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# The Indian Small and Marginal Farmer : A Tale of Two Villages in Hazaribag

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Abstract

*This micro study on poverty alleviation in India is based on a ground level survey of two villages in Hazaribag district of Jharkhand state. After a presentation of the main features surrounding poverty in rural India and the massive resources spent by the government which target the "bottom of the pyramid", perceptions, especially of the poorest marginal farmer, of the multifarious schemes and programmes are analysed. After hearing directly from the sample set of farmers on how they cope with poverty, one concludes that these alleviation programmes are not delivering in this state what they promised.*

Acknowledgements

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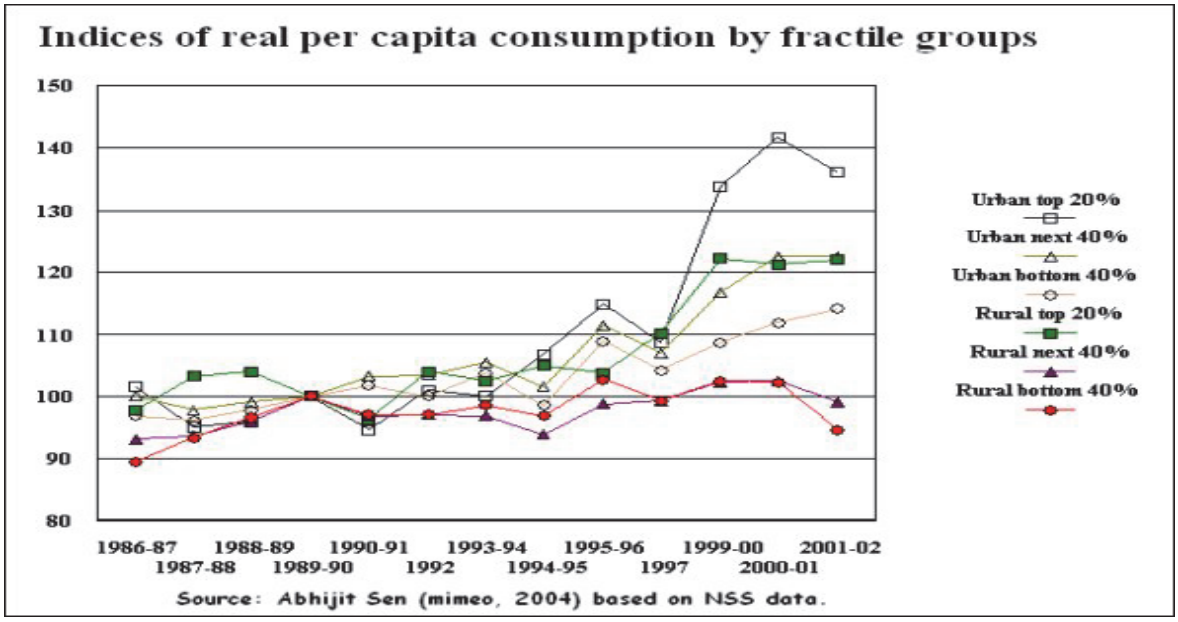
This is a modest pilot study commissioned by the Groupe d'Economie Mondiale of Sciences-Po, Paris[3], and is based on a ground level survey of two villages in Hazaribag district of Jharkhand state. It attempts to glean some insights into the lot of the "bottom of the pyramid"; see how various schemes, systems and subsidies to uplift them are actually functioning; and hear directly from the sample set of farmers what they feel about them. Before we layout the specific objectives (research issues), limitations and research methodology of this micro-level study and start analysing the data and feedback, it may be useful, specially for the reader not fully acquainted with India, to present a general picture at the macro-level of its dark side co-existing with its growth story – poverty and inequality, and policies to alleviate them.

## 1. India "Shining", Indians "Deprived"

*Anything you can say about India, the opposite is also true (Joan Robinson)*

India's growth story, its sustained tempo of growth even during the recent financial crisis of 2008 and the current projected 8.5% growth rate are too well known to merit much discussion. Even as we are writing this paper we see the cover of the Economist magazine carrying the blurry picture of a sprinting tiger with the caption, "How India's growth will outpace China's"[4]). The media makes much of India's burgeoning corporate sector with its super rich – "the combined net worth of India's 100 richest people rose to $300 billion this year from $276 billion last year, driven by the country's booming economy and a rally in the stock market[5]. This makes them, a mere 100, capture an astounding 25% of India's trillion dollar GDP.

Contrast this with the stark reality of a "backward class" villager in the depths of rural India, earning an average of less than US$1 per day and drinking water from the same pond where buffaloes wallow. This side of India, the India of the poor and deprived running into millions (estimates discussed further below) sought to be uplifted by massive injections of money in the form of subsidies, income support, employment and other schemes of social inclusion delivered by the central and state governments is troubling its collective conscience – of primary concern is the ever widening belief that the delivery system to uplift them with all these schemes and programmes is failing, and is corrupt. To underpin statistically the extent how the gap between the rich and poor has widened we borrow from an eminent researcher, Abhijit Sen, his graph showing real per capita income by fractile groups from 1986 to 2002:



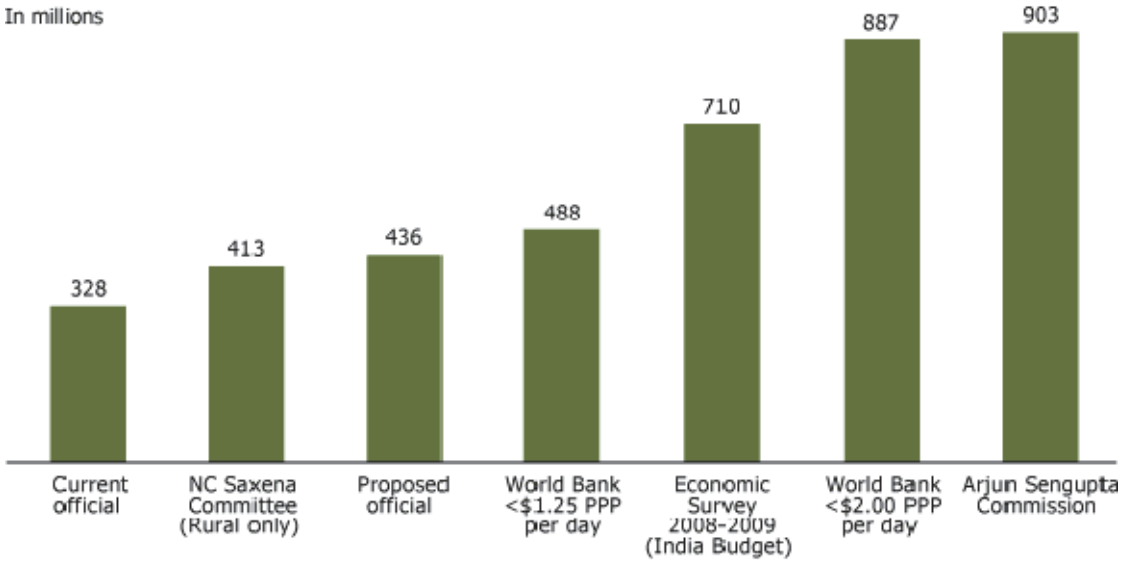

It will be seen that the lot of the rural bottom 40% has hardly improved over these years, whereas the urban upper 20% has prospered by 50%. And the rural upper too by 33%. It can also be seen that after 1995 the lot of the urban upper 20% sharply improved, whereas that of the rural bottom 40% actually declined (the urban bottoms were not so badly off).

## 2. Below the Poverty Line (BPL): Who and How Many?

It would be useful first to understand who exactly is being targeted, how the poverty line is defined and how many are below it, i.e. below poverty line (BPL). We found, as we scanned the literature on this, much discussion with different contesting views and definitions!

Wikipedia summarises the situation: "The World Bank estimates that 456 million Indians (41.6% of the total Indian population) now live under the global poverty line of $1.25 per day (PPP). This means that a third of the global poor now reside in India. ……. However, according to the latest NCAER estimates, in 2009, only 15.6% of the households or 200 million people, had income levels less than Rs 45,000 annually ($ 1.4 PPP per day) http://en.wikipedia.org/wiki/Poverty_in_India_-_cite_note-8? On the other hand, the Planning Commission of India uses its own criteria and has estimated that 27.5% of the population was living below the poverty line in 2004–2005, down from 51.3% in 1977–1978, and 36% in 1993-1994. The source for this was the 61st round of the National Sample Survey (NSS) and the criterion used was monthly per capita consumption expenditure below Rs. 356.35 for rural areas and Rs. 538.60 for urban areas. 75% of the poor are in rural areas, most of them are daily wagers, self-employed householders and landless labourers."[6]

We also came across a useful compilation of different estimates in a convenient chart form:




**Source:** PRB, based on different recent estimates of the percentage below poverty, as cited by *Carl Haub and O.P. Sharma, in* http://www.prb.org/articles/2010/indiapoverty.aspx**W**

Many of these estimates base their norms after a discussion of the intake of required calories per day. The prices of a basic basket of goods were considered and calories required were calculated differentiating between rural and urban areas. It was fixed at 2400 calories per head per day in rural areas, and 2100 calories in urban areas. The N.C. Saxena Committee, for example, finds that 50 per cent of Indians are below the poverty line if one takes into account the criterion of calorie intake.

The above is just a small sample of the ongoing discussion on BPL definition. Arriving at an agreed definition is of course important for it provides a basis for identifying who qualifies for BPL status , budgeting expenditures for various poverty alleviation schemes, organising distribution of subsidised grains and other commodities in the public distribution system, etc. It would seem that the proposed official figure of 436 million (of which about 77% in rural areas) is a compromise between the extremes of the different estimates.

3. **Poverty Alleviation, Social Inclusion and Employment Generation Projects and Schemes**,

There are a multitude of such schemes especially in the rural sector for the below poverty line (BPL) families. In fact, when we look at the number of schemes targeting the poor, especially the BPL category, and the amount of funds spent on subsidies, income support and on employment generation (see annexure 1 to get an idea of the leap in social services expenditures since 2004, now about 24% of total government spending) , even the severest critics of the "failed and corrupt" delivery system will acknowledge the clear and honest intention of the Indian government, with serious money to back its seriousness, to achieve ambitious targets aimed at the social inclusion, and participation in India's much vaunted growth, of the poorest sections of Indian society.

Without going into too much detail, the schemes and programmes in the rural sector fall into the following broad categories:

1. Subsidies for agricultural inputs such as fertiliser and seeds and agricultural implements

For nitrogenous and phosphate/potassium fertilisers the subsidised proportion is about 2/3 of the price; For potato and some variety of lentil seeds, subsidy during current drought period goes up to 75% of the price; Agricultural implements such as power tillers and paddy threshers have a 50% subsidy element.

Generally, the farmer pays the price minus the subsidy at the retail sales center, which claims the subsidy amount separately from regional distributors or manufacturers like the public sector Fertiliser Corporation of India.

2. Schemes for Infrastructure and Rural Development

Principally it is the Bharat Nirman (build India) scheme that aims at building infrastructure and basic amenities in rural areas, and have "six components, namely rural housing, irrigation potential, drinking water, rural roads, electrification and rural telephony"[7] There are also several schemes that can be classified under this rubric of rural uplift including social security and insurance, midday meals, skill development and education. Every child of the age 6-14 years has a right to free and compulsory education in a neighbourhood school till completion of elementary education –a promise widely criticized as not kept, given the realities of teacher less primary schools, absent teachers, temporary teachers, teachers not being paid salary regularly etc.

3. Direct Income Support and Cheap Credit Schemes

These include pension scheme for widows; old age pension scheme; and for house construction. Included in the schemes are facilities for cheap credit, e.g. the Kisan (farmer) credit card entitling the card holder to a loan of Rs. 50000 at 4% interest, reportedly not working well.

4. Minimum Price Support Scheme

To protect the farmer from downward price fluctuations, the Food Corporation of India extends through its vast national network of storage and distribution points and purchase centers the minimum price support scheme for purchase of some cereals like paddy, wheat, barley, gram, maize, bajra, varieties of oilseeds, cotton and sugarcane at a fixed price that is declared and operative each year. In Jharkhand state, where our survey was undertaken, paddy is the only cereal where the minimum price of Rs. 9.30 per quintal is currently offered. As we shall see, the farmers in our survey sample had much to say about the (non- and mal-) functioning of their local purchase center

5. Public Distribution System (PDS)

Supply of foodgrains including certain cereals, sugar and other essential commodities like kerosene oil are made available at subsidised prices to holders of ration cards

through the PDS. The PDS also helps to modulate open - market prices for commodities that are distributed through the system. Regulating supply and distribution of, and trade and commerce in, essential commodities with a view to maintain or increase supplies thereof and secure their equitable distribution and availability at fair prices is enforced by the Essential Commodities Act, 1955, and various Control Orders made thereunder. The BPL families are entitled to get 25kg of wheat and 10kg rice per month per family[8].

6. Employment Generation and Guarantee

The most ambitious initiative that has been taken by the Congress party dominant UPA Government is the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), popularly known as MNREGA or NREGA scheme, as originally called when enacted by legislation on August 25, 2005. It provides a "legal guarantee for one hundred days of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work at the statutory minimum wage of Rs.100 per day". In the event of such employment not being forthcoming, Section 7.3 of the Act has provisions for an unemployment allowance according to prescribed rates and procedures. It is described as "growth engine for sustainable development of an agricultural economy. Through the process of providing employment on works that address causes of chronic poverty such as drought, deforestation and soil erosion, the Act seeks to strengthen the natural resource base of rural livelihood and create durable assets in rural areas." A 60:40 wage and material ratio has to be maintained. No contractors and machinery are allowed. There are very elaborate provisions for the issuance of job cards to applications within time bound limits and the system is sought to be transparent and subject to stringent audit. The typical works that are undertaken are construction of paved or unpaved roads, small bridges over streams and drains, digging of wells, construction of public buildings like primary school or local *Panchayat Ghar* (village community space). Members of Parliament and Stare Legislatures have been given annual limits (Rs 20 million for MPs) within which they can recommend projects to the administrative authorities or local bodies for execution[9].

The Central government outlay for scheme is Rs. 400, 1 trillion in FY 2010-11. During the year 2008-09, more than 45.1 million households were provided employment under the scheme[10]

The Act has attracted some criticism over its actual working on the ground, the centrepiece of it being that once the multiple layers of the administrative and local government (panchayat) machinery - from the state to the district, and then to the village level - have done with their procedures of scrutiny, approvals and control, and duly seized the opportunity to siphon off some funds at each layer of transaction, only a fraction (estimates differ) of the benefits reach the BPL householder, if at all he has managed to obtain a job card. Dr. Jean Drèze, a Belgian born economist at the Delhi School of Economics, reportedly one of the main architects of this scheme is often quoted in the media both in support, and in acknowledging criticism, of this scheme[11].

As we shall see, the ground realities of the benefits realised is a key insight of the survey that we made in the two villages in Jharkhand.

4. **Unique Identification Authority of India (UIDAI)**[12]

The government has introduced an ambitious scheme envisaging a Multipurpose National Identity Card or Unique Identification card (UID Card). There is as yet no document or identity card in the country officially prescribed for purposes of identifying its citizens, especially the poor and illiterate in rural areas.. Existing identity databases e.g. ration card issued under the public distribution system, neither cover the entire population nor are necessarily genuine, as fraudulent and duplicate or "ghost" cards (to misappropriate extra quantities of subsidised grain, pulses, sugar, kerosene oil etc. from the fair price shops) are abundant, as is commonly believed. With biometric identification technology that will provide a 12-digit unique number to each citizen, it will be a definitive and authentic identification document. This should also address the problem of rigged state elections and misappropriation of subsidies and benefits of poverty alleviation programs such as the MNNREGA described above through fraudulent attestations of BPL (below poverty line) status and issue of bogus job cards. The scheme aims to cover 600 million by 2014 and was inaugurated with due fanfare on September 29 by Prime Minister Manmohan Singh. The iconic co-founder of Infosys Technologies Ltd, Nandan Nilekani, the author of this scheme, and the Chairman of UIDAI.

## 5. The BPL farmer and the WTO

We need not spend much time discussing whether the subsidies, minimum price support, tariff protection, and direct income support that the BPL farmer (who by the way has absolutely no idea what WTO means!) "enjoys" could pose any problem to India under the present provisions of the Agreement of Agriculture of the World Trade Organisation. The short answer is in the negative. There have been various studies and calculations made to estimate the aggregate measure of support (AMS). One such study by IFPRI found the product-specific aggregate measure of support (AMS) negative because external reference prices were larger than minimum support prices. Non product-specific AMS, by way of fertilizer, electricity, irrigation, credit, and seed subsidies, accounted for about 7 percent of the value of agricultural production in 1995[13]. In current times, even with the bloated spending on poverty alleviation schemes as described above, it is unlikely that total non-specific AMS and product specific AMS (for cereals specially) would exceed the 10% of farm production limit proposed in the Doha Round. As a final remark, one can safely assume that even if in future years the AMS surpasses the limit set in *deminimis* exemptions, even the most mean-minded delegate from the industrialised world negotiating in the WTO would balk at raising the issue, considering the dire lot of the public targeted viz. the small and marginal Indian farmer.

## 6. Objectives of the Study

The objectives that we set are as follows:

a. Check how the small (1/2 to 5 acres landholding) and marginal (1/2 acre or less) farmers earn their livelihood, in particular whether the income from farm production is sufficient or whether it is supplemented by other means (using the farmer's hands, his manual labour resource)

b. Check how the schemes and facilities , e.g. the MGNREGA Act, the Purchase Centers for purchasing the produce at minimum support prices, the public distribution system of subsidised grain and kerosene oil, etc. are actually operating at the ground

c. Test the hypothesis that the marginal farmer is more a landless labourer than a farmer. If so, what are the options available to him to offer his labour within and outside agriculture, e.g. rural tourism, casual employment in retail outlets, processing and storage of agricultural or non-agricultural products, etc.

## 7. Limitations of the Study

This study was sponsored by the Groupe d'Economie Mondiale (GEM), Sciences-Po, Paris with a very small budget. The limitations are thus quite severe, the study being based on a very small and arguably unrepresentative, statistically speaking, sample drawn from two villages in Hazaribagh district of Jharkhand state in India (a particularly under developed region of the country). Feedback from respondents was verbal, collectively received in an informal gathering in the houses of one of the respondents in each village and is based on their own unverified estimates, but we are inclined to believe these estimates as accurate because they were consensually arrived at, often after lively debate and discussion by the farmers present in the assembly. Moreover, this feedback including too the insights of the local MP Mr. Yashwant Sinha, who hosted and organised our field visits, is in almost complete congruence with the general belief in the public about the lot of the marginal farmer and should thus hopefully lend the study credibility.

## 8. Research Methodology

The main survey tool was the questionnaire that we devised for each category of farmers in the two villages (see annexure 2 with detailed figures and remarks filled in). The feedback was elicited collectively from a sample of about 25 farmers divided in three categories selected randomly as described in the following section. As will be seen on a scrutiny of the questionnaire, the questions were designed to elicit the following information:

- The main crops sown (cereals, vegetables, other), and estimates of annual income from the sales of the farm produce
- Income from other sources (in particular, from selling labour to other big farmers and in employment guarantee schemes)
- Total annual income (estimates averaged over the recent past years)
- Expenses on farm inputs (seeds, fertiliser, electricity) and other miscellaneous income
- Estimation of residual income after current expenses

Clarificatory remarks, along with the footnotes providing additional information and comments were recorded, and constitute along with the statistical estimates filled in the questionnaire the basic ingredients for an analysis of the feedback received.

## 9. The field visits and the Q&A sessions with the sample farmers

We visited two villages, HARLI and KANDTARI, in the Barkagaon Development Block of Hazaribag district in the state of Jharkhand, India, on 9th. September 2010. A Block is the smallest unit of administration for the purposes of governance and development since the independence of India in 1947. Geographically the state of Jharkhand can be divided into two distinct units--

Chota Nagpur and Santhal Pargana. It is one of the most under developed parts of the country. though rich in resources - mines, minerals and forests. It has an important tribal population (27% of India's total), many of whom have been displaced owing to large scale mining operations. Perceiving themselves to be social rejects, they join (are exploited by) the Naxalites, an extreme left movement whose objective is to redress the injustice by violence and terror. The lot of the poorer sections of the non-tribals is hardly better, as we shall see. It is in this backdrop that the two villages Harli and Kandtari were selected randomly.

Village Harli is 8 km away from the Barkagaon Block headquarters in the eastern side. It is connected by a macadamized road, rather bumpy though with potholes caused by the heavy monsoonal showers that still continued unabated into September, and generally has all the requisite facilities of goods and services. The population of the village is mixed, belonging to different castes and creeds. The total population is about ten thousand. Though the area is facing drought, it was comparatively green all along our drive to the village. There is a high school with hostel facility. We took a sample size of twenty five farmers randomly out of which eight farmers had ½ acre of land or less (A category), twelve farmers had land from ½ acres to 2.4 acres (B category) and five farmers had 2.4 acres or more (C category). However, none had more than 10 acres of land. It may be added that official statistics categorise marginal holdings as of size 1 hectare or less, small holdings of size 1 to 2 hectares, medium holding between 2 to 10 hectares, and large holdings over 10 hectares (2.4 acres being equal to 1 hectare)[14]. In Jharkhand generally and in these two villages in particular the average holdings are much smaller so it was more meaningful to have our own defined A, B and C categories as above. And it was the plight of the extremely small, and fragile, marginal farmer in A category that was our special concern as the analysis will bring out[15].

Village Kandtari is 2 km away from the Barkagaon Block headquarters. It is on the southern side. The village is connected with macadamized and concrete road, similarly showing signs of monsoonal damage. Inside the village, movement is difficult as the village roads are neither macadamized nor brick soled. The village does not have the requisite facilities of goods and services unlike the case of Harli. It is connected by a bridge built over a small river. The construction of the bridge is a recent development. It was constructed five years ago. Till then, it was an island. The small river is known as Haharo river / Badki river. (it goes into Damodar river, the life line of Jharkhand). The population is about 4,000. It is also a mixed population. We took a sample size of twenty five farmers randomly similarly sub-grouped in three categories; A - four farmers had ½ Acres of land or less, B - sixteen farmers had land from ½ Acres to 2.4 acres and, C - five farmers had 2.4 acres or more. Two farmers had more than ten acres of land. So, the land holding pattern was somewhat different in Kandtari in comparison to Harli.

The Q&A sessions that we had at these villages was very lively, and generated considerable discussion and debate on the individual responses given that were often challenged. This was reassuring to the authors as it meant that the final estimates recorded would likely be a consensual one with a good degree of credibility of the figures, though they remain as broad estimates.

The questionnaires, with the information obtained through verbal feedback of each category of the sample in both villages, are appended as Annexure 2. The names of the farmers who were included in these samples are recorded in Annexure 3.

## 10. **Analysis of the Field Survey Data and Verbal Feedback**

Apart from the statistical information on production, prices, income, expenses, etc. the copious explanatory comments we provided in the footnotes under each category in these annexures actually constitute the basic ingredients for an analysis of the feedback, as discussed below:

It will be seen that the main crop grown in Harli is paddy, followed by maize and some vegetables. The average production of paddy for all categories suggests that the yield is estimated at 20+ quintals (qtl) per acre. Remembering that about 3kg of paddy yields after the milling process 2kg of rice, this would mean about 12 quintals of rice per acre. Compared to the all-India average of 21.30 quintals of rice per hectare (or 8.8 qtl per acre) estimated for 2009-10[16], this appears to be a surprisingly high estimate. Perhaps the fact, as confirmed by Mr. Yashwant Sinha, MP that this upland area of Jharkhand is relatively more fertile and blessed with good monsoonal rainfall would explain the higher productivity.

**Feedback from the Harli A category farmers:**

This was our special concern - several insights emerged concerning this most fragile set possessing 1/2 or less acre of land. As recorded in footnote one, Rs. 9.30 per kg. was the minimum support price for paddy in Jharkhand for the financial year 2009-10. The purchase centre of the Government is committed to buy paddy at this rate (there is no purchase center for wheat, which sells in the open market for Rs. 12 per kg., nor for vegetables and other produce). The unanimous feedback was that its officials are deliberately slow and farmers are made to wait for weeks for their turn when their paddy could be weighed and payment is made after several weeks. The farmers are more often than not forced to sell their paddy in the open market where the rate is Rs. 7.50 per kg but the weighing is quick and the payment is done instantly. It appears to be common knowledge that middlemen who operate in the open market then sell it to the government purchase centre at the higher price whose officials receive a "cut" for this favour. Moreover, these purchase centres do not work round the year. They close by the end of March. However, as a footnote comment to our footnotes, we were intrigued to note after we returned from Harli that the farmers did not avail of the possibility of selling their paddy directly to the rice mill. On making a casual telephonic enquiry we were told that it offered Rs. 10 per kg, which is a price even superior to the purchase center price. On checking back with one of the (bigger) Harli farmers, he offered the explanation that as the mill was about 40km from the village, the poorer farmers could not go that far carrying their grain on their bicycles, and even those who could use their tractor for transportation found the distance too long, given the poor road conditions.

d. We can see that the total annual income from farm produce, including wheat, vegetables etc. Is Rs. 20000. This is supplemented by income from offering his labour in schemes undertaken by public works, and other official agencies but chiefly under the MNREGA employment guarantee scheme described earlier. It is significant to note that this is only Rs. 2500, whereas it should be Rs. 10,000 (100 days @Rs. 100 wages per day. This is only 25% of the promise. Reasons mentioned included "delays" in preparation of the job card and insufficient schemes (typically digging public wells, constructing bridges over small rivulets, and unpaved roads). Another interesting observation is that the current daily wage rates in the market, whether for public or private sector works, ranges from Rs. 100-150 per day (the latter often includes the cost of a midday meal provided by the "big" farmer), and, what is more significant was the impression we gained in our dialogue with the farmers that they are eager as ever to seek employment wherever available. Presence of MNREGA therefore has very low opportunity cost, i.e. no switching of employment demand from private to public sector involved because of the MNREGA Scheme. Perhaps one reason why the farmer willingly seeks employment under this

scheme, apart from the basic element of the guaranteed employment, is that there is no sense of social stigma attached with it as there is in working for a "big brother" in another farm – his *amour-propre* is intact. For this reason, often the farmer (who, we now see, is as much a landless labourer as a farmer) goes to work on a distant farm several kilometres away in another village. As for other options available to him to offer his labour apart from the MNREGA Scheme and working on bigger farms, unfortunately there are none, unlike many other parts of the country this is a particularly underdeveloped region of the country – no rural tourism, minimal retail trade activity, no cold storage or agro-industry processing units.

On the expense side, the expenditures on farm inputs including seeds, fertiliser, and kerosene oil for generating sets) total Rs. 7000. Seeds have now to be purchased from agencies supplying high yielding varieties from multinationals (Monsanto, Cargill) as the current consumption exigencies do not leave any surplus seeds for planting the next year. These are now a recurrent and significant expense[17]. As for kerosene oil, it is required to run generating sets for pumping water from tubewells and ponds and streams for irrigation. It is odd, as we noted, that the state supplies electricity (very irregularly though with frequent "outages") for domestic use but not for agricultural purposes.

It is interesting to note that debts and its repayment did not seem to be much of an issue (unlike the general impressions in this country with so much media discussion on farmer indebtedness, usurious moneylenders, suicides etc.). They seem to get along without moneylenders. There is a Kisan (Farmer) Credit Card scheme in force providing loans up to Rs10000 at 4% rate of interest, but unsurprisingly it is not perceived to be working effectively. Nationalised banks seem reluctant to go through the expense of opening local branch offices to service the scheme, an impression that the local MP shared with the farmers.

The Income- Expense gap, i.e. net income, comes to Rs. Rs. 30,500 p.a. This provides for a family of five, on an average. This translates to $1.85 per day.[18]We note too that almost 50% of this income is from his labour, not from his farm.

**Harli B and C Categories**

Discussion in these bigger farm categories will not be similarly elaborated as most of the observations are common (but for convenience are repeated in the footnotes under each category). The average holding for Category B is about 1.5 acres and 6 acres for Category C. An interesting feedback we received was that most farmers in this category leave part of their land fallow. The reason given was that labour during the sowing and harvesting seasons becomes scarce and hence expensive (as much as Rs 150 per day) so it is unprofitable to cultivate all the parcels of land that they hold. Apparently there are no economies of scale in agricultural operations in these types of holdings as the average remains basically the same as for Category A farms, about 10-12 quintals per acre.

The net income for Category B is Rs 71500 p.a , or $4.3 per day. For Category C, the net income of Rs 355000 p.a translates to$7900, or $20 per day.

**Feedback from the Kandtari farmers, all categories**

As a contrast to the paddy dominant Harlivillage, Kandtari was chosen for to get an appreciation of contrasting circumstances of incomes and expenses within the same area wise categories when the dominant crop is sugarcane. The farmers do not sell the raw sugarcane, but process it to jaggery (unrefined sugar, without separation into molasses and crystals) sell it in the market for about Rs. 3000 per qtl. Small quantities of maize, vegetables and onions are also grown.

We noticed that there were a smaller number of Category A (four only) farmers who volunteered to participate in the general assembly discussions, but contrastingly (and to our delight) a large number of women joined the discussion, squatting respectfully at the back but not hesitating to caustically challenge occasional remarks made by their menfolk which they evidently considered stupid!

Normally seeds are saved for the next sowing, but the last sugarcane crop was infected with "red sugarcane" disease, also invaded by white flies. This obliged them to buy seeds as an additional expense.

The income-expense pattern for Kandtari is different (more) compared to Harli, no doubt the "cash" crop nature of sugarcane cultivation being the reason. Net incomes are as under:

Category A: Rs.41500 p.a, or $2.52 per day

Category B: Rs. 105000 p.a or $6.4 per day

Category C: Rs. 339000 p.a or $7550, $20.6 per day

The table below summarises net incomes per day of all categories for both villages (US$):

| **Category** | **A** | **B** | **C** |
|---|---|---|---|
| **Harli** | **1.8** | **4.3** | **20** |
| **Kandtari** | **2.5** | **6.4** | **20.6** |

## 11. The 10,000 Rupee Question!

An interesting option that we discussed with our sample related to the alternative of doing away with all these schemes of poverty alleviation for which trillions of rupees are spent and instead giving all this money directly to the BPL householder as direct income support and letting them find employment in the labour market. Most of these schemes are market distorting and poor and corruption ridden implementation makes matters worse. We have attempted a broad estimation of some of the major schemes and programmes in the table below:

**Market Distorting Effects of Poverty Alleviation Schemes***

| NAME | NOTE (Range from ++ to --)* | REMARKS |
|---|---|---|
| Subsidies for Agricultural Inputs, esp. Fertilisers | -- | Huge drain on public funds; misappropriation; big farmers benefit more |
| Rural Uplift Schemes | +/- | Free primary education along with teacherless schools! Mid-day meals a political tool |
| Direct Income Schemes; Pension; Insurance; Cheap Credit | + | Implementation poor |
| Minimum Support Price | -- | The classic market distorter! Benefits not reaching the poorest farmer – discussed |

| | | |
|---|---|---|
| | | further down |
| Public Distribution System through "Fair Price Shops" | +/- | Good intentions: providing essential commodities at subsidised rates to the poor. Widespread misuse – fake ration cards, etc. |
| Employment Generation and Guarantee Schemes | +/- | Implementation in backward areas very poor and benefits not reaching the intended "below poverty level" population – discussed further down |

The question that we put to the farmers was: "If, instead of guaranteeing employment for 100 days at Rs100 per day, the government was to just transfer Rs 10000 per year in your bank account, would you prefer this option?" The response, unsurprisingly, was unanimously in the affirmative, even when we cautioned that there would obviously be some *quid pro quo* type of conditions and qualifying criteria that may be imposed.

Making direct income transfers instead of meddling with the market by giving subsidies linked to specific inputs (fertiliser, fuel oil, edible oil, food grains etc.), offering minimum price support, tariff protection etc. is of course the beloved axiom of liberal economists. For example, an OECD survey on Farm Household Income quantifies the support distribution of public intervention on farm households, landlords and input suppliers. In terms of efficiency of farm household income transfers, it unsurprisingly concludes that direct payments are more efficient than market price support in achieving income objectives[19]. Interestingly, the MP Mr. Yashwant Sinha said that this option was being seriously debated in Delhi. One view (on which we based the question) is to substitute, i.e. abolish the MNREGA scheme, and instead of incurring "expenditures worth Rs. 39,100 crore (1 crore =10 million) allocated to (it), transfer Rs. 10,000 each to the bank accounts of 3.91 crore households. The transfer would give the households income worth 100 days employment at Rs 100 per day"[20]. This, it was argued, would bypass the passage of the funds through multiple layers of bureaucracy which grasps "at the opportunity for bribes" at each layer as a result of which "only a small fraction of expenditures … reaches the targeted beneficiaries". However, we must acknowledge that this is a utopian solution of the pure economist and, as Mr. Sinha agreed, so impractical (What? Abolish a Mahatma Gandhi scheme for the poor that supplements their income and creates needed public assets?) that even the opposition party – of which he is a member – would not propose it. Additionally we find some doubtful assumptions in Panagariya's article. Leaving aside his unsupported estimates on number of "poor" households and actual wage-material ratios on the ground, we cannot agree with his contention that the scheme has led to a "withdrawal of a section of the workforce to work on projects of uncertain value". This would mean by implication that there is demand for work in the real (public and private) labour market which remains unsatisfied because of this switching to employment guarantee schemes. We have however already remarked earlier that no such switching costs are perceived, at least in the context of our limited two village survey.

A well regarded expert on poverty alleviation issues, NC Saxena, is quoted as saying at the other extreme that "direct cash transfers (DCT) is not feasible, as foodgrains purchased from the

farmers through MSP mechanism need an outlet for distribution. Besides DCT needs a good banking structure, functional registration system, and widespread debit cards. At best it could be tried on a pilot basis in a few poor localities of metropolitan cities."[21] Another economist close to, and associated with, policy making processes on poverty and employment guarantee schemes, Jean Dreze, also holds a similar view, "I am not a gung-ho advocate of cash transfers: I have doubts too. The big advantage of EGS (Employment Guarantee Schemes), in theory if not fully in practice, was that it was self-targeting and self-liquidating. Cash transfers can suffer from errors of inclusion and exclusion. They can quickly become never-ending doles plagued by corruption. Nobody will admit rising above the poverty line for fear of losing benefits."[22]

We have not gone deeply into the merits and demerits of this option nor attempted to ascertain the current thinking at policy making levels in New Delhi so do not feel competent to suggest our own solutions. As a working hypothesis however, perhaps it may be worthwhile to explore the middle-ground, neither wholesale direct cash transfers on the one hand nor none on the other. One approach could be to have triggers determining when and where the direct cash transfer mode would be fired, e.g. doing it where MNREGA implementation is seen to be severely failing, as in some pockets in Jharkhand. Also, benchmarking with successfully implemented direct cash transfer schemes in other countries could be insightful, e.g. the Bolsa Familia scheme in Brazil which "provides financial aid to poor and indigent Brazilian families on condition that their children attend school and are vaccinated. The program attempts to both reduce short-term poverty by direct cash transfers and fight long-term poverty by increasing human capital among the poor through conditional cash transfers."[23]

## 12. Concluding Remarks

We have presented in this study our analysis of the feedback obtained in the form of direct verbal evidence from a sample set of farmers from two villages in Hazaribag district. Before doing this we devoted a few pages describing and commenting on the general picture of the dark side of India's growth story, of its millions living below the poverty line (BPL) and the various programmes and schemes of poverty alleviation, in particular the MNREGA employment guarantee scheme. The highlights of the survey results could be summarized as follows:

i) The category A (less than 1/2 acre) farmer earns after expenses Rs. 30,500 p.a. on an average, or $1.85 per day. Of this, almost 50% comes not from selling his farm produce, but his labour. He is therefore as much a farmer as a landless labourer

ii) The MNREGA employment guarantee scheme promises 100 days of employment at Rs.100 per day, i.e. Rs. 10,000 p.a. Against this, his average earnings are about Rs.2500 only. Delays in obtaining the job card, a prerequisite and insufficient availability of public works programmes are the reasons.

iii) Perceived collusion between the purchase center staff and private traders ensures that the former deliberately delays accepting the paddy at the minimum support price, constraining the farmer to sell at a lower price to the trader in return for immediate cash payment.

iv) Daily wage rates range from Rs. 100 to 15O per day. Demand is seasonal, high during harvest time and when public works are in progress nearby. Bigger farmers who

need extra hands for harvesting reportedly find this wage level too high, hence leave some of their land fallow.

v) Marginal farmers carry their produce on bicycles to the nearest mandi (market). It is a very arduous job, with several uphill struggles on the way. The bigger ones hire a, or use their own, tractor.

vi) Category B and C farmers (up to 10 acres) are relatively much better off, earning as much as $7500 per annum when cash crops like sugar cane are grown.

vii) There is an obvious preference for direct cash transfers, bypassing the layers of bureaucracy, for obvious reasons. This could be tried in areas such as Jharkhand where the benefits of poverty alleviation schemes are not reaching their targets.

## ANNEXURE 1

**Trends in social services expenditure by Central Government**

**(Central and State Governments combined)**

| (Rs. trillion) | | | | |
|---|---|---|---|---|
| ITEMS | | 2004-05 | 2009-10 | |
| | | Actual | (BE) | |
| Total Expenditure | | 8,697 | 18,709 | |
| Expenditure on | | | | |
| Social Services | | 1,728 | 4,457 | |
| of which: | | | | |
| i) Education | | 841,0 | 1,988 | |
| ii) Health | | 375,0 | 893,0 | |
| iii) Others | | 511,0 | 1,575 | |
| As % of GDP | | | | |
| Total Expenditure | | 26,85 | 30,35 | |
| Expenditure on | | | | |
| Social Services | | 5,33 | 7,23 | |
| of which: | | | | |
| i) Education | | 0.03 | 3,23 | |
| ii) Health | | 1,16 | 1,45 | |
| iii) Others | | 1,58 | 2,56 | |
| As % of Total Expenditure | | | | |
| Expenditure on | | | | |
| Social Services | | 19,9 | 23,8 | |
| of which: | | | | |
| Education | | 9,7 | 10,6 | |
| ii) Health | | 4,3 | 4,8 | |
| iii) Others | | 5,9 | 8,4 | |
| As % of social services exp. | | | | |
| Education | | 48,7 | 44,6 | |
| ii) Health | | 21,7 | 2.0 | |
| iii) Others | | 29,6 | 35,4 | |
| ***Source: Reserve Bank of India, as obtained from Budget Documents of Union and State Governments.*** | | | | |
| ***BE: budget estimates*** | | | | |
| | | | | |
| | | | | |

**ANNEXURE 2**

**Village : Harli ( Category 'A')**

**Category A : Farmers having land holding ≤ ½ acre**

| A | B | C | D | E |
|---|---|---|---|---|
| Name : Category A. | ≤ ½ acre | | | |
| | | | | |
| Size of Holding (acre) | | | | |
| | | | | |
| Area Cultivated | in Acres | Avg. Annual Prodt (Qtl)-Q | Minimum Support Price/Market Price -P (per kg,) | Theoretical Value of Farm Production (PxQ) |
| of which | | | | |
| Paddy | | (Qr) 11 - 15 | (Pr) 9.30/7.50[1] | Rs. 10,230 - 13,950 |
| Wheat | | (Qw) 1 | (Pw) NA* / 12 | Rs. 1200 |
| Maize | | (Qm) 5 | (Pm) 6 | Rs. 3000 |
| Vegetables | | (Qv) | (Pv) | Rs. 5000[2] |
| Other | | (Qot) | (Pot) | Rs. 5000[3] |
| Total | | | Total | 25,430 - 27,150 |
| | | | | |
| Average Annual Income | | | | |
| of which | | | | |
| a. Sale of farm produce* | | | Rs. 20000[4] | *Compare with Value(PxQ)! |
| | | | | |
| b. Wages (Labour Supply) earned in | | Daily Wage Rate 100-150[5] | | |
| Govt. Schemes, e.g. NREGS | | | Rs. 2500[6] | |

| | | | | |
|---|---|---|---|---|
| Cold Storage | | | Nil | |
| Other Big Farms | | | Rs. 15000 | Notes : |
| Other service Sectors | | | | 1.Income and Expenses could be |
| Total b. | | | | the average of estimates of last |
| c. Other misc revenue | | | Nil [7] | two or three years |
| Total (a+b+c) | | | Rs. 37,500 [8] | 2. Yields(kgs/ha)for different |
| Annual Average Expenses | | | | categories of farm holdings in the |
| Of which | | | | sample can also be calculated and discussed |
| a. Seeds | | | Rs.3,500[9] | |
| b. Fertiliser | | | Rs. 1500[10] | |
| c. Electricity | | | Rs. 2000 [11] | |
| d. Transport (to Mandi/Sale Point) | | | Nil [12] | |
| e. Debt Repayments | | | ? [13] | |
| f. Other Misc | | | | |
| Total (a+b+……f) | | | Rs7000 | |

***FOOTNOTES OF HARLI, (CATEGORY. A)***

1. *Rs. 9.30 per kg. was the minimum support price for paddy in Jharkhand for the financial year 2009-10. The purchase centre of the Govt. was to buy paddy at this rate. But the govt. officials are very slow and farmers are made to wait for weeks for their turn when their paddy would be weighed. The payment is also made after several weeks. The farmers are therefore, forced to sell their paddy in the open market where the rate is Rs. 7.50 per kg but the weighing is quick and the payment is done instantly. It is common knowledge that the middlemen operate in the purchase of paddy in the open market which is then sold to the govt. purchase centre where the govt. officials are hand in glove with these middlemen. Moreover, these purchase centres do not work round the year. They close by the end of March.*

* *There is no purchase centre for wheat in Barkagaon. The farmers sell their wheat at Rs. 12.00 per kg. in the open market.*

2. *It was difficult to get the price of vegetables with their variations round the year as it was dependent on several variables. Generally, a farmer of this category earned Rs. 5000.00 per year from vegetables.*

3. *Other produce include oilseeds and pulses.*

4. *Earnings collected from selling different farm produce.*

5. *Daily wages of a labourer vary from work to work and season to season e.g. The daily wages of a labourer is Rs. 100.00 per day in farms. However, it goes up to Rs. 150.00 per day during the rainy season. Similarly , a labourer gets Rs. 130.00 in construction work.*

6. *Though the govt. employment schemes like National Rural Employment Guarantee Scheme (NREGS), now known as Mahatma Gandhi National Rural Employment Guarantee Schemes, promises hundred days of guaranteed employment but in practice a villager gets, on an average, only twenty five days of employment at the rate of Rs. 100.00 per day.*

7. *There is no cold storage in Barkagaon block.*

8. *These farmers work in big farms or do other petty works. Some farmers migrate to other places for employment. On an average, their total income from these sources is Rs. 15,000.00*

9. *The cost of seeds. High yielding seeds are to be bought every year.*

10. *The cost of chemical fertilizers. It does not include the cost of the fertilizers made of cow dung etc.*

11. *It means the cost of Kerosene oil and diesel which are used for running generators for providing power to the pump sets of tube well. It is an irony that the village is connected with electric lines but the electricity provided is only for domestic use and not for agricultural purposes.*

12. *The cost of transportation is nil because the farmers carry their produce on cycle to the market.*

13. *The farmers did not say anything about debt repayment. When inquired, they said that they do not prefer to take loan from local money lenders and they can do without it. The govt. has a provision for Kisan Credit Card at a marginal rate of 4% interest up to a loan of Rs. 10,000 but it is ineffective as the nationalised banks do not take much interest in giving loan to the farmers.*

**Village : Harli (Category 'B')**

**Category B : Farmers having land holding from ½ acre to 2.4 Acre**

| A | B | C | D | E |
|---|---|---|---|---|
| Name : Category B. | | | | |
| | | | | |
| Size of Holding (acre) | ½ - 2.4 Acre | | | |
| | | | | |
| Area Cultivated | in Acres | Avg. Annual Prodt (Qtl)-Q | Minimum Support Price/Market Price -P (per kg,) | Theoretical Value of Farm Production (PxQ) |
| of which | | | | |
| Paddy | | (Qr) 30-40 [1] | (Pr) 9.30/7.50 | Rs. 27,900 - 37,200 |
| Wheat | | (Qw) 3 | (Pw) NA / 12 | Rs. 3,600 |
| Maize | | (Qm) 15 | (Pm) 6 | Rs. 9,000 |
| Vegetables | | (Qv) | (Pv) | Rs. 15,000 |
| Other | | (Qot) | (Pot) | Rs. 10000 [4] |
| Total | | | Total | Rs. 67,900 |
| | | | | |
| Average Annual Income | | | | |
| of which | | | | |
| a. Sale of farm produce* | | | Rs. 55,000 | *Compare with Value(PxQ)! |
| | | | | |
| b. Wages (Labour Supply) earned in | | Daily Wage Rate 100-150 | | |

| | | | | |
|---|---|---|---|---|
| Govt. Schemes, e.g. NREGS | | | Nil | |
| Cold Storage | | | Nil | |
| Other Big Farms | | | | Notes : |
| Other service Sectors | | | | 1.Income and Expenses could be |
| Total b. | | | | the average of estimates of last |
| c. Other misc revenue | | | Rs. 40,000 | two or three years |
| Total (a+b+c) | | | | 2. Yields(kgs/ha)for different |
| Annual Average Expenses | | | | categories of farm holdings in the |
| Of which | | | | sample can also be calculated and discussed |
| a. Seeds | | | Rs.10,500 | |
| b. Fertiliser | | | Rs. 5000 | |
| c. Electricity | | | Rs. 6,000 | |
| d. Transport Mandi/Sale Point) | | | Rs. 2,000 | |
| e. Debt Repayments | | | ? [13] | |
| f. Other Misc | | | | |
| Total (a+b+……f) | | | Rs23500 | |

*Notes:*

*All the footnoted remarks of category A apply to this category with following additional remarks:*

1. *Hiring labour for farm work (average 1.5 acres) is costly during harvesting season. Hence a majority of farmers do not cultivate their entire land holding. The average production of paddy of farmers in this category is between thirty to forty quintals.*

2. *They will not do any manual work as it is against their "social standing". They may have small businesses like village general store to supplement their income*

**Village : Harli**

**Category C : Farmers having land holding from 2.4 Acre to 10 acre**

| A | B | C | D | E |
|---|---|---|---|---|
| Name : Category C. | | | | |
| | | | | |
| Size of Holding (acre) | 2.4 - 10 Acre | | | |
| | | | | |
| Area Cultivated | in Acres | Avg. Annual Prodt (Qtl)-Q | Minimum Support Price/Market Price -P(per Kg) | Theoretical Value of Farm Production (PxQ) |
| of which | | | | |
| Paddy | | (Qr) 120-140 [1] | (Pr) 9.30/7.50 | Rs. 1,11,600 - 1,30,200 |
| Wheat | | (Qw) 12 | (Pw) NA / 12 | Rs. 14,400 |
| Maize | | (Qm) 60 | (Pm) 6 | Rs. 36,000 |
| Vegetables | | (Qv) | (Pv) | Rs. 60,000 |
| Other | | (Qot) | (Pot) | Rs. 60,000 |
| Total | | | Total | Rs. 2,82,000 |
| | | | | |
| Average Annual Income | | | | |
| of which | | | | |
| a. Sale of farm produce* | | | Rs. 2,50,000 | *Compare with Value(PxQ)! |

| | | | | |
|---|---|---|---|---|
| b. Wages (Labour Supply) earned in | | Daily Wage Rate 100-150[6] | | |
| Govt. Schemes, e.g. NREGS | | | Nil | |
| Cold Storage | | | Nil | |
| Other Big Farms | | | | Notes : |
| Other service Sectors | | | | 1.Income and Expenses could be |
| Total b. | | | | the average of estimates of last |
| c. Other misc revenue | | | Rs. 2,00,000 | two or three years |
| Total (a+b+c) | | | Rs. 450000 | 2. Yields(kgs/ha)for different |
| Annual Average Expenses | | | | categories of farm holdings in the |
| Of which | | | | sample can also be calculated and discussed |
| a. Seeds | | | Rs.40,000 | |
| b. Fertiliser | | | Rs. 20,000 | |
| c. Electricity | | | Rs. 25,000 | |
| d. Transport (Mandi/Sale Point) | | | Rs. 10,000 | |
| e. Debt Repayments | | | | |
| f. Other Misc | | | | |
| Total (a+b+……f) | | | Rs. 95000 | |

***Notes:***

*As in category B. The average holding is 6 acres and production of paddy is between 120 to 140 quintals. There was a farmer in the sample who had more than 10 acres.*

**Village : Kandtari**

**Category A : Farmers having land holding of ½ Acre or less**

| A | B | C | D | E |
|---|---|---|---|---|
| Name : Category A | | | | |
| | | | | |
| Size of Holding (acre) | ≤ ½ Acre | | | |
| | | | | |
| Area Cultivated | in Acres | Avg. Annual Prodt (Qtl)-Q | Minimum Support Price/Market Price -P(per Kg) | Theoretical Value of Farm Production (PxQ) |
| of which | | | | |
| Paddy | | (Qr) x [1] | (Pr) x | |
| Wheat | | (Qw) x [2] | (Pw) x | |
| Maize | | (Qm) 5 | (Pm) 6 | Rs. 3,000 |
| Vegetables | | (Qv) | (Pv) x | Rs. 3,000 |
| Other (Sugarcane)[3] | Jaggery | (Qot)10-11q/q | (Pot) Rs.3000[4] | Rs. 30,000 - 33,000 |
| Total | | | Total | Rs. 36,000 - 39,000 |
| | | | | |
| Average Annual Income | | | | |
| of which | | | | |
| a. Sale of farm produce* | | | Rs. 35,000 [5] | *Compare with Value(PxQ)! |
| | | | | |
| b. Wages (Labour Supply) earned in | | Daily Wage Rate 100-150[6] | | |
| Govt. Schemes, e.g. NREGS | | | 2,500 [7] | |

| | | | | |
|---|---|---|---|---|
| Cold Storage | | | Nil [8] | |
| Other Big Farms | | | Rs.15,000 [9] | Notes : |
| Other service Sectors | | | | 1.Income and Expenses could be |
| Total b. | | | | the average of estimates of last |
| c. Other misc revenue | | | Nil | two or three years |
| Total (a+b+c) | | | Rs.52,500 | 2. Yields(kgs/ha)for different |
| Annual Average Expenses | | | | categories of farm holdings in the |
| Of which | | | | sample can also be calculated and discussed |
| a. Seeds | | | Rs.4000[10] | |
| b. Fertiliser | | | Rs. 4,000 [11] | |
| c. Electricity | | | Rs. 3,000 [12] | |
| d. Transport (to Mandi/Sale Point) | | | x | |
| e. Debt Repayments | | | ? [13] | |
| f. Other Misc | | | | |
| Total (a+b+……f) | | | Rs.11,000 | |

**FOOTNOTES OF KANDTARI, (CATEGORY. A)**

1. *There is no cultivation of paddy in this village.*
2. *There is no cultivation of wheat in this village.*
3. *The village farmers primarily cultivate sugarcane. But they do not sell raw sugarcane. They manufacture Jaggery and then sell in the market.*
4. *Jaggery is sold in the market @ Rs. 3,000 per quintal*
5. *The farm produce means Jaggery, Maize, some vegetables and Onions*

6. *Daily wages of a labourer vary from work to work and season to season e.g. The daily wages of a labourer is Rs. 100.00 per day in farms. However, it goes up to Rs. 150.00 per day during the rainy season. Similarly , a labourer gets Rs. 130.00 in construction work.*

7. *Though the govt. employment schemes like National Rural Employment Guarantee Scheme (NREGS), now known as Mahatma Gandhi National Rural Employment Guarantee Schemes, promises hundred days of guaranteed employment but in practice a villager gets, on an average, only twenty five days of employment at the rate of Rs. 100.00 per day.*

8. *There is no cold storage in Barkagaon block.*

9. *These farmers work in big farms or do other petty works. Some farmers migrate to other places for employment. On an average, their total income from these sources is Rs. 15,000.00*

10. *The cost of seeds is 4,000. Generally, the farmers do not need to buy seeds for the cultivation of sugarcane. But the crop of sugarcane in this village was infected with red sugarcane disease. It was also invaded by white flies. This is the reason that they had to buy seeds this time.*

11. *The cost of chemical fertilizers. It does not include the cost of the fertilizers made of cow dung etc.*

12. *It means the cost of Kerosene oil and diesel which are used for running generators for providing power to the pump sets of tube well. It is an irony that the village is connected with electric lines but the electricity provided is only for domestic use and not for agricultural purposes.*

13. *The farmers did not say anything about debt repayment. When inquired, they said that they do not prefer to take loan from local money lenders and they can do without it. The govt. has a provision for Kisan Credit Card at a marginal rate of 4% interest upto a loan of Rs. 10,000 but it is ineffective as the nationalised banks do not take much interest in giving loan to the farmers.*

**Village : Kandtari**

**Category B : Farmers having land holding from ½ Acre to 2.4 Acre**

| A | B | C | D | E |
|---|---|---|---|---|
| Name : Category B | | | | |
| | | | | |
| Size of Holding (acre) | ½ -2.4 Acre | | | |
| | | | | |
| Area Cultivated | in Acres | Avg. Annual Prodt (Qtl)-Q | Minimum Support Price/Market Price -P(per Kg) | Theoretical Value of Farm Production (PxQ) |
| of which | | | | |
| Paddy | | (Qr) x | (Pr) x | |
| Wheat | | (Qw) x | (Pw) x | |
| Maize | | (Qm) 5 | (Pm) 6 | Rs. 9,000 |
| Vegetables | | (Qv) x | (Pv) x | Rs. 10,000 |
| Other (Sugarcane) | Jaggery | (Qot)30 - 35 | (Pot) 3000/qtl | Rs. 90,000-1,05,000 |
| Total | | | Total | Rs. 1,09,000 |
| | | | | |
| Average Annual Income | | | | |
| of which | | | | |
| a. Sale of farm produce* | | | Rs. 1,05,000 | *Compare with Value(PxQ)! |
| | | | | |
| b. Wages (Labour Supply) earned in | | Daily Wage Rate 100-150[6] | | |

| | | | | |
|---|---|---|---|---|
| Govt. Schemes, e.g. NREGS | | | Nil | |
| Cold Storage | | | | |
| Other Big Farms | | | | Notes : |
| Other service Sectors | | | | 1.Income and Expenses could be |
| Total b. | | | | the average of estimates of last |
| c. Other misc revenue | | | Rs. 30,000 | two or three years |
| Total (a+b+c) | | | Rs. 1,39,000 | 2. Yields (kgs/ha) for different |
| Annual Average Expenses | | | | categories of farm holdings in the |
| Of which | | | | sample can also be calculated and discussed |
| a. Seeds | | | Rs.12,000 | |
| b. Fertiliser | | | Rs. 12,000 | |
| c. Electricity | | | Rs. 10,000 | |
| d. Transport (Mandi/Sale Point) | | | x | |
| e. Debt Repayments | | | ? | |
| f. Other Misc | | | | |
| Total (a+b+……f) | | | Rs. 34000 | |

***<u>Notes:</u>***

***Footnoted remarks for category A apply with the additional remark that this category will not do any manual work as it is against their "social standing". They may have some side business like village general store to augment their income. There is no potential given the extreme underdeveloped nature of this region for other options e.g. retail business like footwear, pharmacy or tourism agency etc.***

**Village Kandtari**

**Category C : Farmers having land holding from 2.4 Acre or more(upto 10 acre)**

| A | B | C | D | E |
|---|---|---|---|---|
| Name : Category C | | | | |
| | | | | |
| Size of Holding (acre) | 2.4 - 10 Acre | | | |
| | | | | |
| Area Cultivated | in Acres | Avg. Annual Prodt (Qtl)-Q | Minimum Support Price/Market Price -P(per Kg) | Theoretical Value of Farm Production (PxQ) |
| of which | | | | |
| Paddy | | (Qr) x | (Pr) x | |
| Wheat | | (Qw) x | (Pw) x | |
| Maize | | (Qm) 50 | (Pm) 6 | Rs. 30,000 |
| Vegetables | | (Qv) x | (Pv) x | Rs. 35,000 |
| Other (Sugarcane) | Jaggery | (Qot) 100 - 110 | (Pot) 3000/qtl | Rs. 3,00,000-3,30,000 |
| Total | | | Total | Rs. 3,65,,000 |
| | | | | |
| Average Annual Income | | | | |
| of which | | | | |
| a. Sale of farm produce* | | | Rs. 3,50,000 | *Compare with Value(PxQ)! |
| | | | | |

| | | | | |
|---|---|---|---|---|
| b. Wages (Labour Supply) earned in | | Daily Wage Rate 100-150 | | |
| Govt. Schemes, e.g. NREGS | | | Nil | |
| Cold Storage | | | | |
| Other Big Farms | | | | Notes : |
| Other service Sectors | | | | 1.Income and Expenses could be |
| Total b. | | | | the average of estimates of last |
| c. Other misc revenue | | | Rs. 60,000 | two or three years |
| Total (a+b+c) | | | Rs. 4,25,000 | 2. Yields (kg/ha) for different |
| Annual Average Expenses | | | | categories of farm holdings in the |
| Of which | | | | sample can also be calculated and discussed |
| a. Seeds | | | Rs.36,000 | |
| b. Fertiliser | | | Rs. 30,000 | |
| c. Electricity | | | Rs. 25,000 | |
| d. Transport Mandi/Sale Point) | | | x | |
| e. Debt Repayments | | | ? | |
| f. Other Misc | | | | |
| Total (a+b+……f) | | | Rs. 86000 | |

***Footnoted remarks for category A apply with the additional remark that this category will not do any manual work as it is against their "social standing". They may have some side business like village general store to augment their income. There is no potential given the***

***extreme underdeveloped nature of this region for other options e.g. retail business like footwear, pharmacy or tourism agency etc.***

**Annexure 3**

**Sample Farmers in Harli**

**Category A – Farmers having ≤ ½ acre of land.**

1. Sri Chabla Prasad
2. Sri Ganesh Prasad
3. Sri AshokaMahon
4. Sri Prabhu Mahto
5. Sri Bisheshwar Kumar
6. Sri Bharosi Mahto
7. Sri Kishori Mahto
8. Sri Duleshwar Kumar Dangi

**Category B – Farmers having land from ½ Acre to 2.4 Acres.**

1. Sri Rameshwar Kumar
2. Sri Kartik Mahto
3. Sri Kanhai Mahto
4. Sri Prem Kumar Bharti
5. Sri Govardhan Sao
6. Sri Sunil Kumar
7. Sri Kailash Kumar
8. Sri Pradeep Kumar
9. Sri Ram Lakhan Mahto
10. Sri Tribhuvan Kumar
11. Sri Baleshwar Mahto
12. Sri Tikeshwar Mahto

**Category C – Farmers having land 2.4 Acres or more**

1. Sri Kedar Mahto
2. Sri Bigeshwar Mahto
3. Sri Ram Nath Mahto
4. Sri Ganesh Mahto
5. Sri Tikeshwar Kumar

**Sample Farmers in Kandtari**

**Category A – Farmers having ≤ ½ acre of land.**

1. Sri Shukar Mahto
2. Sri Kheman Mahato
3. Sri Tetar Mahto
4. Sri Chetlal Mahto

**Category B – Farmers having land from ½ Acre to 2.4 Acres.**

1. Sri Suresh Mahto
2. Sri Chitradayal Mahto
3. Sri Nand Kishore Kumar
4. Sri Pradip Mahto
5. Sri Bisheshwar Razak
6. Sri Chanrakant Mahto
7. Sri Bhuneshwar Mahto
8. Sri Hari Nandan Prasad
9. Sri Nakul Mahto
10. Sri Balram Mahto
11. Sri Balram Mahto
12. Sri Jitendra Kumar
13. Sri Pancham Kumar
14. Sri Chiranjeevi Ram

**Category C – Farmers having land 2.4 Acres or more**

1. Sri Chandrika Mahto
2. Sri Murli Mahto
3. Sri Hari Nandan Prasad
4. Sri Devendra Mahto
5. Sri Binesh Mahto

## References

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[3] The views and conclusions expressed in this study are those of the authors' alone, and not of GEM, Sciences-Po, Paris
[4]The Economist, Oct 2-8, 2010
[5], Nazneen Karnali*. India's Richest*, Forbes, 29/9/10
[6]Wikipedia, extracted from the web, 1/10/2010
[7]Economic Survey of India, 2009-10
[8]Economic Survey of India, 2008-09
[9]NREGA 2005 Act, Operational Guidelines (2008), Ministry of Rural Development, Government of India
[10]Economic Survey of India, 2009-10
[11] See for example, *"NREGA: An exchange with Jean Dreze",* The Economic Times, 11 Nov, 2009 (web)
[12] Sources consulted : Economic Survey of India, 2009-10 and Wikipedia
[13] Munisamy Gopinath. *India: Shadow WTO Agricultural Domestic Support Notifications*, , IFPRI Discussion Paper 00792, September 2008

[14] The National Sample Survey of 2002-03 found that Marginal holdings (of size 1 hectare or less) in 2002-03 constituted 70% of all operational holdings, small holdings (size 1 to 2 hectares) constituted 16%, semi-medium holdings (2 to 4 hectares), 9%, medium holdings (4 to 10 hectares), 4%, and large holdings (over 10 hectares), less than 1%. (*Some Aspects of Operational Land Holdings in India*, 2002-03, Press Note of Government of India, 31/8/2006)
[15] The question, "Why are land holdings getting transformed into smaller and smaller non-productive units?", does have a bearing on the marginality of the marginal farmer, but is outside the scope of this paper. It would merit a discussion on the progressive sub-division of family holdings as ownership passes on from father to sons (which the farmers confirmed was happening in their villages over the years, and to the fact that Jharkhand has not benefitted from land reforms including consolidation of holdings into bigger compact parcels as in many other states.
[16]Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation, Government of India.

[17]The entry of genetically modified (non-renewable) seeds in farming practices and their patenting by these multinationals, replacing farm saved seeds and requiring more fertilisers and pesticides has raised much controversy and outcry by NGOs in developing economies like India, and is another story that we will not discuss here.
[18] $1 = Rs.45 taken as an approximate general average during September 2010
[19] *Farm Household Income – Issues and Policy Responses.* OECD, 2003
[20]ArvindPanagariya. *More Bang for the Buck*, Times of India, New Delhi, 19/09/2009
[21]NC Saxena.*Food Security in India*, Column wrttien in Inclusion (http://inclusion.in) , date unknown
[22]Mani ShankerAiyer.*"NREGA : An exchange with Jean Dreze,",* The Economic Times, 11/11/2009
[23]Wikipedia, extracted 3/12/2010