

Systems, Extent and Constraints of Tenant Farming in Bihar: An Exploratory Study

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ABSTRACT

Tenant farming remains a vital yet under-recognized component of agriculture in Bihar, India, where marginal and landless farmers predominantly cultivate leased lands without legal protections. This study, conducted collaboratively by ICAR-RCER, Patna and World Vision India, explores the systems, extent, and constraints of tenant farming across Bhojpur, Muzaffarpur, and Vaishali districts. This study employed a combination of structured surveys (n=360), focused group discussions, and expert field observations during 2020–21, and we captured socio-economic profiles, tenancy patterns, and farmers' perceptions. We find that more than 85% of tenant farmers are marginal or landless, with tenancy arrangements primarily involving sharecropping or the Bataidari system (41%), fixed cash (33%), and fixed produce (16%). Predominant crops include paddy and wheat, with the emerging cultivation of vegetables and fruits in irrigated areas. Major constraints identified are high input costs, lack of formal lease agreements, limited access to institutional credit, and absence of compensation during crop failures. The study emphasizes the urgent need for policy interventions, including the formalization of tenancy agreements to extend the benefits of government schemes such as credit access, crop insurance, and disaster compensation to tenant farmers.

Keywords: Tenant Farming, Fixed Cash System, Bataidari System, Constraints Analysis, Bihar, Policy Measures

ARTICLE INFO

Received on	:	28/01/2025
Accepted on	:	09/03/2025
Published online	:	31/03/2025



INTRODUCTION

Agriculture and the allied sector form the backbone of Indian economy. The sector in India still provides livelihood to 47% of the country's workforce in 2015-16 but it contributed only 17.5% of the GDP at current prices (Deshpande, 2017). Farming in India is dominated by small and marginal farmers, with about 86% of landholding being less than 2 hectares. The increasing number of fragmented land holdings and reducing size of operational holdings is one of the biggest challenges of agriculture sector. Income from such small farms is not enough to maintain a healthy life. Agriculture is practiced mostly by the farmers on their own land but significant area in country is also under tenant farming in which farmers rent a piece of land for certain period of time for cultivation without getting the ownership rights from land owners. Tenancy is one of the oldest agrarian institutional devices evolved over a period of time to distribute the operational holdings in an equitable manner as compared to distribution of ownership of holdings and thus, contributes to a better distribution of income (Srivastava, 1989). Traditionally, tenancy is viewed as institution in which small and marginal farmers, in general, intend to leased-in land, while the big farmers prefer to lease-out their land for farming. This temporary transfer of land via

tenancy is evolved to facilitate adjustment and interlinked transactions in agriculture (Bardhan and Rudra, 1978). In a rapidly changing development based economy, some people involved in agriculture switch on to non-farm activities or migrate to urban areas for jobs. They themselves are unable to cultivate their land and therefore willing to leased-out their land to tenants.

Leasing out land to cultivators by land owners is a common agricultural practice in India. Conferring the right to use a piece of land belonging to others, either on rent or free of cost, by the owner without transferring the title is termed as lease of land. Such agreements, even when made orally, are considered as lease contracts (NSSO, 2015). Thus, tenant farming is a mode of farming system in agriculture where landowners provide their land, and/or operating capital and management process; while tenant farmers contribute their labour along with necessary capital and management as per the agreement. It's a system tenant farmer rents land from a landowner in exchange for a share of the produce or a fixed cash rental payment. This practice is prevalent in many parts of India, including Bihar. Agriculture being a state subject,

laws related to tenancy farming is different in different states. Many of the states do not recognize these types of farming systems. This forced tenancy farming to be more informal, insecure, and inefficient. Informal tenants do not have legal sanctity and access to institutional credit, insurance and other support services. Farmers in Bihar State mostly own very small land holdings, which causes a major issue in the agricultural sector in the state. Currently, marginal farmers (< 1 ha) accounted for 91.21% of the holdings and 57.73% of the area (DACF&W, 2019). According to the 59th round of NSSO, about 36 percent of the tenant farmers are landless, while nearly 56 percent of the tenant households are marginal land owners, having less than one hectare of land. The tenancy system in Bihar is prevalent and there are 28.2 per cent tenant farmers in Bihar (Ministry of Statistics and Programme Implementation, 2019). Informal tenants are most insecure, as they either have short-duration oral leases or get rotated from plot to plot each year, so that they cannot prove continuous possession of any particular piece of land for any specified period, which could give them occupancy rights, according to the law of a state. In view of existing issues, an attempt was made to study the nature, extent, and constraints of tenant farming in Bihar state with the help of an NGO, World Vision India.

MATERIALS AND METHODS

The state of Bihar was selected for this joint study of World Vision, India, and ICAR-RCER, Patna, because the incidence of tenancy is the second highest in terms of leased in area to the percentage of total area owned. Andhra Pradesh has the maximum area, which is to the extent of 59%, followed by Bihar, having 30.7% leased in area out of total area owned. This study was conducted in three selected districts of Bihar, namely Bhojpur, Muzaffarpur, and Vaishali during 2020-21, and a stratified random sampling technique was used in which one block of each district was selected, and three panchayat from each block were selected for surveying this study. The work was designed to capture specific best practices, policy adaptation analysis, and gaps in tenancy farming.

Different activities like primary and secondary data collection were carried out using various tools and techniques. The research methods and techniques used were based on the requirement of objectives set forth in this study. The ex-post facto research design is a type of "after-only with control group" design where both the experimental and control groups are selected after the experimental variable is introduced. (Kerlinger, 1964). This design was used and as the name suggests, data was collected after the respondents are exposed to experimental variables. ry for the onset of labor in the greater one-horned rhinoceros.



Fig. 1: Map of Bihar showing study area with asterick mark

Altogether 60 farmers from each operational Gram Panchayat were selected for the present study. Thus, a total of 360 respondents (60 each from 6 operational GPs) acted as experimental group. Observation, Survey and focused Group Discussion methods were implemented. Interview schedule was developed and pretested in the field before final administration to farmers. Data was collected from selected respondents using a structured interview schedule focused on tenancy system prevalent among the farmers. To validate the findings of survey, focused group discussion (FGDs) was also organized.

RESULTS AND DISCUSSIONS

Socio-economic condition of tenant farmers

The primary survey of tenant farmers was conducted in all selected districts. Analysis of data revealed many important findings about the social and economic status of tenant farmers, which is given in Table 1. The analysis revealed that almost half of the tenant farmers were of the middle age category, i.e. 35-50 years and only 13.6% of them were less than 35 years old, which shows that experienced farmers took the tenant farming. The majority of tenant farmers (55.5%) were illiterate and received primary-level education. OBC category farmers (57.22%) were the dominant caste, followed by Scheduled Caste and general category farmers. Out of all farmers, 54% were under BPL (Below Poverty Line) card while the rest were Above Poverty Line (APL). Regarding family size, it was observed that almost two-thirds of tenant farmers had a large family of 6 or more family members. This, in turn, aided in extra family labour that could be used in farming, thereby reducing the cost of cultivation.

The land holding shows the perfect picture of the dominance of marginal and small farmers, which is the root cause of tenancy. It can be seen that approximately 97% of tenants belonged to the marginal and small category of farmers having less than 5 acres of operational land holding. Because of very small holdings, these farmers have to cultivate the land

of others, taking on rent. Another study also found that the proportion of operational holding and area leased-in was comparatively higher in the marginal and small farmers while medium and semi-medium farmers had a comparatively lower proportion of their total area under lease cultivation (Haque, 2001). Occupation pattern confirms this as almost 80% of the respondents depend on agriculture for their livelihood. A significant 15.28% of them are dependent on a daily wage as they work as labourers in agriculture or other fields.

Table 1: Socio-economic status of head of the household (N=360)

Socio-economic Variables	Categories	Frequency	Percentage
Age of head of the family	Young (< 35 Years)	49	13.61
	Middle (35-50 Years)	181	50.28
	Old (> 50 Years)	130	36.11
Education level of head	Illiterate	108	30.00
	Primary (upto 5th Class)	92	25.56
	Middle (6th to 9th)	74	20.56
	High School (Upto 12th)	55	15.28
	Graduation and above	31	8.61
Caste	General	15	4.17
	OBC	206	57.22
	SC	125	34.72
	ST	14	3.89
Poverty level	BPL	194	53.89
	APL	166	46.11
Family size	Up to 3 members	33	9.17
	4 to 5 members	94	26.11
	> 5 members	233	64.72
Housing (Own House)	Kuchcha	168	46.67
	Pucca	192	53.33
Land holding	<2.5 acre (Marginal)	311	86.39
	2.5-5 acre (Small)	39	10.83
	5-10 acre (Semi-medium)	6	1.67
	10-25 acre (medium)	3	0.83
	> 25 acre (Large)	1	0.28
Primary Occupation	Agriculture	285	79.17
	Animal Husbandry	11	3.06
	Govt. or private Job	5	1.39
	Business	4	1.11
	Wage (Labour)	55	15.28

Cropping system adopted by tenant farmers

The cropping system was also studied and analyzed in the present investigation, and the percentage of major crops grown by the tenant farmers during the study period is illustrated in Fig. 2, and major crops grown during different seasons are given in Table 2. It was observed that many crops are grown during kharif, rabi and summer seasons and cultivation mostly depends on availability of irrigation facilities, specifically for summer season crops. The results revealed that the majority of respondents in selected districts grow paddy (90%) during the Kharif season and wheat (76%) during the Rabi season. The share of maize growing farmers was merely 20%. During summer season, pulses, especially green gram was grown by farmers due to low water requirement.

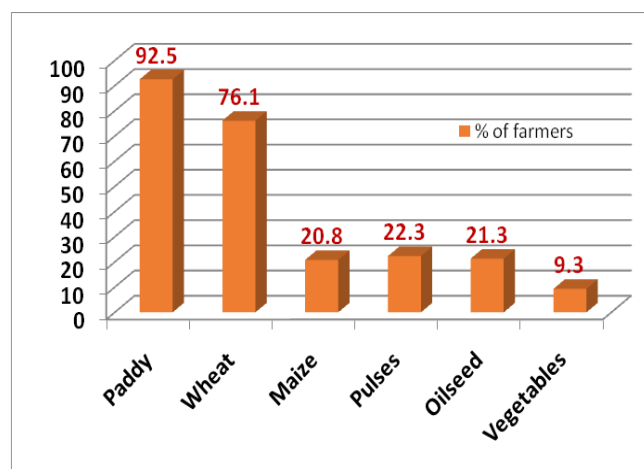


Fig. 2: Major crops grown by the tenant farmers

During focused group discussion with farmers, it was found that irrigation water was available to them but rate of hiring was high i.e. Rs 100-120 per hour. Among oilseeds, mustard was most popular among farmers. In Vaishali district, many farmers were cultivating seasonal vegetables as cash crops like tomato, chilly, brinjal, cucumber etc. throughout the year. In Muzaffarpur, a sizable proportion of farmers had mango and litchi orchards also in addition to cereals and pulses as major crops.

Table 2: Major crops grown during different seasons

SI No.	Seasons	Main crops of selected area
1.	Kharif	Paddy, sugarcane, bitter gourd, brinjal, sweet gourd (Nenua)
2.	Rabi	Wheat, potato, onion, mustard, lentil, pea,
3.	Summer	Moong, Maize, parwal, cucurbits

Major systems of tenancy in study area

There are three systems of tenancy prevalent in study areas which include fixed cash, fixed quantity of crops and sharing of produce. These systems were studied in detail and the same is presented in Fig. 3. Among these three, sharing of produce in 50:50 proportions was overall the most popular form of tenancy (41%) system prevailed in Bihar (Fig. 3). The second most popular system was fixed cash system (33%) in which tenant farmers took a piece of land on lease and paid a fixed amount of money to the land owner. Nearly one third of total respondents reported to use fixed cash system. It was noticed that trend for fixed money was slowly increasing in study area. This trend was in confirmation with the earlier findings which suggested that lease against the share of produce was slowly losing importance, while fixed money as a term of the lease was increasingly gaining popularity (Bansal and Grover, 2019). However, fixed cash system places the entire risk of crop failure on the tenant. Sharecropping on the other hand emerges as a way to share not only the output but also the risk associated with it by varying the rent payable with the size of harvest (Stiglitz and Weiss, 1981). A fixed quantity of produce was also found to be popular (16 %) among of sampled households in which tenants had to pay a certain quantity of produce (rice, wheat, maize etc.) per unit area to land owners.

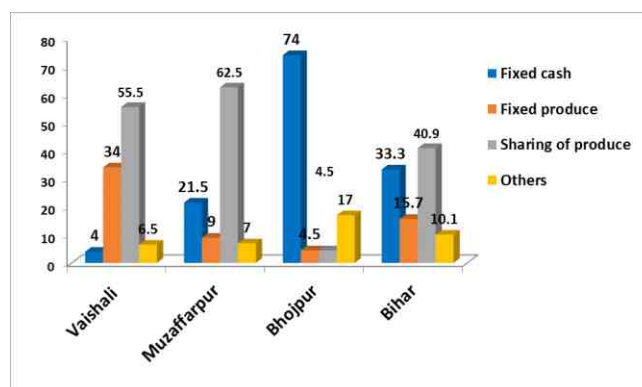


Fig. 3: Major systems of tenancy used by farmers in selected districts (%)

District wise analysis of the tenancy system revealed that sharing of produce was most popular in Muzaffarpur (62.3%) and Vaishali district (55.5%). However, in Bhojpur, only 5 per cent tenants had sharing of produce. The fixed cash system was most popular in Bhojpur with nearly three fourth (74%) of farmers in the district using it. The fixed cash system was also the second most important in Muzaffarpur district with 22% farmers using this system. During focused group discussion with farmers, it was observed that earlier land owners were demanding produce only for leasing out their land. But in recent times, fixed cash system is becoming very popular which can also be seen through analysis of data. The reason behind this shift may be that landowners don't want to take risk of crop loss due to frequent monsoon failure as well as

diseases and pest attack on crop.

Major Constraints faced by farmers in tenant farming

The constraints faced by tenant farmers were also studied using open ended questionnaire. The responses were elicited from farmers and the same is presented in Table 3. Higher price of inputs like seed, fertilizers, pesticides, irrigation water etc was found to be major constraints perceived by nearly 40% of farmers. They felt that agriculture requires a lot of investment in inputs. Higher rental value of land, No compensation in case of crop loss due to flood/drought/fire and lack of finances were also felt as main constraint as perceived by 15-16% of farmers. Tenants also felt that farmers are not giving proper land suitable for cultivation directly and they have to first properly clean and manage it before crop sowing.

Table 3: Major constraint faced by tenant farmers in selected study region (N=360)

Sl. No.	Major constraints	Frequency	Percentage
1.	Farm owner should provide properly clean farm for cultivation of crops	46	12.78
2.	Higher price of inputs like seed, fertilizers, etc	148	41.11
3.	Higher rental value of land	54	15.00
4.	Lack of money for cultivation	59	16.39
5.	No compensation in case of crop loss due to flood/drought /fire	55	15.28
6.	No input assistance from owners	25	6.94

***Multiple responses**

CONCLUSION

This study highlights the socio-economic condition of tenant farmers, systems of tenancy prevalent in study area and constraints faced by farmers. The results will be very helpful in devising policy for tenant farmers cross the state. Findings showed that 97% of tenant farmers are marginal and small farmers and there should be effective strategies for this group of tenants who face a lot of problems during cultivation. Without ownership of land, they don't get benefits of government schemes in case of crop failure due to natural disaster like flood and drought. There has been increasing

trend of adopting fixed cash system by landowners which is not a good sign for tenants in case of crop failure. The Provision for a lease document can be made which can act as legal document in absence of ownership of land. This document can be utilized by poor tenants for access to government schemes like subsidy on inputs viz. seed, fertilizers, tools and implements; credit, crop insurance, compensation of loss caused by flood/drought/diseases/pests, minimum support price etc.

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Citation:

ingh Dhiraj Kumar, Kumar Ujjwal, Sarma Kamal, Raman Rohan Kumar and Sainath Banda.2025. Systems, Extent and Constraints of Tenant Farming in Bihar: An Exploratory Study. *Journal of AgriSearch*.12(1):49-53.