

## Inequality of Income Distribution in Rural and Urban Poor Communities

A Case Study on Former Beneficiaries of PNPM-M Program in Banyumas Regency

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### ABSTRACT

This study aims to analyze the impact of The National Program for Community Empowerment-Independent (PNPM-M) to the poor in order to resolve income inequality in Banyumas Regency. The research method was survey on beneficiary respondents in urban areas (PNPM-MP) and rural areas (PNPM-PMd), conducted using a questionnaire. Data analysis in this research used income distribution inequality criteria from World Bank and Gini Ratio. The result found that more than 50% of respondents both in groups and areas had low income and did not meet the standard for decent living standard (KHL). The average respondents income distribution both in the groups or areas according to the World Bank and Gini Ratio criteria was in the moderate category. However according to areas, inequality of income distribution in rural areas was higher than in urban areas. To minimize income inequality between the communities, community groups and areas, it is necessary to empower the community based on the potential of local economic resources.

**Keywords:** Income Distribution, PNPM-M, KHL, Gini Ratio.

### ABSTRAK

*Penelitian ini bertujuan untuk menganalisa dampak dari Program Nasional Pemberdayaan Masyarakat Mandiri bagi masyarakat miskin guna menanggulangi ketimpangan dalam distribusi pendapatan. Metode penelitian yang kami gunakan adalah survei dengan responden para penerima manfaat di daerah perkotaan (PNPM-MP) dan daerah pedesaan (PNPM-PMd). Analisis data dalam penelitian ini menggunakan kriteria distribusi pendapatan dari World Bank dan Gini Ratio. Hasil penelitian kami menunjukkan bahwa lebih dari 50% responden baik dalam kelompok maupun daerah memiliki pendapatan rendah dan tidak memenuhi standar untuk standar hidup layak (KHL). Distribusi pendapatan responden rata-rata baik dalam kelompok atau daerah sesuai dengan kriteria Bank Dunia dan Rasio Gini berada dalam kategori sedang. Namun menurut daerah, kualitas distribusi pendapatan di daerah pedesaan lebih tinggi daripada di daerah perkotaan. Untuk meminimalkan ketimpangan pendapatan antara masyarakat, kelompok masyarakat dan daerah, perlu untuk memberdayakan masyarakat berdasarkan potensi sumber daya ekonomi lokal.*

**Kata Kunci:** Distribusi Pendapatan, PNPM-M, KHL, Rasio Gini.

### INTRODUCTION

Although economic growth in Indonesia surpasses population growth, but poverty still persists. According to Central Bureau of Statistics (BPS) in September 2016, Indonesian poor population reached 27.76 million people (10.70 percent). In September 2016, the percentage of poor people in urban areas was 7.73 percent, while the percentage in rural areas was 13.96 percent. The number of poor people in rural areas is higher than in urban areas. Of all regions of Indonesia, Java is the island with highest

number of poor people reaching 14.83 million people (10.09%), divided into urban poverty of 7.04 million people (7.72%) and rural poverty of 7.79 million people (13.94%). This condition shows the difference in the number of poor people between urban and rural areas. In 2016, the number of poor people in Banyumas Regency reached 293,900 people; the poverty rate reached 17.23 percent or 6.53 percent higher than the national poverty rate. The high poverty rate indicates the difference in community income distribution, both in urban and rural areas.

Community participation according to Kimani and Kombo (2011) involves act of sharing in development process. Community based-development arise as popular model for development assistance and today can be viewed as a form of decentralization that devolves authority to the lowest level into local community (Park and Wang, 2010). For example, Chinese government in 1994 applied large-scale poverty alleviation that promote local economic development through public investment in form of subsidized credit, grants, and food-for-work program to lift 80 million poor from poverty in 2000 (Meng, 2013).

One effort to improve community living standard is through development activities in the economic field. Increasing real output that is higher than population growth will increase per capita income. Increasing per capita income will encourage the community to be able to meet their life needs, so that people can avoid poverty.

The poverty alleviation program has been conducted by the Indonesian government through the National Community Empowerment Program-Independent (PNPM-M) from 2006-2015 targeting rural and urban communities, this program aims to reduce unemployment and poverty. This means that the decreasing unemployment may allow more people to have jobs and earn income, the increasing income will reduce poverty.

Based on the result of Suprpto *et al.* (2017), the program in urban areas sample has been able to alleviate poor people of 29 percent as indicated by their income which was above the decent living standard (KHL). In the rural areas, the program has also been able to increase welfare by an average of 28 percent in two rural areas samples as indicated by the income received program beneficiaries which was above the KHL. Both results of the research indicate that poverty alleviation program through PNPM-M both in urban and rural areas can assist to alleviate poverty, even though it only reaches an average of 28.5 percent. This means that there remains income distribution inequality for poor people as the beneficiaries of PNPM-M program. In PNPM-M, the poor are assisted to empower their economy through the provision of revolving loans for productive economic activities. Through these activities, it is expected that the poor can increase their income, so that there is equality of income among them. This research aims to analyze the income inequality to the poor as beneficiaries of PNPM-MP and PNPM-MPd revolving loan funds. Poverty and income inequality do not only occur in urban and rural areas in Indonesia. Based on the research (Ballard *et al.* 2013), there has been income distribution inequality between various regions and between various classes of society in the Colombia district, United States from 1976 to 2008.

## **RESEARCH METHOD**

Economic development has been based on the success of economic growth, but the poverty and inequality still persist. This can be seen from the emergence of an agreement from 189 member states of the United Nations (UN) concerning the Millenium Development Goals (MDGs) in 2000, where the first goal is to eradicate extreme poverty and hunger in countries in the world. One country that considered successful in reaching first MDGs is China, meanwhile other country outside China according to Chen and Ravallion (2010) will not attain the MDG without higher poverty reduction than in 1981 to 2015 ever have. So it is not an easy task for any government to achieve. Moreover, although MDGs ended in 2015, a new design has emerged to continue the MDGs program, namely Sustainable Development Goals (SDGs Dev) to be implemented in 2016-2030.

In the next stage, it turns out that this per capita income raises a new problem, namely income distribution. This can be understood because per capita income is the average income, whereas the individual ability to earn income is different. As famous Simon Kuznets's inverted U theory stated that although there is an imbalance in the distribution of income, the income inequality will be reduced in

the long run. Through various policies, the government seeks to increase income, reduce poverty and evenly distribute income. The patterns of inequality in income distribution between urban and rural communities are different, where income inequality that occurs in rural community is lower than in urban community (Ballard *et al.*, 2013).

In Indonesia, the government has implemented efforts to reduce poverty through a series of community empowerment programs since 1994, including the Presidential Instruction for Disadvantages Villages (IDT), Supporting Infrastructure for Disadvantages Village Development Program (P3DT) in 1996, Sub-District Development Program (PKK) and the Poverty Reduction Program Due to Impact of Economic Crisis (PMKDKE) in 1998, and the National Community Empowerment Program-Independent (PNPM-M) in 2006 (Haryadi *et al.*, 2016). PNPM-M program is divided into 2 (two) according to the target area, namely the National Community Empowerment Program-Urban Independent (PNPM-MP) for urban areas and the National Community Empowerment Program-Rural Independent (PNPM-PMd) for rural areas. PNPM-M program has been implemented from 2007-2015 which was the longest among other poverty reduction programs.

The poverty in Indonesia can be measured from expenditure of per capita population to fulfill their life needs. Based on the result of Indonesian National Socio-Economic Survey (Susenas) in 2016, the expenditure of per capita population is Rp 361, 990.00 with the details for urban areas of Rp 372, 114.00 and rural areas of Rp 350,420.00. There is a difference in the amount of per capita income of Rp 21, 694.00 in which the expenditure in urban areas is higher than in rural areas. The amount of income is the income limit earned by the community and is used to meet the food and non-food consumption needs. In general, the expenditure for food consumption is greater than the expenditure for non-food consumption both in urban and rural areas. The average food consumption expenditure is 73.45 percent, the expenditure for food consumption in urban areas is 68.89 percent, while the expenditure in rural area is 7.22 percent higher. Meanwhile, the expenditure for non-food consumption in urban areas is higher than in rural areas, the expenditure in urban areas is 30.16 percent, while the expenditure in rural areas is only 22.94 percent.

The difference in poverty lines between urban and rural areas indicates income inequality between urban and rural communities. This difference does not only occur between areas, but also between communities in the area. According to Kuncoro (1997), there are several criteria according to World Bank criteria to find out the level of income inequality in communities, namely: a) high income distribution inequality, if 40 percent of low-income community receive less than 12 percent of national income share, b) moderate income distribution inequality, if 40 percent of low-income community receive between 12 to 17 percent of national income share, and c) low income distribution inequality, if 40 percent of low-income community receive more than 17 percent of national income share.

The level of income inequality between individuals in a community can also be seen through Gini Index or Gini Ratio (GR). According to Haughton and Khandker (2009) in Sugiyarto *et al.* (2015), the formula to determine GR is as follows:

$$GR = 1 - \sum_{i=1}^k (f_i - f_{i-1}) (y_{i-1} + y_i)$$

Where:

- k : Number of classes/groups
- f<sub>i</sub> : Proportion of cumulative number of households in i-class
- y<sub>i</sub> : Proportion of cumulative household income in i-class

In Indonesia, the average GR value in 2014-2017 is 0.41. This means that the level of income inequality in Indonesia is in high category. However, the level of income inequality in Central Java in 2014-2017 is in moderate category because the GR value is 0.39. The difference of between GR value of Central Java Province and the average GR value of Indonesia is 0.02. Central Java province has lower

value, meaning that the equality of income distribution in Central Java Province is relatively better than the average income distribution inequality in Indonesia.

The object of this research is the group of poor people as former beneficiaries of PNPM-Urban and Rural Independent in Banyumas Regency. The sample of urban poor group is two urban sub-districts (25%) of 8 urban sub-districts of post PNPM-MP former beneficiaries in Banyumas Regency in which after the end of PNPM, the areas were categorized as slum areas in Banyumas Regency according to Banyumas Regency Head Decree No.050/1444/2014 concerning the location of Urban Slum, namely Kedungwuluh and East Purwokerto Urban Villages. A total 10% of existing group is taken randomly in each urban village and the sample is all members of the selected group. The sample of rural poor group is two villages with the highest number of poor people as PNPM-MPd beneficiaries in two sub-districts, namely Beji village Kedungbanteng sub-district and Karangtengah village Cilongok sub-district, a total of 10% of existing group is taken randomly in each rural village and the sample is all members of the selected group (see Table 1).

Table 1. Number of Group Samples and Research Respondent Samples in Banyumas Regency

No.	PNPM-M	Urban Village/Village	Number of Groups	10% of Group Samples	Respondent
1	PNPM-MP	Kedungwuluh	48	5	41
		East Purwokerto	34	4	38
		Amount	75	9	79
2	PNPM-MPd	Beji	28	3	38
		Karangtengah	64	7	49
		Amount	92	10	87
Total			167	19	166

This research analyzes the condition of income distribution of PNPM-MP and PNPM-MPd revolving loan beneficiaries based on low, moderate, high income criteria in the groups. Then we examine the inequality of income distribution based on World Bank and Gini Index criteria, occurred in in urban village sample and rural sample, then we measure the inequality of income distribution based on World Bank and Gini Index criteria in urban and rural areas, and in all selected sample areas.

## RESULT AND DISCUSSION

### Condition of Income Distribution of NPM-MP and PNPM-MPd Loan Beneficiaries Based on World Bank Criteria, and Low, Moderate, and High Inequality

Overall, seeing from condition of income distribution in each urban village/village, sub-district samples both in urban and rural areas, and all samples in Banyumas Regency areas, the category of respondent condition in low income group is more than 50% of total respondents, even the overall PNPM-MPd beneficiaries in sample area reach 86%, while the percentage of PNPM-MP beneficiaries is only 66% (see Table 2). Most of beneficiaries in moderate and high income groups are in urban areas.

Thus, in the post-program, the condition of income distribution of most of program beneficiaries is in low category. This also means that that program beneficiaries are the community with low income category and their income level is below the decent living standard (KHL) of Banyumas Regency. This indicates an inequality of income distribution to overall PNPM-M beneficiaries.

Table 2. Percentage of Income Distribution of PNPM Beneficiaries Based on Income Level in 2016

No.	PNPM	Urban Village/ Village	Low (%)	Moderate (%)	High (%)
1	PNPM-MP	Kedungwuluh	76	23	1
		East Purwokerto	55	24	21
		Sub-District	66	23	11
2	PNPM-MPd	Beji	71	26	3
		Karangtengah	65	31	4
		Sub-District	86	13	1
3	PNPM-MP and PNPM MPd of Regency		79	18	3

### Income Distribution of PNPM Beneficiaries in Each Urban Village/Village Group Based on World Bank and Gini Index Criteria

Based on World Bank criteria, the level of respondent income equality in urban area, namely Kedungwuluh urban village is better than in East Purwokerto (see Table 3). The level of respondent income equality in Kedungwuluh is in high category or in low level of inequality because 40% of low-income respondents receive more than 17% of the total respondent's income in Kedungwuluh, which is 23.06%. While in East Purwokerto, the level of income equality or inequality is in moderate category because 40% of low-income respondents receive 13.43% of total respondents income in East Purwokerto and the percentage is within the income range from 12% to 17% of total respondent's income.

Table 3. Income Distribution of Respondent Groups Based on World Bank and Gini Ratio Criteria in Urban Village/Village Sample in Banyumas Regency in 2016

No.	PNPMM	Urban Village/ Village	Criteria	Value	Description
1	PNPM-MP	Kedungwuluh	World Bank	23.06	Low Inequality
			GR	0.27	Low Inequality
		East Purwokerto	World Bank	13.43	Moderate Inequality
			GR	0,38	Moderate Inequality
2	PNPM-MPd	Beji	World Bank	20.07	Low Inequality
			GR	0.36	Moderate Inequality
		Karangtengah	World Bank	16.65	Moderate Inequality
			GR	0.40	Moderate Inequality

The condition of rural areas is the same as urban areas, one village where the level of income inequality is measured by the World Bank criteria is better than another village. 40% of low-income respondents in Beji village receive 20.07% of the total respondent's income, while 40% of low-income respondents in Karangtengah village only receive 16.65% of total respondent's income. This means that according to the World Bank criteria, the level of income inequality in Karangtengah village is higher than in Beji village.

The level of income inequality of PNPM-MP and PNPM-MPd loan beneficiaries according to GR indicates that all areas are in moderate category because GR values are between 0.30 to 0.40, namely East Purwokerto of 0.3, Beji of 0.36, and Karangtengah of 0.40, while Kedungwuluh is in low category because the GR value is 0.27 or below 0.30.

### Income Distribution of PNPM Beneficiaries in Each Urban Village/Village Based on World Bank and Gini Index Criteria

As seen in Table 4, from per urban village/village according to World Bank criteria, income equality in urban areas is better than in rural areas. 40% of low-income respondents in urban areas receive 17.67% of total respondent's income, while 40% of low-income respondents in rural areas only receive 13.84% of total respondent's income. Thus, the level of income inequality in urban areas is in low category,

while the level of income inequality in rural areas is in moderate category. However seeing from GR criteria, the levels of income inequality in urban and rural areas are relatively the same, which are in moderate category. GR value in urban areas is 0.35, while GR value in rural areas is 0.40, the values are in the range of 0.30 to 0.40 with moderate category.

Table 4. Income Distribution of Respondents Based on World Bank and Gini Ratio Criteria in Urban Village/Village Sample in Banyumas Regency in 2016

No.	PNPM - M	Criteria	Value	Description
1	PNPM-MP	World Bank	17.67	Low Inequality
		GR	0.35	Moderate Inequality
2	PNPM-MPd	World Bank	13.84	Moderate Inequality
		GR	0.40	Moderate Inequality
3	Banyumas Regency	World Bank	17.68	Low Inequality
		GR	0.39	Moderate Inequality

PNPM-M is a government program that seeks to create/improve the quality of community, both individually and in groups in solving various problems in relation to the efforts to improve the quality of life, independence, and welfare of the poor (Sujana, 2008). The program implementation in Banyumas Regency has been efficient, the research result indicates that 79% of program beneficiaries are the poor. This indicates that the existence of program to improve the welfare of the poor is needed.

The result of this research is in accordance with the research result of Madjid *et al.* (2013) conducted on PNPM-MP in 4 (four) urban villages in Kota Kotamobagu sub-district, namely: Mongondow, Moyag Tudulan, West Mongkonai dan Sia. The result indicates that there is a significant relationship between PNPM-M program and poverty reduction, this means that the program can alleviate poverty. Similarly, the research result of Bancin (2011) on the implementation of PNPM-MPd in West Bandung finds that the program provides benefits to beneficiaries, including increased income, but the benefits received by each group differ. The difference in the benefit of increasing income received by the beneficiaries also occurs in this research, as indicated by the proportion of 40% of low-income respondents receiving a share of all respondents' income and by GR value.

This difference indicates that there is an inequality of income distribution of beneficiaries, occurring in group, urban village/village sample and regency. The number of respondents in low income category in urban areas is lower (66%) than in rural areas (86%). The inequality of income distribution occurs in urban and rural areas. Based on World Bank criteria, inequality of income distribution in urban areas (17.67) is lower than in rural areas (13.84). In terms of GR, GR value in urban areas is 0.35, while GR value in rural areas is 0.40, thus GR value in urban areas is better than in rural areas. However, overall condition of inequality of income distribution between urban and rural areas is in moderate category of 17.68 according to World Bank criteria and 0.39 according to GR. Thus, the value is almost to the category of high income distribution inequality.

## CONCLUSION

More than 50% of respondents are in low-income group calculated based on the respondents domicile group, program in the areas, and overall areas. The level of income distribution of respondent groups in urban and rural areas, urban and rural areas sample and in regency area calculated based on World Bank and GR criteria is relatively the same, which is in moderate category. However, the income distribution in urban areas are relatively more equitable than rural areas, both in terms of groups and areas.

To realize general welfare in accordance with the 1945 Constitution, there is a need for more intensive community empowerment programs because even though the level of income distribution inequality is in the moderate category, but it leads to a high inequality category. Empowerment activities can be conducted through increasing productive economic activities based on local economic

resources, maintaining stimulation of PNPM-M revolving loan funds and sustainable mentoring program.

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