



# Impacts of Social Safety Nets on Inequality Prevalence: *A Developing Country Perspective*

MOHAMMAD ABDUL SALAM<sup>1</sup> and DAVID POTTS<sup>2</sup>

## ABSTRACT

Social safety nets have been enlisted as key instruments to reduce poverty and inequality in many developing countries. The safety net programs are designed to provide support for the vulnerable sections of society. Despite having a large number of safety net programs, the rate of poverty reduction and inequality prevalence is not satisfactory. This paper analyses the impacts of safety net programs on inequality of developing countries particularly of Bangladesh. The study examines time series data of the expenditure on safety nets and the rate of inequality. The analysis suggests that no clear association is found between safety nets and inequality. Initially, inequality has shown an increasing trend with expansion of safety net expenditures, then the inequality trend is declining. Also, inequality in consumption was relatively lower than that in income.

**Keywords:** social safety nets, developing countries and inequality

## 1. Introduction

Bangladesh has been struggling for a long time to reduce poverty and inequality and to improve the living standards of its millions of underprivileged people. It has shown considerable progress on poverty reduction in the last decade. Moreover, the inequality index has risen to 32.1 per cent in 2010 from 27.6 per cent in 1990 (World Bank, 2015). This trend of inequality has counteracted the recent improving poverty situation. Furthermore, there is a strong regional disparity amongst household income and expenditure. In developing world, social safety net (SSN) programs have been enlisted as key instruments to reduce the incidence of poverty and inequality (Cook and Pincus, 2014). Therefore, many governments are adopting social protection strategies to address inequality along with poverty (Barrientos, 2011).

Bangladesh has executed a large number of safety net programs to protect vulnerable people and promote their welfare. Currently, safety net spending is around 15 percent of government expenditure and more than 2 percent of gross domestic product (Barakat et al., 2011), and approximately 25 percent of households are covered under safety net coverage (MoF, 2015). But, the rate of poverty diminution and inequality prevalence is still not satisfactory. This study is to evaluate the impacts of safety net programs on inequality in developing countries. The research addresses the key question: what are the impacts of social safety net programs on inequality in Bangladesh? Therefore, the objective of this research is to analyze the impacts of social safety net programs on inequality.

**Data Source:** The study aims to find the effects of SSN programs on inequality of developing countries particularly of Bangladesh. The data of government expenditure on SSN programs are gathered from two main sources viz. Bangladesh Budget Document: 1991-2015 and Bangladesh Economic Review: 1991-2015 (MoF, 2015). The inequality data of Bangladesh are collected from the Household Income and Expenditure Surveys of 2005 and 2010 conducted by Bangladesh Bureau of Statistics (BBS, 2007 and 2011). For analysing the international perspective, the data are gathered from Statistical Yearbook for Asia and the Pacific (SYAP) accompanied by the Economic and Social Commission for Asia and the Pacific (ESCAP, 2009 and 2014) and World Development Indicators castoff by the World Bank (World Bank, 2015).

<sup>1</sup> PS to Secretary, Planning Division, Ministry of Planning, Bangladesh

<sup>2</sup> Senior Lecturer, BCID, University of Bradford, United Kingdom



**Methodology:** Both the qualitative (Berg, 2008) and quantitative (Bell, 2005) methods are used in this research. In quantitative analysis, the study is followed to examine the association of safety net programs with inequality. In this case, the inequality indexes are used as the dependent variable, whereas safety net expenditures are used as the explanatory variable. Lastly, scatter plot diagrams are drawn to demonstrate the relationship between dependent and explanatory variables.

**Limitations:** The research depended on secondary data mainly from grey literatures. Most of the data were taken from reliable global organizations but some sources of national data were also considered such as HIES or BER reports. Sometimes, these data can be inaccurate, inconsistent, and unreliable. In addition, the measurement and analysis of government SSN expenditures are beset with difficulties and gaps in data. Furthermore, some SSN program exhibits the long-term developmental impact on poverty that requires long-term observation.

## 2. Conceptual Framework

Poverty indicates the scarcity of resources that avert people from accomplishing their potential. It comprises absolute poverty and relative poverty. The concept of relative poverty and inequality along with its importance in developing country context is discussed here.

**Relative Poverty and Inequality:** Relative poverty measures the distribution of income and wealth across the population (Sen, 1992). The idea of relative poverty is closely associated to the notion of inequality. Inequality is typically considered as different people are having different degrees of income and consumption. According to McKay (2002), disparities in education, health and nutrition, power and security, income or consumption, wealth or assets can be considered as indicators for measuring relative poverty and inequality. For example, patterns of educational inequality may reflect gender disparities, or asset inequalities may be magnitudes of political power.

Poverty is a major concern of various countries (Slater, 2011), inequality is also a nuisance of many countries. Inequality is an indicator of how material resources are distributed within society. Some people believe high levels of income inequality are morally undesirable. There are some reasons why development agencies and developing countries are frightened with inequality. First and foremost, inequality matters for poverty by ensuring the level of income, education, ownership, etc. Secondly, there is increasing evidence that countries with high levels of inequality-especially in assets-achieve lower economic growth rates on average (McKay, 2002). Finally, there is a sensible level of equality among individuals to ensure their own rights.

**Social Safety Net Programs:** The safety net has been defined in diverse ways. Gillion *et al.* (2000: 465) stated that 'social safety net is a government-provided anti-poverty benefit'. According to ILO (2000), the SSN is only a segment of social assistance while social assistance is a segment of social security, and social security is a segment of social protection. The ILO definition of social protection involves not only public social security schemes, but also private or non- statutory schemes with a similar objective, such as mutual benefit societies and occupational pension schemes. Similarly, Pradhan *et al.* (2013: 131) argued that the SSN programs are mostly publicly provided along with private programs that include household transfers, community support arrangements or different types of charity. Finally, safety net implies a set of public measures taken by the government that anticipates protecting individuals, households and communities against uninsured income and consumption risks.





**Safety Nets and Tackling Inequality:** Numerous studies found that safety net policies and programs could influence inequality. But, it is difficult to say whether the programs and policies have minimized the inequality. The significance of safety nets in reducing inequalities is well recognized that is sustained by some recent studies, such as the inequality decreasing effect of the conditional cash transfer programs in Brazil, Mexico, and Chile (Soares et al. 2007). As a result of such programs the Brazilian and Mexican Gini index has shown a decline of 21 percent, whereas Chilean programs led to a decline of 15 percent in inequality. Moreover, Lustig et al. (2012) found that direct transfers have reduced the Gini coefficient for six Latin American countries by 2% (in Bolivia and Peru) and 8.5% (in Argentina). According to Cecchini (2014), the support of social protection systems has been substantiated particularly in ensuring incomes that make it feasible to sustain a basic quality of life and in guaranteeing basic rights to food, health, education and housing in Latin American countries.

The policies for addressing inequality may differ country to country. According to Gao (2008), social benefits played different roles in affecting overall inequality in Vietnam and China. The Chinese social benefit system amplified overall income inequality due to its much more regressive effect compared to the Vietnamese system, but social benefits reduced overall income inequality in Vietnam. Particularly, social benefits in China enlarged the income inequality gap at the top by 3% of the income distribution. But, inequality gap was reduced by social benefits in Vietnam. Some attempts have been made to analyze the causes of inequality, particularly in developing countries. For instance, Bhattacharya and Khan (2008) established that the SSN could be a significant policy tool to address inequality in Bangladesh. Osmani and Sen (2011) argued that foreign remittance and self-employment in non-agriculture are responsible to decrease inequality across the socioeconomic groups in developing countries.

Some studies accomplished that inequality can impact on poverty and at the same time variations in inequality during the growth spell affect the poor gaining from a given level of growth (Bourguignon, 2004). However, several studies exposed the poverty change rate against the changes in equality. Bruno *et al.* (1998) found that “a small change of the inequality in general distribution may lead to a big change of poverty incidence”. McKay (2002) claimed that per capita income is one of the main factors, along with social policy factors for more equal distribution of income or consumption particularly in the developing world. But, Ravallion and Chen (1997) found in their research on 67 developing and transitional economies that inequality and poverty are more or less un-correlated (cited in MoP, 2014). They also found that negative growth creates more inequality than positive growth, and growth as a whole reduces poverty. Therefore, the economic growth issue is considered as a critical agenda in this research. The global debates and recent studies revealed that the safety nets have implication in reducing inequalities.

### 3. Trends of Inequality

The inequality situation of Bangladesh depicts to recognize the level and incidence of inequality. The decile group, Lorenz curve, and Gini index are considered to examine the distribution of income and consumption and inequality trends. Distribution of income and consumption has been pictured against *decile groups*<sup>3</sup> in Table-1 and Table-2 respectively to analyze the inequality scenario of Bangladesh. The concentration of income has slightly decreased. According to BBS (2011), the first five deciles continue to share only 20.33 percent of total income, although they comprise 50 percent of the population. Between 2005 and 2010 urban income inequality reduced remarkably despite a small reduction in income share of the poorest 10 percent.

<sup>3</sup> A decile is any of the nine values that divide the sorted data into ten equal parts, so that each part represents 1/10 of the sample or population



The distribution of consumption expenditure has been stable. There are very insignificant changes in the percentage shares of consumption expenditures in the decile of 2010 relative to those of 2005 (BBS, 2011). Decile-1 to decile-6 has nearly similar shares of consumption expenditures, decile-7 to decile-9 has increased slightly and the share of decile-10 dropped slightly.

**Table-1:** Share of households' income distribution by decile: 2005-10 [BBS, 2011]

Groups	2005			2010		
	National	Rural	Urban	National	Rural	Urban
Decile -1	2.00	2.25	1.80	2.00	2.23	1.98
Decile -2	3.26	3.63	3.02	3.22	3.35	3.09
Decile -3	4.10	4.54	3.87	4.10	4.49	3.95
Decile -4	5.00	5.42	4.61	5.00	5.43	5.01
Decile -5	5.96	6.43	5.66	6.01	6.43	6.31
Decile -6	7.17	7.63	6.78	7.32	7.65	7.64
Decile -7	8.73	9.27	8.53	9.06	9.31	9.30
Decile -8	11.06	11.49	10.18	11.50	11.50	11.87
Decile -9	15.07	15.43	14.48	15.94	15.54	16.08
Decile -10	37.64	33.92	41.08	35.85	33.89	34.77

**Table-2:** Share of households' consumption distribution by decile: 2005-10 [BBS, 2011]

Groups	2005			2010		
	National	Rural	Urban	National	Rural	Urban
Decile -1	3.85	4.37	3.15	3.85	4.36	3.40
Decile -2	4.91	5.49	4.31	5.00	5.57	4.66
Decile -3	5.71	6.30	5.14	5.84	6.41	5.54
Decile -4	6.47	7.08	6.07	6.63	7.22	6.42
Decile -5	7.31	7.92	7.14	7.48	8.03	7.37
Decile -6	8.28	8.80	8.09	8.48	8.97	8.48
Decile -7	7.58	9.97	9.71	9.73	10.01	10.01
Decile -8	11.37	11.56	12.03	11.49	11.63	12.03
Decile -9	14.52	14.15	15.39	14.59	14.07	15.06
Decile -10	27.99	24.36	28.96	26.90	23.63	27.03

Lorenz curves<sup>4</sup> are also used for analyzing the income and consumption inequality of Bangladesh. Figure-1 shows the income and consumption Lorenz curves of Bangladesh during 2005-2010. It is found that inequality is more acute in the case of income distribution than consumption distribution. Both the income and consumption distribution has been improved in 2010 compared to 2005 (BBS, 2011).

Gini index<sup>4</sup> is a composite index that is also considered to measure the deviation of actual income and consumption distribution. Figure-2 shows the trend in the distribution of income and consumption in Bangladesh. The consumption Gini index increased until 1996 indicating increasingly unequal distribution. Between 1996 and 2000 Gini index remained unchanged, then it reduced gradually from 2005. The Gini index of income displayed a more progressive trend than the consumption index over time. This mixing tendency in inequality has aggravated the recent somewhat improving poverty scenario of Bangladesh.

<sup>4</sup> In this curve 450 diagonal lines indicate perfect inequality in the distribution of wealth. The Lorenz curve gives the measurement of the inequality in the distribution of income and consumption.

<sup>5</sup> The area between the Lorenz curve and the line of equality gives the numerical value of Gini index, which expressed as a percentage ranging between 0 and 100, or the Gini coefficient ranges from 0 to 1.



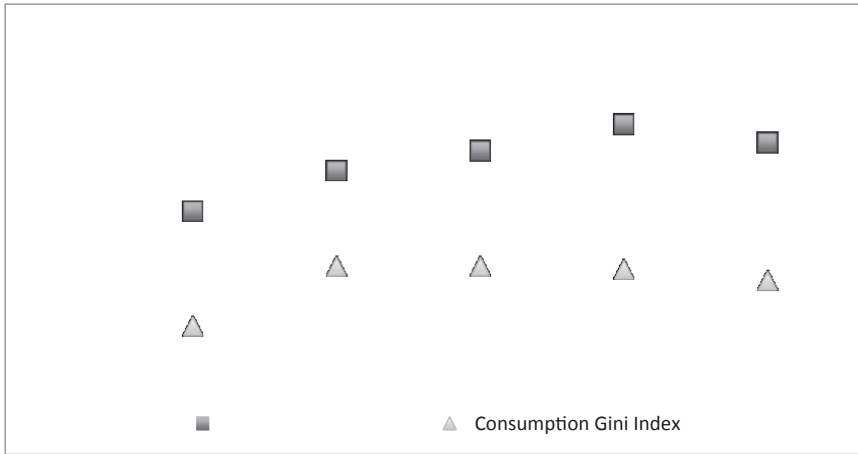
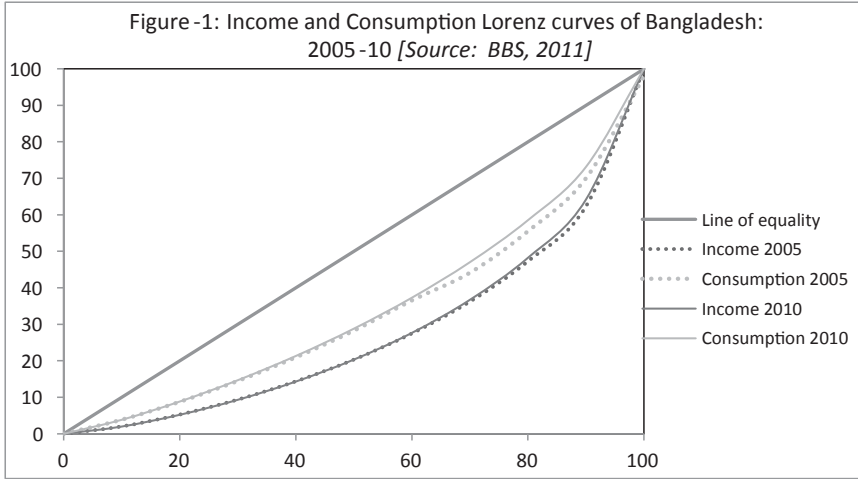
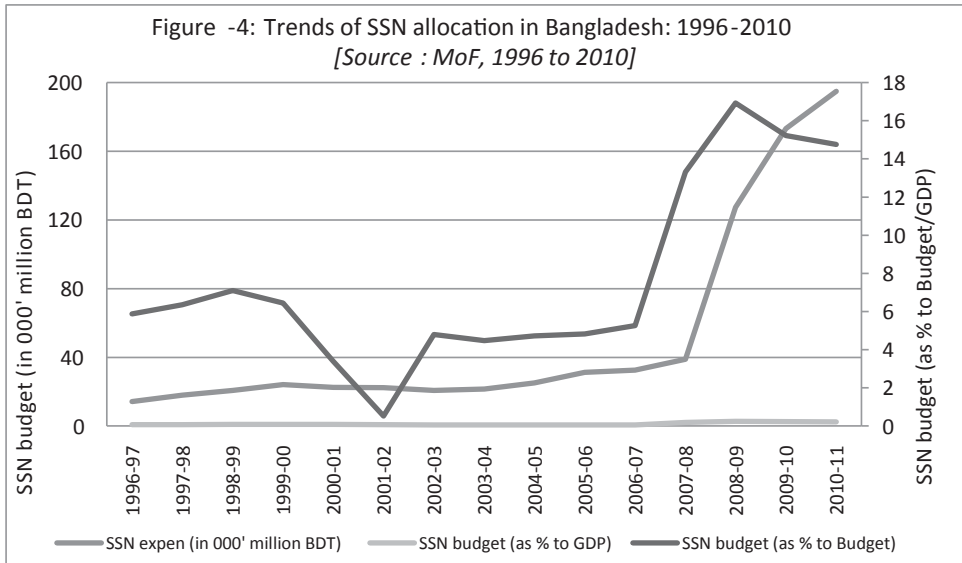


Figure-3 illustrates a comparative analysis of the inequality situation of South Asian countries; the level of inequality in Bangladesh is lower than India, but higher than Pakistan (World Bank, 2015). Sri Lanka attained comparatively low level of inequality (Gini Index 36.4) in 2010 amongst other south Asian countries. In respect to Gini index, the position of Bangladesh was commendable among the other comparator countries of South Asia, but the income inequality remained a bit high.

#### 4. Safety Net Allocations

In Bangladesh, the SSN program was introduced after independence in 1971 (Pradhan *et al*, 2013). In the early 1970s, the food-for-work program was significantly scaled-up with the purpose of social protection and the micro-credit program took-off for employment generation with the purpose of social empowerment. In the early 1990s, conditional cash transfers were launched in the form of food-for-education while in the late 1990s, the unconditional allowances took-off focusing on elderly citizens and vulnerable women.

Considering the purpose of reducing poverty, the allocation for SSNs in national budget has gradually increased over the years (Figure-4). The SSN expenditure of Bangladesh has increased from 14,330 million BDT in 1996-97 to 1,94,970 million BDT in 2010-11. As a percentage of GDP, the SSN's expenditure is also getting higher, but a blending trend as a percentage of the national budget. Along with the increase in allocation for safety net programs, some new programs are also added each year with the intention to reduce poverty.



In order to compare the spending pattern, Table-3 discloses the safety net coverage by different countries of South Asia during 2004-2010 periods. According to World Bank (2015), the highest rate of safety net coverage is found in Sri Lanka. Bangladesh attained least coverage, but with an increasing trend. The country has covered 19.22 percent beneficiaries under safety net coverage in 2010 to 13.98 percent in 2004. On the other hand, there was a decreasing trend of safety net coverage in India.





**Table-3:** Safety net coverage (%) by South Asian countries: 2004-10 [World Bank, 2015]

Country	Y-2004	Y-2005	Y-2006	Y-2007	Y-2008	Y-2009	Y-2010
Bangladesh	-	13.98	-	-	-	-	19.22
India	27.22	-	-	-	-	21.45	-
Pakistan	-	-	-	9.29	-	19.07	-
Sri Lanka	-	-	35.61	-	-	-	-

Various attempts have been made to analyze the sources of inequality in Bangladesh. Khan and Sen (2001), Osmani et al. (2003) and Khan (2006) concluded that SSN is a distinctive influence on income equality in Bangladesh. Bhattacharya and Khan (2008) studied household income and expenditure survey data and affirmed that SSNs can contribute to reducing overall inequality and the safety net can be a significant policy instrument to tackle inequality. They also noted that coverage of safety nets in Bangladesh is highly rural biased with less concern about urban areas where almost one-third of the hardcore poor live. Therefore, the allocation of the safety net program needs to be revisited. Iqbal *et al.* (2008) concludes income inequality is influenced by safety nets. They also affirmed that the safety net could be a suitable option to restore income distribution from further deterioration.

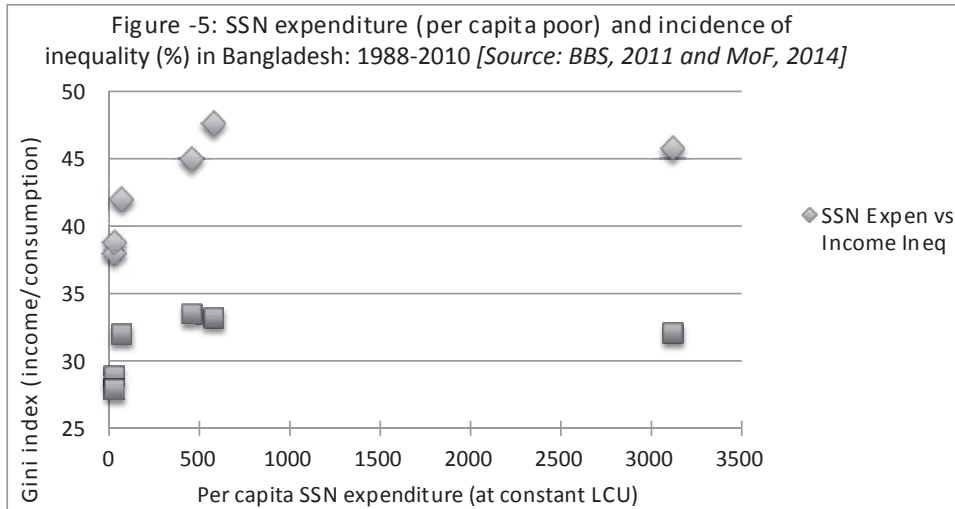
Some studies are confined to effectiveness of safety net programs rather than program impacts (Hasan et al., 2013). Most of the studies focused only on poverty alleviation rather than inequality measures (Pradhan *et al.*, 2013; Ferdous, 2014; Ahmed *et al.*, 2014). Very few attempts are made to analyze the causes of inequality, particularly in developing countries (Khan and Sen, 2001 and Osmani *et al.*, 2003). So, it is somewhat perplexing to draw precise conclusions about the functioning and future policy directions on SSN programs in Bangladesh. From this viewpoint, understanding the impacts of SSN programs and its impediments during implementation has become more important. The study tries to examine the impacts of SSN on inequality issue.

## 5. Analysis and Discussions

Inequality has shown an unusual trend over the years although the government of Bangladesh has increased its budget for safety nets to minimize the inequality. Therefore, the study attempts to answer the question whether inequality is associated with expenditure on SNPs. To answer this question, the study examines the impacts of safety nets on inequality after that the regional consequence of SSN on inequality is analysed.

**Empirical Analysis:** Two variables are considered here. One is safety net expenditure and the other is the inequality index. A couple of features have been conceived from Figure-5. First and foremost, income inequality grew in tandem with rise in safety net expenditure but inequality in consumption was relatively low. It is seen that inequality indices rose with higher SSN expenditure till 2005 but during 2005-2010 it went down again. It indicates a positive relation at the beginning and a negative relation at succeeding period. The study outcomes are partially sustained by the findings of Osmani and Sen (2011). They suggest that distribution of income has become more unequal over the decade, and distribution of consumption has remained more or less unchanged in Bangladesh. It is evident that SSN transfers can contribute to the progress in inequality. Inequality is not only affected by the safety net programs, but also the speed and quality of economic growth. Furthermore, the income inequality can worsen the poverty situation. The growth in per capita income is one of the determining factors here. According to Kuznets hypothesis (1955), in developing countries, the income inequality increases as per capita income increase initially. After some turning point, the income inequality starts to decline.



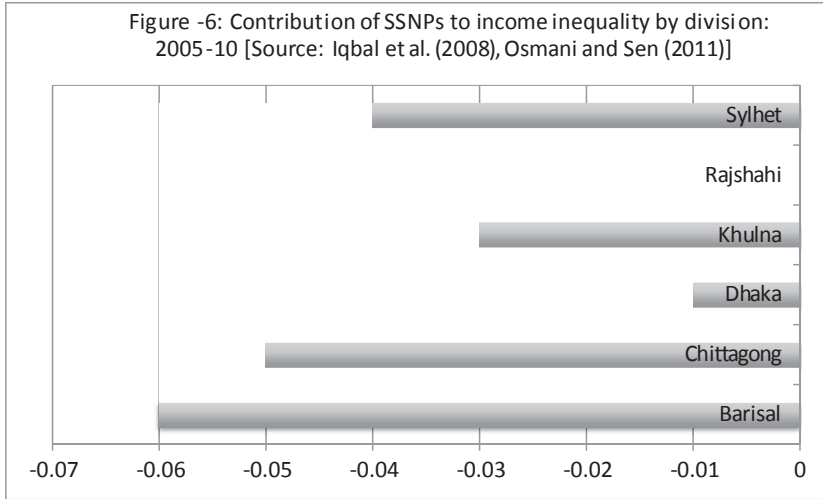


**Regional Variations:** The study also focuses on the impact of SSN programs on inequality in different regions. Table-4 summarizes the contributions of SSN programs on income and consumption inequality in the years 2005 and 2010. The increasing beneficiaries of SSN is higher in rural areas. For income inequality, the SSN effect has exposed a positive trend (+0.003%) in rural areas and a negative trend (-0.045%) in urban areas. In the case of consumption inequality, it has declined by 0.009 per cent in rural areas, while by 0.027 per cent in urban areas. It indicates that rural income inequality exacerbates the national income inequality. However, the consumption inequality (particularly urban inequality) has clearly played the leading role in decreasing the overall inequality in Bangladesh. So, allocation of SSN program needs to be revisited for tackling urban inequality. Battacharya and Khan (2008) also pointed to the argument that the coverage of SSN programs in Bangladesh is highly rural biased. They suggest that only 10% of the SSN is allocated for urban areas.

**Table-4:** Contribution of SSNPs on inequality: 2005-10 [Osmani and Sen, 2011]

Region	Increase in beneficiaries (%)	Changes in Gini coefficient due to SSN (%)	
		Income Coefficient	Consumption Coefficient
National	+11.51	-0.009	-0.011
Rural	+14.48	+0.003	-0.009
Urban	+3.97	-0.045	-0.027

The level of income inequality also varies at division levels (Figure-6). Across the divisions, SSN is found to reduce income inequality. The Gini coefficient suggests that SSN programs had most success on income inequality in Barisal Division (with 0.06% rate of reduction in inequality). But, SSN programs were ineffectual in Rajshahi Division (no changes in inequality index). Dhaka Division is more unequal than other Divisions of Bangladesh but Sylhet Division (22.42%) receives more benefits from SSN programs. The variations in influences of SSN on inequality are corroborated at divisional levels. Persistent regional or social biases in the allocation of social assistances or insurances are also impeding to achieve the required poverty alleviation. Therefore, it can be contended that SSN programs in Bangladesh need to be rationalized. Similarly, Iqbal et al. (2008) found that SSN has an influence on inequality but it was very insignificant.



**Cross-Country Perspective:** The study is also extended to a cross-country viewpoint that could give the position of Bangladesh compared with other countries. The experiences of South Asian countries are considered to assess the impacts of social safety on poverty and inequality. A positive relation is found between SSN coverage and poverty or inequality using world development indicators: 1998-2014 (World Bank, 2015).

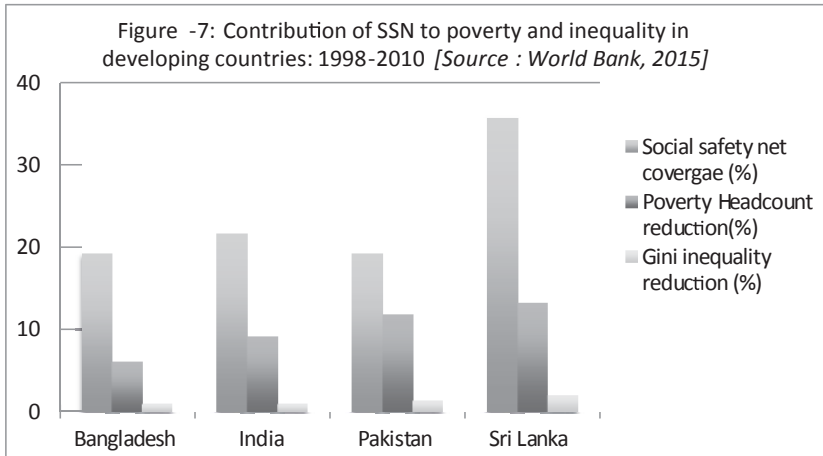


Figure-7 indicates Sri Lanka has the highest SSN coverage and the highest reduction in poverty and inequality in South Asia. The reduction rate of income inequality is highest in Sri Lanka (2%) and lowest in Bangladesh and India (0.9%). No meaningful relation is found between safety net and income inequality in developing countries. It can be seen, there are some other factors that are responsible for widening inequality or strengthening equality in income. According to Arunatilake *et al.* (2000), civil conflict is one of the causes of rising inequalities in Sri Lanka and sharp deterioration in living standards. Moreover, much of the development was concentrated in the Western Province that led to increasing of poverty and inequality to other provinces. However, Yan (2003) has found that the income distribution difference can weaken the anti-poverty tendency. He stated that the rate of poverty reduction has been reduced with the expansion of income inequality in China. This indicates that poverty increases when inequality increases.



## 6. Summary and Conclusions

The core objective of this study is to assess the implications of safety nets on inequality. An irregular association is found between safety nets and inequality from the analysis in Bangladesh context. Initially, the inequality has shown an increasing trend with expansion of safety net expenditure over the period of 1988-2010. Afterward the inequality trend was declined. Besides, the inequality in consumption was relatively lower than income. It is also observed that the majority of safety net benefits are provided in rural areas. Allocation of SSN program needs to be revisited to tackle both rural and urban inequalities. However, no clear link is found between safety net expenditure and inequality from cross-country perspectives. It appears a pressing need to broaden this discussion to include other ways of analysing the contribution of SSNs on inequality that currently uncovered.

The results of the analysis on social safety nets have certain policy implications. It may conclude by noting a couple of policy implications for policymakers that can promote to proper implementation of SSN programs. A reduction of the actual amount of safety net expenditure would result in an increase in the incidence and depth of poverty. Therefore, an appropriate budget should be designed to minimize unwanted outcomes. Limited resource is a key impediment to the interruption of safety nets in Bangladesh. More care is needed to improve targeting and beneficiary selection so that resources are channelled correctly to the actual vulnerable groups or households. Leakage could be reduced through cash transfers rather than in the form of food. The regional disparity issue is an important aspect of safety nets in Bangladesh, which demands a great deal of improvement. In targeting the poor, the variations in the incidence of poverty and inequality between regions have to be incorporated. A more equal and rapid economic growth is essential for proper addressing the inequality. The growth in per capita income can contribute to strengthening equality. The SSN expenditure in health, education, and technical sectors positively impact on per capita income through increasing the productivity.

Accomplishing a reduction in poverty and inequality is an ultimate challenge in the country without which the human development, economic growth and employment generation goals of the government. Hence, a comprehensive safety net policy is needed to respond to the emerging challenges. But, there is no ideal and widespread approach of SSN programs that can be ensured for tackling inequality. A policy on safety net should be developed with particular attention on strategic options for channeling SSN aids and targeting beneficiaries. However, the policy needs to be characterized by the promotional role that can play a leading role for addressing inequality in the long run.

## REFERENCES

- Ahmed, I., Jahan, N. and Zohora, F.T. (2014) Social safety net programme as a means to alleviate poverty in Bangladesh. *Development Country Studies*, 4 (17), pp.46-54.
- Arunatilake, N., Jayasuriya, S. and Kelegama, S. (2000) *The economic cost of the war in Sri Lanka*. Colombo: Institute of Policy Studies.
- Barkat, A., Karim, A., and Hussain, A.A. (2011) *Social protection measures in Bangladesh: As means to improve child well-being*. Dhaka: Pathak Samabesh.
- Barrientos, A. (2009) Introducing basic social protection in low-income countries: Lessons from existing programmes. In: Townsend, P. (ed.) *Building Decent Societies: Rethinking the Role of Social Security in Development*. London: Palgrave and ILO. pp.253-273.





- BBS (Bangladesh Bureau of Statistics) (2007) *Preliminary report on household income and expenditure survey-2005*. Ministry of Planning: Government of Bangladesh.
- BBS (Bangladesh Bureau of Statistics) (2011) *Preliminary report on household income and expenditure survey-2010*. Ministry of Planning: Government of Bangladesh.
- Bell, J. (2005) *Doing your research project*. Berkshire: Open Press University.
- Berg, B.L. (2008) *Qualitative research methods for the social sciences*. 7<sup>th</sup>(ed.) Harlow: Pearson Education.
- Bhattacharya, D. and Khan, T.I. (2008) Pro-poor economic growth in Bangladesh: exploring growth and inequality linkage in poverty reduction. In: Centre for Policy Dialogue. *Emerging issues in Bangladesh economy*. Dhaka: University Press Limited.
- Bourguignon, F. (2004) The poverty-Growth-inequality triangle. *Indian Council for Research on International Economic Relations*. New Delhi, 4 February, 2004. New Delhi: ICRIER, pp.1-28.
- Bruno, M., Ravallion, M. and Squire, L. (1998) *Equity and growth in developing countries: Old and new perspectives on the policy issues*. Beijing: Vito Tani and Ke-Younf Chu. Income Press.
- Cecchini, S. (2014) Social protection, poverty and inequality. *Journal of Southeast Asian Economics*, 31(1), pp.18-39.
- Cook, S. and Pincus, J. (2014) Poverty, Inequality and Social Protection in Southeast Asia: An Introduction. *Journal of Southeast Asian Economies*, 31(1), pp.1-17.
- ESCAP (Economic and Social Commission for Asia and the Pacific) (2009) *Promoting the Millennium Development Goals in Asia and the Pacific*. New York: Statistical Yearbook for Asia and the Pacific-2008.
- ESCAP (Economic and Social Commission for Asia and the Pacific) (2014) *Promoting the Millennium Development Goals in Asia and the Pacific*. New York: Statistical Yearbook for Asia and the Pacific-2013.
- Ferdous, J. (2014) Social safety net programmes for poverty alleviation in Bangladesh: An overview. *International Journal of Research*, 1(10), pp.649-662.
- Gao, Q. (2008) The Chinese social benefit system in transition: Reforms and impacts on income inequality. *Annals of the New York Academy of Sciences*, 1136, pp.342-347.
- Gillion, C., Turner, J., Bailey, C., and Latulippe, D. (2000) *Social security pensions: Development and reform*. Geneva: International Labor Organization.
- Hassan, R., Islam, M.S., Saifullah, A.S.M. and Islam, M. (2013) Effectiveness of social safety net programs on community resilience to hazard vulnerable population in Bangladesh. *J. Environ. Sci. & Natural Resources*, 6(1), pp.123-129.
- Iqbal, M.A., Khan, T.I., and Tahsina, T. (2008) *Macroeconomic implications of social safety nets in the context of Bangladesh*. CPD Occasional Paper 75, Dhaka: Centre for Policy Dialogue.
- Khan, A.R. (2006) Rising inequality in Bangladesh: An analysis of sources and policies for containment. In: S. Ahmed and W. Mahmud (eds.) *Growth and poverty: The development experience of Bangladesh*. Dhaka: The University Press Limited.



- Khan, A.R. and Sen, B. (2001) Inequality and its sources in Bangladesh (1991/92 to 1995/96): An analysis based on household expenditure surveys. *Bangladesh Development Studies*, XXVII(1), pp.1-49.
- Kuznet, S. (1955) Economic growth and income inequality. *The American Economic Review*, XLV(1), pp.1-28.
- Lustig, N., Molina, G., Higgins, S., Jaramillo, M., Jimenez, W., Paz, V., Pereira, C., Pessiono, C., Scott, J. and Yanez, E. (2012) *The impact of taxes and social spending on inequality and poverty in Argentina, Bolivia, Brazil, Mexico and Peru: A synthesis of results*. Working Paper No. 1216, Tulane: Department of Economics.
- McKay, A. (2002) *Inequality briefing*. Briefing Paper No. 1, University of Nottingham: Overseas Development Institute.
- MoP (Ministry of Planning) (2014) *Poverty and Inequality in Bangladesh: Journey Towards Progress: 2014-2015*. Planning Division: Government of Bangladesh.
- MoF (Ministry of Finance) (2015) *Bangladesh Economic Review (Budget Documents)*. Finance Division: Government of Bangladesh.
- Osmani, S.R. and Sen, B. (2011) Inequality in rural Bangladesh in the 2000s: Trends and causes. *Bangladesh Development Studies*, XXXIV(4), pp.1-34.
- Osmani, S.R., Mahmud, W., Sen, B., Dagdeviren, H. and Seth, A. (2003) *The Macroeconomics of Poverty Reduction: The Case Study of Bangladesh*. The Asia-Pacific Regional Program, New York: United Nations Development Program.
- Pradhan, M.A.H., Mohd, S. and Sulaiman, J. (2013) An investigation of social safety net programs as means of poverty alleviation in Bangladesh. *Asian Social Science*, 9 (2), pp.139-148.
- Ravallion, M. (2004) *Pro-Poor growth: A Primer*. Policy Research Working Paper No. 3242, Washington DC: World Bank.
- Ravallion, M. and Chen, S. (1997) What can new survey data tell us about recent changes in distribution and poverty? *World Bank Economic Review*, 11, pp.357-382.
- Sen, A. (1992) *Inequality re-examined*. Oxford: Oxford University Press. pp.47-52.
- Slater, R. (2011) Cash transfers, social protection and poverty reduction. *International Journal of Social Welfare*, 20, pp.250-259.
- Soares, S., Osorio, R., Soares, R.V., Medeiros, M. and Zepeda, E. (2007) *Conditional Cash Transfers in Brazil, Chile and Mexico: Impact upon Inequality*. Brazil: UNDP (International Poverty Centre).
- World Bank (2015) *World Development Indicators-2015*. Washington DC: World Bank.

