



Sustainable Livelihood Issues In Jharkhand: A Case Study

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This study attempts to examine the assets, vulnerabilities, structures and processes which affect the livelihoods of the poor in Jharkhand using the Sustainable Livelihood Framework Analysis by a sample survey of three hamlets of Khijri village in Ranchi District. The overall purpose of the study was to develop a livelihood profile of rural Jharkhand using the sustainable livelihood analysis framework. The findings indicate linkage between the inequity in land ownership pattern and food insecurity; the emergence of wage labor as the main mode of employment; inadequate income generation in spite of diversification of livelihood strategies and weak institutions for implementing anti-poverty programs in the rural Jharkhand. The study also reveals the strong traditional coping mechanisms of the poor households vulnerable to food insecurity, and provides recommendations on potential interventions to realize improved asset creation for sustainable livelihoods and enhanced food security.

Key words: Sustainable Livelihoods, Assets, Vulnerability, Transforming Structures.

Introduction

In Jharkhand, where more than 40 percent of the population lives below the poverty line., many rural households, particularly households lacking access to land and diversified livelihood opportunities, remain food insecure. Food insecurity, poverty, low agricultural productivity, inability to cope with natural hazards are all linked to low income levels. The ability of the poorest households to purchase food and other necessities is limited by their insufficient incomes. The overall purpose of the study was to develop a livelihood profile of rural Jharkhand using the sustainable livelihood analysis framework to identify and locate some of the entry points for focused livelihood oriented interventions.

The Sustainable Livelihoods Analysis (SLA) is essentially a conceptual framework to analyse the factors that affect people's livelihoods, and their interlinkages. This framework takes into consideration the natural, human, social, physical, and financial assets available to the poor within their vulnerability context which enable people to pursue sustainable livelihoods. The transforming structures and processes within the livelihoods framework are the institutions, organisations, policies and legislation that shape livelihoods. They effectively determine access to various types of capital, to livelihood strategies and to decision-making bodies and sources of influence.

The study uses this technique to evaluate the livelihood strategies of the poor in the sample village including the physical assets, financial assets, social assets and human assets which directly affect livelihood like access to land, irrigation, level of education, ownership of livestock, cropping methods etc.

Objectives of the Study

- I. To assess the existing assets available to the rural poor of Jharkhand and locate the areas of deficits.
- II. To examine the livelihood strategies and pathways of the poor and their adequacy for providing food security
- III. To understand the implications of the various Government anti-Poverty Schemes on livelihood outcomes of targeted areas.
- IV. To suggest policy recommendations that will have a significant impact on the livelihoods of the poor.

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Methodology

The study used a multiple methodology that included a combination of data collection procedures which included interviews of stake holders, secondary source review, institutional study, qualitative assessment and quantitative household survey in order to obtain an in-depth information of socio-economic profile of the rural poor of Jharkhand. Prior to undertaking the qualitative assessment and quantitative survey, relevant secondary sources of data were collected and perused in order to:

- Gain a basic understanding of the food security, education, employment and income generation in rural Jharkhand;
- Identify the physical and institutional contexts affecting household decision-making, livelihood strategies, and resource access and allocation and
- Assess the risk coping mechanisms employed across rural households in rural Jharkhand.

The secondary source review included documents from GOI, NGOs operating in the rural India and Jharkhand, academic studies, census data, GOI statistical data, World Bank Reports and relevant reports on previous development and food assistance interventions in rural Jharkhand.

The primary data collection was done through qualitative assessment and quantitative household survey. The qualitative study was undertaken in the first stage. This included the following :

a) Transect walk, b) focused interviews, and c) village mapping which provided a visual display of people's perceptions of the resources of the village and its inhabitants. All these were aimed at eliciting perception and priorities of the village community.

The quantitative survey comprised a structured questionnaire designed to get information on a few key issues. The survey questionnaire solicited data about: education and economic activities, type of dwellings, sources of drinking water, land and land use details, agricultural details like cropping, irrigation, seeds, fertilizers, livestock details, occupation and livelihood strategies, food consumption patterns, food security patterns, household assets, health, maternal and child care, shocks and coping strategies.

Selection of respondents was done through stratified random sampling. A list of all households in a village stratified by hamlets was drawn up. Names were drawn randomly from each hamlet in the village by sequence to ensure that all were given equal representation.

Survey Result

The survey was conducted in three hamlets of Khijri village in Namkum Block of Ranchi District: Sahera, Sindwar Toli and Chotka Sahera. The total number of respondents was 145 of which 113 were males and 32 females. Of the 145 respondents, 72% belonged to ST households 8% came from SC households, 4% belonged to the other backward classes (OBC) while 16% belong to other castes. The survey results highlighted the following linkages and important features:

Linkage between Inequity in Land Ownership Pattern and Food Insecurity

The land holding distribution in Khijri village was such that 74 percent of the population had land holdings of less than 2 acres and an average family size of 5.4 members.

Approximately 17 per cent of the sampled landholders had properties of less than 1 acre and 12 percent had no land . 45 percent households had properties of between 1 and 2 acres (see Figure 3.1 and Table 3.3).

21 percent households had 2 to 3 acres of land and 5 percent had more than 3 acres. If we consider less than one acre as functionally land less and 1 to 2 acres as marginal landholdings then their total is 74 percent, i.e.; almost three fourths of the households are living in a situation where they cannot obtain sustainable

livelihood from their land holding.

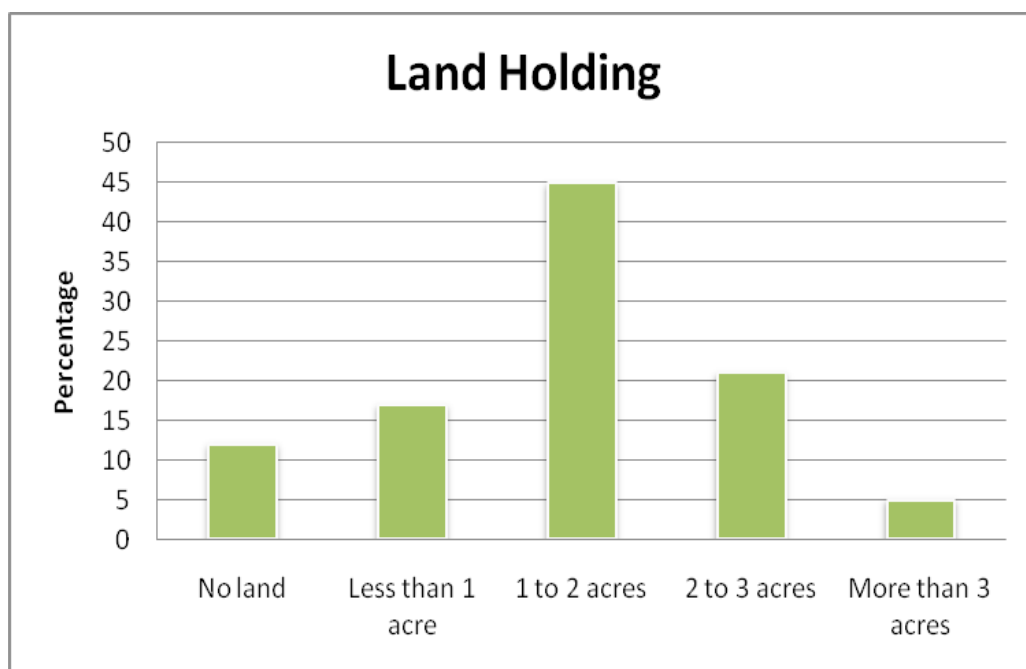
Our results show that 88 percent of all households either own or lease some land, only 12 percent are completely landless. The major constraint therefore is not landlessness but the poor quality of land and the small size of holdings by the poor. There are some households who do not own the land on which they reside. These constituted 12 percent of all respondents and are the most vulnerable and poor.

Table1 Land Holding Distribution

	No. of HH	Percentage
No land	6	12
Less than 1 acre	36	17
1 to 2 acres	65	45
2 to 3 acres	30	21
More than 3 acres	8	5
Total	145*	100

Source: Primary

Figure1 Number of Households by Property Size



Source: Primary

The food grain production and the food sufficiency of the households shown in Table2 depicts the plight of the farmers of the village. 4% of the households grow foodgrains that lasts only 2 months. Around 40% of the households produce less than 6 month's requirement of food grains, 19% produce 7 month's, 10% produce 8 month's, 7% produce 9 to 10 month's and 24 percent produce a full year's requirement of foodgrains.

This food grain insufficiency is a critical vulnerability of the poor which they try to augment by diverse livelihood strategies within the constraints of very low education level, skills and extremely limited financial resources.

Table 2
Distribution of Households by Food Sufficiency during the Year

	No. of HH	% of HH
2 Mths	06	4.13
3 Mths	07	4.82
4 Mths	20	13.79
6 Mths	24	16.55
7 Mths	28	19.31
8 Mths	15	10.04
9 Mths	06	4.13
10 Mths	04	3.09
1 Year	35	24.14
Total	145	100.00

Source: Primary

Emergence Of Wage Labor

According to the statistical profile of Jharkhand 63% of the rural population owns no land or less than one hectare of land i.e. are marginal farmers. Landless and marginal farmers lack the assets and capabilities required for a means of living as they are uneducated and unskilled and do not have access to physical and financial capital.

They concentrate on activities within these constraints and are forced to rely on some form of **wage employment** as a principal means of livelihood. The availability of agriculture labor opportunities in the villages has steadily declined over the last few decades. This, according to the respondents, is due to the increasing pressure of steadily growing population on stagnant or declining labor demand, leading to a slump in wage rate. Availability of work is generally low except during the agricultural seasons (cultivation and harvesting).

As per the principal status of employment in Jharkhand on average, only 11 percent of the rural poor are engaged as agricultural labor. In comparison, about 50 percent of the rural poor are employed in non-agricultural casual wage employment, mainly in construction and transport and less so in mining and manufacturing. Non-agricultural casual wage employment which provides a source of income to 50 percent of the rural working population of Jharkhand has thus emerged as the main source of livelihood for the rural poor.

This is clearly evident from the survey results as shown in Table 3. Occupations of the households have been classified into two major groups. One group of occupation includes cultivators, agricultural labor, daily wage labor, labor in government programmes like NREGA, and daily wage labor in the nearby brick kilns. The second major group of occupations which requires some education and higher level of skills include services, jobs as guards, drivers, anganwadi helpers, jobs in the army and brokership.

Table 3
Percentage Distribution of Respondents by Occupation

	Occupation	No. of HH	% of HH
	Low Wages		
1	Farming	145	100.00
2	Labour	85	58.62
3	NREGA	43	29.65
4	Brick Kiln	90	62.07
	Higher Income		
5	Service	39	26.90
6	Broker	05	3.45
7	Anganwadi	03	2.07
8	Guard	02	1.38
9	Driver	01	0.69
10	Armi	02	1.38
11	Shopkeeper	02	1.38

Source: Primary

The first group of occupations is available to the whole population of the village as is evident from the table all the villagers are involved in **farming**. They farm on their own land if they possess land, others work as agricultural laborers if they do not possess land. Another group cultivates on a contractual basis by leasing land from the rich land owners. The families of the householder who goes out of the village for service take care of the field work. Migrants come back to their village during the sowing and harvesting time as more labor is needed at that time.

Due to fragmentation, the size of land holdings have decreased and do not yield enough food grains or income for adequate sustenance of the families and 59 % of the households are also employed as **wage laborers**; 66% work in the **brick kilns** and 43% have been provided wage labor in the **NREGA** programme.

The emergence of wage labor , not cultivation is a major feature of rural Jharkhand. This large mass of unskilled labor force with a high level of food security is the target of most anti poverty interventions of the government.

Impact on Education and Level of Skill

The low human development status of the area is reflected in the educational profile of respondents. 59% of male and 76% of female respondents were illiterate though most of them had learned how to sign. Only 9% of males and 5% of the female respondents had gone further than primary education and only 4% of the men and 1% of the women were graduates. While achievements are low overall, women are especially disadvantaged. Three fifths of males and three fourths of all women and girls were illiterate. At each level of education, the proportion of women is lower.

With only 5% of males in the village with secondary education and 4% male graduates and a much lower proportion of females, i.e., 4% with secondary education and 1% graduates the job opportunities requiring

skilled and educated candidates are not available to them.

Low paying livelihood opportunities like casual farm and non farm wage labor, collecting and selling non timber forest products, selling livestock from the limited stock available to them and migrating to towns to work as household help are the kind of low paying livelihood opportunities that would be available to them at this level of skill and education.

Though literacy rates have increased tremendously in Jharkhand and education in the primary schools has shown an unprecedented growth the survey revealed that only 9% of the males and 5% of the females had studied beyond the primary classes. 59% males and 76% females are illiterate and low paying

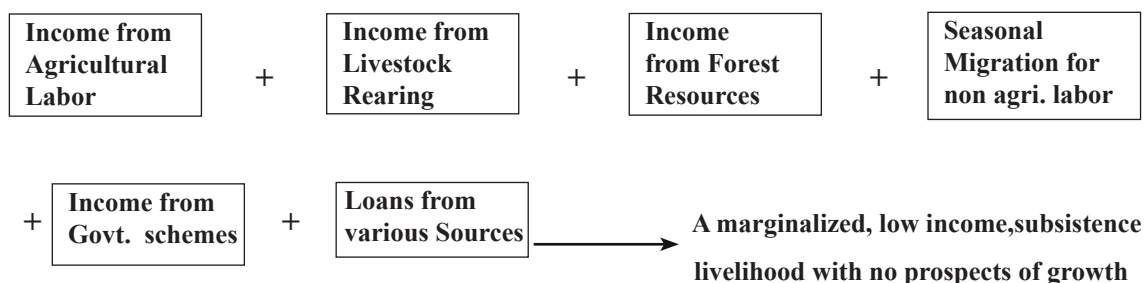
livelihood opportunities like casual farm and non farm wage labor are available to them. Collecting and selling non timber forest products, selling livestock from the limited stock available to them and migrating to towns to work as household help are the kind of low paying livelihood opportunities to choose from at this level of skill and education.

The educated members of the community have secured services out of the village as drivers, guards, anganwadi workers and other low end jobs which helps them to supplement the farm income and obtain food security.

Inadequate Income Generation From Diversification Of Livelihood Strategies

Current livelihood strategies often fail to achieve basic livelihood outcomes. Food security is a major priority and communities must, increasingly, diversify or straddle across sectors. To most survey participants, being able to increase income is the next priority after food security.

Figure 3 Diversification Of Livelihood Strategies



The livelihood strategy of landless and marginalized farmers is of diversification which include income from agricultural labor, livestock rearing, minor forest resources, seasonal migration in search of non-agricultural labor, income from government schemes and loans from various sources. All these strategies combined provide a less than subsistence livelihood to the marginal farmer with no savings or prospects of growth.

The better off farm households, however, have income from some other sources apart from income

	Male%	Female%
Illiterate	58.60	76.20
Primary Education	32.20	18.80
Secondary Education	5.30	3.80
Graduate	3.90	1.20
Total	100.00	100.00

Source: Primary

from agricultural activity, which is, salaried work and or from private businesses. Similarly, households with a private family business also receive other types of income, for instance, from family farms. This diversification implies significant interconnections between different sectors of the Indian economy and suggests that policies that affect one sector of the economy could have widespread impact on a large number of households. Some of these sources of income are highly interconnected.

Threats To Landless And Marginal Farmer

Along with very low income the farmers are confronted with various constraints which prevent or diminish the chances of further income generation. Some of them are the small size of land holdings, dependence on rainfall, monocropping, buying seeds, fertilizers and pesticides on credit which leads to indebtedness, no savings as consumption is more than income, very low wages, no or low education level and food insecurity.

Strengths of the Poor which can be Channelised towards Income Generation

Awareness: The experience of focus discussions clearly brings out the fact that the poor are well aware of their problems, their needs, and priorities. They understand the reasons for their plight and they also have solutions for this.

Hardworking: The poor are hardworking, courageous and resilient. They work for long hours to earn their living. They migrate from their villages to urban slums, accept the hard work of brick kilns or factories, push heavy carts and carry heavy loads on their heads on railway platforms or godowns and they suffer the extreme cold or extreme heat for livelihood.

Celebration: In spite of being poor, they are generally simple and hard working and they accept what comes to them as fate and sing and dance during celebrations and festivals which have given rise to the folk songs and dances of India.

Social Capital Surplus: Tribals hold social capital in high regard, irrespective of income level, gender, or ethnicity. All prefer to rely on their community than to seek assistance elsewhere. Networks and connectedness, and relationships of trust, reciprocity, and exchanges determine how they work together in pursuit of livelihood outcomes.

Households routinely participate in reciprocal labor exchange to transplant and harvest paddy and women band together to collect non-timber forest products from the forest.

Recommendations

Ensuring inclusive growth for the rural poor of Jharkhand requires an innovative approach in areas such as agricultural productivity, healthcare, sanitation, education, employment generation, infrastructural improvements, use of modern technology, access to markets and tribal upliftment.

As the country's growth gathers pace, we must deploy innovative solutions to ensure that the poor have unconditional access to nutritious food, quality education, affordable healthcare and sustainable employment. Innovative policies need to be formulated that focus on helping the disadvantaged people to emerge from an existence of perpetual poverty and to give all the landless and marginal farmers:

Food security,

Employment oriented education

Affordable and accessible health centres

Ample jobs, and not seasonal and short term employment opportunities.

Creation of infrastructure to induce nonfarm business activities.

To ensure this, we need to adopt a focused approach offering self empowerment opportunities to the disadvantaged so that they can participate in growth and partake in its dividends, lifting themselves out of poverty.

Agriculture is the very core of our economy. Agricultural productivity through technological interventions is the key to development. Adopting a **holistic approach** to agricultural development, i.e., including livestock, fisheries, forestry, irrigation as well as markets and power will help in removing most of the constraints to increase in productivity. Agricultural scientists need to work on farming system models, keeping in mind the special features of Jharkhand's agriculture, integrating animal husbandry, fisheries, poultry, and bee keeping in the system as depending on a single crop is risky along with low income generating capacity.

The healthcare sector can be one of the largest job creators; a healthcare set-up requires not only doctors and nurses but also paramedics, technicians, healthcare workers and providers of ancillary services. All these are sustainable jobs, which are essential for individual and societal progress. By improving and expanding the healthcare sector not only will the medical needs of the poor be fulfilled but it will create sustainable employment opportunities for both skilled and semi-skilled health workers.

Upgradation of skills needs to be one of the focal points of our educational system. Boosting primary education must be accompanied by a culture of innovation in our higher institutions. We still do not have a pool of well trained manpower to realize the scientific potential of the country. It is important to fill this gap in skills.

Micro finance and **micro insurance** also help to minimize risks in times of droughts, livestock loss, crop failure and other hazards. Most of the respondents of the survey were illiterate and unable to go to banks for loans because they did not understand the formalities involved in loan taking. They preferred to go to money lenders for he did not go through any cumbersome procedures though he may be charging almost 300% in terms of interest. They wished the process of bank loans could be simplified. Simplification of loans would make **microfinance** the catalyst for agricultural development in Jharkhand.

Prevention of leakages by introducing more transparency in governance will benefit the poor. The various poverty reduction schemes of the GOI do not help in poverty alleviation to a large extent due to leakages, faulty administration of the scheme, the terms of the scheme not being complied with and middlemen whittling away the benefits of the scheme from the beneficiaries. Even when projects are able to identify the poorest and bring them into the net of services, it cannot be assumed that project benefits will reach them or improve their livelihoods. The better-off are positioned to capture a disproportionate share of any economic gains offered by development projects. And with their new resources, they can often further tighten their grip over land and other productive assets, thereby worsening the position of the poor.

The use of media and new technology will also help in bringing about transparency. The creation of websites with information of the beneficiaries of various schemes, the highlights of the scheme, a redressal forum to look into the grievances of the poor without disclosing their identities (for fear of reprisals); advertising in mobiles the actual rates of the benefits in various schemes can be done with use of media and communication technology.

An obvious pathway out of poverty for poor households in agricultural based economies like the sample village is to supplement agricultural incomes with non-farm economic activities. This could be done by sculpting Jharkhand's natural scenic beauty and developing tourism in the state which will give a tremendous boost to the revenue of the state as well as incrementing the income of the poorest primitive forest tribes who live in the forests of Jharkhand. The forests in Jharkhand which extend over 23600 sq kms representing almost 30 % of the total geographical area of the state along with the numerous waterfalls and the pleasant climate of the region are very conducive to the development of a very economically viable employment generating possibility.

In other words, this study shows that Jharkhand has a long way to go if it has to achieve sustainable livelihood for the poor but a concerted effort in this direction is needed on the part of the planners, administrators, business community to harness the possibilities of this resource abundant region and give it a productive

direction and turn the goal of inclusive development into a reality.

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