*ISSN : 1411-0199*
*E-ISSN : 2338-1884*

# Variations of Electricity Supply Patterns in the Regions of Sumenep Madura Island

Eni Sri Rahayuningsih[1]*, Agus Suman[2], David Kaluge[3]

[1] Graduate of Doctoral Program, Faculty of Economics and Business, University of Brawijaya, Malang
[2]Lecturer of Doctoral Program in Economics, Faculty of Economics and Business, University of Brawijaya, Malang
[3]Lecturer of Doctoral Program in Economics, Faculty of Economics and Business, University of Brawijaya, Malang

**Abstract**

The problem of limited electricity supplies in the Sumenep Madura Islands serves the background of this paper. This study aims to reveal the phenomenon of variations in the electricity supply patterns in Sumenep Madura Islands region. While employing rationality theory, social capital, and collective action, this present study used qualitative research methods with triangulation and snowball sampling techniques to bring out the truth of Emic. This study found that, while most of the geographical conditions of the Sumenep Islands were difficult to reach by transportation and communication facilities, this situation limited electricity supplies and caused a variety of electricity supply patterns. There were at least 6 patterns, each pattern had different characteristics: group size, relationship between group members, electricity use capacity per household (Watt), payment system (pre-paid or post-paid), usage time (hours/days), rates (IDR/household /month), potential conflicts, moral hazard potential, sustainability, perpetrators, and location. The author concludes that local community wisdom can be used as an effective and efficient solution to independently meet electricity demands in the areas whose resources are very limited. The results of this study can be used as a reference to solve problems in other locations that share similar characteristics.

**Keywords:** variation, pattern, electricity supply, island

## INTRODUCTION

The problem of limited electricity infrastructure in the Sumenep Madura Islands region is an interesting phenomenon to analyze. This problem is very common in most Indonesian areas. In reality, the abundant natural resource potentials in the archipelago have not been utilized optimally. For some reasons, it is because most islands in Indonesia are difficult to reach, not to mention some other limited infrastructures such as electricity. The poverty as experienced by people living in Sumenep Islands has been caused by gaps, isolation and limited infrastructure facilities. In fact, the availability of infrastructure plays a very strategic role as "social overhead capital" to stimulate the development of all sectors [1; 2; 3].

In order to meet the electricity needs in the Sumenep Madura Islands, PT PLN plans to build a Gas and Steam Power Plant (PLTGU) in Sumenep Regency with a capacity of 400 to 450 MW. The fact that Sumenep Regency has received the top priority for the development of electricity infrastructure is because Sumenep Regency is the only archipelago out of four other regencies in Madura Island.

Sumenep Regency is at the eastern end of Madura Island, consisting of lands and island regions. The area of Sumenep Islands is 946.53 Km2 or 45% of the area of Sumenep Regency, including 9 Districts, 84 villages, and 126 islands. Of 126 islands, 48 inhabited islands and 78 uninhabited islands. Sumenep Islands Region covers 9 Sub-districts such as Masalembu, Sapeken, Kangayan, Arjasa, Raas, Nonggunong, Gayam, Talango and Giligenting. Population density in all sub-districts is relatively low (less than 1000 people/km2) because many islands are uninhabited. The sex ratio in all sub-districts is less than 100, meaning that the female population is more than men [4]. The population of Sumenep Archipelago consists of Madurese and Bugis Tribes. They have shared similar cultural behavior such as wandering into other areas. Moreover, they also have a high work ethos. The number of male population of productive age is relatively small because most of them migrate outside the region or abroad. Currently, the population in the

Correspondence address:
**Eni Sri Rahayuningsih**
Email : enih4n4_utm@yahoo.com
Address : Perum Graha Kamal Permai B1/31, Desa Gili Timur, Kec. Kamal, Kab. Bangkalan 69162

islands has been dominated by the elders, women and children.

The limitations of electricity infrastructure facilities in Sumenep Islands are shown by the lack of households that enjoy the infrastructure facilities. Only about 15% belongs to that group. The limited capacities Sumenep Regency and PT PLN Regional Governments have make most of the remote islands in the Sumenep archipelago unable to enjoy 24-hour electricity from PT PLN. These conditions result in variations of electricity supply patterns in Sumenep Islands region. The institutional aspects of the rules of the game and player aspects (players) in various electricity supply patterns in Sumenep archipelago are interesting phenomena to analyze [5]. With these rationales, this study aims to reveal the institutional phenomena from the aspects of the rules of the game (Rule of the Games) and aspects of player in various variations of electricity supply patterns in Sumenep archipelago.

## MATERIAL AND METHOD

This study uses a qualitative approach with Emic truths. This approach concerned with the exploration of the meaning behind a person's social, emotional, and experience phenomena. The qualitative research was based on unique and complex problems. Instead of looking for generalizations, it focused on looking for specific truths related to the location and certain contexts. This approach was also holistic in nature viewing the object of research as a whole. This research focused on the meaning behind the non-sensual empirical (*noumena*) facts and phenomena, instead of *nomothetic* ones (measurable).

This research was to reveal institutional aspects from the rules of the game and player aspects in various variations of electricity supply patterns in Sumenep Madura archipelago, especially in remote islands that are difficult to reach.

## DATA COLLECTION

The data in this study were social reality about the institutional aspects of the rules of the game (Rule of the Games) and aspects of players in various variations of electricity supply patterns in the Sumenep Madura archipelago, especially in remote islands that are difficult to reach.

The data of this study included primary and secondary data. Primary data are in the form of information from stakeholders, among others: Staff of the Sumenep District Planning Agency, Staff of the Sumenep District Community and Village Empowerment Service (DPMD), PT PLN staff, DPRD members from the islands, community leaders, and rural communities in the Sumenep Islands Region. The secondary data were from relevant documents, among others: Sumenep Regency documents in Figures issued by the Central Bureau of Statistics of Sumenep Regency, planning documents prepared by Sumenep Regency Regional Planning Agency, and other relevant sources.

Primary data sources were the key informants or people considered to have a lot of information about the phenomenon under study [6]. The initial informants were chosen based on the purposive sampling technique, subsequently supported by snow ball sampling technique. In addition, observations of events and documents relevant to the research context also became the sources of data. The analysis and data collection were carried out together until conclusions were drawn.

## RESULT AND DISCUSSION

The results of the study indicate that there was a gap regarding the availability of electricity in the mainland and Sumenep Madura islands. The geographical conditions of the Sumenep Islands which were mostly difficult to access by transportation and communication facilities caused limited electricity and a variety of electricity supply patterns. There were at least 6 patterns, namely, pattern A, pattern B, pattern C, pattern D, pattern E, and pattern F. The results of the institutional analysis of aspects of the rules of the game and the aspects of patterns and players on various variations of electricity supply patterns in the Sumenep Island regions is as follows.

### 1. Institutional: Aspects of Main Rules (Rule Of The Games)

#### Aspects of Formal Rule of the Games)

Formally, the State Electricity Company (PLN) has been established as the holder of the electricity business power in Indonesia. The supply of electricity in Indonesia by PT PLN is at least supported by 11 regulations, including: (1) Law Number 30 of 2009 concerning Electricity; Government Regulation No. 17 of 1990 concerning the determination of the State Electricity Company (PLN) as the holder of the electricity business power; (2) Government Regulation Number 23 of 1994 concerning Transfer of Forms of Public Companies (Perum) of State Electricity into Company Companies

(Persero); and (3) Regulation of the Minister of Energy and Mineral Resources No. 27 of 2017 concerning the Level of Quality of Services and Costs Related to Electric Power Distribution by PT Perusahaan Listrik Negara (Persero).

**Informal Rules of Rule of the Games**

Sumenep Islands region bordered with the islands of Kalimantan, Sulawesi and Bali. These conditions resulted in the characteristics of heterogeneous (multi-ethnic) Sumenep Islands communities, dominated by Madurese and Bugis ethnic groups who had shared similar characteristics such as the same religion (Muslims), upholding self-esteem, hard work ethic; wandering culture, strong kinship ties, strong tribal ties, and a group culture of cooperation [7].

The limitations of Sumenep District Government and PT PLN in providing the infrastructure mostly took place in remote islands. Various required infrastructures were provided by being jointly funded by parties who were willing to contribute the necessities through groups or individuals. However, free riders remained to stay in such a joint venture business [8].

Social interdependence and scarcity of resources factors on remote islands formed an incentive structure for communities or groups of users. This beneficial collective action (Mutually Beneficial Collective Action) was proven to be effective to overcome the electricity supply problems.

The collective action by a community or group facilitated by strong social capital reduced transaction costs in the supervision and enforcement of rules. This happened because of the interdependence between community members. Social sanctions or customary sanctions agreed among them served as the incentive to prevent and overcome violations of rules carried out by free riders. Kimbal (2012) also found that social capital played an important role to ensure the success and sustainability of economic activities [9].

One form of collective actions facilitated by strong social capital was *Gotong Royong* or *Ghutong Rojhung*. The success and sustainability of *Ghutong Rojhung's* collective actions were influenced by social capital in cognitive and structural aspects. Both aspects of social capital met ideas or expectations leading to beneficial collective action behavior (mutually beneficial collective action). Cognitive social capital influenced the community's willingness to carry out beneficial collective actions. Meanwhile, structural social capital served to facilitate this beneficial collective action. Both social capital cognitive and structural aspects became more effective if they were supported by complementary interactions from formal and informal institutions [10; 11].

*Gotong Royong* or *Ghutong Rojhung* on electricity supply in remote islands of Sumenep Regency, cognitive aspects facilitated by Madurese cultural norms had derived from Islamic teachings (congregation). Meanwhile, the structural aspects were facilitated by community groups or organizations such as recitation groups, *arisan* groups, *Dasa Wisma, Rukun Tetangga, Rukun Warga*, *Dusun*, *Desa*, and *Tanean Lanjhang*. *Tanean Lanjhang* was a Madurese traditional house which consisted of a collection of houses in a stretch of family land with a certain structure. The distance between houses was close together, and the houses were only limited by the yard or yard. The main part of the *Tanean Lanjhang* was the main house and mushola (family house of worship).

Mutual cooperation or *Ghutong Rojhung* on electricity supply in Sumenep Madura Islands was one form of the beneficial collective actions. The collective action was a rational action because each individual had different advantages and disadvantages. These actions required mutual work that complemented and benefited all members [12].

The rationality of the *Gutong Royong* or *Ghutong Rojhung* players who were supported by good morals (altruistic / sympathetic) had positive implications for productive, effective, efficient behavior both in the short and long term. Conversely, rationality supported by moral hazard (egoistic / opportunistic) forms social capital had negative implications such as tragedy of the commons. This situation had a negative impact on all parties both short and long term [13].

1. Institutional: Pattern and Player Aspects

The supply of electricity in Sumenep Islands consisted of at least 10 players and 6 patterns:

1. Player 1: National Electric Company Limited Liability Company (PT PLN)
2. Player 2: Private companies that act as managers of Diesel Power Plants (PLTD) or Solar Power Plants (PLTS) government assistance in remote villages whose locations were not accessible to PT PLN;
3. Player 3: The Central Government acts as a regulator;

4. Player 4: Local Government of Sumenep Regency who acted as a provider of electricity subsidy funds in remote villages whose locations were not accessible to PT PLN;
5. Player 5: Local Government of Sumenep Regency and East Java Province who act as providers of PLTD Assistance or PLTS in remote villages whose locations were not accessible to PT PLN;
6. Player 6: people who acted as electricity users;
7. Player 7: people who played a dual role as users and electricity managers of PLTD government assistance;
8. Player 8: people who individually played a dual role as owners, managers, and users of PLTD for commercial purposes;
9. Player 9: people who individually played dual roles as owners, managers, and users of PLTD for personal interests;
10. Player 10: community in a group that played a dual role as owner, manager, and user of PLTD within the scope of Lane Tanean.

**Pattern A: Electricity of PT PLN**

Pattern A had a large collective group size. The power plant from PT PLN had a large capacity (capacity of 3000 customers), meeting all the electricity needs in several villages. Pattern A consisted of three players such as player 1, player 3, and player 6. In pattern A, PT PLN held the main role as an BUMN dealing with all aspects of electricity in Indonesia.

Pattern A was the ideal pattern. This was because the 24-hour electricity service by PT PLN was at a low cost. The average customer expenditure for purchasing electricity pulses (tokens) with a capacity of 900 watts with 24-hour service was Rp. 70,000 / household / month. Pattern A had good sustainability because this pattern used a prepaid system and had a small potential for conflict and moral hazard.

The change from postpaid system to prepaid was proved to be effective. It had several advantages such as minimizing face-to-face between customers and PT PLN officers, preventing waste of resources, preventing moral hazard of field officers who often exploited public disobedience to seek personal gain, and preventing moral hazard people who made illegal connections, arrears in bills, and wasteful use of electricity. 24-hour electricity supply by PT PLN can only be implemented if all customers were willing to use a prepaid system.

Pattern A was done in villages easily accessible by PT PLN. This pattern did not require additional costs in operational and maintenance activities. One location with A was in Talango Subdistrict. It was an archipelago close to the mainland of Sumenep. These areas were easily accessible by sea transportation and supported by adequate supporting infrastructure facilities.

**Pattern B: Cooperation between PT PLN and Government Assistance**

Pattern B was almost the same as pattern A. In pattern B, the government provided subsidies to PT PLN. In Pattern B, PT PLN cooperated with the local government of Sumenep Regency. The local government of Sumenep Regency acted as a provider of subsidy funds to cover the additional costs incurred by electricity supply in villages that are difficult for PT PLN to reach.

In the process of supplying electricity, PT PLN financed all the costs of procuring and maintaining electricity facilities in easily accessible land areas. Meanwhile, the Regional Government of Sumenep Regency through the Community and Village Empowerment Service (DPMD) provided APBD funds to assist PT PLN in financing the procurement and maintenance of electricity facilities in remote islands.

Especially for Gili Island, special treatment was carried out. This was because Gili Island has been declared as one of the islands with the best oxygen content provider in the world after Jordan. The provision of electricity on Gili Island used PLTD with special filters. This was done to prevent the deterioration of oxygen quality. PLTD in Giliyang is temporary. In 2018 the underwater network by BPWS was built and targeted for completion in 2019. In Gili Raja Island, Sumenep Regional Government provided medium and low voltage engines and networks. Meanwhile, PT PLN had the role of managing electricity operations. In Raas Island, Sumenep Regional Government provided electricity poles. On the other hand, PT PLN provided machinery and manages electricity operations. The limited resources of Sumenep District Government and PT PLN made many remote islands unable to enjoy 24-hour electricity facilities from PT PLN. To reach all the islands, a very large budget and time were needed.

**Pattern C: Power Plants Government Assistance**

Pattern C had a small collective group size. This was because the power plant of local government assistance had a small capacity (capacity of 10-30 customers) and was only able to meet the electricity needs in a small scope. Pattern C

consisted of four players such as player 2, player 5, player 6, and player 7.

The community received and managed PLTD or PLTS assistance from the sub-district government. In each community sub-district, there were groups of 10-30 members. Based on the results of a collective agreement, in each group there was a PLTD manager. They acted as coordinators and had the responsibility to regulate the rules of the rules regarding service hours, service fees, bill payments, maintenance, operations, and supervision of illegal connections.

Pattern C was proven to be far from being ideal. This was because electricity services could not last more than 24 hours and the cost was relatively expensive. The average customer expenditure for <100 watts was Rp. 250,000 /household/month. Pattern C had a poor level of sustainability. This was because this pattern had great potential for conflicts and moral hazard such as uneven assistance, moral hazard of PLTD or PLTS managers, and moral hazard of users who make illegal connections and arrears of bills.

In Pattern C, the local government of Sumenep Regency cooperated with the remote island communities whose locations could not be reached by PT PLN. This pattern was to provide assistance to Diesel Power Plants (PLTD) or Solar Power Plants (PLTS) to the community through sub-district governments. The limited amount of assistance caused only a small portion of the community to enjoy the assistance, especially those living in the subdistrict capital. The uneven distribution of PLTD assistance or PLTS caused conflict in the community.

Pattern C was susceptible to potential conflicts due to managerial and user moral hazard. Without good supervision, managers became less disciplined in carrying out their duties to operate and maintain PLTD or PLTS equipment in accordance with the provisions. As a result, PLTD or PLTS were often damaged and not functioning. The tools had an economic age shorter than they should be. Without conducting good supervision, users were likely to conduct illegal connections and delinquent bill payments. This condition was detrimental to other users. The moral hazard of the manager and user led to losses such as high operating costs and low income. The ongoing moral hazard caused a power outage.

One of the failures in managing PLTD for local government assistance in groups was found in Masalembu District. In 2001, Masalembu District received PLTD assistance from the Government of Sumenep Regency and the Provincial Government of East Java. In 2001, the management of the PLTD was handed over to the community in groups. The PLTD management by the community failed because they did not have professional human resources in operating and maintaining equipment. In addition, moral hazard users make some people carry out wild electricity and delinquent bills. Every time, there was damage to the PLTD, electricity managers and users blamed each other and throw each other responsibility. Finally, PLTD did not work because the equipment was damaged and they always lost. Subsequently, the regional government managed the PLTD in 2009.

Furthermore, the conflict between the PLTD management by the community was followed up by the local government by auctioning the PLTD management to private companies. The auction-winning private company was then designated as a PLTD manager on the islands. In the Masalembu sub-district the auction was won by CV Angkasa from Surabaya.

For three years (2009-2012), CV Angkasa managed PLTD management properly. Under normal conditions, the average customer expenditure for <100 watts was Rp.250,000 / household / month. 10 hours per night service started from 5:00 a.m. - 5:00 p.m., with a rest time of 2 hours (from 23:00 to 01:00). But in mid-2012, PLTD began to break down with the need for large operational and maintenance costs. This condition caused blackouts in turn and electricity turned on only for 2-3 hours/night. Meanwhile, the electricity bills to users remained the same as before the PLTD had been damaged. This condition lasts for months. This condition causes conflict between the user community and CV Angkasa. CV Angkasa manager still requires the user community to pay the same electricity bill as before, on average Rp. 250,000 per night. Users are forced to pay. If they are not willing to pay, their electricity connection will be disconnected.

This condition continued until its peak on November 3, 2012 when the Regent of Sumenep made a working visit in the Masalembu District. The community and members of the DPRD from Masalembu demanded that the Regent of Sumenep withdraw the power of the management of the PLTD from CV Angkasa and hand over electricity services to PT PLN which was considered more professional. Up to now, the electricity supply in Masalembu Island by PT PLN was hampered by locations that were very difficult to reach, not to mention large operational and maintenance costs, and community moral

hazard in the form of illegal connections and payment bill arrears. Meanwhile, the implementation of the prepaid system was successful to carry out widely.

**Pattern D: Electricity Individuals that are leased Commercially**

Pattern D had a small collective group size because of the power plant with a small capacity (capacity of 10-30 customers), This power plant was only able to meet the electricity needs in small scopes. Pattern D consisted of two players such as player 6 and player 8.

Pattern D had has poor sustainability because commercial relations were more dominant than social relations. This condition caused potential conflicts and large moral hazard. In Paliat Island, 30 households rented out PLTD to their neighbors.

Pattern D was not ideal. This was because electricity services were commercial in nature and only provided electricity for 3-10 hours per night with a relatively expensive cost. The average electricity bill for the use of <100 watts varied according to service hours. The variations in electricity bills were based on service hours such as electricity bills 3 hours per night between Rp.35,000 - 55,000 / household / month, electricity bills of 5 hours per night between Rp. 60,000 - 75,000 / household / month, electricity bills 6 hours per night between Rp. 100,000 - 140,000 / household / month, and electricity bills of 10 hours per night more than 150,000 / household / month.

**Pattern E: Personal Electricity**

E pattern consisted of one player, that is, player 9. They were the individuals who acted as the owners, managers, and users of PLTD. Pattern E was the simplest pattern because it was a single player. The owner played doubles roles both as the manager and as the user. Households bought generators for their own use without being rented to others. Private PLTD which was only used alone without being rented to neighboring neighborhoods required a large operational cost which had to be borne by themselves. However, it had advantages such as increasing social status, time and capacity to use according to the needs of the owner, longer economic age (because the care was guaranteed), no potential conflict with others. A lot of households had private generators that were not rented out. These tools were rarely used 24 hours a day because the operating costs were very big.

**Pattern F: Ghutong Rojhung in the Tanean Lanjhang Scope**

Pattern F consisted of one player, player 10: a group of people who play a dual role as owners, managers and users of PLTD within the scope of Tanean Lanjhang.

Pattern F was a relatively ideal pattern because the electricity service was 10 hours per night with a relatively low cost. The average electricity bill for use of less than 100 watts was less than Rp. 150,000 / household / month. In accordance with the findings of the field, PLTD or generators were the most widely used island communities with a minimum capacity of 900 watts. On average, households got less than 100 watts of electricity. As a result, PLTD or generator with 900 watt capacity could be used for more than 10 households.

The limited ability of PT PLN and the Regional Government to supply electricity encouraged Madurese people in remote islands to collectively supply electricity to the Mutual Cooperation or Ghutong Rojhung with the principle of mutual benefit. In addition to electricity, various shared needs were also collectively fulfilled by Ghutong Rojhung, including: (1) clean water; (2) daily consumption; (3) telecommunications; and (4) transportation.

The rules of the game for the collective action Ghutong Rojhung were agreed among them. They obeyed these mutual benefit rules. A number of rules of the game related to electricity supply were among others capacity, purchase, operation, maintenance, service hours, and tariffs.

The success and sustainability of Mutual Cooperation or Ghutong Rojhung collective action which was mutually beneficial in the provision of electricity was facilitated by strong social capital from cognition and structural aspects, including: (1) good moral originating from the teachings of Islam was very effective in preventing conflict and moral hazard. In addition, Islamic teachings also encouraged his people to prioritize worship in groups (in congregation) rather than alone; (2) Madura Tanean Lanjhang culture which formed good morals and strong kinship among player was also very effective in preventing conflicts and moral hazard; (3) player rationality was based on good morals (altruistic / sympathetic) with mutual benefit motivation; (4) the rules of the game were agreed upon and adhered together by all group members; and (5) strong and small supervision kept free rider opportunities from interfering the collective efforts.

**CONCLUSION**

The infrastructure limitations in the Sumenep Madura Islands Region cause negative multiplier effects on people's welfare. This is because the economic activities of the community are not productive and inefficient. The limited ability of PT PLN and the Regional Government to provide electricity in remote islands has led to the formation of various electricity supply patterns. Of the 6 patterns found, each pattern has its own strengths and weaknesses. Regarding these limited conditions, local community wisdom such as the *Ghutong Rojhung* and *Tanean Lanjhang* cultures can serve as an effective and efficient solution to meet electricity needs independently. The results of this study can be used as a reference for electricity supply and other needs in other locations that have similarities.

**REFERENCES**


[1]. OECD. 2006. *Infrastructure To 2030: Telecom, Land Transport,Water And Electricity*. Published by Organisation For Economic Co-Operation And Development (OECD). Paris

[2]. Agu, Chukwuma dan Vincent A. Onodugo. 2009. *Capacity, Proximity and the Limitations of Infrastructure Services Decentralisation for Poverty Reduction : Evidence from Benchmarking of Nigerian States.* Journal of Infrastructure Development 1: 153-178. Published by: SAGE http://www.sagepublications.com.

[3]. Rohima, Siti (2013). *Vicious Circle Analysis of Poverty and Entrepreneurship.* IOSR Journal of Business and Management (IOSR-JBM). ISSN: 2278-487X. Volume 7, Issue 1 (Jan. - Feb. 2013), PP 33-46. www.iosrjournals.org

[4]. BPS Kabupaten Sumenep. 2018. *Kabupaten Sumenep Dalam Angka 2018.* Badan Pusat Statistik Kabupaten Sumenep.

[5]. Arsyad, Lincoln. 2010. *Ekonomi Pembangunan*. (Edisi Keempat). Yogyakarta: BP STIE YKPN

[6]. Miles, Mattew B. et al. 1992. *Analisis Data Kualitatif. Buku Sumber tentang Metode-Metode Baru*. Penerbit Universitas Indonesia (UI-Press). Jakarta

[7]. Rifai, Mien Achmad. 2007. *Manusia Madura*. Pembawaan, Perilaku, Etos Kerja, Penampilan, dan Pandangan Hidupnya seperti dicitrakan Peribahasanya. Pilar Media. Bogor.

[8]. Miller, Roger le Roy. et al. 1997. *Teori Ekonomi Mikro Intermediate.* PT. RajaGrafindo Persada. Jakarta.

[9]. Kimbal, Rahel Widiawati. (2012). *Social Capital In Non-Barter Transaction Chain In Pasar Blante Ka W Angkoan, North Sulawesi Province.* Journal Of Indonesian Economy & Business (Jurnal Ekonomi Dan Bisnis Indonesia). Fakultas Ekonomi Universitas Gajahmada. Yogyakarta.

[10]. Yustika, Ahmad Erani. 2008. *Ekonomi Kelembagaan. Definisi, Teori, & Strategi.* Bayumedia Publising. Malang.

[11]. Zainuri. (2010). *Makna dan Tata Kelola Zakat Dalam Perspektif Ekonomi Kelembagaan.* Disertasi. Program Doktor Ilmu Ekonomi Pascasarjana Fakultas Ekonomi Universitas Brawijaya. Malang.

[12]. Ritzer, George dan Douglas J Goodman. 2009. *Teori Sosiologi. Dari Teori Sosiologi Klasik Sampai Perkembangan Mutakhir Teori Sosial Postmodern*. Kreasi Wacana. Yogyakarta.

[13]. Hausman, Daniel M and Michael S.McPherson.1993. *Taking Ethics Seriously: Economics and Contemporary Moral Philosoph*y. Journal Economic Literature. Vol 31: 671-731. Published by American Economic Association