Social Engineering Model for Empowering the Poor in the Border Areas of Pandeglang Regency and Serang Regency

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Abstract—By using the concept of poverty (causes, measurement of poverty and dimensions of poverty), the concept of community empowerment, the concept of education, the concept of public health, infrastructure development, the concept of purchasing power and the concept of village potential, researchers attempt to analyze these concepts and formulate the proper engineering models of social empowerment in eradicating poverty in the bordering areas is seen from the point of view of education, health, purchasing power and infrastructure. This research used qualitative methods with a case study approach. The technique of collecting data used in-depth interviews, participatory observation, and documentation. Meanwhile, the data analysis used qualitative methods, supported with quantitative data. The informants interviewed were divided into 2 large groups, namely government representatives consisting of Regional Working Unit (OPD) related to poverty eradication and community representatives. This research focuses on areas that have connection as causes of poverty and potentially create appropriate empowerment models for the community, namely: education, health, purchasing, and infrastructure. Through this research, it is expected to be used as a model for other regions where the poverty level of the people is still high so that it is expected to reduce the poverty rate in Banten Province, especially in Pandeglang Regency. The results of this research explain that the social engineering model for empowering the poor begin with the policies and implementation of the central and regional governments through the relevant agencies to develop various infrastructure facilities which included: 1) educational facilities; 2) health facilities; 3) transportation; 4) economic facilities and 5) settlement facilities, which begin with the process of identifying problems, community needs, supporting local nature conditions, assessing feasibility, and finally the development actions, then monitoring and maintaining the infrastructure facilities together with the community and village officials and build continuity.

Keywords — Social Engineering Model and Empowering the Poor

I. INTRODUCTION

Pandeglang Regency is one of the regencies in Banten Province with an area of 2,746.31 km2 or 29.98% of the total area of Banten Province. It is divided into 35 districts. Geographically, Pandeglang Regency borders land directly with Serang Regency and Lebak Regency. In total, there are 9 subdistricts located in the border area of both Lebak Regency and Serang Regency, namely Cadasari Subdistrict, Carita Subdistrict, Banjar Subdistrict, Mekarjaya Subdistrict, Bojong Subdistrict, Picung Subdistrict, Sindangresmi Subdistrict, Pandeglang Subdistrict and Munjul Subdistrict. Besides having the characteristics of border areas, these subdistricts also have other similar characteristics such as coastal characteristics, agricultural characteristics, forestry characteristics, high poverty characteristics, and etc.

The average poverty and Gini index (level of income inequality) in the villages located on the border area of Pandeglang Regency and Serang Regency, can be seen in the table below:

Table 1. Gini Index and Poverty Rate of Border Villages

<table>
<thead>
<tr>
<th>No</th>
<th>Nama Desa Perbatasan</th>
<th>Gini Index</th>
<th>Poverty Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paniis</td>
<td>0.21</td>
<td>9.79</td>
</tr>
<tr>
<td>2</td>
<td>Koroncong</td>
<td>0.22</td>
<td>3.66</td>
</tr>
<tr>
<td>3</td>
<td>Gerendong</td>
<td>0.21</td>
<td>4.10</td>
</tr>
<tr>
<td>4</td>
<td>Awilega</td>
<td>0.21</td>
<td>5.02</td>
</tr>
<tr>
<td>5</td>
<td>Sukajaya</td>
<td>0.22</td>
<td>6.62</td>
</tr>
<tr>
<td>6</td>
<td>Cikentrungr</td>
<td>0.22</td>
<td>3.81</td>
</tr>
<tr>
<td>7</td>
<td>Kaungcaang</td>
<td>0.20</td>
<td>5.31</td>
</tr>
<tr>
<td>8</td>
<td>Cinjuk</td>
<td>0.32</td>
<td>26.70</td>
</tr>
<tr>
<td>9</td>
<td>Cadasari</td>
<td>0.32</td>
<td>12.43</td>
</tr>
<tr>
<td>10</td>
<td>Tapos</td>
<td>0.21</td>
<td>6.93</td>
</tr>
<tr>
<td>11</td>
<td>Koranji</td>
<td>0.19</td>
<td>6.77</td>
</tr>
<tr>
<td>12</td>
<td>Kaduuela</td>
<td>0.20</td>
<td>9.41</td>
</tr>
<tr>
<td>13</td>
<td>Kaduengang</td>
<td>0.20</td>
<td>15.59</td>
</tr>
<tr>
<td>14</td>
<td>Saniten</td>
<td>0.20</td>
<td>9.91</td>
</tr>
<tr>
<td>15</td>
<td>Bayumundu</td>
<td>0.19</td>
<td>11.85</td>
</tr>
<tr>
<td>16</td>
<td>Campaka</td>
<td>0.20</td>
<td>11.09</td>
</tr>
</tbody>
</table>
The second problem is related to education and health. Education and health remain problems related to distance and cost. The distance is well illustrated by the far distance from the village to the city center, the ideal education center which is difficult to reach, and also the far distance to the nearest hospital. So we need supporting public health center (Puskesmas). But the supporting health center presents new problems which is the incomplete availability of the facilities and the infrastructure. Regarding costs, it is often that the societies in border areas feel the cost of accessing education and health is much higher because this is influenced by the distance they have to travel. General factors affecting the level of public health according to the Pandeglang Regency Welfare Indicator in 2017 were the availability of health facilities, adequate environmental conditions and the quality of food consumed. Meanwhile, the degree of health can be calculated through the number of infant deaths. In 2015, the number of infant deaths according to the Pandeglang District Health Office was 327 babies [1]. One of the problems related to health is the lack of adequate health facilities in remote areas and communities who prefer to use the services of medical doctors because of the relatively affordable costs and the closer distance. Then, related to education indicator factor, it can be seen from the average number of years studying in school. In Pandeglang in 2015, the length of the people having school was only 6.60 years. This is due to several things such as difficulties in accessing education facilities in terms of geographical location or education costs [2].

The third problem is low infrastructure development. The distance from the city center to the border area makes infrastructure in the border area also not maintained. The road infrastructure, the connecting bridges, until the infrastructure in the context of providing public services such as schools and health services are not maintained well. Pandeglang Regency Welfare Indicator in 2015 explained that this difference in facilities is due to the unequal distribution of population in Pandeglang which results the differences level of ease for the society accessing various facilities in both physical and social. Mostly, the facilities will usually be available as supporting things in an area with a lot of population. The district with the highest population density is Labuan District with 3,622.22 people per km2 while the district with the smallest density is Sumur District with 92.81 people per km2. Meanwhile, in Cadasari District as a research sample which is 1249.20 people per km2 and Carita District which is 795.25 people per km2 [3].

II. METHOD

The approach used in this research is a qualitative approach, with the case study method, which is a fact finding with the right interpretation. Qualitative research is a process of understanding inquiry based on the tradition of different investigation methodologies that explore social or human problems. Researchers constructed complex and holistic images, analyzed words, reported detailed views of information, and conducted research in natural environments [4]. Further, qualitative research is research that intends to understand the phenomena about what is experienced by research subjects holistically by means of descriptions in the form of words and languages, in a special natural context and by utilizing various scientific methods. In this case, the case of poverty Pandeglang Regency population which exist on the border of Lebak Regency with the characteristics of coastal areas and agricultural areas [5].

While the analysis of the data used is a mix of analysis that is a combination of qualitative analysis and quantitative analysis. Qualitative analysis attempts to tell a description of the current problem based on actual data and information. Qualitative analysis is intended to obtain information about the description of poverty, potential and problems that exist in the border communities of Pandeglang and Lebak Regency and what efforts have been made by the local village government and what actions have been taken by the relevant agencies. Furthermore, quantitative analysis is based on secondary data (data in border districts with coastal and agricultural characteristics), mainly related to data on education level, health level, type of work, average income level, village potential, educational facilities, worship facilities, population mobility, population growth rate and unemployment rate from year to year.

III. RESULTS AND DISCUSSION

In the discussion of the results of this study explains a number of things including: 1) Economic Analysis of the Poor, 2) Educational Analysis of
the Poor, 3) Health Analysis of the Poor, and 4) Engineering Models for Empowering the Poor.

A. Economic Analysis of the Poor

Factors that influence poverty levels are economic growth. High economic growth with equitable results of growth throughout the business sector is needed in an effort to reduce poverty levels. To accelerate poverty reduction, economic growth must be increased through increasing household income [6]. Some aspects discussed in the economic aspects of the poor are a portrait of the economy of the poor consisting of: the number of poor families, the number of poor individuals, the age classification of the population, woman as the head of the family, cooking fuel, the main source of house lighting, residential buildings, number of working head of the family, and working status in families in Cinedjuk Village and Sukanagara Village.

The welfare status of families in Cinedjuk Village and Sukanagara Village of Pandeglang Regency is in Decile 4 and Decile 3. These mean that the two are basically not having very high levels of family poverty, but when compared between the poverty conditions of the family in Sukanagara Village is relatively poorer the family in Cinedjuk Village. This is proven by Sukanagara Village has approximately 70% of poor families. Thus, it shows that the level of family poverty in Sukanagara Village is relatively higher compared to Cinedjuk Village. Other conditions indicate that most individual communities in Pandeglang District have welfare status in the Decile 3 and Decile 4 categories. Nevertheless, it shows that the two villages (Cinedjuk Village and Sukanagara Village) are relatively high in the individual welfare status of the Decile 3 category and Decile 4. Furthermore, comparison between the two villages shows that the number of poor individuals in Sukanagara Village is relatively higher compared to Cinedjuk Village. This is due to the relatively infertile nature conditions and access to economic centers in the Sukanagara Village is relatively far. Although Sukanagara Village has closer access to beach resorts, some of the beach resorts have not been able to make a significant contribution to economic development in Sukanagara Village.

Judging from the age of the population, it shows that most of the people in Cinedjuk and Sukanagara, are basically at a very productive and productive age, with only around 20% to 30% of the population being unproductive. Communities of productive age basically become the main pillars of the community's economy, where people of productive age have high physical strength and ability of ideas and high level of creativity. They have the ability to generate income for their families. For people whose productive age is less, it will affect the economy and welfare of the community. In this productive age population, there must be intervention and policy by the local government in order to they truly become economically productive for their families and for the communities in both villages.

Some families in Cinedjuk Village and Sukanagara Village are headed by women. It means that there are several families left by their husbands who are ideally heads of the family. The family is left by the husbands because they had passed away or they had divorced, where the children lived with their mother. Thus, women become the breadwinner in supporting their families. The two villages show that Sukanagara village has more female as family head than in Cinedjuk Village. This condition is certainly very influential on the economic condition of the family. The condition of women who are naturally weaker than men creates a tendency of being lack in raising the family economy, especially in the family, where the woman’s function as a "single parent".

Furthermore, the people in Cinedjuk Village and Sukanagara Village already have their own house. However, there are some families that occupy a rent house or occupy a house that is free from rent because it belongs to their family or in other words living together with their parents or siblings. Home ownership is also an indicator of the level of poverty. If there are people who do not have their own house, it will show that the level of the poverty is still relatively vulnerable.

Other conditions indicate that many heads of families in Cinedjuk and Sukanagara work in the fields of education, health, and community services, and farming of paddy and secondary crops. Particularly in Cinedjuk Village, most of the people work more in the fields of paddy and secondary crops compared to education, health, and community services. This is due to nature condition of Cinedjuk Village which is having relatively large potential of agricultural land and crops.

The people in Cinedjuk and Sukanagara are included in the total unemployment category. This condition certainly directly affects the poverty level of the community. Data shows that the productive age from 15 to 59 years in those two villages are in the position of more unemployed people compared to working people. Information obtained in the field shows that almost 60% of the population are into the category of not working. If they work, their jobs are not a permanent job but odd jobs which are expected to get more money directly for their family.

Some factors which support the unemployment society are: 1) The community does not have sufficient skills; 2) The community does not have the level of education as a basic necessity in finding work; 3) The culture of the people who are lazy to work.
B. Educational Analysis of the Poor

Education is a medium about efforts to overcome the problem of poverty. The government needs to level up and spread educational accessibility [7]. In the educational analysis of the poor explains about several things which consisted of: The level of school participation and the level of community education in Cijnjuk and Sukanagara.

Community participation rates in education in Cijnjuk and Sukanagara, Pandeglang Regency, are quite good. Nevertheless, there are still education participation rates especially education at the elementary level (elementary school) which is still higher in Sukanagara Village compared to Cijnjuk Village. The comparison of this condition is due to the relatively easy access of education in Cijnjuk Village compared to Sukanagara Village. This condition is quite worrying because the low level of community’s education has a big influence on the level of poverty of the community, the more people who have low education will result higher level of community poverty, this is related to the extremely low level of community’s skills.

Communities in Cijnjuk Village and Sukanagara Village, Pandeglang Regency, already have an awareness to go to school. Yet, there is still a high number of people who do not study in school in Sukanagara Village compared to Cijnjuk Village. In some of the districts, community participation in schooling is still very low, although the community who are not in school are also low. In the concept of poverty, the low level of community participation in schooling is a factor that influences community poverty.

C. Health Analysis of the Poor

Health is a very important factor in human life so that the country is obliged to maintain people’s health [8]. In the health analysis of the poor explains about several things consisting of: Final Disposal of Household Feces, Facilities of Defecate Places, Source of Drinking Water, Chronic Disease, and Disability Level.

The level of community knowledge in Cijnjuk Village and Sukanagara Village, Pandeglang Regency, related to the final disposal of the latrine is still relatively low. This is indicated by the small number of people in the two villages who dispose the feces through tanks and potholes. The percentage of final disposal of latrines through tanks is in the range of 50% to 60%. This means that most of the people in Cijnjuk and Sukanagara are still dispose their feces in other places, for example in the river, garden, or the places around their neighborhood. On this issue, there is striking difference between the communities in the two villages regarding the final disposal. The people in Sukanagara Village who prefer to dispose through the tank are 81 families, while the people in Cijnjuk Village who prefer to dispose through the tank are 82 families.

Mostly people in Cijnjuk and Sukanagara do not have their own toilets, only a few have them. Toilet ownership is a picture of the healthy behavior of the community. People who have their own toilets show a high concern for family and environmental health whereas for people who do not have them show that their family healthy behavior is still low. For people who do not have a toilet, usually dispose their feces in the river or in the garden which is often known as “dolbon” behavior. This behavior is very disturbing for the health of the surrounding environment by creating “unpleasant odors” for the surrounding community, so that it can disturb the health system. Henceforth, it is necessary to have very detailed data collection related to the number of people in Pandeglang Regency who are still carrying out that “dolbon” behavior.

Then, about water fulfillment used by the community, there is a difference between the fulfillments of water in Cijnjuk Sukanagara, although most of the water supply comes from unprotected sources such as ground water and river water. Communities in Cijnjuk Village use more water supplies through protected sources as well as using shared water reservoirs, while people in Sukanagara Village use more water supplies through unprotected sources. Unprotected water sources are very dependent on the condition of the land where the community lives. Sometimes, in some areas show the source of water which is not guaranteed the cleanliness, especially for drinking purpose.

Some people in several subdistricts of Cijnjuk Village and Sukanagara Village, Pandeglang Regency, have chronic diseases that are contagious or non-contagious. This certainly has effect in increasing poverty in the community. Some of these chronic diseases result a very weak and an unproductive community condition. Data shows that the community in Cijnjuk Village relatively has more people affected by chronic diseases compared to the people in Sukanagara Village. Some diseases that were identified affected by many people are: tuberculosis, malaria, vomiting and diarrhea (muntaber), and several diseases related to the lungs.

The level of disabled community in Sukanagara Village is relatively higher compared to Cijnjuk Village. The highest level of disability is between the age of 15 to 44 years and age of 45 to 59 years. Disability occurs more in the productive age and mostly in men. The high risk of disability in men happens because men become the breadwinner in the family and they are mostly earning money by doing a hard work (for example working as a labor). Thus, it is very possible that disability occurs in the communities in both villages due to
accidents while the men were working or earning a living. This turned out to be more experienced by the people in Sukanagara Village compared to Cinjuk Village. People’s disability is basically due to hereditary (congenital) or due to accident. In addition, these disabilities are generally divided into physical disabilities and congenital disabilities.

D. Engineering Models for Empowering the Poor

The poor community empowerment strategy model that has been carried out both by the government and reform agents still have some weaknesses, so researchers submit scenarios in order to improve and optimize the community empowerment model [9].

Based on the description and analysis above, it needs to implement the social engineering model of empowering the poor in the Border Areas of Pandeglang Regency and Serang Regency which is divided into 3 (three) aspects, namely: 1) Improvement of the Economy for the Poor, 2) Improvement of Education for the Poor, and 3) Improvement of Public Health for the Poor. In general, the three social engineering models for empowering the poor emphasize 2 (two) main strategies, namely “Institutional Capacity” and “Social Community Capacity.”

Institutional Capacity of the community can make an active contribution to solve public problems at the village level. This argument then becomes the basis for the government to create various policies to strengthen the institutional capacity of rural communities, so that rural communities can solve their public problems independently and sustainably [10]. Institutional Capacity emphasizes more in strengthening of government institutions in planning strategies and programs to solve problems related to those three aspects. Thus, the programs are top down from the government institutions of Pandeglang Regency.

Community capacity is often based on homogeneity (the similarity of attributes possessed by its members), but more importantly is communality (equality) which is a condition where there are things shared between members, but not always derived from the attributes property, but based on motivation, goals, desires, blood relations, and mutuality [11]. Thus, Social Community Capacity emphasizes more on strengthening communities which characterized by social community groups and their participation to involve in solving problems related to these three aspects (health, education, and economy). Explanations regarding to the three Engineering Models are as follow:

1. Improvement of the Economy for the Poor

The social engineering model related to improvement the economy of the poor in the border areas of Pandeglang Regency and Serang Regency consists of 2 (two) main strategies, namely Institutional Capacity and Social Community Capacity.

Institutional Capacity Strategy is measured from the main indicators namely Human Resource Management, Organization and Budget. This condition is measured by sub-indicators which emphasize 3 (three) things, namely: 1) Human Resource ratio, 2) Budget ratio, and 3) Facilities and Infrastructures ratio. The Institutional Capacity Strategy is followed up with several work programs including: (a) capacity building for farmers in the field of processing agricultural and plantation products, (b) allocation of funding for upstream and downstream industry managers, and (c) budgeting allocation for forest preservation.

Social Community Capacity Strategy is measured from the main indicators namely Methods and Technology Development of Civil Society. This condition is measured by sub-indicators emphasizing 3 (three) things, namely 1) Communal-based community intervention model, 2) Number of community groups, and 3) number of community group members. The Social Community Capacity Strategy is followed up with a number of work programs including: (a) Coordination between Regional Work Unit (SKPD) in the management of degraded land, and (b) Management of degraded land aware groups in the forest revitalization program.

2. Improvement of Education for the Poor

The social engineering model related to improvement the education for the poor in the border areas of Pandeglang Regency and Serang Regency also consists of 2 (two) main strategies, namely Institutional Capacity and Social Community Capacity.

Institutional Capacity Strategy is measured from the main indicators namely Human Resource Management, Organization and Basic Educational Budget. This condition is measured by sub-indicators emphasizing 3 (three) things, namely: 1) Ratio of Human Resource for 9 years Educational Program, 2) Ratio of Educational Budget for 9 years Educational Program, and 3) Ratio of Facilities and Infrastructures for 9 years Educational Program. The Institutional Capacity Strategy is followed up with a number of work programs including: (a) Fulfillment of Basic Education Human Resource Needs, (b) Placement of Human Resource Education with appropriate competencies, (c) Distribution of Human Resource Education, (d) Fulfillment of the 9 years Educational Program Budget, (e) Fulfillment of the Facilities and Infrastructures of 9 years Educational Program, (f) Development of Teachers, (g) Recruitment of Educational Staffs, and (h) Monitoring and Evaluation.
Social Community Capacity Strategy is measured from the main indicators namely Methods and Technology Development of Civil Society in the educational sector. This condition is measured by sub-indicators emphasizing 3 (three) things, namely 1) Intervention model of communal-based community, 2) Number of Community Groups, and 3) Number of community group members. The Social Community Capacity Strategy is followed up with a number of work programs including: (a) Establishment/Arrangement of education-aware community groups, (b) Technical guidance of education-aware community groups, (c) Reading culture movement, (d) Village Library, and (e) Monitoring and evaluation.

3. Improvement of Public Health for the Poor

The social engineering model related to improvement of public health for the poor in the border areas of Pandeglang Regency and Serang Regency also consists of 2 (two) main strategies, namely Institutional Capacity and Social Community Capacity.

Institutional Capacity Strategy is measured from the main indicators namely “How to Manage Human Resource, Organizations and Health Budgets more effectively and efficiently.” This condition is measured by sub-indicators emphasizing 3 (three) things, namely: 1) Ratio of Medical Staffs for Human Resource, 2) Ratio of Health Budget, and 3) Ratio of Health Facilities and Infrastructures. Institutional Capacity Strategy is followed up with a number of work programs including: (a) Fulfillment of Human Resource Health, (b) Placement of Human Resource with appropriate competencies, (c) Distribution of Human Resource Health/Internship, (d) Fulfillment of Health Budget, (e) Improvement of Facilities and Infrastructures Regional Public Hospital, (f) Development of Health Center and Supporting Health Center, (g) Development of Human Resource Health, (h) Fulfillment of Facilities and Infrastructures of Health and Medicines, (i) Establishment of Local Government Health Clinic in South Pandeglang, (j) Construction of Referral Hospital in South Pandeglang, (k) Recruitment of Medical Staffs, (l) Improvement of Integrated Health Post (Posyandu)/Health Village Post (Poskesdes)/Maternity Village Post (Ambulance), and (m) Monitoring and Evaluation.

The Social Community Capacity Strategy is measured from the main indicators, namely the Methods and Technology Development of Civil Society in the health sector. This condition is measured by sub-indicators emphasizing 3 (three) things, namely 1) Intervention model of communal-based community, 2) Number of Community Groups, and 3) Number of community group members. The Social Community Capacity Strategy is followed up with a number of work programs including: (a) Formation/Preparation of a health-aware community group, (b) Technical guidance of a health-aware community group, (c) Competitive Donation among health-aware community groups, (d) Revolving Fund of a health-aware community group, and (e) Monitoring and Evaluation.

IV. CONCLUSION

This research basically aims to formulate the Social Engineering Model for Empowering the Poor in the Border Areas of Pandeglang Regency and Serang Regency, namely: Cining Village and Sukanagara Village. The fields seen in this study are the fields identified as causes of poverty. Therefore, they also used as the potential basic to formulate an appropriate social engineering model for empowering the poor in both villages. The intended fields are the economy, education, and health. The social engineering model for empowering the poor begins with the policy and implementation of the central and regional governments through the relevant agencies carrying out the development of various infrastructure and facilities which include: 1) educational facilities; 2) health facilities; 3) transportation facilities; 4) economic facilities and 5) settlement facilities. It is started with the process of identifying problems, community needs, supporting local nature conditions, feasibility studies, and finally the development actions, then together with the community and village apparatus, monitoring and maintenance of infrastructure and facilities that have been built continuity.

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REFERENCES