there has not been a research found that discussed about the decision making related to the fuel subsidy policy for the fisheries sector and obstacles in the implementation of fuel subsidy policy of the fisheries sector.

The objective ofthis research is to produce a model of structural institutionalstrategic relationship which mutually supports on fulfillment of fuel subsidies for fishermenthrough policy formulation and acknowledge theobstacles that are considered to be a major factor in the implementation of the fuel subsidy policy to the fisheries sector.

2. LITERATURE REVIEW

2.1 Subsidy

Fuel as one of the important factors in fisheries sector can massively contribute to the increase in fishing costs. In order tosupport fisherman, many countries give fuel subsidies toincrease fisherman revenue (Sang-Go, 2013). A subsidy is any measure that keeps prices for consumers below themarket level or keeps prices for producers above the market level, or that reducescosts for consumers and producers by giving direct or indirect support (De Moor, 1964). In addition, a subsidy is some kind of government support - mostly of a monetary nature - to the private sector, generally serving a public purpose (FAO, 2002).

In fisheries sector, Fishery subsidies are defined here as financial transfers, direct or indirect, from publicentities to the fishing sector, which help the sector make more profit than it wouldotherwise(Sumaila, 2010). In addition, Fisheries subsidies are government actions or inactions that are specific to thefisheries industry and that modifies-by increasing or decreasing - the potentialprofits by the industry in the short-, medium- or long-term (FAO, 2002).

2.2 Fisheries subsidy in Indonesia

The Indonesian government provides subsidies to the fisheries sector through various programs such as Coastal Community Economic Empowerment Program (PEMP),Small Scale Fishing Enterprise Development Program, fuel subsidies, various supports for fisheries and marine conservation,management, and rehabilitation, Development of Infrastructure Program and other programs, including price supports and subsidizedcredit programs for providing easily accessible capital tofishing, processing, and marketing activities(Ghofar, Schorr, & Halim, 2008). About fuel subsidy, since the reformation era,the Government of Indonesia has made various changes to subsidy policy for the fisheries sector. In late 2014, the Indonesian government issued Presidential Decree No. 191 of 2014 that one of its contents are subsidies to the fisheries sector is limited only to fishermen who use Indonesianfishing vessels with a maximum of 30 GT vessel size.

2.3 Delphi

Delphi method was first developed by Norman Dalkey from the RAND Corporation in 1950 for a project sponsored by the United States Military (Skumolski, 2007). The Delphi technique is well suited as a means and method for consensus-building by using a series of questionnairesto collect data from a panel of selected subjects (Chia-Chien, 2007). Delphi has 4 characters that anonymity of Delphi participants, Iteration, Controlled feedback and Statistical aggregation of group response (Skumolski, 2007). The main statistic used in the Delphi study are measure of central tendency (mean, median, and mode) and the degree of dispersion (standard deviation and interquartile range) to present information on the collective judgment of respondents (Chia-Chien, 2007). Several types of mean scores were computedare: (a) Arithmatic Mean, (b) Geometric Mean, dan (c) the log of the Arithmatic Mean (Rohrmann, 2007).

In this study, prior to entry into the Interpretive Structural Modeling (ISM) methodology, the necessary expert opinion (expert) with the aim to filter the variables obtained from the literature. Experts needed in the study, totaling at least four experts from the field associated with the object of research, which each have a work experience of more than ten years as head of the department or office level, which reflects that the expert skilled in the art(Dachyar, Eriyatno, Rusli, & Zagloel, 2013).The question posed to the expert using 4 Likert scaleby eliminating the middle value/neutral value in order to avoid the tendency of respondents choosing that number. Results of the assessment concluded using Geometric Mean respondents with the lowest average score achieved by criterion was 2.75 out of 4, which is substantial enough to keep the criteriaunder consideration (Mohapatra, 2010).

2.4 Interpretive structural modeling

Interpretive Structural Modeling (ISM) was developed by Warfield (1974) and Sage (1977) and is an adaptation of paired-comparison approach (Sharma, 2014). ISM (Interpretive Structural Modeling) as one of the methodologies used is an interactive learning process where a set of elements that relate directly or indirectly comprehensively compiled in a systematic model. The model developed by ISM describes the structure of a complex issue or system of the target of study in a pattern designed carefully using graphics and statements (Shahabadkar, Hebbal, & Prashant, 2012). ISM change mental models system that are not clearly conveyed into the model a clear and well defined. The model will help to find the key factors related to the problem or issue. After identifying key factors or elements, strategies can be developed to deal with an issue (Attri, 2013). Interpretive Structural Modeling (ISM) is one ofthe modeling techniques was developed for the strategicpolicies that can be use (Dachyar, 2014).

ISM methodology based on contextual relationships developed through expert knowledge and expertise in understanding the variables. ISM does not provide quantitative information about the relationships of variables. However, ISM can be used to build the initial model using the available literature and through brainstorming with expert (Khan & Rahman, 2015). ISM has the capability to develop an initial model throughmanagerial techniques such as brain-storming, nominal grouptechniques, etc (Govindan, 2012)

Interpretive Structural Modeling (ISM) is used for modelling and multicriteria decision making in the area of *Supply Chain Management* (Shahabadkar, Hebbal, & Prashant, 2012). In addition, the ISM is also frequently used in research related Knowledge Management, Education, Energy Policy, Industry and Productivity. In various journals, the use method of the ISM with the theme of energy policy discusses the development of renewable energy and increase the level of domestic components in the upstream oil and gas. In this study, the Interpretive Structural Modeling (ISM) method will be used to analyze the development and implementation of fuel subsidies policy in the fisheries sector to support on fulfillment of fuel subsidies for fishermen.

Table-1. Various research with ISM Method.

Author	Knowledge Management	Education	Energy Policy	Industry	Productivity	Supply Chain
Singh, 2008	√					
Georgakopoulos, 2009		√				
Govindan, 2012						√
Eswarlal, 2012			√			
Sohani, 2012		√				
Yacob, 2012						√
Raeesi, 2013				√		
Abraham, 2013						√
Siddiqui, 2014		√				
Sadirsan, 2014			√			
George, 2014				√		
Solanki, 2014					√	
Chaghooshi, 2014						√
Sharma, 2014				√		
Kapoor, 2014	√					
Amma, 2014	√					
Sandbhor, 2014					√	
Jayant, 2014						√
Dachyar, 2014			√			
Khan, 2015						√

3. RESEARCH METHODOLOGY

3.1 Collecting data

At the stage of data collection, the data collection was conducted to gather data associated with the study, which includes:

- Institutions involved in the preparation, organization and implementation of fuel subsidy policy of the fisheries sector with a view Presidential Instruction No. 15 of 2011, Presidential Decree No. 191 of 2014 and the Minister of Energy and Mineral Resources Regulation No. 16 of 2011 and other relevant regulations.
- The study of literature related obstacles in the supply and distribution of fuel in remote areas.
- Institutional and obstacles of implementing factors for fuel subsidy policy to the expert validated through interviews and brain-storming

3.2 Stage Processing and data analysis

Data processing is done by using the steps in the ISM method, namely:

- Identification of factors, using 4 scales questionnaires given to the expert to obtain institutions involved in the preparation, organization and implementation of policies and barriers in the implementation of the fuel subsidy policy of the fisheries sector
- Expert interviews and through brainstorming has assessed the relationship between factors to producecontextual relationship between elements to develop a structural self-interaction matrix (SSIM) (Dachyar, 2014)
- Build Structural Self Interaction Matrix (SSIM)
- Build Reachability Matrix (RM) for each element
- Transitivity Analysis dan build final Reachability Matrix
- Partition Levels
- Build Conical Matrix
- Build ISM Diagraph
- MIC-MAC Analysis

4. RESULT AND DISCUSSIONS

4.1 Fishery fuel subsidy policy institutional design

Results of the questionnaire to five experts with Delphi method produce the 18 institutions that affect the decision, setting and implementation of fuel subsidy policy for the fisheries sector with Geometric Mean values above 2.75. The data is then processed using ISM method to get the key elements in the formulation and implementation of policies in order tosupport the fulfillment of fuel subsidies for fishermenthrough policy formulation. The 18 institutions are:

Table-2. Institution.

No	Institution	Code
1	Deputy for Energy and Mineral Resources, Coordinating Minister for Economic Affairs	L1
2	Ports Directorate of Fisheries, Ministry of maritime Affairs and Fisheries (MMAF)	L2
3	Directorate of Fishing Vessels and Fishing Tools, MMAF	L3
4	Directorate of Coastal Community Empowerment and Enterprise Development, MMAF	L4
5	Directorate of Oil and Gas Downstream Business Development, MEMR	L5
6	Legal Bureau, MEMR	L6
7	Provincial Government (Governor)	L7
8	Regency / City Government (Regent / Mayor)	L8
9	The Directorate of Fuel, BPH Migas	L9
10	Fisheries Regional Work Unit	L10
11	Energy Regional Work Unit	L11
12	Fishing Port	L12
13	Fuel Subsidy Supply & Distribution Enterprise	L13
14	Fuel Station / Fuel Retailer	L14
15	Village Government / District	L15
16	Banking	L16
17	Supervisory Fisheries	L17
18	Harbormaster	L18

The next step is to analyze the contextual relationships between variables by using the notation V, A, X and O with an explanation for each notation is:

V: sub-element i support the existence of sub-elements j, but not vice versa

A: sub-element j support the existence of a sub-element of i, but not vice versa

X: sub-elements i and sub-elements j support mutual existence

O: sub-elements i and sub-elements j unrelated

The relationship between these variables that described in the form of Structural Self Interaction Matrix (SSIM) is based on the opinion of the expert through a questionnaire.

Table-3. Institutional SSIM.

No	L18	L17	L16	L15	L14	L13	L12	L11	L10	L9	L8	L7	L6	L5	L4	L3	L2	L1
L1	O	O	O	O	O	V	O	O	O	V	O	O	V	V	V	O	O	
L2	O	O	O	O	O	O	V	O	V	X	O	O	O	O	X	X		
L3	O	O	O	O	O	O	O	O	V	O	O	O	O	O	X			
L4	O	O	O	O	O	O	O	O	V	O	V	V	O	O				
L5	O	O	O	O	V	V	O	V	O	V	O	O	X					
L6	O	O	O	O	O	O	O	O	O	X	O	O						
L7	O	O	O	O	V	O	O	V	V	O	O							
L8	O	O	O	V	V	V	V	O	V	O								
L9	O	O	O	O	V	V	O	O	O									
L10	X	X	O	O	V	O	V	O										
L11	O	O	O	O	O	O	O											
L12	X	X	O	O	V	O												
L13	O	O	X	O	V													
L14	O	O	A	O														
L15	O	O	O															
L16	O	O																
L17	X																	
L18																		

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The results obtained in the Structural Self Interaction Matrix is translated into binary digits 0 and 1 in the form of Reachability Matrix (RM) using the ruleV: eij= 1; eji= 0, A: eij= 0; eji= 1, X: eij= 1; eji= 1, O: eij = 0; eji = 0.

Based on the results of *Reachability Matrix*, transitivity analysis mentioned as the statement "If the variable A associated with variable B and variable B associated with variable C, then variable A related to the variable C"(Ravi, 2005). Results from the analysis of transitivity are Final Reachability Matrix.

Table-4. Institutional final reachability matrix.

Variable	L18	L17	L16	L15	L14	L13	L12	L11	L10	L9	L8	L7	L6	L5	L4	L3	L2	L1	Driving Power
L1	1	1	1	0	0	1	1	0	1	1	0	0	1	1	1	1	1	1	13
L2	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	0	14
L3	1	1	1	0	1	1	1	1	1	0	1	1	0	0	1	1	1	0	13
L4	1	1	1	0	1	1	1	1	1	0	1	1	0	0	1	1	1	0	13
L5	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	14
L6	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	13
L7	1	1	0	0	1	0	1	1	1	0	0	1	0	0	0	0	0	0	7
L8	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0	0	0	9
L9	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	1	0	13
L10	1	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	5
L11	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
L12	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	4
L13	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
L14	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L16	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
L17	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4
L18	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4
Dependence	13	13	10	2	13	10	13	8	12	5	7	7	4	3	4	4	6	1	

Fromfinal Reachability Matrix obtained, will be processed to obtain structural models (digraph) which is based on partition level. Partition Level is obtained by processing Reachability Set, Antendent Sets and Interaction Set. Step assessment of the partition level by comparing the Reachability Set (RS) and Interaction Set (IS). If a particular variable, RS value same with IS, then the variable is entered as Level I and the variables eliminated in the next step.

After the partition level, then compiled canonical matrix (lower triangular format) as the basis for preparing diagraf structural model.

Table-5. Institutional Canonical Matrix.

Institution	Reachability Set	Antendent Set	Intersection Set	Level	Driving Power	Dependence
L11	11	2,3,4,5,6,7,9,11	11	I	1	8
L14	14	2,3,4,5,6,7,8,9,10,12,13,14,16	14	I	1	13
L15	15	8,15	15	I	1	2
L17	10,12,17,18	1,2,3,4,5,6,7,8,9,10,12,17,18	10,12,17,18	I	4	13
L18	10,12,17,18	1,2,3,4,5,6,7,8,9,10,12,17,18	10,12,17,18	I	4	13
L12	12	1,2,3,4,5,6,7,8,9,10,12	12	II	4	13
L13	13,16	1,2,3,4,5,6,8,9,13,16	13,16	II	3	10
L16	13,16	1,2,3,4,5,6,8,9,13,16	13,16	II	3	10
L10	10	1,2,3,4,5,6,7,8,9,10	10	III	5	12
L7	7	2,3,4,5,6,7,9	7	IV	7	7
L8	8	2,3,4,5,6,8,9	8	IV	9	7
L2	2,3,4,9	1,2,3,4,5,9	2,3,4,9	V	14	6
L3	2,3,4	1,2,3,4	2,3,4	V	13	4
L4	2,3,4	1,2,3,4	2,3,4	V	13	4
L6	5,6,9	1,5,6,9	5,6,9	V	13	4
L9	2,6,9	1,2,5,6,9	2,6,9	V	13	5
L5	5	1,5	5	VI	14	3
L1	1	1	1	VII	13	1

Based on the results of the iteration at partition level, the institutional structural model of the fuel subsidy policy for the fisheries sector can be described by adjusting the results of canonical matrix.

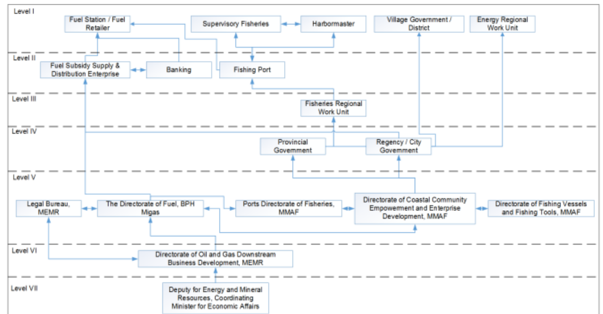

Figure-2. Institusional Structural Model.

The next step is to classify the key variables that are important for the system under study. Each variable was divided into four parts, namely autonomous, linkage, independent and dependent in the diagram MIC-MAC.

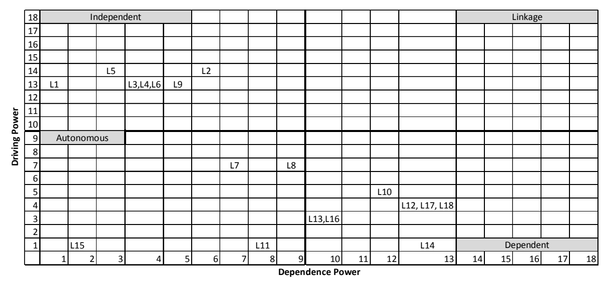

Figure-3. Institusional MIC-MAC Analysis.

4.2 Institutional analysis

MIC-MAC Analysis showed that seven institutions, namely L1, L5, L3, L4, L6, L9 and L2 become a major factor in the preparation, organization and implementation of fuel subsidy policy of the fisheries sector. In addition to the seven institutions are supporting the implementation of the fuel subsidy policy of the fisheries sector. From ISM diagraph, it appears that the L1 is the most influential institution in making policies to encourage the fulfillment of the fuel subsidies needs of the fisheries sector.

4.3 Fishery fuel subsidy policy implementation barrier

Presidential Decree No. 191 of 2014 stipulates that the fuel subsidies custody transfer point to the fishing sector is in the fuel station. The custody transfer point is a point where the government guarantees the price of domestic fuel subsidies in accordance with established. This means, the sale price will depend on the existence of the fuel station especially for fishery. The analysis is based on literature searches related factors that affect the existence of fuel station, especially in remote areas (Rural and Mountains) adapted to the problems that occur in the distribution of fuel subsidies to the fisheries sector in Indonesia, acquired some of the obstacles faced in particular on the sustainability of the fuel station.

As the steps taken by the institutional analysis, the study of literature about the obstacles will be validated

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to the five experts using the Delphi method through an open questionnaire in the first stage. Furthermore, the validation phase II to obtain a consensus related barriers in fuel subsidy policy implementation for fisheries sector. Results of the validation of 5 experts showed that 11 variables such obstacles are important. This is indicated by Geometric Mean values for all the above constraints 2.75. Further interviews were conducted using a questionnaire with expert on the relationship between the obstacles of the implementation of fuel subsidy policy for the fisheries sector, in order to obtain a picture of the relationship between the barriers in the form of Structural Self interation Matrix.

Table-6. Implementation barrier SSIM.

Barriers		K11	K10	K9	K8	K7	K6	K5	K4	K3	K2	K1
Investment feasibility	K1	O	A	A	X	X	O	A	A	A	A	
Fisherman centre location	K2	O	O	O	A	A	O	O	O	X		
Transportation access	K3	O	O	O	A	O	O	O	O			
1 Price Policy	K4	V	V	O	O	V	O	O				
Regulation and Licensing	K5	X	V	O	O	O	O					
Purchasing Power of Fisherman	K6	V	O	O	O	O						
Distribution of Fuel Stations	K7	O	O	V	O							
Infrastructure condition	K8	O	O	O								
Fluctuations in fuel Needs	K9	V	X									
quota restrictions	K10	V										
Potential misuse of Fuel Subsidy	K11											

The results obtained in the Structural Self Interaction Matrix is translated into binary digits 0 and 1 in the form of Reachability Matrix for further transitivity analysis in order to obtain Final Reachability Matrix.

Table-7. Implementation barrier final reachability matrix.

Barriers	K11	K10	K9	K8	K7	K6	K5	K4	K3	K2	K1	Driving Power
K1	1	0	0	1	1	0	0	0	0	1	1	5
K2	0	0	0	0	0	0	0	0	1	1	0	2
K3	0	0	0	0	1	0	0	0	1	1	1	4
K4	1	1	1	1	1	0	1	1	0	0	1	8
K5	1	1	1	1	1	0	1	0	0	0	1	7
K6	1	0	0	0	0	1	1	0	0	0	0	3
K7	1	1	1	0	1	0	0	0	0	1	1	6
K8	0	0	0	1	0	0	0	0	1	1	1	4
K9	1	1	1	0	0	0	0	0	0	0	1	4
K10	1	1	1	0	0	0	0	0	0	0	1	4
K11	1	0	0	0	0	0	1	0	0	0	0	2
Dependence	8	5	5	4	5	1	4	1	3	5	8	

The next step is the assessment level of the partition (Partition Level) obtained by processing Reachability Set, Antendent Sets and Set Interaction.

Table-8. Implementation barrier Partition level.

Barriers	Reachability Set	Antendent Set	Intersection Set	Level
K2	2,3	1,2,3,7,8	2,3	I
K11	5,11	1,4,5,6,7,9,10,11	5,11	I
K1	1,7,8	1,3,4,5,7,8,9,10	1,7,8	II
K9	9,10	4,5,7,9,10	9,10	III
K10	9,10	4,5,7,9,10	9,10	III
K7	7	3,4,5,7	7	IV
K3	3	3,8	3	V
K8	8	4,5,8	8	VI
K5	5	4,5,6	5	VII
K4	4	4	4	VIII
K6	6	6	6	VIII

Results of the partition level is made as a basis for preparing diagraph.

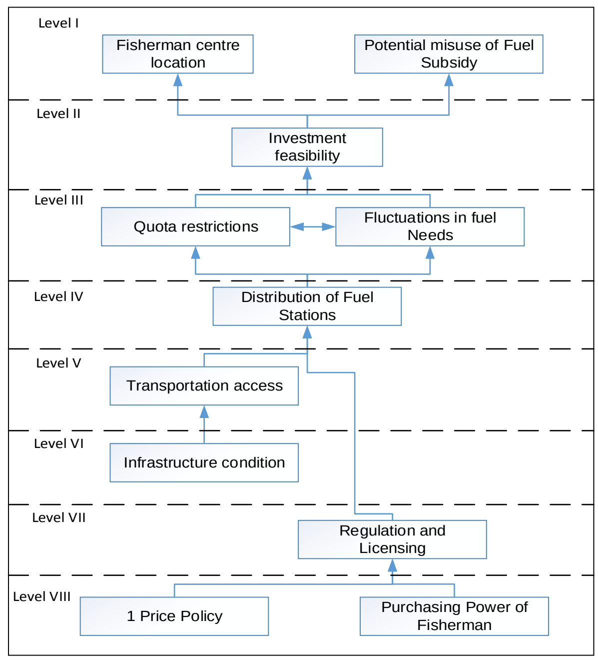

Figure-4. Implementation Obstacle Diagraph.

The final step is the MIC-MAC analysis or commonly referred to as Driving Power - Dependence Matrix which aims to analyze the driving power and dependence of each variable.

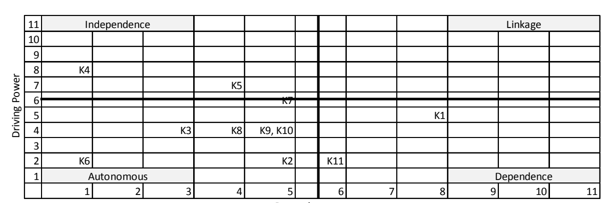

Figure--5. Implementation Barrier MIC-MAC Analysis.

4.4 Fuel Subsidy policy for fisheries sector implementation obstacle analysis

MIC-MAC analysis on the fuel subsidy policy implementation for fisheries sector obstacles shows that one price policy (K4) and Distribution of Fuel Stations (K5) is the main obstacle in the implementation of policies that meet the needs of fuel subsidies to the fishing sector is not performing well. While the ISM diagraph illustrates that one price policy is the most influential obstacle in the implementation of policies related to efforts to fulfill the needs of the fisheries sector in fuel subsidies. What should be observed from the ISM diagraph is that, even though the purchasing power of the fishermen in the category of autonomous factors but also influential in the implementation of fuel subsidy policy for the fisheries sector?

4.5 Institutional and implementation obstacle Analysis

Based on analysis of the obstacle of policies implementation, one price policy is the most influential obstacle to the implementation of fuel subsidy policy for the fisheries sector; it would require mutually government intervention. the final impact of one price policy as a obstacle that supported by another obstacle in the form of the purchasing power of the fishermen and the condition of infrastructure is the availability of fuel subsidy stations for the fisheries sector is not evenly distributed throughout the Indonesian territory. Availability of fuel stations for fishery will affect efforts to meet the needs of fuel subsidies for fishermen and also the suitability of fuel price subsidies received by fishermen with the Government decree.

According to the analysis of the institutional, Deputy for Energy and Mineral Resources, Coordinating Minister for economic affairs is a key factor to push for a solution to the implementation barrier of fuel subsidy policy for the fisheries sector by involving seven institutions in the category of a major factorinstitution. The ultimate goal of the policy that will be taken by the Government on existing obstacles is the fuel subsidy for fishermen can be obtained easily and the price paid by the fishermen according to the price set by the Government.

5. CONCLUSIONS

Based on the results of data processing and analysis, related to the goals of this research can be concluded that:

- Generated structural model of institutional with 18 Institutions involved in the preparation, organization and implementation of fuel subsidy policy for the fisheries sector.
- From the 18 institutions, 7 institutionsare considered to be a major factor in the preparation, organization and implementation of fuel subsidy policy of the fisheries sector. In addition to the seven institutions are supporting the implementation of the fuel subsidy policy for the fisheries sector.
- From 7 major factorinstitutions, the most influential institution is Deputy for Energy and Mineral Resources, Coordinating Minister of Economic Affairs.
- Generated 11 factors that become obstacles in the implementation of fuel subsidy policy for the fisheries sector.
- From the 11 obstacles, 3 obstaclesare major obstacles in the implementation of fuel subsidy policy for the fisheries sector.
- from 3 major factorobstacles, one price policy is the most influential obstacle in the implementation of fuel subsidy policy for the fisheries sector

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