

# Dynamics of Rural Livelihoods and Poverty in Bangladesh\*

Uttam Deb, Cynthia Bantilan, Soumitra Pramanik and Patan Elias Khan

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

## Introduction

- Rural livelihoods in Bangladesh have been changing rapidly with the spread of modern technologies and new income generating assets (such as power tiller, thresher, harvester, pump set) and expansion of employment opportunities in rural non-farm sector. With the change in sources of livelihoods, poverty situation has also been changing. This paper has documented these changes.

## Objectives

- To analyze the trend in income and sources of household income in rural Bangladesh
- To quantify the extent, intensity and severity of poverty among rural households of Bangladesh
- To identify the factors associated with income and poverty in rural Bangladesh

## Data and Methodology

**Survey years:** 1988, 2000, 2004, 2008, 2010, 2011, 2012 and 2013.

**Study villages:** 12 villages of 11 districts located in different agro ecological zones (favorable, drought prone, flood prone) and socio-economic condition.

- Sample Size:** 240 households in 1988 and 500 households in 2013 (including split households)

**Household Incomes** were computed for all farm and non-farm sources. Farm income sources include crop, livestock, fish and farm labor. Non-farm income sources include service, business, non-farm labor, caste occupation, remittances, rental income.

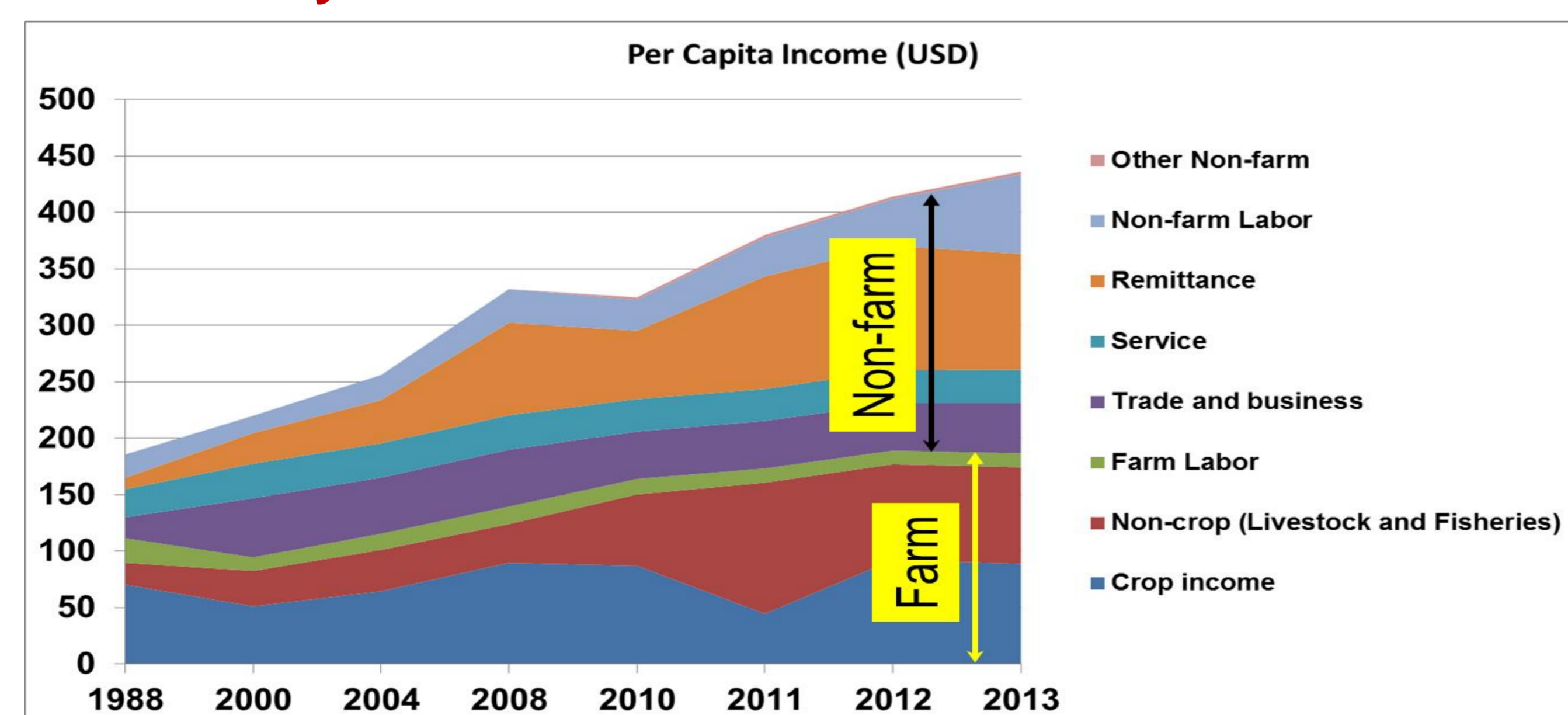
**Poverty Estimation Method:** Head Count Ratio to measure the extent of poverty, Poverty Gap Index for calculating intensity (depth) of poverty and Squared Poverty Gap to quantify severity of poverty. FAO norm based calorie intake method was used for calculation of poverty line.

**Extreme Poverty Line** represents costs of a balanced food basket that provides 1,800 calorie per person per day. It is based on total calorie from rice, other food and vegetables, taking half calorie from pulses, oil, spices and sugar and nothing from fruits, meat and fish.

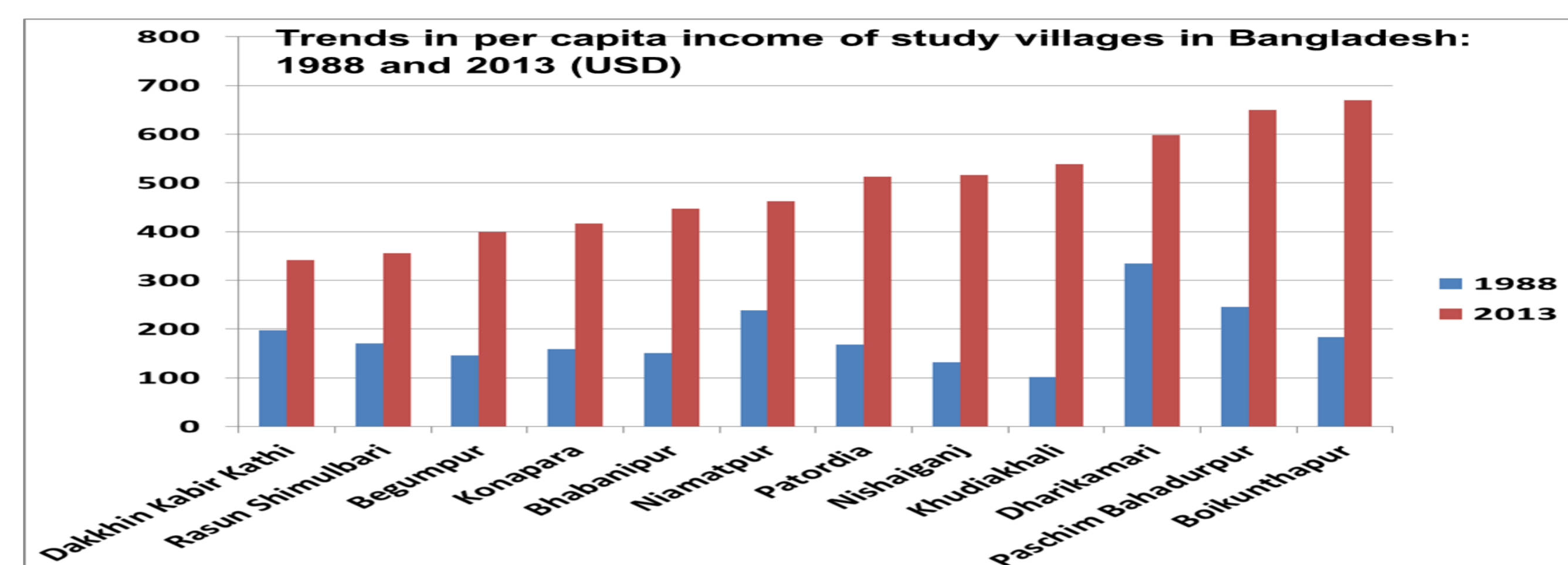
**Moderate Poverty Line** represents cost of balanced food basket that provides 2,110 calorie per person per day plus provision for non-food basic needs on the assumption that 70 per cent of the poverty threshold level income is spent on food.

Particulars	1988	2000	2004	2008	2010	2011	2012	2013
Extreme Poverty Line (in USD)	88	74	76	119	135	129	133	147
Moderate Poverty Line (in USD)	143	130	136	221	224	214	220	243

## Income Dynamics

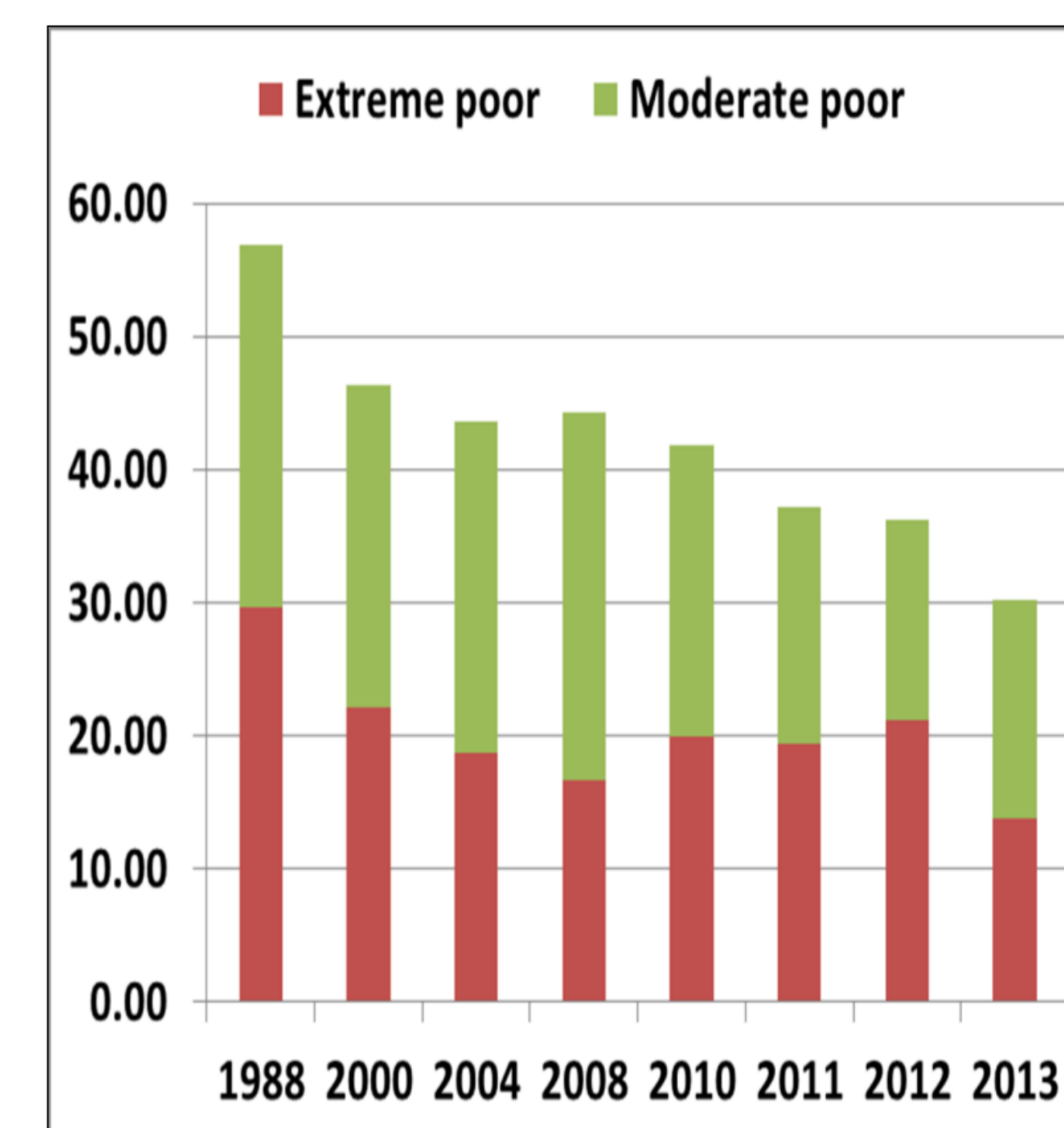
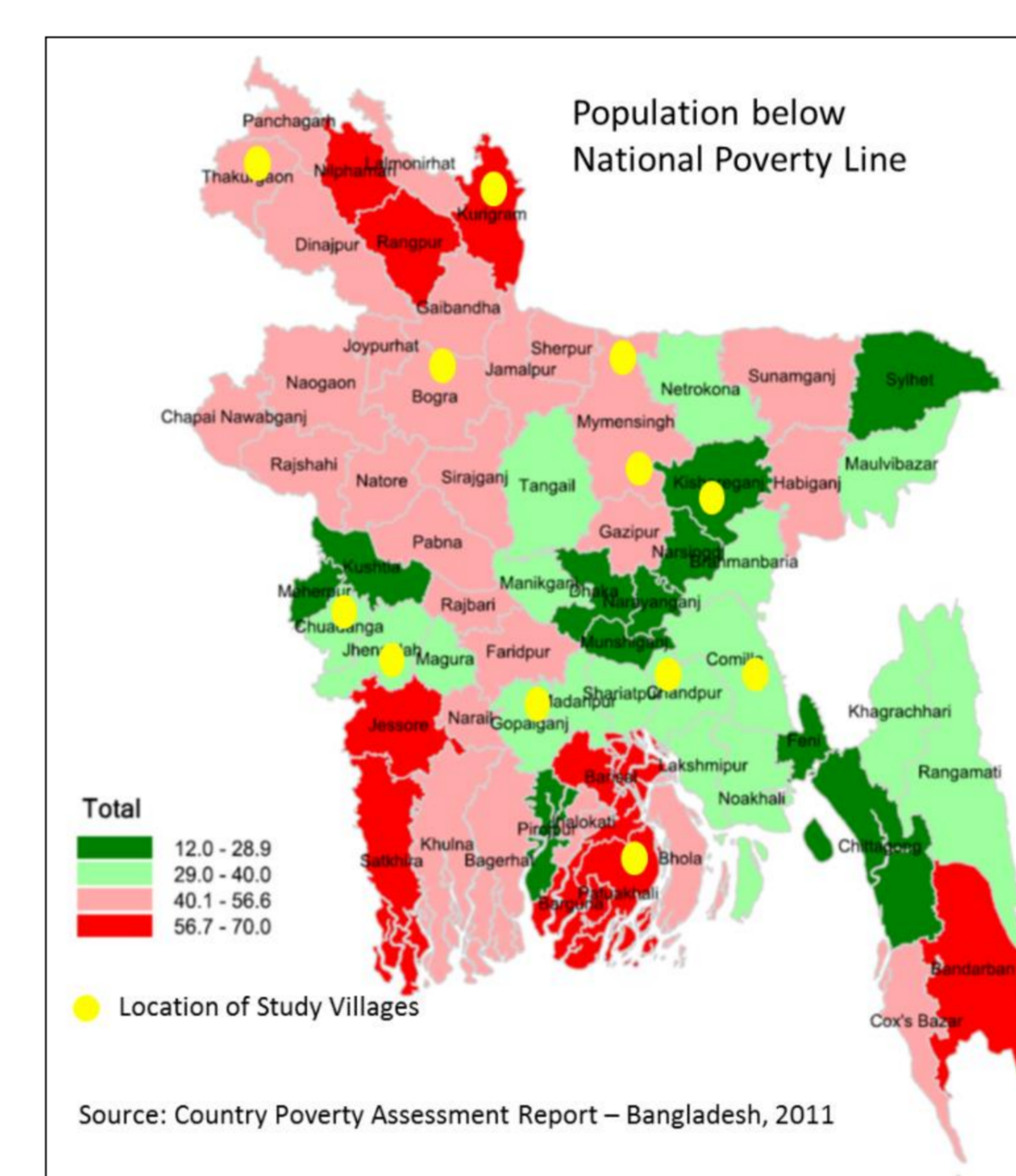


- Between 1988 and 2013, average per-capita income increased by 2.40 time (from USD 186 to USD 445). Income sources has diversified. Increased dependence on non-farm sector as sources of livelihood.
- Agriculture continuous to play an important role and contributing more than 40% average income of all rural households and more than 80% for farm households.

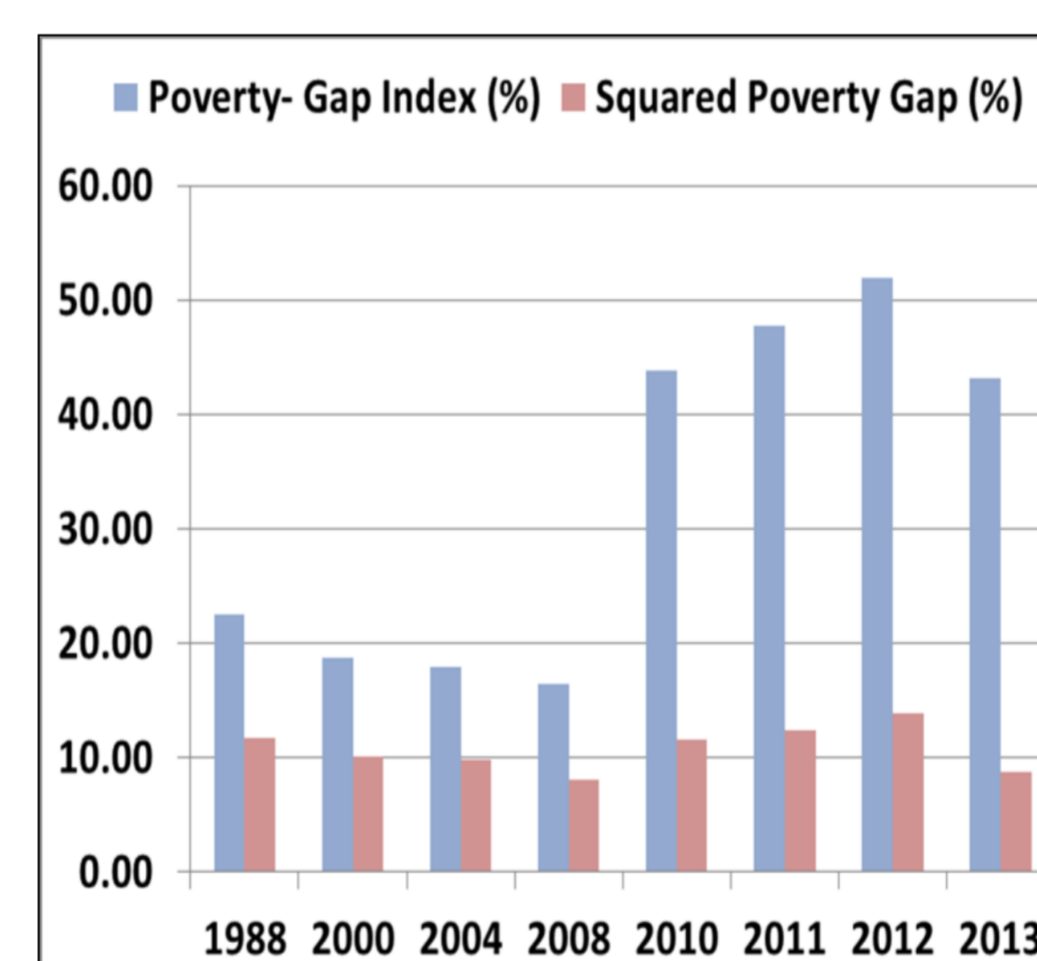


- Wide variation exists in per capita income across villages. Per capita income increased rapidly in the villages which has experienced technological change, better market access, accumulation of new income generating assets expansion of non-farm sectors.

## Poverty Dynamics



- Extent of poverty** decreased from 57% in 1988 to 30% in 2013. Rapid reduction in poverty in the recent years: from 42% in 2010 to 30% in 2013. During the same period, Extreme Poverty has reduced from 30% to 14% and Moderate poverty from 27% to 16%.



- Intensity of Poverty** has increased in the recent years indicating that after moving out of poverty by the households who were nearer to the poverty line, remaining poor are far from the poverty line.
- Severity of poverty** has reduced in 2013 implying that conditions of the extreme poor households have improved relatively faster than the other poor households.

## Changes in economic indicators

Particulars	1988	2000	2004	2008	2010	2011	2012	2013
<b>Resource Endowment &amp; Human Capital</b>								
Land owned (Ha)	0.61	0.50	0.49	0.50	0.46	0.47	0.45	0.46
Irrigated land (Ha)	0.16	0.23	0.24	0.25	0.43	0.44	0.42	0.42
Household size	5.69	5.02	4.90	4.78	5.40	5.30	5.30	5.30
Dependency Ratio	2.55	2.74	2.39	2.56	0.79	0.76	2.11	2.29
Agricultural worker	1.14	0.68	0.80	0.79	0.74	0.72	0.68	0.67
Non-agricultural worker	0.48	0.67	0.65	0.70	1.04	1.04	1.07	1.10
Total worker	1.63	1.35	1.45	1.49	1.78	1.77	1.75	1.77
Average education of worker (Years)	3.23	4.15	4.42	4.59	7.43	7.19	7.02	7.21
<b>Assets Ownership and Liabilities and Income</b>								
Per-capita Agricultural capital (USD)	134	145	160	290	3343	3637	4193	4772
Per-capita Non-agricultural capital (USD)	140	261	244	465	648	689	834	982
Per-capita Total capital (USD)	274	406	404	756	3991	4327	5027	5754
Total loan (USD)	46	77	98	159	322	329	311	303
Per Capita Income (USD)	186	220	256	332	325	384	414	445
Farm Income (%)	60.05	42.97	45.07	41.98	49.65	49.94	45.63	50.70
Non-farm Income (%)	39.95	57.03	54.93	58.02	50.35	50.06	54.37	49.10

- Increase in income and reduction in poverty was associated with expansion of irrigation facility, adoption of modern varieties, accumulation of agricultural and non-agricultural capital, access to agricultural credit, market access through better roads and infrastructure, educational attainment, and expansion of rural non-farm economy. Migration within country and outside country has also played an important role.

## Conclusion

Rural households in Bangladesh are ready to take advantage of income generating opportunities within and outside agriculture. Development and promotion of new technologies along with policy support for farm and non-farm growth can facilitate the process.

\* Presented at the conference on 'Raising the voices of the Poor for evidence-based policy making' held at ICRISAT, Patancheru, on 2-3 April 2015