

Annexure I

POVERTY IN BIHAR: TRENDS AND CORRELATES

TABLE I.1 POVERTY-GAP INDEX ESTIMATES (DEATON & DREZE -2002)

State	1993-94 (50th round)			1999-2000 (55th round)			Changes		
	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall
Bihar	5.6	10.7	10.1	5	8.5	8.0	-0.6	-2.2	-2.1
Orissa	3	9.7	8.9	3	10.5	9.2	0	0.8	0.3
Punjab	1.1	1	1.0	0.4	0.3	0.4	-0.7	-0.7	-0.6
Tamil Nadu	4.5	9.1	7.5	2	4.6	3.7	-2.5	-4.5	-3.8
All India	3.7	7.0	6.2	2.3	5.2	4.5	-1.4	-1.8	-1.7

Source: Deaton & Dreze (2002).

TABLE I.2 DISTRIBUTION OF RURAL WORKING AGE POPULATION OF BIHAR BY PER CAPITA CONSUMPTION QUINTILE AND PRINCIPAL ECONOMIC ACTIVITY

	Agricultural Cultivation labor		Regular non-farm	Casual non-farm	Self non-farm	Other	Total
50th round (1993/94)							
Bottom	65.6	21.8	1.1	3.9	7.4	0.2	100
Quintile 2	53.0	30.9	2.6	3.3	10.0	0.2	100
Quintile 3	43.0	40.3	2.6	2.5	11.3	0.2	100
Quintile 4	32.3	48.4	4.2	1.9	13.0	0.1	100
Top	17.5	56.3	9.5	1.9	14.7	0.1	100
Overall	41.9	39.9	4.1	2.7	11.4	0.2	100
55th round (1999/2000)							
Bottom	54.5	25.2	1.1	6.9	12.1	0.2	100
Quintile 2	51.6	29.5	1.6	5.3	11.7	0.3	100
Quintile 3	41.9	38.1	2.4	4.0	13.5	0.1	100
Quintile 4	33.5	46.0	3.2	4.5	12.8	0.1	100
Top	23.5	51.2	8.7	2.8	13.3	0.5	100
Overall	40.4	38.5	3.5	4.6	12.7	0.3	100

Source: 50th and 55th round, NSSO surveys.

TABLE 1:3 DISTRIBUTION OF POPULATION IN BIHAR BY CONSUMPTION QUINTILE AND OCCUPATION OF HOUSEHOLD HEAD (URBAN)

Consumption quintile	Self-employment	Regular employment	Casual wage labor	Others
50th round (1993/94)				
Bottom	24.1	8.9	49.8	12.3
quintile 2	23.8	15.8	22.6	19.3
quintile 3	22.7	20.6	11.4	15.9
quintile 4	16.6	26.6	10.6	19.9
Top	12.9	28.1	5.6	32.6
% of population	39.8	38.8	11.6	9.8
Mean pc exp	305	417	230	433
55th round (1999/00)				
Bottom	19.5	9.0	53.5	14.9
quintile 2	26.4	12.4	23.7	12.6
quintile 3	21.6	19.1	17.4	19.3
quintile 4	20.9	24.2	4.6	23.1
Top	11.6	35.3	0.8	30.1
% of population	43.6	31.3	12.6	12.6
Mean pc exp	525	784	342	680

Source: 50th and 55th round, NSSO surveys.

TABLE 1:4 NOMINAL DAILY WAGES FOR CASUAL LABOR BY GENDER AND LOCATION (IN RS.) IN 1998

Gender	In the village			Outside the village		
	Agr. labor	Non-agr. labor	Total	Agr. labor	Non-agr. labor	Total
Male	27.9	37.5	29.5	49.5	55.5	53
Female	26.3	26.8	26.4	27.8	35	28

Source: Srivastava (2003).

Poverty and out-migration

In rural Bihar, the poor have limited livelihood means due to lack of land ownership, lack of education, and social discrimination. Under these circumstances, as many studies show, out-migration is a crucial survival strategy for the rural poor. Both the Census and NSS report that Bihar has the highest rate of gross inter-state out-migration in India.

Data on migration at the sub-state level is usually difficult to obtain and, if available, involve conceptual problems in identifying out-migrants. The 1998 UP-Bihar Living Conditions Survey, was unique in containing accurate and detailed information on migration in Bihar. Based on this survey, Srivastava (2003) shows a wide range of findings on out-migration in Bihar.

TABLE 1:5 PERCENTAGE OF HOUSEHOLDS WITH ABSENT MALE MEMBERS

Consumption quintile	
Bottom	32.5
quintile 2	25
quintile 3	20.6
quintile 4	23.3
Top	26.3
Overall	25.3

Source: Srivastava (2003).

TABLE 1.6 THE DISTRIBUTION OF ABSENCE OF MALE MEMBERS AMONG CONSUMPTION QUINTILE

Consumption quintile	>9 months	7 to 9 months	4 to 6 months	1 to 3 months
Bottom	23.5	49	20.4	7.1
Quintile 2	41.4	35.6	13.8	9.2
Quintile 3	45.4	26	16.9	11.7
Quintile 4	56.8	19.3	17.1	6.8
Top	64.9	21.1	3.5	10.5
Overall	47	30.2	13.8	9.1

Source: Srivastava (2003)Notes: Authors' computation based on Table 51 in Srivastava (2003).

Three facts emerge: first, 95 % of out-migrants were male; second, out-migration is the highest in the poorest and the richest quintiles (Table 5); third, the duration of out-migration from the poorest quintile tends to be shorter, as compared to the richest group (Table 6).

TABLE 1.7 PERCENTAGE OF REMITTANCES REPORTED TO CONSUMPTION

	North	South	Overall
SC/STs	2.9	2.4	2.7
All households	3	5.6	3.9

Source: Srivastava (2003).

Another important aspect of out-migration is remittance from migrants to households. Table 7 reports the share of remittances in consumption expenditure. It indicates this percentage is lower for SC/STs households, who are likely to be poor, for North and South Bihar alike. This may be so because out-migration from poorer households tends to be temporary, while out-migration from richer households tends to be much longer.

TABLE 1.8 LAND OWNERSHIP AND OCCUPATIONS

Land own (ha)	Agricultural labor	Cultivation non-farm	Regular non-farm	Casual non-farm	Self	Other	Total
50th round (1993/93)							
No land	70.3	1.6	6.9	5.7	15.2	0.3	100
0<* <=0.4 ha	67.2	11.4	3.1	2.8	15.4	0.2	100
0.4<* <=1 ha	17.7	66.8	3.8	3.1	8.4	0.2	100
1<* <=2 ha	7.0	81.7	4.4	1.4	5.5	0.1	100
2<* <=4 ha	1.9	88.1	5.9	0.0	4.0	0.0	100
>4 ha	2.3	87.7	7.1	0.0	3.0	0.1	100
Overall	41.9	39.9	4.1	2.7	11.4	0.2	100
55th round (1999/00)							
No land	76.6	2.6	2.1	6.2	12.3	0.2	100
0<* <=0.4 ha	57.1	16.3	3.5	6.2	16.6	0.3	100
0.4<* <=1 ha	9.5	75.1	4.0	2.8	8.4	0.3	100
1<* <=2 ha	2.1	87.6	3.2	0.7	6.1	0.4	100
2<* <=4 ha	0.6	87.6	5.0	1.1	5.7	0.0	100
>4 ha	1.7	86.4	5.7	0.5	5.4	0.3	100
Overall	40.4	38.5	3.5	4.6	12.7	0.3	100

Source: The NSSO 50th and 55th round Surveys.

BOX 1.1 LAND REFORM IN BIHAR

The close link between poverty and landlessness has been continuously discussed in India's political arena since independence, with rural land reform being placed high in the policy agenda. Land reforms in Bihar can be classified into three main categories according to their main purpose: abolition of intermediaries; ceilings on landholding; and tenancy reform to protect tenants in terms of rents and their legal status.

In 1950, Bihar abolished the intermediaries between landlords and cultivators who worked under feudal lords, who in turn extracted very high rent from tenants. The implementation of this act was very slow in Bihar, though the abolition of intermediaries has been proved to achieve limited and variable success in protecting small landholders if implemented properly (Besley and Burgess 2000).

The first land-ceiling act was passed in 1961 with subsequent amendments in 1973 and 1976. Under the ceiling act large landholders are required to distribute surplus plots of land to the landless. The imposition of a ceiling on land ownership achieved a certain level of success. For example, it increased the number of marginal and semi-medium farmers while decreasing the number of large landholders. However, the extent of success has been very limited. In Bihar, only 1.53 percent of cultivable land was acquired and distributed in 1986, of which the surplus land accounted for 20 percent (Sharma 1995).

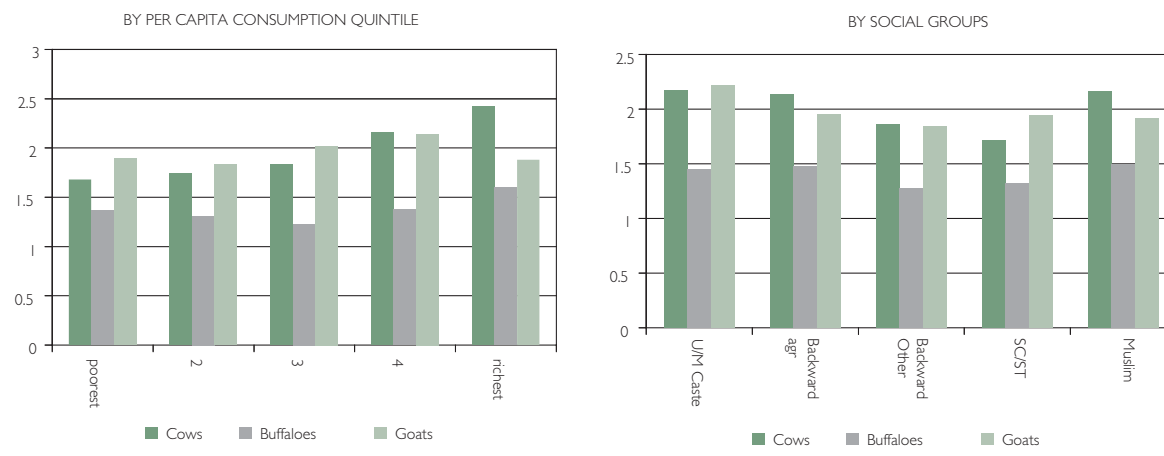
In order to enhance tenure security, tenancy reforms have been carried out since 1963. Nevertheless, the status of tenants in Bihar has been vulnerable in terms of rents and security of tenure despite the series of tenancy reform acts. Rural Bihar has a fairly significant proportion of cultivated land under tenancy arrangements (nearly 25 percent of cultivated land in 1998 (Srivastava 2003)). The majority of tenants pay half the gross output to landowners although the statutory provision with regard to rent is 25 percent. Furthermore, the tenancy reforms appear to have worsened the security of tenants. After a series of ceiling acts and tenancy reform acts, the system of tenancy became almost entirely concealed and informal. Concealed tenancy reduces the scope of greater land access through rental markets, the tenant's bargaining position, and the ability to enforce contract terms.

As illustrated above, the implementation of the various land reform measures has been very slow and unsatisfactory. Such poor implementation can be attributed to lack of political will, up-to-date land records, fair legal systems, and organizations representing the poor peasants and agricultural labor (e.g., Sharma 1995, Besley and Burgess 2000).

TABLE HISTORY OF LAND REFORM IN BIHAR

Year	Title	Description	Class
1950	Land Reforms Act	Abolition of zamindari; implementation of this act very slow.	2
1957	Homestead Tenancy Act	Confers rights of permanent tenancy in homestead lands on persons holding less than one acre of land.	1
1961(amended 1973)	Land Reforms Act	Prohibits subletting, preventing sublettee from acquiring right of occupancy.	1
1961	Land Ceiling Act	Imposition of ceiling on landholdings of 9.71 - 29.14 hectares (1960-72) and of 6.07-18.21 hectares (after 1972).	3
1973(amended 1982)	Act 12 (Amendment to Land Reforms Act)	Introduced provisions relating to the voluntary surrender of surplus land.	3
1976	Act 55	Provided for the substitution of legal heir; ceiling area shall be redetermined when classification of land changes; ordered that the landholder necessarily retain land transferred in contravention of the Act.	3
1986	Tenancy (Amendment) Act	Provides definition of personal cultivation; provides for acquisition of occupancy rights by under raiyats.	1

Source: Besley and Burgess (2000) "Land Reform, Poverty Reduction, and Growth: Evidence from India," Quarterly Journal of Economics
 Notes: The extent of land reform acts are classified into four categories (1 = tenancy reform, 2 = abolition of intermediaries, 3 = ceilings on landholdings).

FIGURE I.1 NUMBER OF COWS, BUFFALOES AND GOATS PER HOUSEHOLD

TABLE I.9 DISTRIBUTION OF POPULATION BY CONSUMPTION QUINTILE AND EDUCATION LEVEL OF HOUSEHOLD HEAD

Rural	50th (1993/94)						55th (1999/00)					
	Illite- rate	Below primary	Primary	Middle	Secon- primary	Higher	Illite- rate	Below primary	Primary	Middle	Secon- dary	Higher
Bottom	78.2	10.4	4.4	4.4	2.4	0.2	71.3	12.9	3.6	6.9	4.5	0.8
Quintile 2	67.0	11.4	6.9	8.0	5.2	1.4	64.6	13.7	6.5	7.3	6.3	1.6
Quintile 3	61.6	13.2	6.1	11.0	7.1	1.1	59.9	14.8	6.2	8.7	8.3	2.2
Quintile 4	50.5	13.7	8.3	13.3	11.4	2.8	50.3	15.5	8.2	12.0	12.1	1.9
Top	37.9	14.7	7.8	14.9	18.1	6.6	41.0	12.8	6.7	14.9	18.0	6.7
Overall	58.9	12.7	6.7	10.3	8.9	2.4	57.4	13.9	6.2	10.0	9.9	2.6
Mean pc exp	196	229	235	251	278	330	354	380	401	425	470	572

Rural	Illite- rate	Below primary	Primary	Middle	Secon- primary	Higher	Illite- rate	Below primary	Primary	Middle	Secon- dary	Higher
Bottom	52.8	16.4	6.8	13.3	8.6	2.2	57.5	16.2	9.1	7.0	7.4	2.8
Quintile 2	32.9	17.8	7.9	24.2	15.1	2.1	36.5	18.9	10.7	18.2	12.0	3.7
Quintile 3	23.5	12.1	13.4	23.1	20.2	7.8	25.9	16.8	9.4	12.8	24.6	10.5
Quintile 4	14.2	8.5	5.4	17.2	33.6	21.1	16.2	11.2	6.2	15.4	29.7	21.3
Top	6.1	3.5	5.1	11.6	35.0	38.8	4.9	3.3	3.5	4.7	36.8	46.8
Overall	25.9	11.7	7.7	17.9	22.5	14.4	28.2	13.3	7.8	11.6	22.1	17.0
Mean pc exp	240	267	301	310	431	581	397	458	473	507	725	1013

Source: The 50th and 55th NSSO round surveys.

TABLE I.10 EDUCATIONAL ATTAINMENTS OF HOUSEHOLD HEADS AND OCCUPATIONS

Education of head	Agricultural labor	Cultivation Regular non-farm	Casual non-farm	Self non-farm	Other	Total
50th round (1993/93)						
Illiterate	54.3	31.9	1.5	3.2	8.8	100
Below primary	29.3	48.8	3.6	2.2	15.9	100
Primary	29.8	48.1	3.4	2.6	16.2	100
Middle	16.4	57.7	7.2	1.3	17.1	100
Secondary	9.0	59.4	15.7	1.4	14.4	100
Higher	7.6	51.3	31.0	1.0	9.1	100
All	41.9	39.9	4.1	2.7	11.4	100
55th round (1999/00)						
Illiterate	52.8	30.2	1.1	5.1	10.7	100
Below primary	26.2	46.0	3.4	5.1	19.2	100
Primary	22.1	53.5	4.3	4.9	14.9	100
Middle	17.9	57.7	5.6	3.1	15.0	100
Secondary	14.1	53.5	12.9	2.8	15.6	100
Higher	3.0	58.2	26.6	0.3	12.0	100
Total	40.4	38.5	3.5	4.6	12.8	100

Source: 50th and 55th round NSSO surveys.

TABLE I.11 EDUCATIONAL ATTAINMENTS BY SOCIAL GROUPS IN RURAL BIHAR

	Illiterate	Below primary	Primary	Middle	Secondary	Higher	Total
50th round (1993-94)							
Majority	52	15	8	12	11	3	100
SC/ST	76	8	5	7	4	1	100
Overall	59	13	7	10	9	2	100
55th round (1999-00)							
Majority	52	15	7	11	12	3	100
SC/ST	72	10	4	7	5	1	100
Overall	57	14	6	10	10	3	100

Source: 50th and 55th round NSSO surveys (Schedules 1 & 2).

TABLE I.12 DISTRIBUTION OF RURAL WORKING AGE POPULATION IN BIHAR BY SOCIAL GROUP AND PRINCIPAL ECONOMIC ACTIVITY

Education of head	Agricultural labor	Cultivation Regular non-farm	Casual non-farm	Self non-farm	Other	Total
50th round (1993/93)						
SC/ST	65.1	22.2	3.3	3.3	5.8	100
Majority	29.1	49.5	4.5	2.4	14.4	100
Overall	41.9	39.9	4.1	2.7	11.4	100
55th round (1999/00)						
SC/ST	58.2	24.6	2.4	6.1	8.6	100
Majority	31.3	45.6	4.1	3.9	14.8	100
Overall	40.4	38.5	3.5	4.6	12.7	100

Source: 50th and 55th round NSSO surveys.

TABLE I.13 DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY LEVEL OF EDUCATION (AGE 20-24): 1995-96

	Primary	Middle	High school	Higher secondary
Rural	15.84	27.86	21.98	16.22
Urban	8.68	11.26	22.91	36.49

Source: 52nd round NSSO survey.

TABLE I.14 SELECTED HEALTH INDICATORS FOR DISTRICTS OF BIHAR

District	Contraceptive prevalence rate	Unmet need	% of deliveries that are safe (out of all child births)	% of children completely immunized	% of children with no immunization	Sum of ranks for all indicators ¹
Patna	36.6	24.6	49.7	37.0	49.0	18
Muzaffarpur	25.3	33.7	30.1	31.1	33.0	31
Khagaria	28.8	37.0	16.7	27.9	43.3	47
Darbhanga	27.1	22.8	14.7	22.2	47.1	50
Bhagalpur	27.5	36.2	18.4	25.6	47.9	53
Nawada	20.4	30.3	23.4	29.6	46.0	54
Vaishali	24.3	26.3	19.3	22.6	48.1	54
Jehanabad	21.2	30.3	33.1	27.2	57.4	58
Saharsa	28.4	24.6	19.7	20.7	63.2	60
Bhojpur	23.4	48.9	58.3	12.0	34.0	65
Purnia	23.7	41.5	23.4	17.2	34.8	65
Siwan	21.8	46.8	19.4	30.7	45.9	65
Saran	18.2	49.0	42.7	20.7	32.7	68
Gaya	22.0	27.5	15.3	24.5	56.3	70
Buxar	20.3	41.2	29.4	24.5	53.1	72
Begusarai	23.1	56.8	28.0	16.4	34.7	76
Aurangabad	21.8	24.8	23.0	18.3	62.8	77
Nalanda	25.6	57.3	36.1	13.1	57.6	85
Samastipur	22.7	31.7	7.9	20.0	57.1	91
Sitamarhi	16.8	30.7	11.9	19.3	52.9	92
Araria	28.1	52.0	10.9	20.4	58.8	93
Madhubani	22.8	31.7	10.1	18.1	60.0	93
Gopalganj	15.9	51.8	21.8	21.2	54.5	97
Madhepura	25.0	44.9	11.6	15.7	62.4	97
Munger	23.1	51.9	22.0	10.9	65.9	108
West Champaran	21.8	36.4	14.9	14.3	68.6	108
Rohtas	21.0	47.1	30.7	8.4	73.6	109
East Champaran	22.5	50.4	12.7	15.4	69.3	116
Katihar	18.8	57.5	8.6	25.6	63.6	117
Kishanganj	16.1	47.8	8.3	11.4	71.6	136
Mean	23.1	39.8	22.4	20.7	53.5	
Standard Deviation	4.2	11.0	12.1	6.7	11.7	

Source: RCHH II survey.

¹The number for each district is the sum of ranks in terms of each of the 6 indicators. The rank for each indicator goes from 1 to 30, with a lower number indicating a higher rank.

TABLE I.15 STATUS OF INFRASTRUCTURE IN PRIMARY HEALTH CENTERS

Number surveyed	Bihar 339	Orissa 364	UP 486	Kerala 790	India 795
Percent of PHCs having:					
Own building	79	99	73	87	92
Toilet facility	40	50	52	95	79
Water (continuous supply)	62	75	36	80	62
Electricity	31	57	41	95	82
Labor room	15	35	20	24	48
Laboratory	19	23	31	19	46
Telephone	1	22	14	20	
Vehicles (functional)	27	19	14	18	29
At least one bed	56	48	90	30	69

Source: Rapid Facility Survey (Department of Family Welfare, Government of India) - selected districts.