ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Nurlina; Hanum, Nurlaila; Safuridar; Muda, Iskandar

**Article**

# Analysis of structural poverty trend among rice farmers in East Aceh Regency, Indonesia

Global Business & Finance Review (GBFR)

**Provided in Cooperation with:**
People & Global Business Association (P&GBA), Seoul

*Suggested Citation:* Nurlina; Hanum, Nurlaila; Safuridar; Muda, Iskandar (2019) : Analysis of structural poverty trend among rice farmers in East Aceh Regency, Indonesia, Global Business & Finance Review (GBFR), ISSN 2384-1648, People & Global Business Association (P&GBA), Seoul, Vol. 24, Iss. 1, pp. 71-79,
https://doi.org/10.17549/gbfr.2019.24.1.71

This Version is available at:
https://hdl.handle.net/10419/224417

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

https://creativecommons.org/licenses/by-nc/4.0/

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

GLOBAL BUSINESS & FINANCE REVIEW, Volume. 24 Issue. 1 (SPRING 2019), 71-79
pISSN 1088-6931 / eISSN 2384-1648 | Https://doi.org/10.17549/gbfr.2019.24.1.71
© 2019 People and Global Business Association

GLOBAL BUSINESS & FINANCE REVIEW

www.gbfrjournal.org

# Analysis of Structural Poverty Trend Among Rice Farmers in East Aceh Regency, Indonesia

Nurlina[a], Nurlaila Hanum[a], Safuridar[a], Iskandar Muda[b†]

[a]Universitas Samudra, Langsa, Indonesia
[b]Universitas Sumatera Utara, Medan, Indonesia

A B S T R A C T

The purposes of this study were to analyze the structural poverty among rice farmers in East Aceh Regency and to analyze factors causing the structural poverty among rice farmers in East Aceh Regency, Indonesia. Data collection was performed by observation, questionnaire distribution and interview. The research objects were rice farmers in East Aceh Regency. The research locations were 14 (fourteen) sub-districts based on the biggest rice field areas in East Aceh Regency. The data collection technique was purposive sampling. The total sample was 1200 respondents. The model in the present study was descriptive quantitative statistical technique to describe the structural poverty among rice farmers in East Aceh Regency. The analysis and research were performed in 5 (five) stages, i.e. ; (1) distributing questionnaires to the research locations; (2) making data tabulation in the form of table (data coding); (3) performing validity test on data; (4) calculating poverty index score; (5) analyzing data. The research result showed that the structural poverty of rice farmers in East Aceh Regency was due to limited access to education, wage difference and low income of farm workers, limited land ownership (size and ownership status of agricultural land), and limited facilities and infrastructures to support agricultural activities. The indicators of poverty in East Aceh Regency were prosperity level, level of material wealth, education, income, environment, land area, service and politics. Based on the indicators, the score of poverty index among rice farmers in East Aceh Regency was medium, with the score of average poverty index of 57.73 percent. The factors causing structural poverty among rice farmers in East Aceh Regency are the rice farmers' dependency to higher social classes, structural injustice and structural wealth of farmers, small opportunity to own and control production assets, especially land and capital, development disparity and lack of policy which sided with poor farmers. The implications of this research are that the government continues to implement price stability policies, subsidies and funds programs, and social assistance policies, and any poverty reduction policies will have political implications that have a short-term impact.

*Keywords: Structural Poverty, Rice Farmer, Welfare*

## Ⅰ. Introduction

Poverty happens when a person or a group of people is unable to reach economic prosperity which is considered the minimum life standard. In *proper* sense, poverty is understood as lack of money and goods to guarantee survival. Broadly, poverty is a concept which has the following dimensions: 1) poorness (proper), 2) powerlessness (powerless), 3) vulnerability to emergency situation (state of emergency). According

Received: Jan. 30, 2019; Revised: Mar. 15, 2019; Accepted: Mar. 29, 2019

† Iskandar Muda
E-mail: iskandar1@usu.ac.id

to Central Bureau of Statistics (BPS, 2017) the open unemployment rate (TPT) lowered to 5.33 percent in 2017 compared with the previous year (2016) which was 5.50 percent. Open employment rate is the indicator which can be used to measure labor supply which isn't used or absorbed by the job market (Nurlina et al., 2016). Various government policies related with creating job opportunities haven't fully succeeded in reducing unemployment rate. By composition, unemployment rate in urban areas was higher than open unemployment rate in rural areas because in urban areas there is limited land. In 2017, the unemployment rate in urban areas was 6.50 percent while in rural areas it was 4.00 percent. Compared with the previous year, there was smaller unemployment rate in urban and rural areas, i.e. open unemployment rate in urban areas lowered by 0.03 percent while in rural areas it lowered by 0.35 percent. Reduced open unemployment rate in rural areas was caused by absorption in the agricultural sector.

Agriculture is highly potential natural resources, as shown by the fact that agriculture is still the biggest occupation in Indonesia. Almost all regions in Indonesia contribute from agriculture. Based on the data of Gross Domestic Product (GDP) in 2016, the agricultural sector of Aceh and Jambi had big contribution to the provincial GDP, i.e. 30 percent, with 5.5 percent of economic growth. East Aceh Regency is one of the regencies in Aceh which have superior commodities in the agricultural sector with rather high poverty percentage among farmers. The number of the poor in East Aceh Regency is below. The purposes of this study were : To analyze the structural poverty among rice farmers in East Aceh Regency and to analyze factors causing the structural poverty among rice farmers in East Aceh Regency.

## Ⅱ. Literature Review

### A. Poverty

The Poverty Dimension is also complex, so experts classify it into three types of poverty (Harniati, 2010), i.e.:

Natural poverty is poverty caused by low quality of natural resources and human resources. It also leads to low production opportunity. Specifically for the agricultural sector, poverty is caused by unsupportive quality of land and climate. In Indonesia, fertile land is commonly found in Java. Outside of Java, fertile natural resources are rare, so farmers only can cultivate their lands during rainy season. As a result, products can only be harvested once a year.

Cultural poverty is closely related with the attitude of a person or group in society which doesn't want to improve their life despite efforts to do so by other parties who help them. This poverty may also be due to tradition. For example, inheritance system leads to land division, so that land ownership per family becomes smaller by generation.

Structural poverty is direct and indirect poverty caused by institutional order or social structure in the society. Institutional order or social structure can be defined as game rules in effect (Nainggolan, 2012). Policies implemented by the government sometimes cause poverty among some groups in the society. The poverty is due to limited or even lack of access of the poor groups to existing development resources. Poverty due to social structure entraps certain groups in poverty for generations. Structural poverty can only be solved with fundamental structural change in the society.

### B. Indicators of Poverty

One of the measurements for poverty level experienced by someone or a group of people is the indicators of poverty used by Bappenas (Harniati, 2010, Alkire et al., 2019 and Kaidi et al., 2019). The indicators of poverty are:

1. Limited food which is measurement of adequacy of food and quality of consumed food. The measures of this indicator are limited food stock, low calorie intake of the poor and poor nutritional status of babies, infants, and mothers.
2. Limited health access which is measurement of

limited health access and low quality of health services. Limited health access is based on difficulty getting basic health services, low quality of basic health services, lack of reproduction services, long distance to health service facilities, expensive costs of medications and treatments. The poor tend to use services in public health centers rather than hospitals. This dimension is used in research by Powers & Kocakulah (2015), Nurlina, (2017), Lee (2016) and Ventura et al. (2019).

3. Limited access to education. The indicator is measured from quality of available education, expensive education cost, limited educational facilities, low opportunity to get education.
4. Limited access to work. The indicator is measured from limited work and enterprise opportunities, weak protection to business assets, wage difference, low work protection, especially to children and women. This dimension is used in research Lee and Jung (2015).
5. Limited access to housing and sanitation services. The indicators are difficulty having healthy and habitable house and healthy and decent settlement.
6. Limited access to clean water. The indicators were difficulty getting clean water, limited ownership of water source, and low quality of water source.
7. Limited access to land. The indicators are land ownership and tenure structures, uncertain land ownership and tenure. Access to land affects many farmer households.
8. Limited access to natural resources. The indicators are poor environmental condition, low natural resources. The indicator is closely related with income from natural resources, e.g. rural areas, coastal areas, and mining areas.
9. Lack of guarantee of security. The indicator is closely related with uncertain social and economic security in life.
10. Limited access to participation. The indicator is measured from low involvement in policy making.
11. Amount of population burden. The indicator is related with the amount of family burden and life pressure.

## C. Poverty Alleviation Program

The Poverty Alleviation Program can be carried out by means of price stability, village subsidies and funds programs, and social assistance (Zhang, 2019). The price stability of basic policy needs that drives price increases. Basic needs must be calculated carefully. If all the prices of staple goods soar, then the poverty rate also increases. This will make the income of the poor, both farmers and construction workers, meaningless. In addition, ministry programs, regional government and distribution of village funds must be able to reach the lowest level population, meaning that government programs must focus on increasing the income and purchasing power of the majority of poor households working in the agricultural and informal sectors.

# Ⅲ. Method

This study was a leading university applied research. The leading university fields were social, humanity and educational studies. Therefore, the present study is titled Analysis of Structural Poverty of Rice Farmers in East Aceh Regency which is categorized as poverty reduction and food independence research. The study was performed on people who worked as rice farmers in East Aceh Regency. Population refers to a whole group of people and phenomenon, or interests the researcher wishes to investigate (Sekaran, 2006). The population in this study was people working as rice farmers in East Aceh Regency who lived in East Aceh Regency during the research period. The research population was 52,019 households which worked as rice farmers in 2017 (Source: http://acehtimur.bps.go.id: 2018).

Sample is subset of population, consisting of some members of the population. The subset is taken because

in many cases it's impossible to study the whole population, so a limit is set to form a representation of the population, called sample (Ferdinand, 2006). The sampling method in the present study used Slovin Formula (Riduwan, 2005) below:

$$n = N/N\ (d)^2 + 1$$

Description:

n = sample; N = population; d = precision score

Because the population was 52,019 households, and the expected error rate was 3 %, the total sample was: $n = 52{,}019/52{,}019\ (0.03)^2 + 1 = 1111.11$ which was rounded up to 1200. The data analysis method in the present study was to get the variables and weights in the indicators of structural poverty. The collected data was analyzed using descriptive analysis and assessment of index score (Cahyat et al., 2007). To determine and analyze the structural poverty of rice farmers in the present study, poverty index score assessment was used. Poverty index was calculated to:

1. Determine the poverty level at household, village, sub-district, and regency/city levels
2. Diagnose regional issues
3. Diagnose sectoral issues
4. Assist intervention strategy preparation in
5. Poverty reduction
6. Assist improvement of accuracy of determination of poverty assistance program targets. (Cahyat et al., 2007).

The formula to calculate the index score in. (Cahyat et al., 2007).

$$\text{Poverty Index} = \frac{\text{Total score} - \text{Minimum total score}}{\text{Maximum total score} - \text{Minimum total score}} \times 100\ \%$$

Index score limits

1. Poor: 0 - 33.33 (high poverty level)
2. Medium: 33,34 – 66,66 (medium poverty level)
3. Prosperous: 66,67 – 100 (low poverty level)

Questionnaire design was carried out by filling in the questions related to indicators of Welfare, Material Wealth, Knowledge, Economy, Environment, Land, Structure and Service and Politics measured by interval scale. Observations and interviews were conducted face-to-face and interviews with respondents spread over 14 (fourteen) sub-districts in East Aceh Regency.

# Ⅳ. Result and Discussion

## A. Result

This study was performed in 14 (fourteen) sub-districts in East Aceh Regency, i.e. Simpang Ulim Sub-District, Madat Sub-District, Pante Bidari Sub-District, Julok Sub-District, Nurussalam Sub-District, Darul Aman Sub-District, Banda Alam Sub-District, West Pereulak Sub-District, Rantau Pereulak Sub-District, East Pereulak Sub-District, Pereulak Sub-District, Sungai Raya Sub-District, Rantau Seulamat Sub-District and Birem Bayeun Sub-District. Of 24 sub-districts in East Aceh Regency, there are 14 (fourteen) sub-districts which are rice production sources in East Aceh Regency. East Aceh Regency has great agricultural potential with 32,240 hectares of rice field. The agricultural product commodities in East Aceh Regency are rice, corn and banana. Rice is the leading commodity in East Aceh Regency because total rice production is bigger than other commodities, i.e. total rice production per year is 244,441 tons, corn production 44,636 tons and banana production 8.003 tons (BPS, East Aceh, 2017). East Aceh Regency is also one of the rice centers in Aceh.

The number of respondents was 1200 people who all work as rice farmers in East Aceh Regency. The indicators of the structural poverty of rice farmers were welfare, material wealth, knowledge or education, economy, environment, land, service and politics. Based on measurement by index score, the result was;

*1. Welfare*

The frequency distribution of welfare with 1200 respondents produces 100% valid statements. The mean of the index score of welfare is 69.17%, meaning that the welfare of rice farmers in East Aceh Regency was high. The median of the index score is 66.67%. The skewedness value is between 0.068 and -0.200 (normal data distribution).

*2. Material Wealth*

The frequency distribution of material wealth with 1200 respondents produces 100% valid statements. The mean of the index score of material wealth is 57.45%, meaning that on average the rice farmers in East Aceh Regency jad medium material wealth. The median of the index score was 60.00%.

*3. Education Level (Knowledge)*

The frequency distribution of education level with 1200 respondents produces 100% valid statements. The mean of the index score of education level (knowledge) is 51.56%, meaning that on average the farmer community (households) in East Aceh Regency had medium education level. The highest education level was high school. Based on their answers, they also learned skills or knowledge on agriculture outside of school. They gained their knowledge from agricultural trainings and socializations held by the government and local universities.

*4. Economy (income)*

Based on the research result, the frequency distribution of the statements on economy was 100% valid. The mean of the poverty index is 52.28%, meaning that rice farmers in East Aceh Regency had medium poverty index score in terms of economy (Medium: 41.68 – 58.32). it was because, on average, rice farmers in East Aceh Regency had other occupations beside farming, e.g. trader, *arbete* driver (motorcycle taxi driver), laborer, fisherman, etc., but their income was also lower than Rp.1.000.000,-. Limited jobs in the research areas also gave the farmers no other option to increase their income.

*5. Social Environment*

Based on calculation result, the frequency distribution of the statements on social environment was 100% valid. The social environment among rice farmers in East Aceh Regency could be seen from medium mutual help attitude (50%). The mutual trust was also low. The mean index score of the rice farmers showed that they had medium social relations (56.84%). It showed that the customs in a *Gampong*/village still had strong kinship and social interactions, so there was rarely any problem in the communities.

*6. Land Availability*

The rice field area in East Aceh Regency was 32.240 hectares. Based on BPS data of fourteen sub-districts in East Aceh Regency, the sub-district with the largest land area was Pereulak Sub-district which had 3.210 hectares and Birem Bayeun Sub-district which had 3.308 hectares. The data of rice field area being presented is the data of rice field area. The rice fields of rice farmers in East Aceh Regency had different sizes. The difference was due to different land ownership. Some lands were privately owned, while some farmers rented the land or lent uncultivated agricultural lands to others. If a land is rented, there is agreement between the land tenant and owner. The government also tried to open new rice fields, e.g. Pante Bidari Sub-district. Local government did this to expand rice field area, but it didn't yield good products due to different soil acidity and birds which couldn't be controlled by the community.

Based on calculation using frequency distribution Table 1, 48% of respondents or 48 respondents had less than 0.1 hectares of land, 52% of respondents or 52 respondents had over 0.1 hectares of land. By land ownership status, 41% of respondents or 41 respondents had their own lands and 59 % of respondents or 59 respondents rented their lands. Most rice field cultivation in East Aceh Regency used irrigation, but some used rainfall, thus affecting

**Table 1.** The Poverty Index Score of Rice Farmers in East Aceh Regency

| No | Indicator | Index Score (%) |
|---|---|---|
| 1 | Welfare | 69.17 |
| 2 | Material Wealth | 57.45 |
| 3 | Knowledge | 51.56 |
| 4 | Economy | 52.88 |
| 5 | Environment | 56.84 |
| 6 | Land | 50.54 |
| 7 | Structure and Service | 54.38 |
| 8 | Politics | 69.00 |
| | Total | 459.47 |
| | Mean | 57.73 |

Source: Processed data (2018).

agricultural product yield. 50.65 percent or 16.837 hectares of land was irrigated, while the rest was rainfed rice fields. By using irrigation, farmers could harvest more than twice a year, while rainfed rice fields could only yield rice when there was rainfall. Sub-districts which fully used irrigation were Simpang Ulim, Madat, Pereulak, Rantau Pereulak, Sungai Raya and Birem Bayeun Sub-districts, while Nurussalam, Darul Aman, West Pereulak Sub-districts hadn't fully used irrigation as some still used rainfall. The mean or index score is 50.54%%. To cultivate the rice fields, the farmers used technology, although some combined tradition and technology.

## B. Discussion

One of the indicators which also supported the economic activities of rice farmers in East Aceh Regency was structure and services provided by the government for the public. Based on observation and interview results, people could easily access health facilities. The poverty index of government structure and service is 54.38%. The existing infrastructures in East Aceh Regency couldn't be entirely utilized optimally, because the facilities and infrastructures were difficult to access by people who lived far from settlements. Some people couldn't use the infrastructures provided by the government, thus limiting their activities. The government keeps making efforts to provide necessary infrastructures, especially since today there is financial aid from the central government in the form of *Gampong* Allocation Fund (ADG). Using this fund, the government improves infrastructures in villages, so that the existing facilities and infrastructures can be used by the public. The observation in this study found that some villages had poor transportation facilities despite having large rice field areas.

A very influential indicator with significant role was politics. The rice farmers in East Aceh Regency mostly easily received information on government via information facilities, e.g. printed and electronic media. The poverty index of politics is 69.00%, meaning low poverty. People were also involved in government elections and were enthusiastic in joining government activities. People were always invited to meetings to discuss activities which were to be held. Factors causing structural poverty among rice farmers in East Aceh Regency are :

*1. Farmers' dependency to higher social class*

Farm workers in East Aceh Regency were paid small wage despite the heavy work. Due to lack of other jobs, they must accept the wage. Female farm workers usually received lower wage than male farm workers due to shorter working hours. Female farmworkers usually planted rice and removed grass with low wage. Meanwhile, male farm workers could plow rice field with harder works. However, they didn't work every day. Rice farmers in East Aceh Regency had other jobs, e.g. women became laundry workers and kiosk owners while men became construction workers and motorcycle taxi drivers. There was strong dependency of the poor farmers to higher social economic class, e.g. farm worker's dependency to their employer and sharecropper's dependency to land owner.

*2. Structural Injustice and Structural Wealth*

Most farmers claimed to be unable to purchase their own lands. Farmers who owned lands said that they inherited the lands from their parents, i.e. they didn't earn it. It was due to inability to purchase

and rent land. Therefore, most rice farmers work as farm workers. In terms of the area of cultivated land, based on the research result, rice farmers in East Aceh Regency had small lands with average land area below 0.1 hectare. Interviews with some farm workers and farmers in East Aceh Regency showed that most of them never received government aids. Some didn't even know there was government aids. Some farm workers were invited to meetings in *Gampong* (Village), but weren't involved when distributing the aids. They also weren't registered to receive aids, although there was information on aids distribution. Some aids they had received were Poverty Rice (RASKIN), Cash Poverty Grant (BLT) and Indonesian Health Card, but they weren't evenly and regularly distributed.

*3. Small opportunity to own and control production asset, especially land and capital.*

When the farmers had crops failure due to bad weather, they experienced a loss because they had to sell their goods at low price or even couldn't have harvest at all. Meanwhile, when they had good or bountiful harvest, everyone had big harvest, so the selling price was also cheap. Some also sold the goods to agents or middlemen who bought rice at much cheaper price than the market price. In this situation, the farmers experienced great loss due to unsuitable price and inability to cover production cost, so they didn't have enough capital to do the next production process.

To get capital, rice farmers in East Aceh Regency borrowed money from financial institutions, but most of them didn't want to borrow from banks due to complicated process and required collateral, since they didn't have any collateral for the banks. The banks also applied high interest, so credit couldn't help farmers because it didn't match their income. Limited land and capital among rice farmers in East Aceh Regency set limit for innovation in agriculture, e.g. planting organic plants. This actually could produce additional income. People also borrowed money to third party (loan sharks) at high interest which had to be paid during harvest. The third party lent money at the beginning of production despite uncertain outcome. During crops failure, the farmers must pay back the loan sharks or pay it using the next production.

*4. Disparity in Development.*

Development disparity was inequality and imbalance in access and lack of government policy which sided with poor farmers in East Aceh Regency. It included difficult access by people in *gampong* in East Aceh Regency to fulfill basic needs, e.g. educational facility, sanitation, and infrastructures such as public road and agricultural infrastructures (irrigation) which appropriately supported agriculture. Development disparity led to issues in expanding access to public services and infrastructures. The government has constructed irrigation channels, but people hadn't used them optimally due to scheduled availability of irrigation. Some farmers also relied on rainfall. Some existing public roads were damaged and hindered farmers in performing their activities.

*5. Lack of policy which sided with poor farmers*

Within a month, a farmer could spend around Rp.500.000,- to Rp. 1.500.000,- for agricultural activities, e.g. buying fertilizer, seed, and pesticide, as well as expenses for tractor to plow rice field. The farmers complained about difficulty in covering production cost since the grain given by the government to the people was also cheap. Some farmers who were interviewed stated that they had difficulty when the harvest price temporarily lowered by the costs of production facilities kept increasing. For example, the price of fertilizer tended to keep increasing disproportionately to the selling price of agricultural products. Expensive fertilizer and other production facilities made farmers unable to set the price of their products, making production process even more difficult. Moreover, the farmers also had to compete with imported agricultural products. Lack of policy which sided with poor farmers, e.g. reduced price of fertilizer, increased price of grain, limited import, reduced prices of basic needs and market access made farmers continue to be powerless (Tulung, 2008).

These led to structural poverty among rice farmers in East Aceh Regency.

# Ⅴ. Conclusion and Suggestion

## A. Conclusion

1. The structural poverty among rice farmers in East Aceh Regency was inseparable from limited access to institution, access to education, wage difference and low income of farm worker, limited land ownership (area and ownership status of agricultural land), and limited facilities and infrastructures to support agricultural activities.
2. The index score of the structural poverty of rice farmers in East Aceh Regency is 53.73 % which was categorized as medium poverty level.
3. Most rice farmers in East Aceh Regency cultivated their agricultural lands using rainfall and didn't use irrigation system optimally.
4. Factors which caused structural poverty among rice farmers were: farmer's dependency to higher social class, structural inequality and structural wealth, small opportunity to own and control production assets especially land and capital, development disparity and lack of policy which sided with poor farmers

## B. Suggestion

1. The political impact of the poverty alleviation program in the form of government caution oversees any increase and decrease in poverty levels due to the implementation of pro-poor assistance programs. This is because such programs have a short-term impact on people who are close to the poverty line. This will also affect whether the programs have to be stopped or their distribution is not running smoothly, so that poor people whose lives have become better can easily become poor again.
2. To solve structural poverty, people must change as to not depend on others.
3. The government should make sure people can get their own lands and there is no land shortage.
4. There should be more agricultural counselors so that people can get information on rice farming
5. The government should solve unequal development and structural inequality among rice farmers in East Aceh Regency
6. The government should solve poor development access among rice farmers in East Aceh Regency.
7. The government should provide capital to protect farmers from loan sharks who apply high interest rates.
8. Local government should construct more complete facilities and infrastructures to support agricultural activities.

# References

Alkire, S., & Fang, Y. (2019). Dynamics of multidimensional poverty and uni-dimensional income poverty: An evidence of stability analysis from China. *Social Indicators Research*, *142*(1), 25-64.

Brodjonegoro, B. P. S. (2007). *Rural development and coastal areas in the millennium*. Depok UI-Press.

Cahyat, A, Gonner, C., & Haug, M. (2007). *Assessing poverty and household welfare; a guide with examples from Kutai Barat, Indonesia, Bogor, Indonesia*. Center for International Forestry Research (CIFOR). Jakarta.

Central Statistic Board. (2018). *East Aceh Central Statistics Agency (BPS) in 2018*. Jakarta. Retrieved from http://acehtimur.bps.go.id.

Christina, M. (2012). Farmer Structural Poverty Analysis (Case Study in Ciaruteun Ilir Hamlet, Ciaruteun Ilir Village, Cibungbulang Subdistrict, Bogor Regency), *Thesis Unpublished*, Depok.

Cuong, N. V. (2011). Estimation using a small area estimation method: Evidence from Vietnam. *Journal of Comparative Economics*, *39*(3), 368-382.

Dollar, D., & Kraay, A., (2002). Growth is Good for the Poor. *Journal of economic growth, 7*(3), 195-225.

Gokan, Y. (2011). Poverty traps, the money growth rule, and the stage of financial development. *Journal of Economic Dynamics and Control*, *35*(8), 1273-1287.

Harniati. (2007). Poverty-Oriented Agriculture Sector Programs. Material of the Secretary of the Agricultural HR Development Agency. *The National Seminar: Increasing the Role of the Agricultural Sector in Poverty Reduction*. Disseminated on August 21, 2007 at the Center for Analysis of Socio-Economic and Agricultural Policy, Bogor.

Kaidi, N., Mensi, S., & Amor, M. B. (2019). Financial Development, Institutional Quality and Poverty Reduction: Worldwide Evidence. *Social Indicators Research*, *141*(1), 131-156.

Kurtz, M. J. (2000). *Understanding Peasant Revolution: from Concept to Theory and Case in Theory and Society*. In: Sajogyo. 2002. Agriculture and Poverty.

Lee, D. H. (2016). The Role of Social Support for Reemployed Women. *Global Business & Finance Review*, *21*(1), 46-55. Retrieved from doi:http://dx.doi.org/10.17549/gbfr.2016.21.1.46

Lee, S. H., & Jung, K. S. (2015). The Role of Social Support for Reemployed Women. *Global Business & Finance Review*, *20*(2), 49-57. Retrieved from doi:http://dx.doi.org/10.17549/gbfr.2015.20.2.49.

Nainggolan, C. (2012). *Peasant Structural Poverty Analysis* (Thesis Unpublished). University of North Sumatera.

Nurlina & Muda, I. (2017). The Analysis of the Effects of Capital Expenditure and Human Development Index on Economic Growth and Poverty In East Aceh Regency. *International Journal of Economic Research in Business and Social Sciences, 14*(17), 395-409.

Nurlina, Ramli, Daulay & Rujiman. (2016). Coastal Fishermen in ACEH, Analysis of East Side Poverty, *International Journal of Academic Research in Business and Social Sciences*, *6*(1), 67-82.

Powers, J & Kocakülâh, M. (2015). Cost Saving Strategy and Wellness Programs Featuring Decision Tree, Utility and Analytical Hierarchy Analysis. *Global Business & Finance Review*, *20*(2), 105-122. http://dx.doi.org/10.17549/gbfr.2015.20.2.105

Rhoumah, O. (2016). Determinants of Factors that Affect Poverty among Coastal Fishermen Community In Malaysia. *IOSR Journal of Economic and Finance (iOSR-JEF), 7*(3), 88-97.

Rosyadi, I. (2017). *Identification of the Causes of Rural Poverty in Structural Perspectives*. The 6th University Research Colloqium 2017, Muhammadiyah University Magelang.

Sartika (2016). Study of the causes of poverty in the Lohia village community in Lohia District, Muna Regency. *Economic Journal, 1*(1), 106-118.

Sekaran, U. (2017). *Research Methods for Business*, Salemba Empat. Jakarta

Soetrisno, L. (2002). *Agricultural Development, A Sociological Review*. Yogyakarta: Kanisus.

Sugiono, D. (2009). Quantitative and Qualitative Research Methods R and D. Alfabeta. Bandung.

Suryadarma, D, Akhmadi, H., & Nina, T. (2005). *Objective Measures of Family Welfare for Individual Targeting*. Results from the Pilot Project on Community Based Monitoring System in Indonesia' Research Report. Jakarta: The SMERU Research Institute.

Suryahadi, A., & Sudarno, S. (2001). *The Chronic Poor, the Transient Poor, and The Vulnerability in Indonesia Before and after the Crisis*. Working Paper. Jakarta: The SMERU Research Institute.

Suyanto, D. (2011). *Research Methods for Economics*. CAPS. Yogyakarta.

Ventura, I. J., Zadran, A., Ho, A. V., Zadran, L., Thuan, D. T., Pham, T. T., & Kost, G. J. (2019). Rapid Diagnosis and Effective Monitoring of Diabetes Mellitus in Central Vietnam: Point-of-Care Needs, Improved Patient Access, and Spatial Care Paths for Enhanced Public Health. *Point of Care*, *18*(1), 1-8.

Isdijoso, W., Suryahadi, A., & Akhmadi. (2016). *Determination of Comprehensive Criteria and Variables for Data Collection of Poor Population in the Context of Protection of District/City Poor Population*, The SIMERU Research Institute.

Wulandari, R. (2016). Factors influencing household poverty in Kendari City in 2014. *Journal of Progress in Development Economics, 1*(1), 56-68.

Zhang, D. (2019). Formulation and Implementation of "China Rural Poverty Alleviation and Development Program (2001-2010). In *The Evolution of China's Poverty Alleviation and Development Policy (2001-2015)* (pp. 1-44). Springer, Singapore.