



# Evaluation methods and indicators of poverty and welfare

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**Abstract:** Regarding the issue of poverty and poverty reduction, and is a global issue. In recent years, reducing the rate of poverty is seen as the goal of development policy and cooperation. Millennium Development Goals, which were agreed by world leaders in 2000 to reduce poverty at the top of its development agenda. Few studies on poverty started at the beginning of the 20th century. Since the late 1970s and early 1980s due to the adoption of structural adjustment programs, liberalization and privatization by many countries of the world, poverty and the protection of vulnerable groups was considered more severe. Many scientists believed that the implementation of economic policies, poor and low-income groups increased. In response to this situation and to prevent the development of poverty, international and regional organizations to take appropriate measures adopted. For example, the decade 1006-1997 the United Nations Decade "eradication of poverty" called. Poverty is a multidimensional phenomenon and therefore is defined in different ways. According to Townsend (1985) individuals, families and population groups is considered to be poor, to take into account the lack of resources to acquire food needs are met. Stats Sen (1979) refers to the exclusion of all definitions of the word poverty is a relative concept. Deprivation of assets and opportunities to which every person is entitled to them. In a developing country, deprivation of food and housing and drug and relative deprivation in more developed countries the average living conditions and opportunities. According to this three definitions of poverty as relative poverty, absolute, there are subjective and objective. As the first step in the calculation and measurement of poverty is the poverty line In this paper, the different concepts of poverty and the poverty line and explain the methods of measuring poverty. The poverty rate of change in Iran and for the region, we will continue. The poverty indicators (measurements) and calculation methods are provided for the period (75-85) will be calculated and analyzed them. To study the effect of growth on the welfare of the criteria used and the results of the analysis of poverty and peace in the Middle East, the Middle East and North Africa. Then the welfare effect of income and economic growth will be oriented with a great view to the issue of poverty scavenger, scavenger poverty index and analyze long-term growth in these areas will come on.

**Key words:** the concept of poverty, poverty, poverty indicators, economic growth, poverty and peace.

## Introduction

Although economic growth is an important tool for the elimination of poverty, the World Bank report in 2005 revealed that despite high economic growth over the past two decades, the process of reducing poverty in the last decade has been slow and the number of poor with earn \$ 1 a day or less from 2.1 billion to 1.1 billion people live on reduced and the number of people who live on \$ 2 or less during this period from 65.2 billion increased to 2.74 billion. Although continuous economic growth in the world, but poverty continues to exist as an undeniable fact. When the global economy, especially during the 1990s, the average growth rate of 5.2% of GDP in experienced, serious discussion about the distribution of growth in developing countries was formed and the question as to is economic growth, an effective way to reduce poverty in developing countries is. Answers and arguments presented can be classified in two categories: international institutions such as the World Bank, are believed to be supportive of growth-oriented economic policies to develop opportunities to

increase incomes of the poor. According to this theory, the reduction of inequality in the distribution of income and assets is a factor that could lead to poverty reduction in low-income countries. Therefore, policies that improve the distribution of income and wealth within the community, such as reform of land tenure, taking into account the cost of funding for the public sector to support the poor and poor mechanisms for improving access to financial markets, should be the country's poverty reduction strategy to be considered. These are the support programs of the IMF's Poverty Reduction and expansion of facilities in the form of a country's poverty reduction strategy is executed, reflected. Planning and integration of a country's macro-economic policies and poverty reduction strategies, and interactive two-way process. First, poverty reduction strategies must be clear and in terms of budget and finance non-inflationary manner to be. However, the level of financial resources is also estimated that most of them, having been established during the process is not valid if poverty reduction strategies are not funded from existing resources, the World Bank and the IMF to countries in acquiring more financial resources in addition to helping charities to finance their poverty reduction strategies. While there are financial deficiencies countries can rethink your strategy, intermediate goals and national priorities. To explain again unless there are serious imbalances in the economy, generally short-term macroeconomic objectives there is room for change and flexibility. However, macroeconomic stability is not threatened.

### **Reviewed the literature on poverty**

Regarding the issue of poverty and poverty reduction, and is a global issue. Few studies on poverty started at the beginning of the 20th century. Since the late 1970s and early 1980s due to the adoption of structural adjustment programs, liberalization and privatization by many countries of the world, poverty and the protection of vulnerable groups was considered more severe. Many scientists believed that the implementation of economic policies, poor and low-income groups increased. In response to this situation and to prevent the development of poverty, international and regional organizations to take appropriate measures adopted. For example, the decade 1006-1997 the United Nations Decade "eradication of poverty" called. The first efforts to measure poverty, about 100 years ago by Booth and Rowentree taken. The new century with commitment and unprecedented decision to get rid of poverty in the world began. The United Nations Millennium Declaration (2000), rich and poor countries have pledged to apply whatever they can to eradicate poverty.

### **Definition of Poverty**

Poverty is a multidimensional phenomenon and therefore is defined in different ways. Deprivation of assets and opportunities to which every person is entitled to them. In a developing country, deprivation of food and housing and drug and relative deprivation in more developed countries the average living conditions and opportunities. According to this there are three definitions of poverty:

Absolute poverty: objective concept in the sense of failure to achieve the minimum standard of living.

Relative poverty: inability to access certain level of living standards in society is desirable.

Mental deficiency: people with incomes above the poverty line itself feels poor.

According to the definition of the poor person who does not have a minimum wage. One way of counting the poor, the World Bank since 1980 and also the method of choice of economic institutions (1379) in our country as well, is to first see the minimum necessary for the survival of man Which of them. Poor census to determine the poverty line and below the line, the same tools as the approach they have used monetary measures. If for a long time less than two hundred kilo calories per day to reach a person, malnutrition takes to hand out food baskets containing at least two thousand and four hundred other computing calories are converted into monetary equivalent. It can be summed calculation steps: The first step is to determine the minimum necessary for the survival of human beings. The minimum food basket with a set. The calculations of the components of the food basket contain at least Dvhzarvchharsd kcal to convert its monetary equivalent. In the next step, with the result obtained by multiplying, the extreme poverty of the community and everyone whose income is less than the monetary equivalent, considered extremely poor. Then calculates that the income of citizens below the line; the number of these people are divided by the total population and the extreme poverty line is obtained. This is the same approach that has already been said monetary measures. According to the definition of the poverty line is defined as spending that person to access a minimum level of prosperity in a given place and time incurred. World Bank to provide a global benchmark, earning a dollar a day poverty line basis and as a criterion for absolute poverty line of one dollar a day, the international poverty

line is called. This definition is based on the assumption that the difference in the cost of living adjustment, taking into account the purchasing power of the dollar in different areas to be taken into account. Minimum average consumption expenditures necessary for survival in developing countries, is a dollar daily.

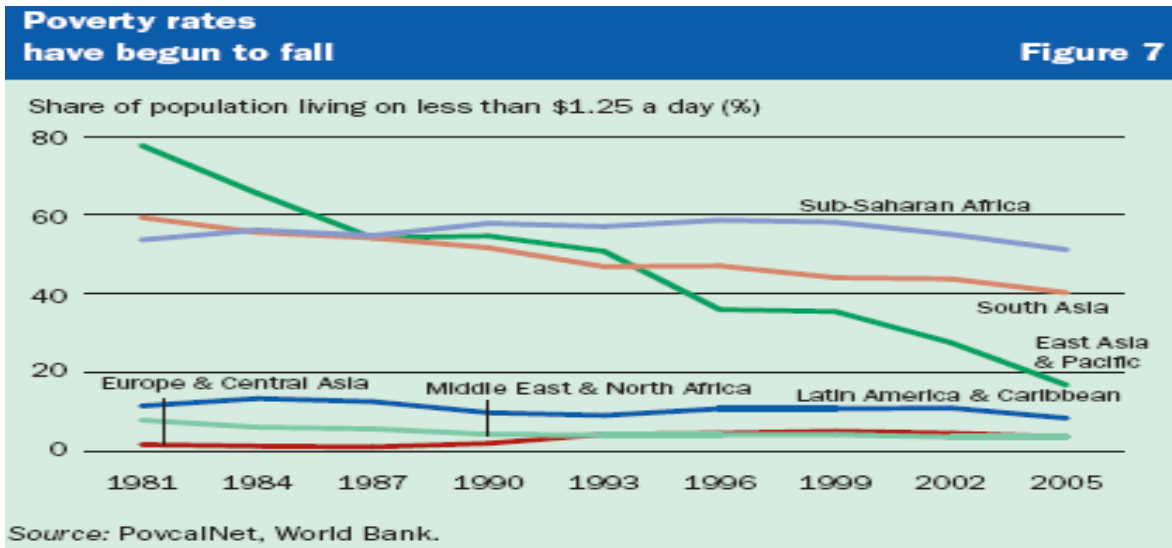


Figure 1. The changes in poverty rates in the world

In countries that are similarly priced and ordered state is determined, Is where governments spend large amounts of national income subsidies and artificially lower the price of basic goods, they can not be expected from calculations based on the accuracy or validity of the adjusted dollars. Earning a dollar a day for very poor countries like those in sub-Saharan Africa live and because Iran is not among their countries, so we have to calculate the poverty line of two dollars per day at least be considered.

**Comparing the growth of poverty and peace in East Asia and the MENA region**

As we said two kinds of methods to measure pro-poor growth:

**Partial method:** without using the poverty line and measure poverty, growth to benefit the poor (against the poor) is shown the advantages of this method relies on specific indicators to measure poverty and not poverty to poor growth rate can not be determined .

**Complete method:** both the poverty line and to measure poverty rate is said needs to compensate the growth of poverty in the Kakwani, Khandkrv Sun introduced and explained, the procedure is complete.

We have the opportunity to compare the measures of "poverty compensatory growth index" is used by Kakwani, N. and E. Pernia. 2000 was introduced. In this index, the overall change in poverty is two effects. The effect of growth on poverty once inequality of income distribution has not changed and the effect of changes in Fqrnashy of changes in total income inequality when it has not changed.

**Poverty Equivalent Growth Rate :  $PEGR = \gamma + (\varphi_\alpha - 1)\gamma$**

$$\frac{\delta_\alpha / \eta_\alpha}{\eta} = \frac{d \ln(P_\alpha) / \gamma}{\eta}$$

In the above formula for the elasticity of poverty to growth elasticity of poverty to inequality and denominator.

Table 1

$\varphi > 1$	Growth is to benefit the poor
$0 < \varphi < 1$	Growth falling from rich to poor
$\varphi < 0$	Growth, aggravating poverty

This section examines the issue of pro-poor growth in MENA countries. The distribution of income in the region is given in Table 2.

Table 2. Distribution of MENA countries by income groups

Rank	Percentage	Group of Income
2	35	High income: nonOECD
3	15	Upper middle income
4	5	Low income
1	40	Lower middle income

According to the table almost half of the countries in the region are less than average in terms of geographical location are located mainly in North Africa. According to the ranking of countries with high income in the next category, with the majority of these countries are oil-rich countries, especially around the Persian Gulf. Followed by, respectively income countries and low-income countries are higher than average. Since the Palestinian position in this ranking is not specified in the World Bank website, so the percentage is less than a hundred.

Table 3. Growth debugger based on \$ 1 a day poverty

Percentages Total	Negative growth	Positive growth	
Based on the percentage of poor people			
3	0	3	Poverty alleviation
7	4	3	Poverty alleviation
10	4	6	Total
Based on the poverty gap			
2	0	2	Poverty alleviation
8	4	4	Poverty alleviation
10	4	6	Total

Source: research findings

The results in Table 2, in the 10 countries where data are available, in both cases based on the percentage of poor and growing poverty gap 6 positive and 4 negative growth occurred. The 6 positive growth on poverty gap equal to the number of anti-poverty and pro-poor growth is pro-poor, meaning that 3 countries with positive growth and 3 countries with positive growth and anti-poverty. In countries with negative growth is poor compared to countries with positive growth of the decrease in revenues suffered more.

In the second part of the poverty gap index used is the number of countries with positive growth and pro-poor half the countries with positive growth and Fqrza. According to the ratio in which the number of countries with positive growth and pro-poor poor people of the countries with positive growth and Fqrza can be said that the MENA region's growth has not been pro-poor and pro-growth pro-poor policies are not followed. Since most countries in the region with low income poverty line of \$ 2 a day, except for a limited number of them is not defined, so it can not be concluded that the growths are more pro-poor people close to the poverty line, or poor farther away from the benefit has been the poverty.

The MDGs, agreed by world leaders in 2000 to reduce poverty have put on the agenda of development. The first goal of halving extreme poverty to income directly related, but many Dygrahdaf also in a wider sense is essentially about poverty reduction. While the above stable growth leading to a substantial reduction in absolute poverty, but, only a few countries, particularly in East, Southeast and South Asia recently, to have achieved this level of growth. Many other parts of the slow growth, or even negative very volatile and stable for the period of time have experienced little progress in reducing poverty is leading to. Even in many countries with high growth, growth has been accompanied by rising inequality, which caused a delay in the effect of growth on poverty. A poverty reduction strategy is to accelerate pro-poor growth strategies to choose. This section analyzes the pro-poor growth in Asian countries with middle income and low pay. The analysis of pro-poor growth by estimating the growth rate of compensation poverty by conducting applied for the MENA region. Table 5 summarizes estimates of poverty based on the poverty line of US \$ patron day. The results

show (28.8%) negative growth rate of 71.2%) had positive growth rates. Of the 42 cases that had positive growth rate, an equal number of cases of 21 (35.6 percent) pro-poor growth (pro-poor), and the anti-poor growth (Fqrza) respectively, in 7 of the 17 negative growth rate, poor It should be noted that these findings fit with reduced if it is true that the pro-poor growth index of the number of poor and poverty indicators used. However, when the pro-poor growth and poverty by using poverty gap measure the results show that growth in Asia for poor people around the \$ 1 a day live below the poverty line are not so desirable. Overall, while growth in Asia was generally positive but much closer to the poverty of the poor have benefited from the very poor to the poverty line of \$ 2 a day is also true.

Table 4.\$ 1 per day poverty line and about poverty

Positive Growth	Negative Growth	Total	
Poverty alleviation	21 (35.6%)	10 (16.9%)	31 (52.5%)
Anti-poverty	21 (35.6%)	7 (11.9%)	28 (47.5%)
Total	42 (71.2%)	17 (28.8%)	59 (100%)

\$ 1 per day poverty line and the poverty gap

Poverty alleviation	13 (22.0%)	13 (22.0%)	26 (44.1%)
Anti-poverty	29 (49.2%)	4 (6.8%)	33 (55.9%)
Total	42 (71.2%)	17 (28.8%)	59 (100%)

\$ 1 per day poverty line and the poverty gap

Poverty alleviation	15 (25.4%)	11 (18.6%)	26 (44.1%)
Anti-poverty	27 (45.8%)	6 (10.2%)	33 (55.9%)
Total	42 (28.8%)	17 (28.8%)	59 (100%)

Poverty line of \$ 2 a day and the proportion of poor people

	Positive Growth	Negative Growth	Total
Poverty alleviation	26 (44.1%)	7 (11.9%)	33 (55.9%)
Poverty alleviation	16 (27.1%)	10 (16.9%)	26 (44.1%)
Total	42 (71.2%)	17 (28.8%)	59 (100%)

Profit and loss patterns of pro-poor growth and poverty rate of two a result of subjectivity. If growth factor Fqrza more than 5 percent for the year. It is a loss of growth and pro-poor growth and pro-poor pattern is if more than 5 percent annually because it is a benefit. Profit and loss as a result of growth in the growth patterns of poverty and poverty-causing desensitization. If growth factor causing poverty is more than 5 percent for the year. It is a detriment to growth and poverty growth debugger, if more than 5 percent annually due to poverty pattern is desensitization is a great benefit. (Kakwani, N. , Prakash, B. , and Son, H, 2000). Two countries in Central Asia (Kazakhstan and Kyrgyzstan) have grown in the 90's many benefits. Although in this period of transition from a socialist economy to a market economy have been the result of pro-poor growth

For the very poor, very high in the years 1999-1996. Growth in Armenia's interests, particularly due to the growth in profit or loss calculated using three poverty indicators:

Table 5. high growth in profit or loss in East Asia

Severity of poverty	Gap of poverty	Census poverty	Year	Country
0.72-7.92	0.57-6.68	39.10	1999- 1996	Indonesia
22.67	19.29	9.11	1999-1996	Kazakhstan
13.33	9.9	20.59	1999-1993	Kyrgyzstan
0.57-	0.73-	6.18	2001-1999	Pakistan
1.5-	1.34-	8.20	1993-1990	Malaysia
		5.21	1999-1996	Sri Lanka

Fluctuations in loss or profit growth due to changes in inequality that shows the growth model is not sustainable. Usually, high growth is the increase in the Gini coefficient in cases where losses occur in these cases, as well as in Malaysia and Sri Lanka has thus benefit the non-poor growth has not been more concerned with the poor.

### Conclusion

Research findings contain a valuable lesson in the approach to the study of the relationship between inequality, growth and poverty in MENA countries, which could open the door for policy perspective as well. Pro-poor growth index called "compensation growth rate of poverty" by Kakwani and Sun (2007) is proposed to be given at the same time growth and distribution on poverty. Although the index for picking up both a reliable indicator of the effects mentioned, but the figures must not overlook the fact that we can not study the initial conditions-uniformity of the inequality Rshd\_ poverty in these countries have and in case we are not able to build a strong indicator of the growth of poverty and peace and must have overlooked this heterogeneous. The results indicate that the problem of poverty debugger that:

If development policy to reduce poverty and inequality debugger poor people away from the poverty line over the poor closer to the poverty line will benefit from the benefits of growth. According to the results despite positive growth rates in MENA countries witnessed poverty compensation index shows that positive growth has not been pro-poor. However, the positive thing is that although being in the 90s for most countries is a big negative, But with the arrival in 2000, and decades later it gradually this indicator is positive and we can say that over the years, little by little the poor more than the benefits of growth, have benefited. In East Asia, on average, double the growth in the MENA region. Therefore, it can be expected that the poor in these regions to benefit most from growth. It should be noted that long-term poverty index, the average number of people below the poverty line shows the larger figures show that in East Asia. In the MENA region, based on 30% of the area of poverty and extreme poverty index of 20 percent growth, pro-poor in East Asia these numbers are 35 and 22. More of their income than the non-poor. Therefore, growth in Asia is generally in favor of the poor. The poverty reduction in Asia more generally facilitate positive growth and pro-poor growth model to help it.

### References

- Anand, S and Kanbur, S. M. R. (1984) "The Kuznets Process and the Inequality Development Relationship", *Journal of Development Economics*, 40, 25-52.
- Atkinson, A. B. (1970) "On the Measurement of Inequality", *Journal of Economic Theory*, Vol. 2, 244-263.
- Barro, R. J. (1999) "Inequality, Growth and Investment", Harvard university, unpublished mimeo.
- Bhagwati, J. N. (1988) "Poverty and Public Policy", *World Development Report* 16 (5), 539-654.
- Bourguignon, F. (2000) "Can redistribution accelerate growth and development?", Paper presented at the World Bank ABCDE/Europe Conference, Paris.
- Brock, W. A. and Durlauf, S. N. (2000) "Growth economics and reality", National Bureau of Economic Research Working Paper series, No. 8041, 1-48.
- Christianensen, L. , Demery, L. , and Paternostro, S. (2002) "Economic Growth and Poverty in Africa: Message from the 1990s", World Bank, unpublished mimeo.
- Deininger, K. , and L. Squire. 1996. "A New Data Set in Measuring Income Inequality. " *The World Bank Economic Review* 10(3):565-91.
- Deininger, K. and Okidi, J. (2001) "Growth and poverty reduction in Uganda, 1992-2000: Panel data evidence", World Bank, Washington D. C. and Economic Research Council, Kampala, unpublished mimeo.
- Dollar, D. and Kraay, A. (2000) "Growth is Good for the Poor", World Bank, Development Research Group.
- Foster, J. , J. Greer, and E. Thorbecke. 1984. "A Class of Decomposable Poverty Measures. " *Econometrica* 52(3):761-66.
- Gallup, J. L. , Radelet, S. and Warner, A. (1998) "Economic Growth and the Income of the Poor", Harvard Institute for International Development, unpublished mimeo.
- Kakwani, N and Son, H. (2002) "Pro-poor Growth and Poverty Reduction: The Asian Experience", the Poverty Center, Office of Executive Secretary, ESCAP, Bangkok.
- Kakwani, N. , Prakash, B. , and Son, H. (2000) "Economic Growth, Inequality and Poverty: An Introductory Essay", *Asian Development Review*, Vol. 16, no. 2, 1-22.

- Kakwani, N. 1993. "Poverty and Economic Growth with Application to Cote D'Ivoire." *Review of Income and Wealth* 39(2):121–39.
- Kakwani, N. and E. Pernia. 2000. "What is Pro-poor Growth?" *Asian Development Review* 16(1):1–22.
- Kakwani, N. and H. H. Son. 2008. "Poverty Equivalent Growth Rate." *Review of Income and Wealth*. Forthcoming
- Kakwani, N. and Pernia, E. (2000) "What is Pro-poor Growth", *Asian Development Review*, Vol. 16, no. 1, 1–22.
- Klasen, S. 2004. "In Search of the Holy Grail: How to Achieve Pro-poor Growth?" In B. Tungodden, N. Stern, and I. Kolstad, eds. , *Towards Pro-Poor Policies: Aid, Institutions, and Globalization*. New York: Oxford University Press.
- Kuznets, S. (1955) "Economic Growth and Income Inequality", *American Economic Review* 45, 1-28.
- Kuznets, S. 1955. "Economic Growth and Income Inequality." *American Economic Review* 45:1–28.
- Liu, H. 2006. "Changing Regional Rural Inequality in China 1980-2002." *Area* 38(4):377–89.
- Ravallion, M. , and S. Chen. 2003. "Measuring Pro-poor Growth." *Economics Letters* 78:93–9.
- Ravallion, M. and Chen, S. (2002) "Measuring Pro-poor Growth", World Bank, Working Paper no. 2666.
- Son, Hyun H. 2007. *Pro-Poor Growth: Concepts and Measures*. ERD Technical Note Series No. 22, Economics and Research Department, Asian Development Bank, Manila.
- Yao, S. , Z. Zhang, and L. Hanmer. 2004. "Growing Inequality and Poverty in China." *China Economic Review* 15:145–63.