Social Protection and Its Impact on Poverty and Food Insecurity

M.Phil.
Department of Economics
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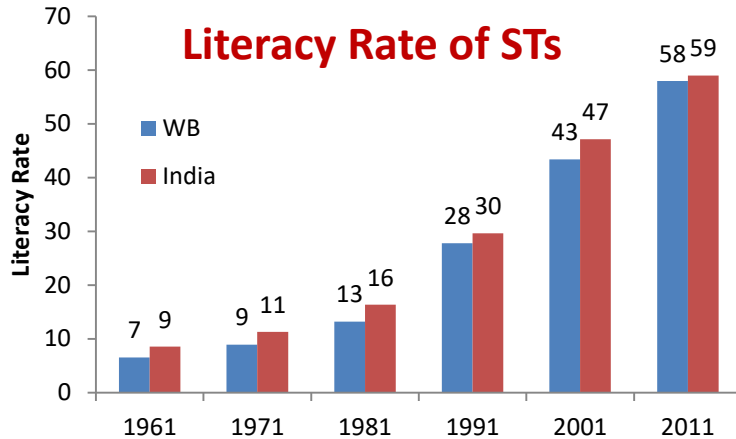Department of Economics
Vidyasagar University
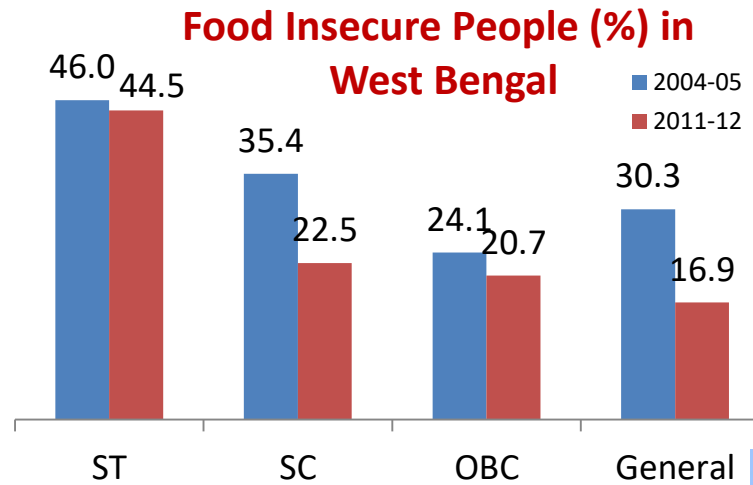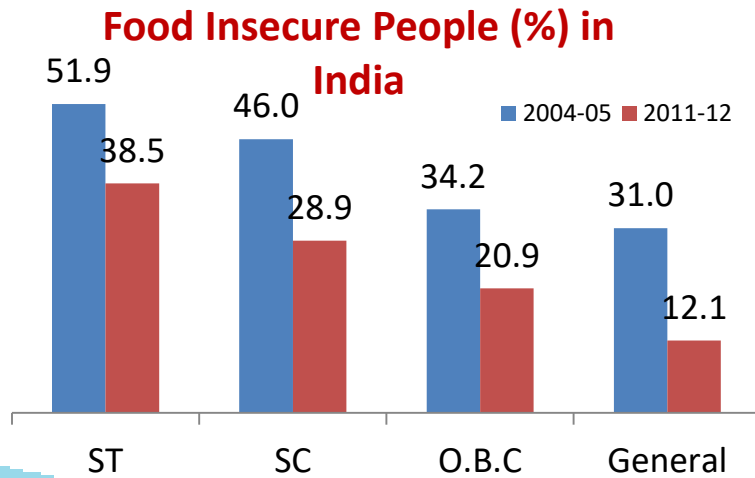
Tale of Two Cities

---- Charles Dickens

"It was the age of wisdom; it was the age of foolishness. It was the epoch of belief; it was the epoch of incredulity. It was the spring of hope; it was the winter of despair."

1. Introduction

Literacy Rate of STs

Literacy Rate (WB and India) by year:
- 1961: WB 7, India 9
- 1971: WB 9, India 11
- 1981: WB 13, India 16
- 1991: WB 28, India 30
- 2001: WB 43, India 47
- 2011: WB 58, India 59

Occupation of STs of West Bengal	2001		2011	
	Male	Female	Male	Female
Cultivators	25	12.6	16	6.6
Agricultural Labour	46.1	62.0	52.7	65
Household Industry	1.7	4.7	1.6	4.1
Other Services	27.1	20.6	29.8	24.3
Total Workers	100	100	100	100

Food Insecure People (%) in India (2004-05, 2011-12)
- ST: 51.9, 38.5
- SC: 46.0, 28.9
- O.B.C: 34.2, 20.9
- General: 31.0, 12.1

Food Insecure People (%) in West Bengal (2004-05, 2011-12)
- ST: 46.0, 44.5
- SC: 35.4, 22.5
- OBC: 24.1, 20.7
- General: 30.3, 16.9

Source: Author's Est. from NSSO Unit Level Data

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1. Introduction

•Nutrition Insecure People (%)

India

Legend: ■ 2004-05 ■ 2011-12

Category	2004-05	2011-12
ST	87	82
SC	84	78
O.B.C	78	75
General	70	67

West Bengal

Legend: ■ 2004-05 ■ 2011-12

Category	2004-05	2011-12
ST	79	85
SC	80	81
OBC	66	81
GEN	76	76

•Poor People (%)

India

Legend: ■ 2004-05 ■ 2011-12

Category	2004-05	2011-12
ST	60	43
SC	51	29
OBC	38	21
GEN	23	13

West Bengal

Legend: ■ 2004-05 ■ 2011-12

Category	2004-05	2011-12
ST	54	49
SC	38	22
OBC	28	18
GEN	32	18
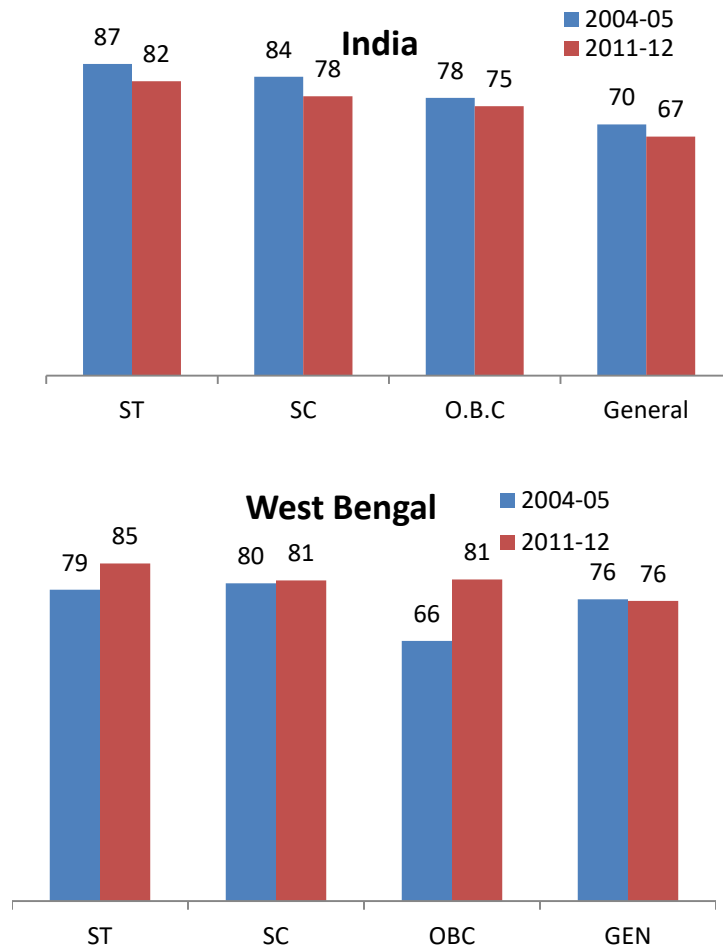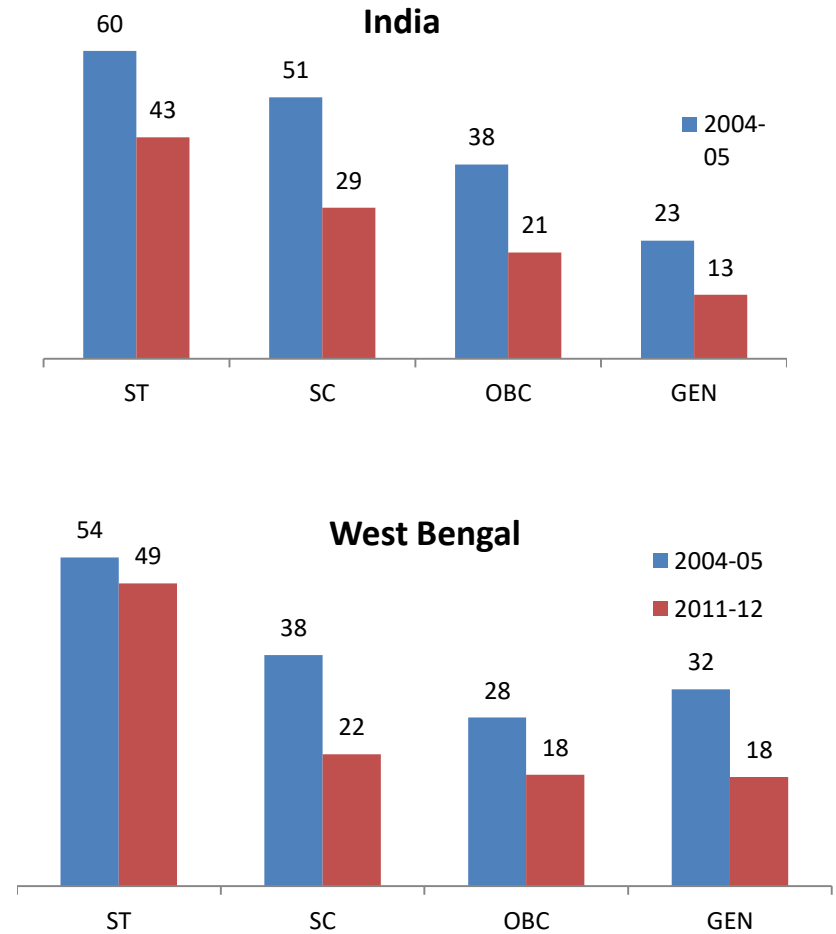
Source: Author's Est. from NSSO Unit Level Data

1. Introduction

Multidimensional Poor People (%)

	India		West Bengal	
	2005-06	2015-16	2005-06	2015-16
ST	86	54	78	51
SC	67	32	62	35
OBC	52	23	55	28
General	48	23	36	17

Source: Author's Est. from NFHS III & IV Unit Level Data
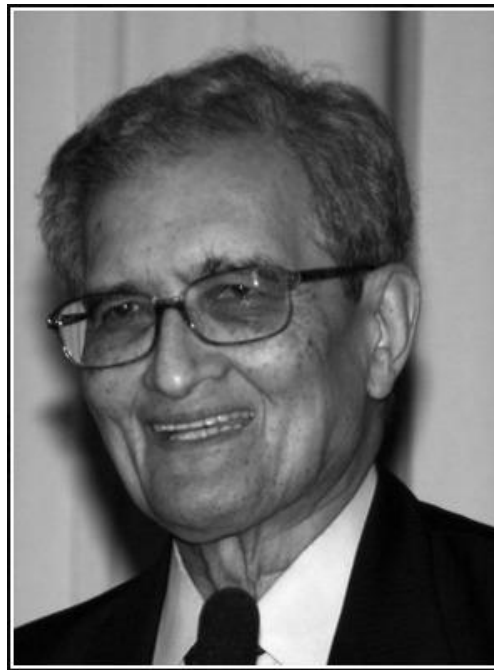
Poverty is not just a lack of money; it is not having the capability to realize one's full potential as a human being

— Amartya Sen —

AZ QUOTES

1. Introduction

➢Inclusive growth and the **SDGs** for poverty reduction cannot be achieved purely through

- the promotion of economic growth
- the development of physical and social infrastructure.

➢Interventions are necessary to directly address

- the needs of the poorest and to prevent members of vulnerable groups
- from falling into poverty and food insecurity.

➢Therefore, the recognition is growing in the world that
the implementation and promotion of **social protections**
to eliminate poverty, deprivation and vulnerability.

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2. What is Social Protection?

ILO:

Social Protection comprises those measures which aim at

- ➢ **preventing,**
- ➢ **reducing and**
- ➢ **eliminating**

economic and social vulnerabilities to poverty and deprivation

Social Protection' is defined as 'a set of public measures that a society provides for its members to protect them against economic and social distress.'

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2. Social Protection Floor (SPF)

SPF is an integrated set of social policies

designed to guarantee income security and

access to social services for all,

paying particular attention to vulnerable groups,

and protecting and empowering people across the life cycle (UN).

Basic Income Security

Pensions for the elderly and persons with disabilities,

Child benefits,

Income support benefits and/or employment guarantees and

Services for the unemployed and working poor

Universal Access to Essential Affordable Social Services

Health, water and sanitation, education, food security, housing, and others defined according to national priorities .
(CEB, 2009; ILO–WHO, 2009).

SPF across the life cycle
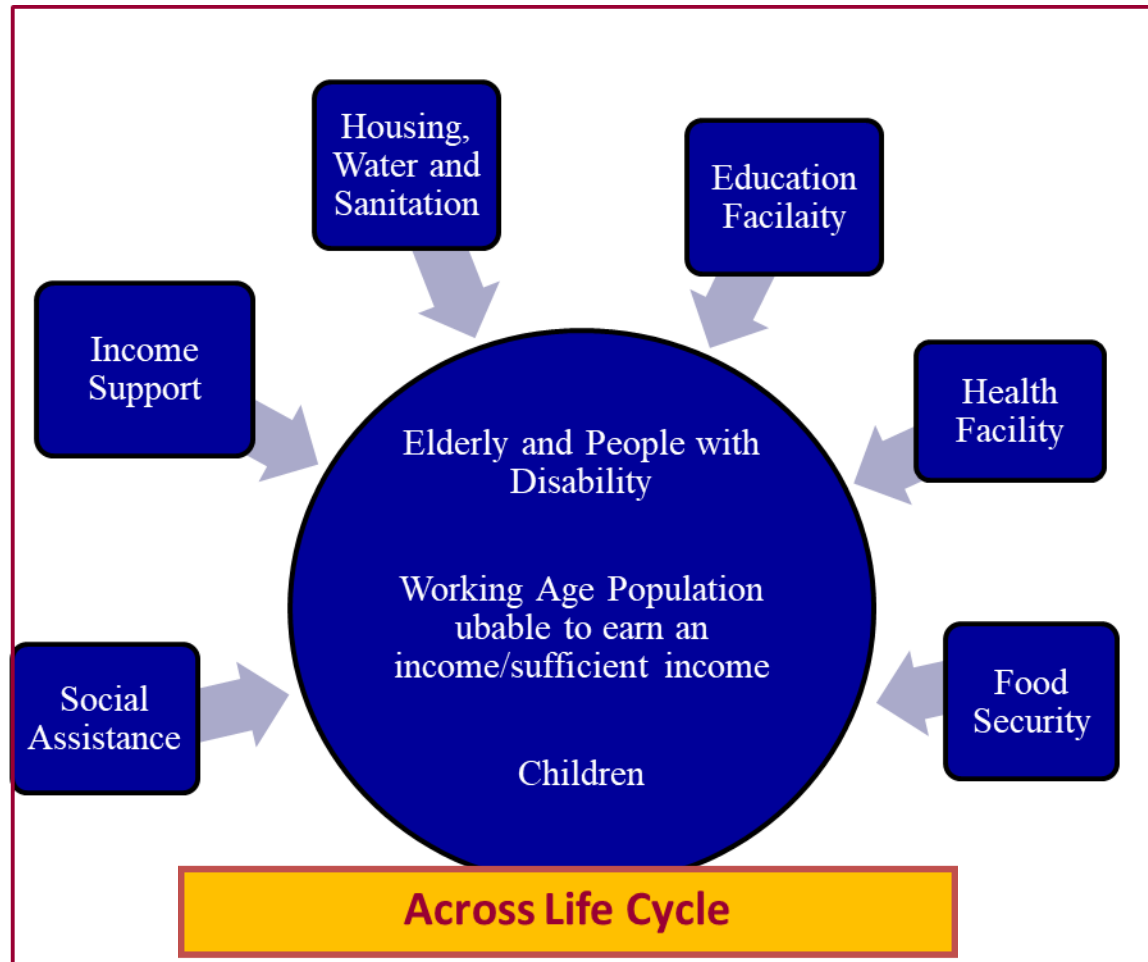
2. Why the Social Protection Floor?

• Realizing human rights and social justice

• An effective tool for combating poverty and inequality

• Helping to address the social and economic impact of crises and global imbalances

• A tool for gender empowerment

• Enhancing social cohesion

• Accelerating progress towards achieving the SDGs and beyond

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5. Social Protection Floor for Rural Households in India
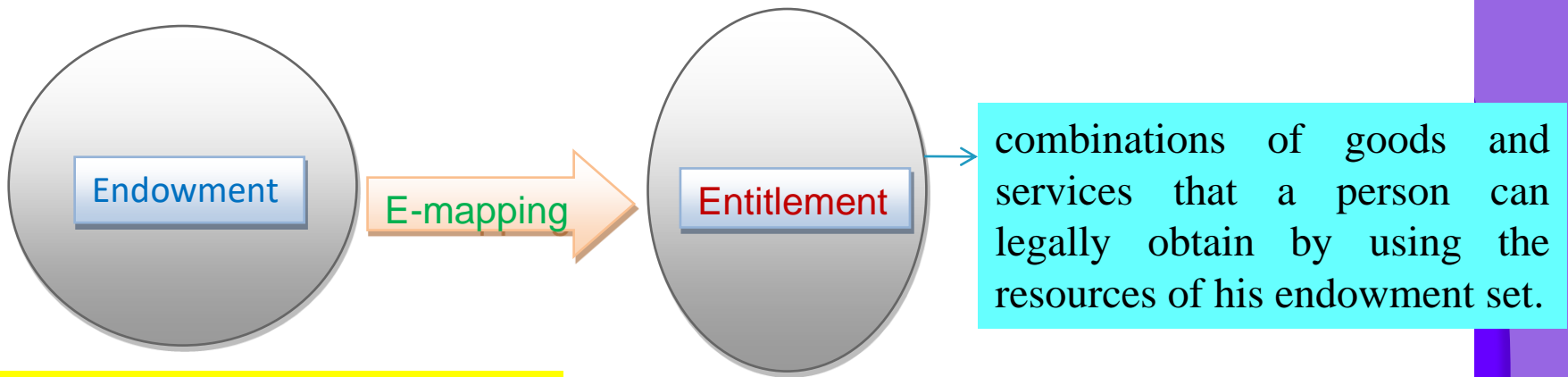
Food	
1a) TPDS for BPL Ration Card Holders	
1b)TPDS under Antyodaya Anna Yojana (AAY)	
1c) TPDS under Annapurna Yojana (AY)	
1d) TPDS for APL Ration Card Holders	

Health	
2) Rural Primary Health Care	
3) Janani SurakshaYolana (JSY)	
4) Swachh Bharat Mission (SBM)	

Education	
5) The Integrated Child Development Services (ICDS)	
6) Sishu Siksha Karmasuchi (SSK)	
7) Madhyamik Siksha Karmasuchi (MSK)	
8)National Programme of Mid Day Meal (MDM)	
9) Books and Book Grant	
10) Other Grants	
11) Kanyashree	

Housing	
12) Indira AwasYojana (IAY)	

Employment and Income	
13) National Rural Employment Guarantee Programme (NREGP)	
14) Swarna Jayanti Gram Swarozgar Yojana (SGSY)	
15) Procurement of Non-timber Forest Produces(NTFP)	

Social Assistance	
16) National Old Age Pension Scheme(NOAPS)	
17) National Family Benefit Scheme(NFBS)	
18) National Widow Pension Scheme (NWPS)	
19) National Disability Pension Scheme (NDPS)	
20) Indira Gandhi Matritya Sahayog Yojana (IGMSY)	
21) Bi-Cycle for School Children	

4. Social Protection and Other Entitlements of HHs

The Basic Concepts

The entitlement approach to poverty is based on three conceptual categories

Endowment → E-mapping → Entitlement → combinations of goods and services that a person can legally obtain by using the resources of his endowment set.

Endowment Set

➢Tangible assets such as land, equipment, animals, etc., and

➢Intangibles such as knowledge and skill, labour power, membership of a particular community, etc.

Entitlement Set
- *Production-based*
  Growing Food & Non-Food
- *Trade-based*
  Buying Food & Non-Food
- *Own-labour*
  Working for Food & Non-food
- *Transfer*
Food & Non-Food by Others (SP Benefits)

5. Construction of Social Protection Index (SPI)

To judge the impact of entire social protection programmes it is import to form an Index, i.e., Social Protection Index (SPI).

➢ SPI is the poverty line deflated ratio of total social protection expenditures to total potential beneficiaries (ADB 2011).

➢ It helps to identify the relative importance of three major social protection programs like basic securities, economic securities and social securities.

SPI by Depth and Breadth

The SPI can be disaggregated into measuring the depth of coverage and also, the breadth of coverage.

✓ ***Depth*** *represents the average monetary benefits that the governments spends for every actual beneficiary as a percentage of poverty-line expenditures* and

✓ ***Breadth*** *represents the ratio of actual beneficiaries to total beneficiaries.*

a.   Depth(D)

The depth (D) is represented as follows:

$$\mathbf{D} = \frac{\left[\dfrac{\sum_1^n E_i}{\sum_1^n AB_i}\right]}{Z}$$

ABi represents the number of actual beneficiaries of i-th programme

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b. Breadth(B)

 The breadth of coverage index is simply the proportion of the total actual beneficiaries receiving government benefits over the total potential beneficiaries.

The breadth (B) is represented as follows:

$$\mathbf{B} = \frac{\sum_1^n AB_i}{\sum_1^n PB_i}$$

The SPI is the product of Breadth and Depth, that is   SPI = B X D

Value of SPI, 2012-13 and 2016-17

| Social Protection Scheme	Expenditure(Rs. Per Month)		Potential Beneficiary (PB)		Actual Beneficiary (AB)		Depth (D)		Breadth (B)		SPI Index	
	2012-13	2016-17	2012-13	2016-17	2012-13	2016-17	2012-13	2016-17	2012-13	2016-17	2012-13	2016-17
A. Food Related Programme	192649	337622	3729	2776	2247	3282	0.10	0.11	0.60	0.85	**0.060**	**0.094**
B. Health Related Programme	9885	75158	3830	3167	846	6271	0.01	0.02	0.22	0.51	**0.003**	**0.011**
C. Education Related Programme	79996	188333	1758	1883	1471	2321	0.06	0.09	0.84	0.81	**0.053**	**0.074**
D. Housing Related Programme	322833	795833	1092	537	601	838	0.62	1.36	0.55	0.64	**0.342**	**0.869**
E. Economic Security Related Programme	273393	153373	3450	1873	3259	3358	0.10	0.07	0.95	0.56	**0.092**	**0.042**
F. Social Security Related Programme	33788	88054	314	259	111	747	0.35	0.31	0.35	0.35	**0.125**	**0.108**
ALL	912544	1638374	14173	10495	8535	16817	0.12	0.14	0.60	0.62	**0.075**	**0.089**

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Impact of SPPs
on
Food Insecurity
## and
Poverty

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Average Income (Rs. per capita per Month) from different form of Entitlements of Sample Households, 2012-13 and 2016-17
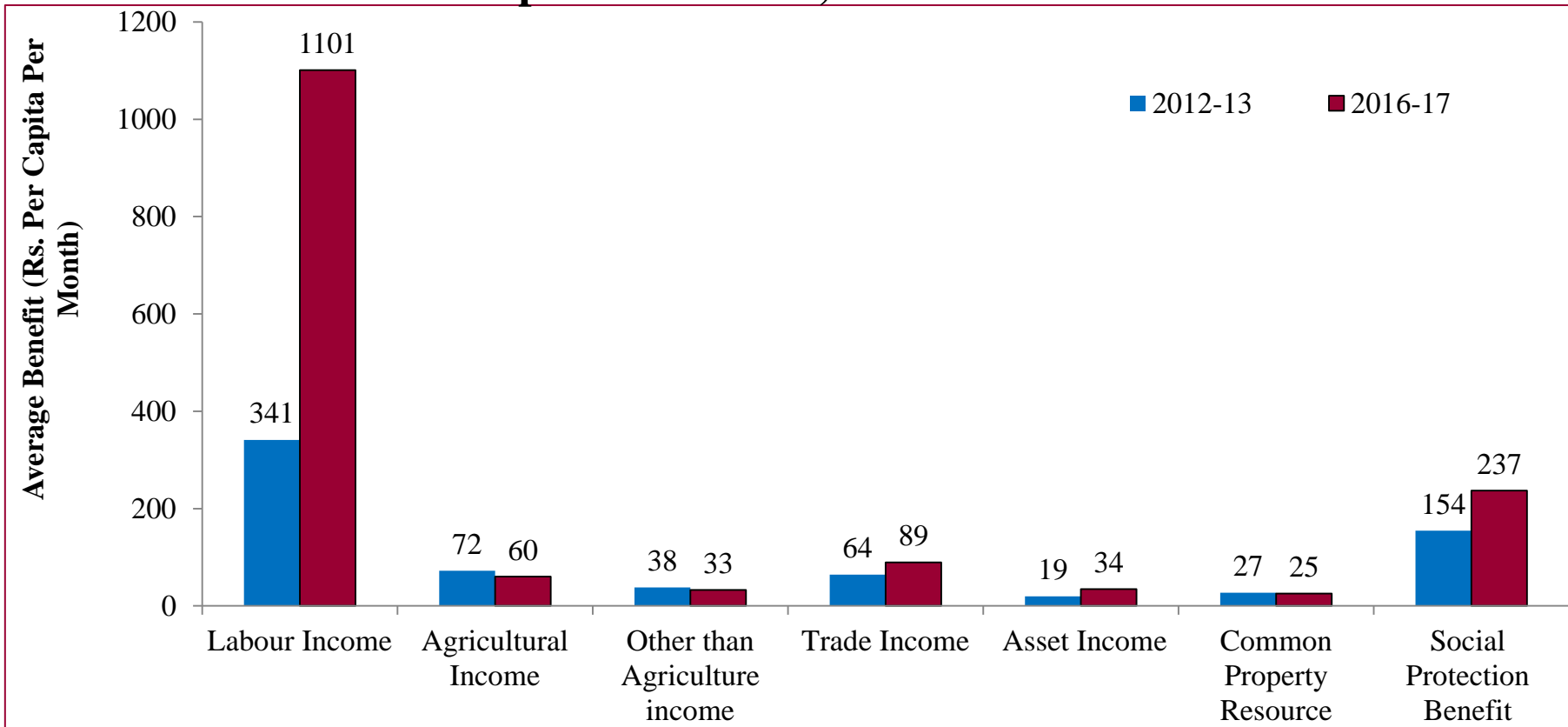
> Higher share of income is generated by the households from
> selling their labor power and
> from social protection benefits

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Distribution of the households by per capita per month income (Rs.) with and without Social Protection Programme, 2012-13 & 2016-17

> Overtime SPBs uplift the households to the upper income groups
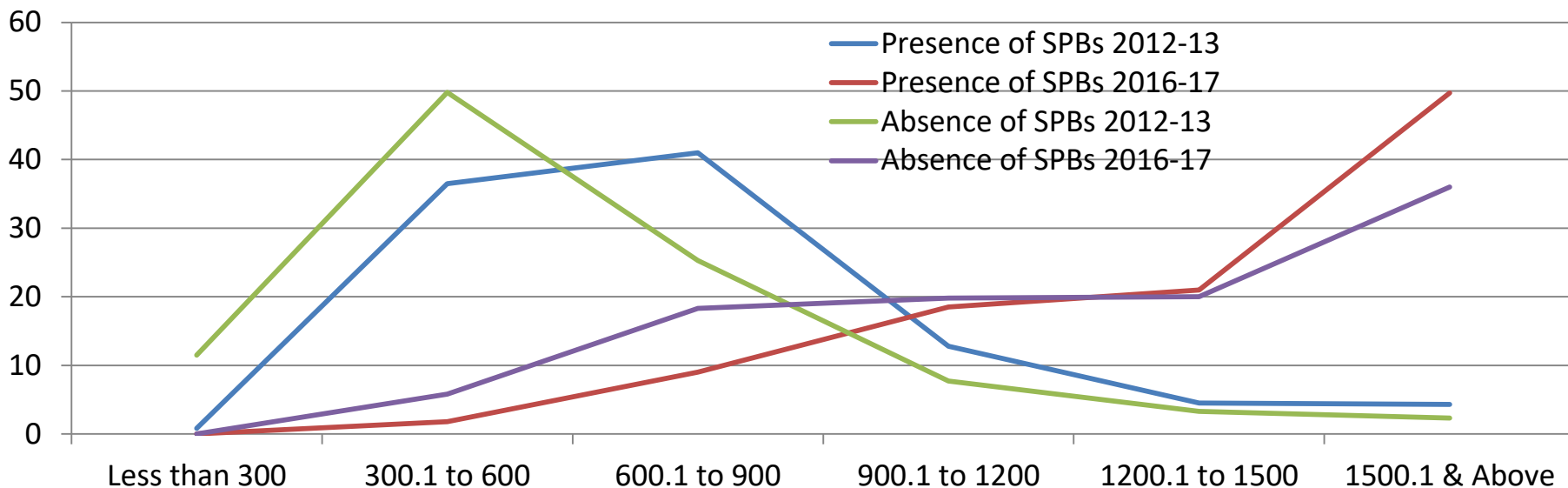
	Presence of SPBs		Absence of SPBs	
	2012-13	2016-17	2012-13	2016-17
Less than 300	0.8	0	11.5	0
300.1 to 600	36.5	1.8	49.8	5.8
600.1 to 900	41	9	25.3	18.3
900.1 to 1200	12.8	18.5	7.7	19.8
1200.1 to 1500	4.5	21	3.3	20
1500.1 & Above	4.3	49.7	2.3	36
Total	100	100	100	100

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Impact of SPPs on Food Security

Methodology

❑The status of food insecurity is measured by using the methodology of Foster, Greer and Therbecke (FGT) (1984) as

$$FI_\propto = \frac{1}{N} \sum_{i=1}^{q} \left(\frac{P_F F - E_i}{P_F F} \right)^\propto \quad ; \propto = 0, 1, and\ 2$$

Where $P_F F$ the food security line and E_i is the actual food expenditure

'q' is the food insecure people and 'N' is the total no of individuals.
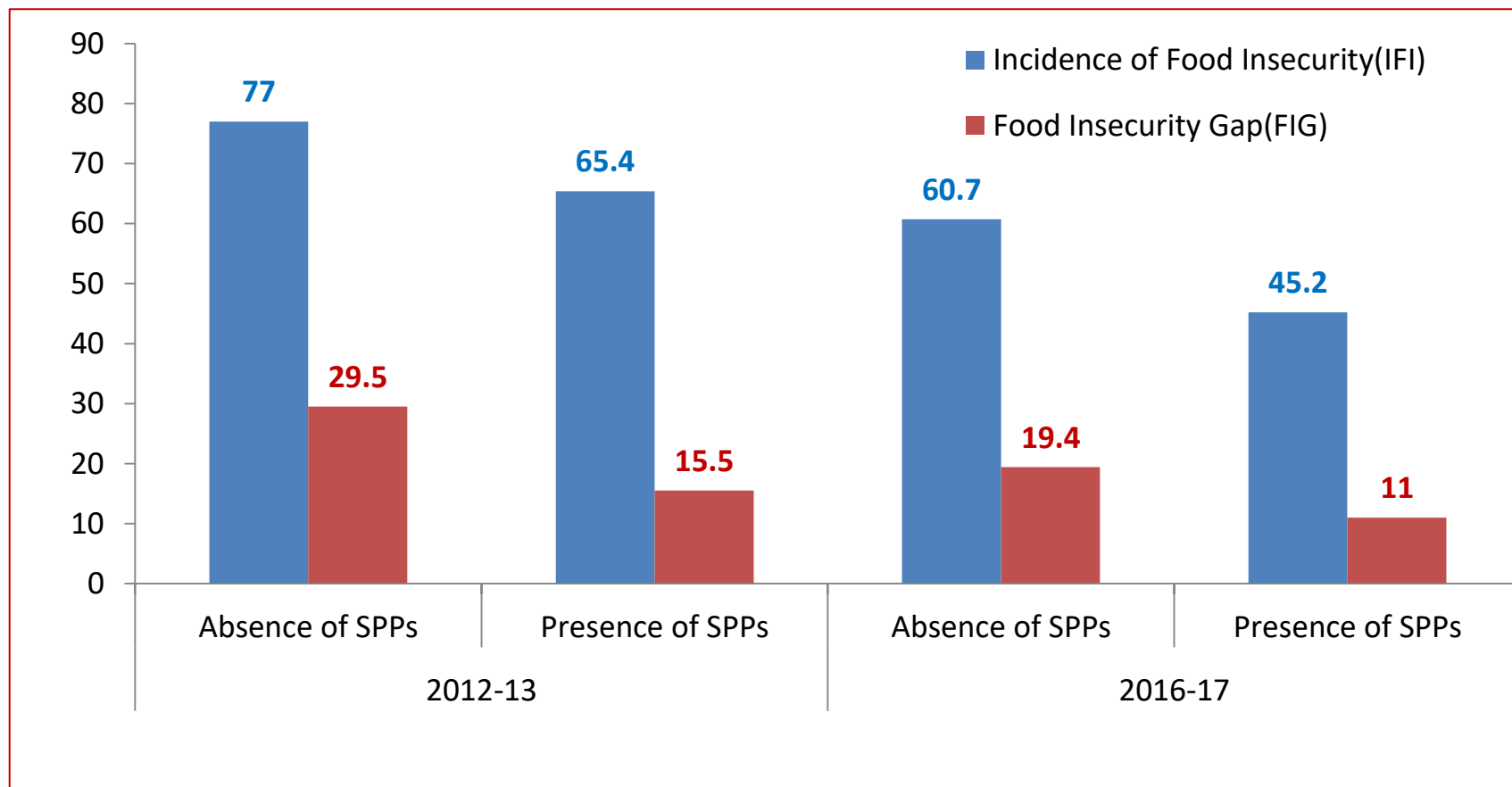
When, α = 0, FI_0 (IFI) implies the incidence of food insecurity

α = 1, FI_1 (FIG) implies the depth of food insecurity

And α = 2, FI_2 (SFIG) implies the severity of food insecurity

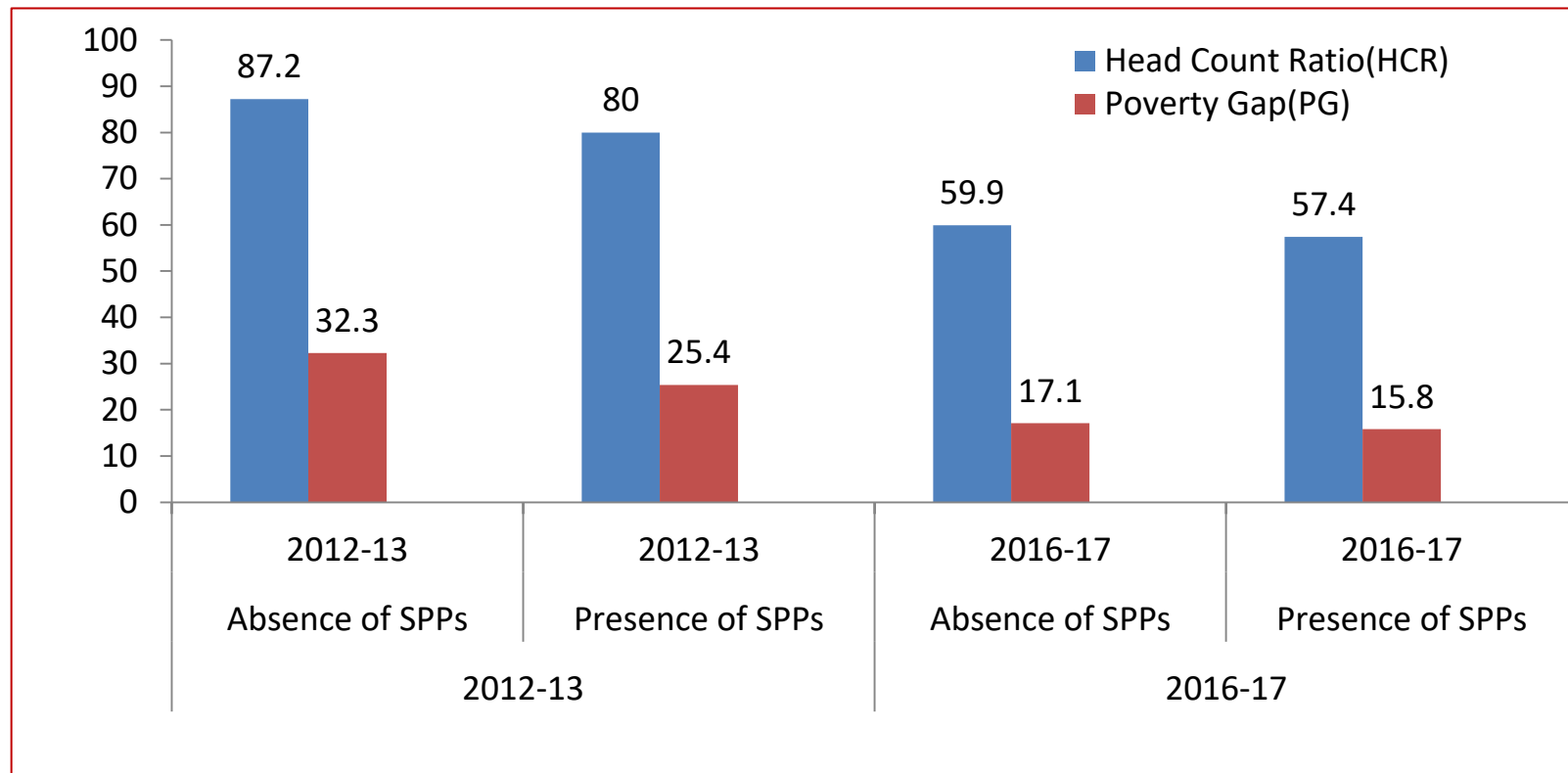# Food Security of the Sample Households in relation to SPP

SPPs have a significant impact on the reduction of food insecurity.

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Status of Monetary poverty of the sample households in 2012-13 and 2016-17 in presence and absence of SPPs

The benefits from SPPs have reduced the incidence of poverty to the extent of 7 per cent in 2012-13 and 2.5 per cent in 2016-17.

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Conclusions

➢ The benefits from SPPs have reduced the incidence of food insecurity y to the extent of 12 per cent in 2012-13 and 15 per cent in 2016-17.

➢ The benefits from SPPs have reduced the incidence of poverty to the extent of 7 per cent in 2012-13 and 2.5 per cent in 2016-17.

➢ This raises the question regarding the effectiveness of SPPs on poor households.

➢ The leakages and inefficient delivery mechanisms are the main reasons for the insignificant effect of SPPs on poor households

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