ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2017; 3(7): 678-683
www.allresearchjournal.com
Received: 25-05-2017
Accepted: 26-06-2017

Kibrom Kahsu Hailu
PhD Scholar, Department of Economics, Andhra University, Andhra Pradesh, India

Dr. G Nagaraja
Associate Professor, Department of Economics, Andhra University, Andhra Pradesh, India

Correspondence
Kibrom Kahsu Hailu
PhD Scholar, Department of Economics, Andhra University, Andhra Pradesh, India

Impact of growth and inequality on poverty in Ethiopia: Empirical evidence from Amhara region

Kibrom Kahsu Hailu and Dr. G Nagaraja

Abstract
Poverty reduction is the fundamental goal of Ethiopia and is to be achieved through sustained and broad based economic growth and income distribution. Therefore, the relationship between economic growth, income distribution and poverty reduction and its change law should be a main concern of policy. At present, a large number of theoretical and empirical studies have shown that economic growth can reduce poverty, but its capacity for poverty reduction is affected by the situation of income distribution. If the income gap widens along with the economic growth, the poor will benefit less from the growth compared to the non-poor. As a result, the poverty reduction effects of economic growth will be partially or completely offset by the increased inequality in income distribution (Datt and Ravallion, 1992; Kakwani, 2000). This study examines the impact of growth and inequality on poverty in Amhara regional of Ethiopia. The study decomposed changes in poverty into growth and redistribution effect by employing the Datt and Ravallion (1992) approach and using panel data from four round household income, consumption and expenditure (HICE) surveys conducted in the region between the period 1995/96 to 2010/11 by the central statistics authority (CSA) of Ethiopia.

Result from this study indicated that the substantial decline in poverty incidence in Amhara region for the period between 1995/96 and1999/00 and between 2004/05 and 2010/11 is attributed to the increase in real household per capita expenditure while the reduction in inequality contributed to the reduction in poverty, more than the contribution of rising per capita expenditure, for the period between 1999/00 and 2004/05. Based on the findings of this study, we recommend that appropriate measures need to be taken to reduce the existing inequality to reduce poverty at a higher rate. That is, in order to deal with poverty problems successfully, the issues of income inequality must also be dealt with. Hence, government should implement policies that aim at redistributing income in favour of the poor and middle class households.

Keywords: poverty in Ethiopia, inequality, Amhara region

Introduction

Poverty reduction is the fundamental goal of the Ethiopia and is to be achieved through sustained and broad based economic growth and income distribution. Therefore, the relationship between economic growth, income distribution and poverty reduction and its change law should be a concern of development economics. At present, a large number of theoretical and empirical studies have shown that economic growth can reduce poverty, but its capacity for poverty reduction is affected by the situation of income distribution. If the income gap widens along with the economic growth, the poor will benefit less from the growth compared to the non-poor. As a result, the poverty reduction effects of economic growth will be partially or completely offset by the increased inequality in income distribution (Datt and Ravallion, 1992; Kakwani, 2000) [6, 10]. Over the two decades since the downfall of Derg regime (1974-1991), Ethiopia has made remarkable achievements in economic growth and accelerated the poverty reduction process by implementing various poverty reduction strategies (PRS), such as Sustainable Development and Poverty Reduction Program (SDPRP) and Plan for Accelerated and Sustainable Development to End Poverty (PASDEP). Ethiopia's economic growth performance is quite vigorous and continued for the tenth consecutive year, with real gross domestic product (GDP) growth touching 10.3 percent in 2013/14. In the context of rapid economic growth, millions of Ethiopian households have shaken off poverty and the poverty incidence rate dropped from 45.5 percent in 1995/96 to 29.6 percent in 2010/11 with an average annual decline of 2.32 percent. Ethiopia is still one of the poorest countries in the world despite the fact that it has been able to register a remarkable economic growth in the last decade (World Economic Outlook, 2014).

The literature that analyse interlinkage among poverty, inequality and growth in Ethiopia is at best scanty. Majority of available studies predominantly focus on poverty profile which describes the pattern of poverty and determinants of household poverty. To date, to the best of my knowledge, there have not been much rigorous studies on this area in ANRS. Most of the studies regarding poverty focus specifically on determinants of poverty in urban areas and others are based on cross sectional data. Analysis of the interlinkage among poverty, inequality and growth using cross-sectional data gives the picture for a particular point in time, and hence, shows an insufficient analysis of the evolution of poverty not the dynamics of poverty. In order to tackle poverty, analysing the interactive effect of growth and inequality on poverty, among others, using longitudinal data is indispensable.

Therefore, given the recognized influence of growth and inequality on poverty reduction, it is necessary to ascertain empirically the nature of the relationships in the ANRS context to inform policy design for achieving the core development objectives of the region. Thus, using the Ethiopian household income, consumption and expenditure (HICE) survey data of 1995/96, 1999/00 and 2004/05 and household consumption and expenditure (HCE) survey data of 2010/11, this paper examined the links among growth, inequality and poverty reduction in ANRS aiming at answering the questions: how economic growth and income inequality impact poverty reduction in Ethiopia?

Brief Literature Review

Views on the relationship between economic growth and poverty are generally put into two theories, which are the 'trickle-down theory' and the 'trickle-up theory'. Proponents of the "trickle-down theory" assert that economic growth plays an essential role in poverty reduction in any given country, given that the distribution of income remains constant. They believe that the benefits of higher economic growth in a country trickle down to the poor. Alternatively, the "trickle down hypothesis" suggests that a time lag exists before the poor benefit from economic growth. For example, economic growth may initially generate greater profits for existing firm owners and current employees.

Their higher incomes may generate greater demand for products which will result in firm expansion. Firm growth may generate demand for additional employees including the unskilled poor, who may then reap the benefits of economic growth.

On the other hand, proponents of the 'trickle-up theory' assert that economic growth does not improve the lives of the very poor; but rather, the 'growth process' tend to 'trickle-up' to the middle classes and the very rich (Todaro, 1997). Todaro, 1997, this, in turn, results in a worsening of the distribution of income (i.e., increase in inequality) which then increases poverty. Put differently, the theory asserts that there are reinforcing factors that maintain poverty amongst the poor population and impede then from contributing to economic growth.

The literature essentially contends that countries do not grow fast, because they are simply too poor to grow. This is because poverty dampens economic growth by creating a vicious circle of whereby high poverty leads to lower aggregate growth. In turn, low growth results in high levels of poverty. In such a scenario, development policies should be aimed at improving the living standards of the poor, which in turn, would ultimately result in virtuous circles that promote economic growth.

Many studies have been conducted on the relationship between poverty and economic growth to verify the theoretical postulation relating to poverty and growth nexus in both developed and under developing countries. Some of these studies empirically concluded that economic growth has negative significant impact on poverty, while others asserted otherwise. While the literature on this topic is plentiful, here we present a brief review of studies that are most relevant for our analysis. For instance, De Janvry & Sadoulet (2000) [7] carried out a study to examine the determinants of change in poverty and inequality in twelve Latin American Countries for the period 1970-1994. They found out a negative and significant relationship between poverty and income growth which implies that per capita aggregate income growth leads to a reduction in the incidence of urban and rural poverty. Similarly, Easterly (2001) states that countries with positive income growth had a decline in the proportion of people below the poverty line, and the fastest average growth was associated with the fastest poverty reductions. In Indonesia, for example, which had average income growth of 76 percent from 1984 to 1996, the proportion of Indonesians beneath the poverty line in 1993 was one-quarter of what it was in 1984. Moreover, Bigsten et.al (2003) [5] examined the impact of growth on poverty in Ethiopia using panel data from 1994-1997, which they consider it a period of economic recovery driven by peace, good weather and much improved macroeconomic management. Empirical evidence from their study showed that economic growth has a negative and significant relationship with poverty. This implies that economic growth is key to poverty reduction in Ethiopia. Their result on the decomposition of changes in poverty into growth and redistribution components also indicates that potential poverty reduction due to the increase in real per capita income was to some extent counteracted by worsening income distribution.

Adams (2004) [1] used data collected in 126 countries including 60 developing countries to analyse the elasticity of poverty. He found that economic growth reduces the proportion of poverty; however, the measurement of the relationship between growth and poverty based on cross-country data is often questionable. Tasai & Huang (2007) [16] [16], using time series data from 1964 to 2003, analysed the relationship between growth and poverty in Taiwan. They confirmed that economic growth is a major driving force for poverty reduction in Taiwan. Similarly, Basu & Mallick (2008) [8] have also examined the relationship between poverty and economic growth in India using several measures. They found modest evidence to suggest that economic growth led to a reduction in poverty. In addition, findings from the study conducted by Agarwal (2008) [2] to examine the relation between economic growth and poverty alleviation in the case of Kazakhstan, using province-level data and using Additively Decomposable Poverty Measures, showed that provinces with higher growth rates achieved faster decline in poverty.

A study conducted, by employing the ARDL-Bounds testing approach, to investigate the causal relationship between financial development, economic growth and poverty in

South Africa for the period 1960-2006 by Odhiambo (2009a) [14] showed that a unidirectional causal flow from economic growth to poverty reduction existed in South Africa. Similarly, Gelaw (2010) [8] empirically examines the relationship between poverty, inequality and growth in rural Ethiopia using a panel data of Ethiopian Rural Household Survey (ERHS) for the period 1994-2004. The author adopted the fixed effects regression model for estimation. Results of the study show that poverty gap and growth in real per capita consumption has a negative and significant relationship which implies growth in mean consumption reduces poverty gap in rural Ethiopia.

Young (2012) [17] uses estimates of the level and growth of real consumption to investigate changes in poverty in 29 sub-Saharan and 27 other developing countries. The author found that living standards in Sub-Saharan African countries have improved during the last two decades–there by implying a reduction in poverty. Ijaiya *et al* (2011) [9] examined the impact of economic growth on poverty reduction in Nigeria by taking into consideration a time subscript and a difference-in-difference estimator that describes poverty reduction as a function of changes in economic growth. Using a multiple regression analysis, the result obtained indicates that the initial level of economic growth is not prone to poverty reduction, while a positive change in economic growth is prone to poverty reduction. The study suggest that to improve and sustain the rate of economic growth in Nigeria from which poverty could be reduced measures, such as, stable macroeconomic policies, huge investment in agriculture, infrastructural development and good governance are to implemented. In a similar case, Mulok *et al* (2012) determined the empirical relationship and importance of growth for poverty reduction in Malaysia. The results showed that growth explains much, but not all, about the evolution of poverty. They stated that economic growth is necessary but not sufficient for poverty reduction, especially if the objective is a rapid and sustained poverty reduction. If a policy objective is focused on poverty alleviation, it is necessary to consider additional variables such as income distribution.

Furthermore, Nurudden & Ibrahim (2014) [13] examined the relationship between poverty, inequality and economic growth in Nigeria using a secondary time series data from 2000-2012. Employing bound testing to cointegration and granger causality techniques, result of the study show that there is a unidirectional causal relationship running from RGDP to poverty, which means that an increase in GDP in Nigeria causes high level of poverty. Similarly, Kolawole *et al* (2015) empirically investigated the relationship among poverty, inequality and economic growth in Nigeria using a time series data over the period from 1980 to 2012. By employing the Ordinary Least Squares (OLS) regression equations, result of the study reveal that growth has a negative significant effect on poverty which implies growth has crucial role in reducing poverty in the country.

As expected some of these studies provide empirical evidence to support the negative and significant relationship between poverty and economic growth while others provide otherwise. Unlike to the above mentioned findings, an empirical study conducted in Nigeria by Aigbokhan (2000) [3] to investigate the relationship between poverty, inequality and economic growth for the period 1986 to 1996 revealed a positive and significant relationship between growth and poverty which implies that the remarkable growth of the Nigerian economy from 1986 to 1992 exacerbated the level of poverty in the country. His findings suggest that the so-called “trickle down” phenomenon, underlying the view that growth reduces poverty and inequality, is not supported by Nigeria’s data. In a similar case for Nigeria, Stephen & Simeon (2013) [15] conducted a research on economic growth and poverty in Nigeria and the results revealed that there is positive and significant relationship between economic growth and poverty which implies that economic growth does not reduce poverty.

From the literature review above, it could be seen as plenty of studies have been conducted in on relationship between poverty and economic growth. Using different methods such as OLS, ARDL-Bounds testing approach, etc. The results from these previous studies are mixed. But majority of these results support a negative and significant relationship between poverty and economic growth. In addition, the number of studies in Ethiopia which tries to figure out the relationship between poverty reduction and economic growth are few. In view of this problem in mind, it is the intent of this paper to fill in the identified gap.

Data and Methodology

Data

Table 1: Sample Distribution by Administration Zone & Survey Year, ANRS (1995/96-2010/11)

Administrative Zone	Sample Size (Number of Households)							
	1995/96		1999/00		2004/05		2010/11	
	N	%	N	%	N	%	N	%
North Gondar	518	17.4	594	17.8	710	19.4	551	17.8
South Gondar	300	10.1	232	7.0	268	7.3	294	9.5
North Wollo	320	10.7	228	6.8	271	7.4	223	7.2
South Wollo	445	14.9	596	17.9	733	20.0	478	15.5
North Shoa	309	10.4	304	9.1	372	10.2	286	9.2
East Gojjam	249	8.4	240	7.2	321	8.8	256	8.3
West Gojjam	505	16.9	664	19.9	355	9.7	452	14.6
Wag Hemira	156	5.2	168	5.0	199	5.4	362	11.7
Awi Zone	84	2.8	156	4.7	228	6.2	66	2.1
Oromia Liyu	96	3.2	156	4.7	199	5.4	124	4.0
Total	2982	100	3338	100	3656	100	3092	100

Source: Author’s Computation from 1995/96, 1999/00 & 2004/05 HICE and 2010/11 HCE survey data

The study made use of panel data from the four round Household Income, Consumption and Expenditure (HICE) surveys of the year 1995/96, 1999/00 and 2004/05 and Household Consumption and Expenditure (HCE) survey of the year 2010/11 collected by the Central Statistical Agency (CSA) of Ethiopia. In ANRS, the HICE survey is representative at regional and administrative zone level covering a total of about 2982, 3338, 3656, and 3038 households for the survey years of 1995/96, 1999/00, 2004/05 and 2010/11, respectively. Mean per capita household consumption expenditure is used as a welfare measure to proxy incidence of poverty and growth in ANRS of Ethiopia.

Methodology

The total change in poverty can be decomposed into the effect of growth when the income distribution does not change and the impact of income distribution when total income is constant (Kakwani and Pernia, 2000; and Pernia, 2003) [10]. The pure growth effect is negative since positive growth reduces poverty, holding inequality constant. The inequality effect can be negative or positive depending on whether inequality is growth improving or growth worsening. Hence, to understand the impact of economic growth on poverty, it is vital to measure separately the impact of changes in average income or expenditure and income or expenditure inequality on poverty.

To quantify the influence of growth and inequality on poverty, a conventional poverty decomposition approach developed by Datt and Ravallion (1992) [6] is used in this study. The methodology, which is proposed by Ravallion and Huppi (1991) and Datt and Ravallion (1992) [6], decomposes changes in poverty indices into its growth and distribution components in order to assess the relative role played by each. Their methodology revolves around decomposing the change in measured poverty into a growth and redistribution component. The growth component refers to the change in poverty that occurs, if we assume that inequality does not change. The redistribution component is the change in poverty, if mean income levels had not altered (i.e. no growth has taken place). Finally, a residual variable captures the interaction between the growth and redistribution effects on poverty.

According to Datt and Ravallion (1992) [6], a change in poverty between periods t and $t+n$ is as follows:

$$P_{t+n} - P_t = G(t, t+n; r) + D(t, t+n; r) + R(t, t+n; r)$$

Where, $R(t, t+n; r)$ is the residual; $G(t, t+n; r) = P(z/\mu_{t+n}, L_r) - P(z/\mu_t, L_r)$ is the growth component, and $D(t, t+n; r) = P(z/\mu_r, L_{t+n}) - P(z/\mu_r, L_t)$ represents the redistribution component.

Result and Discussion

Following this methodology proposed by Datt and Ravallion (1992) [6], we estimated the influence of both economic growth and changing inequality levels on the reported poverty changes. The decomposition is carried out for the survey years between 2004/05 and 2010/11, 1999/00 and 2004/05 and 1995/96 and 1999/00 and estimates are provided in table 2, 3 and 4.

Table 2 below presents the results of the Datt-Ravallion decompositions for ANRS between 2004/05 and 2010/11 and between 1995/96 and 1999/00 periods across rural and urban areas. In this case, the growth component refers to the growth in mean household per capita expenditure. The result in the table shows that at regional level poverty incidence declined between 1995/96 and 1999/00, between 1999/00 and 2004/05 and between 2004/05 and 2010/11 because the increase in real household per capita expenditure contributed more to the change in poverty than the negative contribution of rising inequality over the periods. However, for the period 1999/00 to 2004/05 the reduction in inequality contributed to the change (reduction) in poverty than the contribution of rising real household per capita expenditure. The findings in the table suggest that overall growth was the main cause for the decrease in the incidence of poverty level during the period of analysis we are considering in this study. For example, during the period 1995/96-1999/00, a decrease of 21.5 percent in the poverty incidence is observed due to high growth, while redistribution reduced the effect of this to the extent of 8.4 percent and thus leaving the net change in poverty of about 9.6 percent. According to the result in the table, if growth had been distribution neutral in the 2004/05-2010/11 period, the incidence of poverty would have declined by 29.5 percentage points instead of 6.5 percentage points. Put simply, the changing distribution of expenditure as a consequence of growth was not sufficiently large to offset the gains realised in terms of a reduction in poverty. The evidence clearly reveals that unequal distribution has blunted the impact of growth on poverty. Similarly in a period between1999/00-2004/05, poverty would have decline by 3.5 percentage points instead of 12.3 if growth had been distribution neutral, which reveals that the rate of decline in poverty has risen by about 8 percent due to a decline in inequality by the same rate.

Table 2: Datt and Ravallion Decomposition of Poverty Incidence, ANRS (1995/96-2010/11)

Survey Year	Total change in Poverty (%)	Change Due to		Residue
		Growth Component	Redistribution Component	
1995/96-1999/00	-9.6	-21.5	8.4	3.4
1999/00-2004/05	-12.3	-3.5	-8	-0.8
2004/05-2010/11	-6.5	-29.5	19.1	3.9

Source: Author's Computation of 1995/96, 1999/00 & 2004/05 HICE and 2010/11 HCE Survey Data from CSA

Table 3 provides result of Datt-Ravallion poverty decomposition for ANRS by area of residence. The result in the table reveals that when economic growth is accompanied by a decline in inequality poverty would have decline by a higher rate than when accompanied by a rise in inequality. For instance, in the period 1999/00-2004/05 poverty would have been declined by 3.1 and 10.4 percentage points instead of by 20.3 and 11.2 percentage points in rural and urban areas of the region, respectively, if growth had been distribution neutral. The contribution of economic growth towards the reduction in poverty for the period between 1999/00 and 2004/05 was 3.1 and 10.4 percentage points and redistribution impacted poverty to decline by 18.9 and 3.6 percentage points and the cumulative effect becomes a reduction in poverty by 20.3 and 11.2 percentage points in rural and urban areas of the region, respectively. To the contrary, poverty would have been declined by 10.1 and 30.5 percentage points in rural and urban areas instead of declining by 0.9 and 20 percentage points if growth had been distribution neutral for the period of 1995/96-1999/00, which shows that the rise in inequality has drove away the positive effect of economic growth on poverty reduction. Furthermore, for the period between 2004/05 and 2010/11, the positive effect of economic growth on poverty reduction was 41.9 and 2.95 percentage points while the negative effect of a rise in inequality on poverty reduction was 25.2 and 11.3 percentage points in rural and urban areas of the region, respectively, which caused poverty to reduce by 18.2 percentage points in rural areas and rise by 7.5 percentage points in urban areas of the region.

Table 31: Datt and Ravallion Decomposition of Poverty Incidence by Area of Residence

Survey Year	Gender	Total Change in Poverty (%)	Change Due to		Residue
			Growth	Redistribution	
1995/96-1999/00	Rural	-0.90	-10.1	8.6	0.56
	Urban	-20.0	-30.5	7.3	3.2
1999/00-2004/05	Rural	-20.3	-3.1	-18.9	1.7
	Urban	-11.2	-10.4	-3.6	2.3
2004/05-2010/11	Rural	-18.2	-41.9	25.2	-1.4
	Urban	7.5	-2.95	11.3	-0.9

Source: Author's computation using 1995/96, 1999/00 & 2004/05 HICE and 2010/11 HCE survey data.

Further breaking down result of Datt-Ravallion decomposition by gender of the household head category reveal that growth has played a major role on poverty reduction for both the male and female headed households. For example, in a period between 2004/05-2010/11, poverty would have decline by 26.5 and 28.7 percentage points instead of 6 and 5.2 percentage points for male and female headed household, respectively. The evidence in table 20 clearly shows that unequal distribution has hampered the impact of growth on poverty. Similarly, in a period between 1995/96-1999/00, poverty would have been declined by 20.5 and 23.3 percentage points instead of 5.2 and 18.8 percentage points for male and female headed households, respectively. However, in the period 1999/00-2004/05, the reduction in inequality contributed to the change in poverty than the contribution of increasing real household per capita expenditure for female headed households, i.e. poverty would have increase by 0.3 percentage points instead of declining by 8.9 percentage points if growth had been distribution neutral, which reveals that the rate of decline in poverty has risen by about 8.6 percent due to a decline in inequality by the 9.3 percentage points.

Table 4: Datt and Ravallion Decomposition of Poverty Incidence by Sex of Household head, ANRS (1995/96-2010/11)

Survey Year	Gender	Total Change in Poverty (%)	Change Due to		Residue
			Growth	Redistribution	
1995/96-1999/00	Male	-5.2	-20.5	10.8	4.5
	Female	-18.8	-23.3	4.6	-0.13
1999/00-2004/05	Male	-14.0	-6.4	-6.6	-1.0
	Female	-8.9	0.3	-9.3	0.1
2004/05-2010/11	Male	-6.0	-26.5	15.1	5.4
	Female	-5.2	-28.7	24.3	-0.8

Source: Author's computation using 1995/96, 1999/00 & 2004/05 HICE and 2010/11 HCE survey data

Table 5 presents the Datt-Ravallion decompositions by administrative zone. It is clear from the evidence that zones which experienced a considerable decline in poverty over the period under consideration did so as a result of the contribution of the growth component outweighing the contribution of the redistribution component. For example, the increase in mean household per capita expenditure between 2004/05 and 2010/11 period in the North Gondar zone contributed to a decline of about 29.6 percentage points in the headcount poverty rate in that zone, while the redistributive component contributed to an increase of 18.6 percentage points in the headcount rate. The net result was a decline of about 9.9 percent in the headcount rate.

Table 5: Datt and Ravallion Decomposition of Poverty Incidence by administrative zones, ANRS (1995/96-2010/11)

Survey Year	zone	Total Change in Poverty (%)	Change Due to		Residue
			Growth	Redistribution	
2004/05-2010/11	North Gondar	-9.9	-29.6	18.9	-0.7
	South Gondar	-20.0	-38.0	21.0	-3.0
	North Wollo	-20.5	-43.9	14.0	9.4
	South Wollo	-3.8	-31.0	25.6	1.7
	North Shoa	14.6	-4.8	20.5	-1.1
	East Gojjam	-6.5	-19.9	13.0	0.4
	West Gojjam	2.7	-21.97	23.3	1.4
	Wag Hemira	-23.5	-51.3	14.9	12.8
	Awi zone	-14.8	-25.0	9.4	0.8
	Oromia Liyu	9.4	-8.04	22.4	-4.9

Source: Own Computation of 1995/96, 1999/00 & 2004/05 HICE and 2010/11 HCE Survey data from CSA

On the other hand, zones have experienced an increase in their headcount poverty rates for the reason that mean household per capita expenditure growth was not being able to erode the negative contribution of rising inequality to changes in poverty. Between for example, West Gojjam and Oromia Liyu saw their headcount rate increase by 2.7 and 9.4 percentage points. The rising inequality contributed to an increase of 23.3 and 22.4 percentage points in West

Gojjam's and Oromia Liyu's headcount rate, respectively. Over the same period, the household per capita expenditure growth in these administrative zones contributed to a 21.97 and 8.4 percentage point decline in their headcount rate, which was however not enough to erode the impact of increasing inequality

Conclusion and Suggestion

The result from decomposition of poverty in this study indicated that the substantial decline in poverty incidence in ANRS for the period between 1995/96 and1999/00 and between 2004/05 and 2010/11 is attributed to the increase in real household per capita expenditure while the reduction in inequality contributed to the reduction in poverty, more than the contribution of rising per capita expenditure, for the period between 1999/00 and 2004/05.

The result has important policy implication in that appropriate measures need to be taken to reduce the existing inequality to reduce poverty at a higher rate. Despite the fact that economic growth has contributed to reduction in poverty levels and improved standard of living in the region, the study has shown that income inequality is still a major constrain to that positive relationship. In order to deal with poverty problems successfully, the issues of income inequality must also be dealt with. Hence, government should implement policies that aim at redistributing income in favour of the poor and middle class households.

References

1. Adams RH. Economic Growth, Poverty and Inequality: Estimating the Growth Elasticity of Poverty. World Development. 2004; 32(12):1982-2014.
2. Agarwal P. Economic Growth and Poverty Reduction: Evidence from Kazakhstan. Asian Development Review. 2008; 24(2):90-115.
3. Aigbokhan B. Poverty, Growth and Inequality in Nigeria: A Case Study. African Economic Research Consortium (AERC). 2000, 102.
4. Basu S, Mallick S. When Does Economic Growth Trickle-Down to the Poor? The Indian Case. Cambridge Journal of Economics. 2008; 32(3):461-477.
5. Bigsten A, Kebede B, Shimeles A, Taddesse M. Growth and Poverty Reduction in Ethiopia: Evidence from Household Survey. World Development Report. 2003; 3(1):87-106.
6. Datt G, Ravallion M. Growth and redistribution components of changes in poverty measures. Journal of Development Economics. 1992; 38:275-295.
7. De Janvry A, Sadoulet E. Growth, Poverty and Inequality in Latin America: A Causal Analysis, 1970-94. Review of Income and Wealth. 2000; 46(3):267-287.
8. Gelaw F. The Dynamic Relationship among Poverty, Inequality and Growth in Rural Ethiopia: A Micro Evidence. Journal of Development and Agricultural Economics. 2010, 197-208.
9. Ijaiya GT, Ijaiya MA, Bello RA, Ajiaiya MA. Economic Growth and Poverty reduction in Nigeria. International Journal of Business and Social Science. 2011; 2(15):147-154.
10. Kakwani Nanak. Growth and Poverty Reduction: An Empirical Analysis. Asian Development Review 2000; 18(2):74-84.
11. Kalawole B, Ombitan O, Yaqub J. Poverty, Inequality and Rising Growth in Nigeria: Further Empirical Evidence. International Journal of Economics and Finance. 2015; 7(2):51-62.
12. Mulock D, Kogid M, Asid R, Lily J. Is Economic Growth Sufficient for Poverty Alleviation? Empirical Evidence from Malaysia. Caudernos de Economia. 2012; 35:26-32.
13. Nurudden T, Ibrahim S. An Empirical Study on the Relationship between Poverty, Inequality and Economic Growth in Nigeria. Journal of Economics and Sustainable Development. 2014; 5(26):20-26.
14. Odhiambo N. Fianance-Growth-Poverty Nexus in South Africa: A dynamic causality Linkage. Journal of Socio-Economics. 2009a; 32:320-325.
15. Stephen B, Simeon I. Does Economic Growth Reduce Poverty in Nigeria? Developing Country Studies. 2013; 3(9):62-68.
16. Tsai P-L, Huang C-H. Openness, Growth and Poverty: The Case of Taiwan. World Development, 2007; 35(11):1858-1871.
17. Young A. The African Growth Miracle. Journal of Political Economy. 2012; 2(5):696-739.