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Wealth Inequality: Evidence from Two Villages in Bihar

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Abstract: This paper examines inequality in ownership of wealth in two villages of North Bihar, drawing on data from the PARI surveys conducted in 2012. The analysis showed extreme levels of inequality, among the highest of the 23 villages surveyed by PARI. Inequality in wealth across socio-economic classes was extremely high, with the top one per cent of households comprising landlords and capitalist farmers owning the bulk of all assets of resident households and the class of manual workers owning a minuscule share of total assets. The present study provides concrete evidence of the vast gap between the wealth of a manual worker and a landlord. Land remained the most important component of household wealth, including among the very rich. Given the strong correlation between caste and class, we found, predictably, that Scheduled Castes were the group worst off in terms of asset ownership, with members of the Extremely Backward Classes close behind. There was heterogeneity among Backward Class (BC) households.

Keywords: Class and caste in Bihar, wealth and asset inequality, asset poverty, village studies.

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Introduction

Wealth reflects the long-term economic status of a household, unlike income or expenditure, which are variables affected by short-term factors. Assets provide a continuing flow of benefits to the holder, especially productive assets which can generate income. For the rich, assets reflect and aid the expanded reproduction of capital, whereas for the poor, they provide a degree of security or a safety net in case of loss of income. The study of assets or wealth thus provides an important and independent assessment of the socio-economic status of households, and contributes

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to the broader debate on poverty. Wealth reflects inter-generational economic status, as it is usually inherited. Accumulation of wealth is also determined by social structures, and in India, most notably by caste and caste discrimination. Members of the Scheduled Castes were not permitted to own assets for generations even after changes in the law, and therefore the effects on wealth accumulation persist. As noted by Piketty, it is mostly inherited assets that are a source of inequality in wealth ownership, as they perpetuate inequality over generations (Piketty 2014). Present-day inequalities in the ownership of assets reflect historical inequalities. Of inherited assets, land was – and continues to be – the most important asset among rural households (Ramachandran, Rawal, and Swaminathan 2010; Sharma and Rodgers 2015).

Bihar has for long been classified as a relatively backward State in India. In the late 1990s and 2000s, its rate of economic growth accelerated. According to official sources, the annual growth rate of SDP in Bihar was nearly 12 per cent between 2007 and 2012, and the head count ratio of poverty fell from 55.7 per cent in 2004–5 to 34.1 per cent in 2011–12, though the decline was mainly in urban areas (GoB 2014). While scholars have questioned the "miracle of growth," they have also noted changes in agrarian society reflected in a weakening of the correlation between class and caste, including in respect of ownership of land (Rodgers *et al.* 2013, 2016).

This paper uses new evidence from two villages in Bihar to explore patterns of inequality in wealth across socio-economic classes, and argues that the gap in ownership of assets between landlords and manual workers is enormous.

The major secondary source of national data on land and assets is the All India Debt and Investment Survey (AIDIS), of which the recent rounds were conducted in 2012–13 and 2018–19. AIDIS is a useful source of data for an aggregate picture of wealth inequality. It has however come under criticism for underestimating the assets of the rich, as also inequalities in wealth (Subramaniam and Jayaraj 2006; Chavan 2012).

The AIDIS data do not permit disaggregation by occupation or socio-economic class. To understand capitalist development in a specific context, and how the associated structure of class and caste is reflected in inequality of wealth, we turn to village-level data. In this paper, we use primary data from two villages of north Bihar, Katkuian in West Champaran district and Nayanagar in Samastipur district, surveyed in 2012, with a small follow-up sample in 2018. We build on the body of work of village studies of Bihar (in particular, Rodgers *et al.* 2013; Datta *et al.* 2014; and Sharma and Rodgers 2015).

DATA AND METHODOLOGY

The village data come from household surveys conducted as part of the Project on Agrarian Relations in India (PARI) of the Foundation for Agrarian Studies (FAS) in Bihar. In Katkuian, a census-type survey of 350 households was undertaken. In Nayanagar – which is a fairly large village both in terms of area and population, with over 1,200 households – a stratified sample of 348 households were selected for survey (with over-sampling of the rich), and appropriate multipliers have been used in the analysis to arrive at estimates of assets for all the households in the village.

In 2018, a sample survey was conducted of select households from the list of households in the original survey; it covered 44 households in Katkuian and 63 households in Nayanagar.

Definition of Wealth or Assets

In the PARI survey, the schedule on assets covered agricultural land, orchard land, homestead land, non-agricultural land, houses and buildings, means of production (including agricultural and non-agricultural machinery), livestock, durable goods, means of transport, inventories, and trees owned by the household.¹ Data on financial assets, gold and silver jewellery were not collected, since reporting of these assets may not have been accurate. While financial assets are not very important in rural areas, jewellery is a valuable asset for many households. This is a limitation in our data.

Ownership of assets has been studied at the household level; the survey data do not have information on individual ownership of assets within the household. Only in the case of land, registration in the name of women of the households was recorded separately.

As we have data on indebtedness in the same survey, we also calculated net worth, defined as the value of total assets owned minus the amount of debt outstanding.

Method of Valuation

The value of an asset is its market value as reported by the respondent at the time of the survey. All data are at current prices, that is, 2011-12 prices.²

There was a specific problem related to the valuation of homestead land in both Katkuian and Nayanagar villages.³ In Katkuian, many households did not have full ownership rights over homestead land, which was often occupied land or *gair majarua* land. After careful deliberation, we decided not to consider the value of such land as part of total wealth, since the households did not have legal sale rights

 $^{^{1}}$ The PARI survey seems more comprehensive than recent village surveys of Bihar conducted by Institute for Human Development in 2009–12 (see Rodgers *et al.* 2013). It is not clear if the latter collected information on all types of land (homestead land, non-agricultural land), on trees and orchards, and on inventories.

² Respondents were asked what would be the asset value if they were to sell it in the market. If they were unable to report the value, a standard price for the asset based on observations in the village was used.

³ We are grateful to Awanish Kumar for providing details on types of land.

over the land they occupied. However, if a family had built a house on *gair majarua* land, the value of the house was included in the total assets owned by the household.

In Nayanagar, more than eight per cent of households reported their homestead land as *parchadari* land or government-owned land that had been occupied without any sale rights. The households, however, had tax receipts called *parchas* for the land tax paid. We have not included the value of homestead land that was reported as *parchadari* land in the total assets of a household, as there were no transactions of such land in the village.

Level and Composition of Assets

Overview of Bihar

The AIDIS of 2012–13 shows that the average value of assets per household in rural Bihar was lower than the national average (Rs 548,464 in rural Bihar and Rs 10,06,985 in rural India). In 2018–19, the average wealth of a rural household nearly doubled to Rs 10,89,000 in Bihar, while the average for rural India was Rs 15,92,000 (GoI 2021).

As in the rest of India, land (73 per cent) and buildings (23 per cent) constituted the two major types of assets possessed by rural households in Bihar (Figure 1). The share of land in total assets, however, declined to 64 per cent in 2018–19 (GoI 2021).

Katkuian Village

The mean value of assets of the 350 households in Katkuian in 2012 was Rs 11.36 lakh, ranging from Rs 1,540 to Rs 10.14 crore (with a median value of Rs 1.79 lakh). There is one household that we treat partially as an outlier in further analysis, because this household reported owning more than 230 acres of non-agricultural land outside the village worth around Rs 90 million.⁴

If the outlier is excluded, the share of agricultural land in the village was around 65 per cent of all assets (Figure 2). If all the land in the village other than homestead land is considered, the share of land in total assets increased further to 70 per cent, thus confirming the dominance of land in assets of rural households.⁵ Although land was the most important asset for rural households, the ownership of land was highly unequal as between men and women. Women had entitlement to land only in 14.5 per cent of the households, and in most cases, land registered in the name of a

⁴ The value of non-agricultural land owned by this household has been excluded when discussing disaggregation by asset category, since it tends to amplify the share of "Other land" in the total assets. It has however been considered in the total and average value of assets whenever village-level inequality in overall asset ownership is discussed.

⁵ A direct comparison with the AIDIS share of land is not possible as we are not always able to separate the value of homestead land from that of the house built on it.



Figure 1. *Composition of assets, rural Bihar, 2012–13 and 2018–19*, in per cent *Source:* Calculations based on NSSO 70th Round and GoI (2021).

woman was less than one acre. Of the households where women had some land entitlement, a quarter were Muslim households.

In Katkuian, trees were an important asset (their share in total asset value was three per cent) and included fruit trees such as mango, litchi, guava, and lemon, but also



Figure 2. Composition of household wealth, Katkuian village, 2011–12, in per cent *Source*: Data from the Project on Agrarian Relations in India (*PARI*).

high-value trees such as sheesham, silk cotton, and bamboo. Trees were owned by a significant proportion of landless households. Agricultural machinery accounted for three per cent of total assets and was owned by only a few farmer households.⁶ Poor peasants and cultivators from manual worker households owned mostly hand-operated implements such as ploughs, hoes, bamboo levellers, and bullock carts. An insignificant proportion of them owned tubewells and pumpsets, and just one household reported owning a second-hand tractor.

While the value of animal resources was only two per cent of total assets, animals were important to individual households. Nearly 75 per cent of all households in Katkuian reported owning livestock. Thus, livestock was owned by households belonging to different socio-economic classes and castes. Among animal assets, milch animals were the single most important type of animal owned by households.

Nayanagar Village

Based on survey estimates, in Nayanagar in 2012, the average value of assets was Rs 40.96 lakh, which was significantly higher (nearly eight times) than the average value of assets per household in Katkuian as well as the average for rural Bihar (Rs 5.48 lakh) according to AIDIS 2012–13. The total value of assets of a household in Nayanagar ranged from Rs 11,342 to Rs 22.69 crore with a median value of Rs 3.98 lakh.

Turning to the composition of assets (Figure 3), agricultural land comprised more than 60 per cent of the total value of assets of all households. If other land and homestead land are also included (without houses and buildings), then the share of land in total asset value in Nayanagar was nearly 70 per cent.⁷ The value of houses, homestead land, and other non-agricultural land constituted more than 20 per cent of the total value of assets. Non-agricultural land was owned primarily by one big landlord household and a few other cultivator households.⁸ A few households owned small ponds/tanks, land for shops and commercial establishments. One household owned pasture land another owned barren land. Around 12 per cent of the households reported that women had entitlements or *pattas* to some land, although in most cases it was jointly registered in the name of the man and the woman. The extent of land jointly owned by women was small (less than one acre).

In Nayanagar, orchard land was an important asset, and trees, a productive asset in this village, were owned even by households without agricultural land. The typical types of trees owned by households included fruit trees such as litchi, mango, jackfruit, jamun, and sheesham, a non-fruit bearing tree. From secondary data for rural Bihar we observed that the share of livestock asset value was more or less comparable to the

⁶ There are few households with major income from rents; they own machinery which they rent out.

⁷ There are some observations for which the house and homestead value could not be separated and are thus not included in this share of total land.

⁸ Since non-agricultural land was held outside the village, it was not easy to get accurate information on such land.



Figure 3. Composition of household wealth, Nayanagar village, 2011–12, in per cent Source: PARI data.

share of means of production, even though the latter included assets which had much higher average value. However, in Nayanagar, livestock assets did not account for a significant share of the total value of assets of all households. The animal assets predominantly comprised milch cattle and draught animals. There was no poultry among the village households (with one exception).

Means of production owned by households in the village included agricultural machinery, tubewells or borewells, and pumpsets. High-value agricultural machinery such as tractor tillers, threshers, rotavators, and combine harvesters were owned by the big landlords and rich peasants, and a few by households dependent on rental income from machinery and moneylending.

Diversification of Assets

There is an argument in the literature that asset diversification is higher for households in lower wealth deciles. As land is the most important asset in rural areas, for wealthy households, the value of land accounts for the bulk of their wealth. Given the fact of widespread landlessness, it is not surprising that the share of land in total wealth increased from the lower to the higher wealth deciles.⁹ Assets are few among landless households, but may be more diversified – some trees, some durable goods, some implements, some housing, and so on. A technical measure of diversification is likely to be higher for such a landless household as compared to a wealthy household, but this is clearly a phenomenon of distress and not of genuine diversification. A decile-wise comparison of asset diversification in Katkuian and

⁹ According to AIDIS 2012–13, land accounted for 38 per cent of the assets of households in the bottom decile, rising steadily to 89 per cent for households in the top decile.

Nayanagar revealed that among the lower deciles, wealth comprised housing, household durables, and food inventories. One would hardly call this asset diversification. At the same time, the wealth of higher deciles was concentrated in agricultural and non-agricultural land.¹⁰

Vertical Inequality

The most striking feature of the data is the staggeringly high level of inequality in ownership of assets in both villages. The Gini coefficient (which ranges from 0 to 1) was 0.833 in Katkuian and 0.84 in Nayanagar, among the highest observed across more than 20 villages studied by PARI thus far (see Appendix Table 5).¹¹ These levels of inequality are only likely to be exacerbated if we include data on ownership of financial assets and gold.

The Gini coefficient for rural Bihar based on AIDIS 2012–13 was lower, at 0.603, and dropped to 0.553 in 2018–19 (GoI 2021).

In Katkuian village, the bottom six deciles together owned less than six per cent of the value of assets of all households combined, while the top decile owned 76 per cent of all assets (Table 1). Further, the top five per cent of households owned 64 per cent of all assets, and the top one per cent owned nearly 40 per cent of the total value of assets of all village residents.

Numbers sometimes mask qualitative details of asset poverty of households in the village. The poorest household had neither homestead land nor a house, and owned only a few durable goods and food inventory. The total value of assets owned by this household was around Rs 1,500 (Table 2). If we exclude their food inventory, the household owned assets worth Rs 900. This was a manual worker household from the Mallah caste, which belongs to the social group of Extremely Backward Classes (EBC). Taking the poorest household among households owning some land, the total value of its assets amounted to Rs 11,415. This household owned 0.01 acre or one cent of homestead land, and had constructed a house on it just three years prior to the survey. This was a Muslim EBC manual worker household.

In Nayanagar, the Gini coefficient, a summary measure of inequality, was estimated to be 0.84. Households in the top decile owned 73 per cent of total assets in the village, whereas the share of the second highest decile was only 14 per cent of total assets (Table 3). The ninth decile had merely 18 per cent of the asset value of the top decile. Further, the top one per cent of households owned 35 per cent of the value of total

¹⁰ Tables are available on request.

¹¹ The Gini for Nayanagar was the highest recorded so far. Inequality in terms of the Gini was also high in Tehang village of Jalandhar district of Punjab and Ananthavaram village of Guntur district of Andhra Pradesh. Both are villages with canal irrigation and a high proportion of landless households. In all but four of the 23 villages listed in Appendix Table 5, the Gini coefficient was high (0.6 or above).

Decile	Share of total value of assets	Average value of assets (in Rs)
D1	0.15	16,746
D2	0.36	40,471
D3	0.56	63,264
D4	0.90	1,01,948
D5	1.27	1,44,435
D6	1.92	2,17,661
D7	2.77	3,15,231
D8	5.13	5,83,377
D9	11.14	12,66,121
D10	75.80	86,11,729
Top 5%	64.18	1,50,11,611
Top 1%	38.88	5,15,28,410

Table 1. Average value of assets per household and share of total assets, by decile classes,Katkuian, 2011–12, in per cent and rupees

Source: PARI data.

assets of all households, with the average wealth of a household exceeding Rs 160 million (approximately USD 32 million at the 2012 exchange rate). The poorest 40 per cent of households accounted for around one per cent of the wealth of all village households.

The poorest household in the village was a manual worker household from the Nunia (EBC) caste. The only assets this household owned were a cot, two trunks, and a few utensils. They neither owned land (not even homestead land) nor had a house of their own. The total value of their assets was around Rs 2,300. The poorest household with some land in the village was a Paswan (Scheduled Caste) household with assets worth around Rs 2,900 (Table 4).

Households without land		Households with land		
Type of asset	Value (Rs)	Type of asset	Value (Rs)	
Wheat	160	Paddy	140	
Lentil	160	Rice	140	
Rice	320	Kerosene	35	
Trunks/boxes/suitcases	400	Homestead land + House	9000	
Utensils/kitchen instruments	500	Handpump	1000	
		Utensils/kitchen instruments	300	
		Cots/beds	800	
Total	1,540	Total	11,415	

 Table 2. Asset ownership of the poorest households by type of asset, Katkuian, 2011–12

Source: PARI data.

Decile	Share of total value of assets (%)	Average value of assets per household (Rs)
D1	0.10	10,447
D2	0.23	22,510
D3	0.33	26,382
D4	0.48	49,713
D5	0.8	75,850
D6	1.4	1,47,600
D7	3.2	4,36,572
D8	6.8	10,64,072
D9	13.8	28,67,299
D10	73.0	1,62,40,461
Top 5%	60.2	3,06,57,996
Top 1%	35.3	16,78,63,170

Table 3 Share of total asset value and average value of assets, by asset deciles, Nayanagar,2011–12 in per cent and rupees

Source: PARI data.

In summary, the average wealth of each household in the two villages was higher than the estimate for the State provided by AIDIS. At the same time, the level of inequality in the two villages was much higher than reported by AIDIS for rural Bihar in 2012–13. Of course, the State-level figure is an average for a much larger sample of villages and households. Nevertheless, our data are consistent with the argument that AIDIS is likely to have underestimated the wealth of the upper deciles (see Kumar 2016; Subramanian and Jayaraj 2006).¹²

Households without land		Households with land		
Type of asset	Value (Rs)	Type of asset	Value (Rs)	
		Wheat	220	
		Homestead land and house	2000	
Cots/beds	100	Cots/beds	150	
Trunk/boxes/suitcases	200	Trunk/boxes/suitcases	70	
Utensils/kitchen instruments	2000	Utensils/kitchen instruments	400	
		Watches	150	
Total	2,300	Total	2,990	

 Table 4 Asset ownership of poorest households, Nayanagar, 2011–12

Source: PARI data.

¹² In Katkuian, since all the households were surveyed, there is no possibility of exclusion of rich households, although it is likely that the rich underestimated their wealth. In Nayanagar, although we chose a sample, the PARI methodology ensures that the largest landowners are fully covered (in short, an over-sampling of the rich). Further, by spending a month in the village and talking to all sections of the population, the under-reporting of land was corrected to some extent.

Inequality by Socio-economic Class

Katkuian

The socio-economic classes in Katkuian as identified in Dhar, Pandey and Kumar (2022) were landlord/capitalist farmers, peasants (large, medium, and small), manual workers (with and without operational holdings), artisans, self-employed business, rent/moneylending, remittances/pension, and salaried employment. The socio-economic class of a household as defined here depends partly on the household's asset ownership (especially for cultivator households).¹³ Thus, it is not surprising that asset ownership varied systematically across these socio-economic groups and was correlated with hierarchy among the classes. The extent of disparity across socio-economic classes is what is alarming.¹⁴

Table 5 shows the share of each socio-economic class in the total population and in the total wealth of all households. An Access Index of a group is defined as the ratio of the share in total value of assets to share in total number of households. An Access Index above one implies that the assets owned by the group are higher than the share of the group in total population. The Access Index for the class of landlords and capitalist farmers (henceforth landlords) in Katkuian, which was 30, was 300 times that of landless manual worker households, and around 150 times that of poor peasants, land-owning manual workers, artisans, and self-employed business households.

Socio-economic class	Share of households	Share of assets	Access Index	Average value of assets (Rs)
Landlords/capitalist farmers	1.4	44	31.4	22,06,155
Peasant 1	1.1	10	9.1	12,54,555
Peasant 2	5	13	2.6	4,47,295
Peasant 3	13	7	0.5	1,04,370
Manual worker: with operational holding and diversified income sources	25	8	0.3	66,323
Manual worker: without operational holding	37	3	0.1	26,703
Artisan work and work at traditional caste calling	2	1	0.5	95,832
Business activity/Self-employed	9	6	0.7	1,38,631
Rents/Moneylending	2	3	1.5	2,83,460
Salaried person	2	5	2.5	4,92,760
Remittances/pensions	1.4	1	0.7	2,24,047

 Table 5. Share of households, share of total value of assets, Access Index, and average assets per household, by socio-economic class, Katkuian, 2011–12

Source: PARI data.

¹³ The PARI methodology for identification of classes is based on three factors: value of means of production, ratio of family labour to hired labour, and level of income. See Ramachandran (2011).

¹⁴ Asset value for the Peasant 1 class excludes one household that self-reported the value of their homestead land as Rs 10 million. This has been excluded since the land was occupied land.

Another way of understanding this is that the landlord class, which made up only 1.4 per cent of the village population, owned nearly 45 per cent of the total assets of all households in the village. On the other hand, the class of manual workers, which made up over 60 per cent of the village population, owned barely 11 per cent of the total value of assets of village households. There were also a number of other classes, such as households dependent on remittances and artisan households, which together constituted a small section of the village population but owned a disproportionately smaller share of total assets. The socio-economic classes with an Access Index greater than one, that is, a disproportionately high share of assets (relative to population), were landlords, rich peasants (Peasant 1 and Peasant 2), households dependent on remit or moneylending.

In absolute terms, the average manual worker household had assets valued at around Rs 26,000, while a landlord household had assets valued at Rs 22 lakh (an extremely high ratio of 1:83).

Landlords and capitalist farmers – a class that compromised the top one per cent of households – had accumulated immense wealth in absolute terms as well as relative terms. Landlords and the two upper peasant classes together accounted for 7.5 per cent of households and 63 per cent of total assets. Nearly 30 per cent of all productive assets including land were concentrated in the hands of landlords-turned-capitalist farmers. Despite comprising only seven per cent of the total village households, the landlords-turned-capitalist farmers and rich peasants (Peasant 1 and Peasant 2) owned 42 per cent of the other land and buildings in the village (Appendix Table 2). This primarily constituted houses and homestead land, but also included non-agricultural land. These were the only classes owning non-agricultural land that included neither a house nor homestead land. For the class of manual workers without operational holdings, the bulk of their asset value consisted of house and homestead land.

Nearly 80 per cent of the total value of assets owned by landlords-turned-capitalist farmers comprised productive assets, which included crop land, orchard land, trees, animal assets, and agricultural machinery (Appendix Table 1). This was true of all peasant classes as well, although the difference in the average value of productive assets per household across peasant classes was large. In Katkuian, the gap between landlord/capitalist farmers and rich peasants (Peasant 1) was much less than between rich and poor peasants. The average value of productive assets per household for landlords/capitalist farmers was 1.5 times that of rich peasants (Peasant 1), but the corresponding ratio was 20 as between rich peasants and poor peasants (Peasant 3) (see Table 7).

The wealthiest household in Katkuian, belonging to the Yadav caste (BC-2), reported land holdings of around 246 acres. The household owned agricultural land in at least three villages other than Katkuian, a well as non-agricultural land (including nine

Type of asset	Total value of assets (Rs)
Agricultural land	25,66,667
Animal assets	31,200
House, homestead land and other land	9,74,56,080
Means of production assets	5,13,574
Means of transport	6,25,800
Other assets	69,300
Trees	1,51,500
Total	10,14,14,121

 Table 6
 Asset ownership of the richest household, by type of asset, Katkuian, 2011–12

Source: PARI data.

shops in markets). The previous head of the household (a father, now deceased, of five sons) had initially acquired land from absentee landlords, and slowly accumulated his holdings by purchasing additional agricultural and non-agricultural land. The current head of the household runs a wrestling club (*akhara*) in the village.¹⁵

Not only was the ownership of total assets highly unequal across socio-economic class, but the ownership of productive income-bearing assets was as unequal. To illustrate, the single landlord household in Katkuian accounted for 28 per cent of productive assets of all households. Manual workers without operational holdings, by contrast,

Socio-economic class	Share of households	Share of assets	Access Index	Average value of assets (Rs)
Big landlords	0.6	42	71.5	1,51,83,259
Cultivator 1	1.2	12	10.3	19,25,975
Cultivator 2	2	14	6.2	15,71,893
Cultivator 3	2	6	3.3	9,36,619
Cultivator 4	9	7	0.8	2,73,047
Manual workers with operational holding	12	2	0.1	1,09,166
Manual workers without operational holding	49	2	0.04	70,816
Artisan work and work at traditional caste calling	4	1	0.2	2,22,290
Business activity/Self-employed	6	2	0.3	2,59,629
Rents/Moneylending	1	2	2.0	6,39,094
Salaried person/s	3	3	1.0	4,06,253
Remittances/pensions	9.7	8	0.8	5,00,708

Table 7 Share of households, share of total value of assets, Access Index, average assets perhousehold, by socio-economic class, Nayanagar, 2011–12

Source: PARI data.

¹⁵ We thank Arindam Das for his observations on this household.

accounted for one per cent of productive assets and four per cent of all assets (Appendix Table 2). While almost 80 per cent of the wealth of the landlords and rich peasants was in the form of productive assets, for manual workers without land, only a quarter of their assets comprised productive assets (Appendix Table 1).

Many rural households are indebted. In that situation, net worth, defined as total value of assets of a household net of outstanding debt, may be a better indicator of long-term economic status than gross wealth or assets. While the ratio of average wealth of a landless manual worker to a landlord household was 1:83, the ratio of their net worth was 1:497 (that is, the net worth of landlords was nearly 500 times that of manual workers). It is possible that this difference in ratios between assets and net worth is exaggerated on account of landlord households under-reporting their indebtedness.

Nayanagar

Big landlords, who comprised less than one per cent of households in the village, owned 42 per cent of the total value of the assets in the village.¹⁶ On the other hand, the class of manual workers taken together (both with and without land) made up more than 60 per cent of the households, and together owned around 0.1 per cent of the total value of assets of all households. The Access Index for the class of big landlords was as high as 71.5, while that of manual workers without operational holdings was 0.04 (Table 7). As we move down the hierarchy of cultivators, the Access Index falls.

More than 80 per cent of the total value of assets owned by big landlords were made up of productive assets such as crop land, orchard land, trees, and machinery, while around 18 per cent comprised homestead land, non-agricultural land, and buildings (Appendix Table 3). For manual worker households, due to landlessness, the value of homestead land and houses dominated their asset profile.

The different classes of cultivators were fairly differentiated, with the average value of assets of the largest cultivators being seven times that of the smallest cultivator class. More than 90 per cent of the total value of assets of the cultivators comprised land and buildings (Appendix Table 3). Further,73 per cent of all productive assets including land were in the hands of big landlords and the two better-off cultivator classes (Cultivator 1 and Cultivator 2) (Appendix Table 4).

There were also some other socio-economic classes, such as those dependent on rent or moneylending, remittances/pensions, and artisanal work, who together constituted a very small share of the households in the village but had a much higher Access Index compared to the class of manual workers.

¹⁶ For a discussion of the socio-economic classes, see Dhar, Pandey and Kumar (2022).

In absolute terms, a manual worker without any operational agricultural land had assets worth around Rs 70,000, whereas a big landlord family had assets of Rs 1.5 crore (a ratio of 1:214). A manual worker had low wealth in absolute terms and almost no productive wealth. All manual workers together accounted for one per cent of productive assets of households. Of all assets of manual workers, more than 90 per cent came from homestead land and buildings. In short, manual workers barely owned any productive asset.

Let us expand on the assets owned by the richest household in the village (Table 8). This big landlord household belonged to the Bhumihar caste. The bulk of its assets were in the form of land – agricultural, homestead, and non-agricultural (377 acres). This household also owned a fair extent of modern agricultural machinery such as a combine harvester, rotavator, disc ploughs, and furrow maker, but did not own any modern durable assets such as a refrigerator or washing machine. It had a laptop computer and mobile phones. This single household accounted for 44 per cent of the productive assets of all households in the village. The source of wealth of this household was without doubt the agricultural land that it owned.¹⁷

If we consider net worth rather than assets, the net worth of a big landlord in the village was nearly 600 times that of a landless manual worker, and around 200 times that of a manual worker with land. There were 11 landless manual worker households in Nayanagar with negative net worth.

Discussion

The village surveys conducted by scholars associated with the Institute of Human Development (IHD) in 2009–12 provide a basis for comparison. This is an important longitudinal study of rural Bihar, with surveys of households in 36 villages across seven districts, conducted over three rounds in 1981–83, 1998–2000, and, most

Asset category	Asset value (Rs)
Agricultural land	15,22,56,787
Animal asset	1,95,000
House, homestead land and other land	6,48,96,912
Means of production	42,02,200
Means of transport	18,00,000
Other assets	1,14,000
Trees	34,50,000
Total	22,69,14,899

 Table 8
 Asset ownership of the richest household, by type of asset, Nayanagar, 2011–12

Source: PARI data.

¹⁷ As Ramachandran (2011) has emphasised, a big landlord is one who owns the best and most land in a village.

recently, 2009–11 (Rodgers *et al.* 2013). The study uses a similar socio-economic classification of households, identifying four broad groups: agricultural labour, cultivator, landlord, and non-agricultural household (and further subgroups).

In 2009–10, the value of land and other productive assets in rural Bihar was estimated to be Rs 2.2 lakh per household (Rodgers *et al.* 2013). The value of housing was Rs 1,00,000 per household, and remaining assets were valued at Rs 10,000. The average per household wealth thus amounted to Rs 3.3 lakh (at 2009–10 prices). The PARI surveys were conducted two years later, and the average wealth of a household at that time was Rs 11 lakh in Katkuian and Rs 41 lakh in Nayanagar. The reason for this difference may be the more comprehensive definition of assets in the PARI surveys.¹⁸

Turning to inequality, in 2009–10, the value of land of a landlord household (a household living on rent or engaged only in supervision of farming) was 33 times that of an agricultural labour household (a household engaged in wage labour) (Rodgers *et al.* 2013). Taking land, livestock, and other productive assets, the ratio was 29:1 (mainly because agricultural labour households owned relatively more livestock than landlord households).¹⁹

In Katkuian, taking all wage labour households (with and without operational holdings), the ratio of average assets of a wage labour household to that of a landlord household was 1:52. The corresponding ratio in Nayanagar was 1:194. The inter-class inequality in the PARI village surveys was significantly higher than in the IHD surveys, probably on account of the approach that ensures inclusion of the rich in the PARI surveys. In Katkuian, the PARI survey was a census of all households, and in Nayanagar, the survey included all landlord households.

INEQUALITY AND CASTE

We grouped data using the official classification of castes: Scheduled Castes, Scheduled Tribes, Extremely Backward Classes (EBC), Backward Classes (BC), and Others.

There was, as expected, a close correlation between caste and socio-economic class in both the study villages. There was no landlord or capitalist farmer who was from the Scheduled Castes or EBCs. The landlord and rich peasants were Bhumihars ('Other' caste group) in Nayanagar, and Yadavs (BC) in Katkuian. The class of manual workers was the most heterogeneous in respect of caste, though it was numerically dominated by Scheduled Castes and EBCs.

¹⁸ In Rodgers *et al.* (2013), assets are discussed in two sections: one on land and productive assets in the chapter entitled "The Social and Agrarian Framework", and another on housing and domestic assets in the chapter entitled "Living Conditions". A single definition of assets is not provided, so it is not clear if data on non-agricultural land, homestead land, orchards, trees, etc., were collected in the survey.

¹⁹ Data on housing, means of transport, and domestic assets are not disaggregated by class, though they indicate that housing is an important asset and that there have been distinct improvements in housing over the last 30 years.

In both the villages we observed high inequality in wealth ownership across caste groups. In Katkuian, Scheduled Castes comprised 12 per cent of village households but owned less than one per cent of the total value of assets. Further, they owned merely 0.3 per cent of the total value of productive assets of all households. Homestead land and house structures constituted the biggest component of wealth among Scheduled Caste households.

EBCs constituted around 47 per cent of the village population but owned only 18 per cent of the total value of assets of village households (Table 9). Backward Classes (BCs), who comprised 35 per cent of the households, owned over 80 per cent of the total value of assets of all households. It is thus clear that EBCs were far worse-off in terms of wealth ownership compared to BCs. The only caste group with an Access Index greater than one was that of Backward Classes.

Nayanagar

In Nayanagar, while Scheduled Castes were the worst-off in terms of the Access Index (with a value of 0.04), EBC and BC households were also disproportionately asset-poor. Scheduled Caste households comprised around 35 per cent of the village households but owned less than two per cent of the total value of assets of village households (Table 10). EBC households comprised more than 30 per cent of the village households but owned merely three per cent of the total value of assets. Backward Class households comprised 10 per cent of all households and accounted for less than one per cent of all wealth. Wealth was concentrated in the hands of "other castes" (Bhumihars and a few Brahmins), who made up a quarter of households in the village but owned 94.5 per cent of all assets.

To sum up, the position of the Scheduled Castes in terms of absolute levels of asset accumulation was abysmal in both villages. In Nayanagar, BC and EBC households

Caste group	Share of households	Share of total value of assets	Access Index
Scheduled Caste (SC)	12	0.9	0.1
Scheduled Tribe (ST)	3	0.5	0.2
EBC	47	16.1	0.3
BC	35	80.2	2.3
Other	4	2.4	0.6

Table 9 Share of households, share of total value of assets, and Access Index, by caste group,Katkuian, 2011–12

Note: Among EBCs, 55 households were Muslim, and the rest belonged to Badhai, Hajjam, Mallah, Teli, and Nunia castes. BCs primarily comprised Yadavs, Kurmis, and Koiris, who together constituted 92 per cent of all BC households.

"Other" castes included Brahmins and Sheikh Muslims. Source: PARI data.

Caste group	Share of households	Share of total value of assets	Access Index	Average value of assets (Rs)
Scheduled Caste (SC)	34	1.6	0.0	61,383
EBC	31	3.2	0.1	1,51,125
BC	10	0.7	0.1	99,237
Other	25	94.5	3.8	15,84,517

Table 10. Share of households, share of total value of assets, Access Index, and average value ofassets by caste group, Nayanagar, 2011–12

Note: EBC included Mullahs, Mahatos, and Nunias (there were no Muslims in this village). BC included Baniyas, Sonars, and a few Kurmis.

"Other" castes were comprised primarily of Bhumihars (94 per cent) and some Brahmins. *Source*: PARI data.

also had low levels of asset ownership, whereas in Katkuian, a section of the BCs were at the top of the socio-economic hierarchy of the village and among the richest. To put it differently, in both villages, asset poverty among Scheduled Castes was the norm, whereas the wealth of BC (and in some cases, EBC) households was remarkably different in the two villages.

Concluding Remarks

This note draws on PARI data from two villages of north Bihar, Katkuian and Nayanagar, surveyed in 2012. First, the study reveals extremely high levels of inequality in wealth, with an extraordinarily high concentration of wealth among the top few households. The lowest six deciles accounted for a minuscule share of total wealth. There was no evidence of a middle class in the two villages. The Gini coefficient for wealth was 0.83 in Katkuian village and 0.84 in Nayanagar village, among the highest of the 23 villages surveyed by PARI.

The All India Debt and Investment Survey, the main secondary source of data on assets, tends to underestimate inequality as it does not adequately capture wealth owned by the upper deciles. The Gini coefficient for rural Bihar was 0.60 in AIDIS 2012–13 and had fallen to 0.55 in AIDIS 2018–19.

Secondly, as regards the composition of wealth, it is clear that in both villages land was the most important component of wealth. Interestingly, it was not just agricultural land, but homestead land, orchard land, and non-agricultural land that contributed to the wealth of the rich households.

Thirdly, an original contribution of this paper is the important findings on inequality *across socio-economic classes* in the two villages. Inequality in wealth across socio-economic classes was extremely high. The top one per cent of households were landlords and capitalist farmers who controlled the largest share of wealth. In both

villages we found that this class had very high Access Indices, reflecting disproportionate control over total wealth. On the other hand, manual workers, both with and without operational holdings, who formed 62 per cent of the village households, held merely 11 per cent of the value of assets of all households in Katkuian. In Nayanagar, manual workers comprised 61 per cent of village households, but owned merely four per cent of the total value of assets. There was a vast gap between the wealth of a manual worker and a landlord, resulting in the crushing inequality that in Bihar is evident to any observer, but which for the first time has been measured with this level of precision within a village.

Fourthly, the disparity between landlords and manual workers widens when we use net worth instead of gross wealth (although the difference in ratios may be exaggerated by under-reporting of debt by landlords). This is primarily on account of the fact that those with low levels of wealth were also highly indebted.

Fifthly, the households at the top of the socio-economic ladder also controlled land and other productive assets. Nearly 80 per cent of the total assets of landlords and capitalist farmers comprised land. We have therefore argued that diversification of assets is not a useful attribute in this context, as the rich have the least diversified asset portfolio. The poor, especially the landless, have the most diversified asset portfolio.

In another paper, we have examined wealth mobility using a small panel from the two villages for the period 2012–18, and found that upward economic mobility among households in the lowest two wealth quintiles was predominantly due to a change in housing assets. Putting it differently, investment in housing has emerged as an area of wealth accumulation among the poor in rural India.²⁰

Lastly, there was a strong correlation between caste and class. There was no landlord or capitalist farmer who belonged to a Scheduled Caste or EBC. Scheduled Castes remained the worst off (as a group) in terms of asset ownership, though members of the EBC in both villages came close behind. There was heterogeneity among Backward Class (BC) households, with BCs in Katkuian being among the wealthiest households.

Those who had access to large parcels of land formed the dominant social and economic group in the village. Further, it was the village landlords/capitalist farmers and a few rich peasants, who belonged to the dominant castes and had historical privilege in terms of land ownership, who had accumulated the most wealth in the village. Thus, the cycle of wealth inequality was being perpetuated in the villages,

 $^{^{20}}$ Jha (2004) noted the same among the agricultural wage worker households in the 1990s in Purnea district of Bihar.

even though each village had a peculiar trajectory (and a different caste and class composition).²¹ Our finding is in line with the IHD study, which argues that "ownership of productive assets is closely related to landowning . . . though there are some specific effects of caste" (Rodgers *et al.* 2013, p. 54).

In Nayanagar, there was dominance of one particular caste, the Bhumihars, who had access to and control over land historically. However, in Katkuian there was a large presence of Yadavs and Koiris who were not traditional landlords but had come to occupy positions of landlords in the village as a result of ongoing political struggles in the State, and taking advantage of absentee landlordism in the village. What was common to both villages, as indeed to most of rural India, was that land was the basis for further wealth accumulation.

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²¹ Studies of Bihar have noted that dominant castes in certain regions comprised "traditional dominant castes," while in other regions it was the upper stratum of OBCs (mainly Yadavs, Kurmis, and Koiris), depending on historic conditions, implementation of land reforms, etc. (Chakravarti 2001; Jha 2004; Sharma 2005).

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Appendix

Socio-economic class	Agricultural land, orchard land, and trees	Other productive assets: livestock, machinery, and transport	Houses, homestead land, and other land	Other assets	All
Landlords/capitalist	78	6	15	1	100
farmers					
Peasant 1	70	2	26	1	100
Peasant 2	76	5	17	2	100
Peasant 3	65	9	23	3	100
Manual workers: with operational holdings and diversified income sources	53	6	37	4	100
Manual workers: without operational holdings	19	8	67	6	100
Others	71	5	22	3	100

Appendix Table 1 Composition of assets by socio-economic class in Katkuian, 2011–12, in per cent

Note: Other assets include consumer durables, inventories, and other household assets. *Source:* PARI data.

Socio-economic class	Share of households	Agricultural land, orchard land, and trees	Other productive assets: livestock, machinery, and transport	Houses, homestead land, and other land	Other assets
Landlords/capitalist	1.4	28	28	7	10
farmers					
Peasant 1	1.1	16	7	7	9
Peasant 2	5	18	16	5	16
Peasant 3	13	8	14	4	12
Manual workers: with operational holdings and diversified income sources	25	8	11	7	18
Manual workers: without operational holdings	37	1	6	5	10
Others	17	21	18	8	25
All	100	100	100	100	100

Appendix Table 2 *Distribution of assets across socio-economic classes by type of asset, Katkuian, 2011–12,* in per cent

Source: PARI data.

Appendix Table 3. *Composition of assets by socio-economic class in Nayanagar, 2011–12*, in per cent

Socio-economic class	Agricultural land, orchard land, and trees	Other productive assets: livestock, machinery, and transport	Houses, homestead land, and other land	Other assets	Total
Big landlords	80	1	18	1	100
Cultivator 1	87	2	9	1	100
Cultivator 2	81	1	16	2	100
Cultivator 3	73	5	21	1	100
Cultivator 4	66	6	25	4	100
Manual workers: with operational holding	42	4	48	6	100
Manual workers: without operational holding	1	4	90	5	100
Others	65	3	29	3	100

Source: PARI data.

Socio-economic	Share	Agricultural	Other	Houses,	All other
class	of	land, orchard	l productive	homestead	l assets
	households	land, and	assets: livestock	, land, and	(consumer
		trees	machinery, and	l other land	durables,
			transport		inventories,
					other)
Big landlords	0.6	44	23	35	14
Cultivator 1	1.2	14	12	5	9
Cultivator 2	2	15	8	10	13
Cultivator 3	2	6	13	6	5
Cultivator 4	9	6	19	8	16
Manual workers: with operational holding	12	1	3	4	6
Manual workers: without operational holding	49	0	4	9	7
Others	23	13	18	21	30
All	100	100	100	100	100

Appendix Table 4. Distribution of assets across socio-economic classes by type of asset, Nayanagar, 2011–12, in per cent

Source: PARI data.

State	Year of survey	Gini coefficient
Andhra Pradesh	2005	0.83
Andhra Pradesh	2005	0.65
Telangana	2005	0.69
Uttar Pradesh	2006	0.75
Uttar Pradesh	2006	0.73
Maharashtra	2007	0.68
Maharashtra	2007	0.68
Madhya Pradesh	2008	0.77
Karnataka	2009	0.64
Karnataka	2009	0.57
Karnataka	2009	0.76
West Bengal	2010	0.6
West Bengal	2010	0.55
West Bengal	2010	0.81
Rajasthan	2007	0.81
Rajasthan	2010	0.52
Punjab	2011	0.83
	State Andhra Pradesh Andhra Pradesh Telangana Uttar Pradesh Uttar Pradesh Maharashtra Maharashtra Madhya Pradesh Karnataka Karnataka Karnataka West Bengal West Bengal West Bengal West Bengal Rajasthan Rajasthan Punjab	StateYear of surveyAndhra Pradesh2005Andhra Pradesh2005Telangana2005Uttar Pradesh2006Uttar Pradesh2006Uttar Pradesh2006Maharashtra2007Madhya Pradesh2007Karnataka2009Karnataka2009West Bengal2010West Bengal2010Rajasthan2007Rajasthan2007Punjab2011

Appendix Table 5 Gini coefficients of household wealth, PARI villages

(continued on next page)

Village	State	Year of survey	Gini coefficient
Hakamwala	Punjab	2011	0.76
Khakchang	Tripura	2016	0.64
Mainama	Tripura	2016	0.63
Muhuripur	Tripura	2016	0.55
Palakurichi	Tamil Nadu	2019	0.64
Venmani	Tamil Nadu	2019	0.7

Appendix Table 5 (continued) Gini coefficients of household wealth, PARI villages

Notes and sources: The data are compiled by Subhajit Patra from the relevant *Socio-Economic Survey* books, Foundation for Agrarian Studies (FAS) workshop presentations (for Tamil Nadu), and his own calculations. Only two of the 25 PARI villages are excluded from this table: both are tribal villages where it was difficult to assess the monetary value of assets (Badhar in Madhya Pradesh and Dungariya in Rajasthan).

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