

CHANGING AGRARIAN RELATIONSHIPS AND INTERLINKED TRANSACTIONS**A.R. Stuart¹ and S. Kumar²**^{1,2}Department of Economic Studies and Policy, Central University of South Bihar, Gaya, Bihar, India¹ashistuart25@gmail.com, ²sanjay31378@gmail.com**ABSTRACT**

Changing agrarian relations have impacted interlinked market exchange. It is found in the study that the occurrence of interlinked transactions has drastically reduced over the years. Some factors that have contributed to the reduction in interlinked transactions were through a natural process of steady penetration of market forces, and others were the result of growth and development through government intervention in the form of welfare policies. The study explores the changes in agrarian relations and their effects on the interlinked exchange relationships. Apart from previous empirical studies conducted in Bihar, the present study uses the findings of micro-level data collected through field surveys based on four important indicators that largely influenced the agrarian relationships in the state.

Keywords: Agrarian relations, Interlinked transactions and Welfare policies.

Introduction

Market interlinkage is a part of an economic theory that analyses the production and exchange relations in the economy. An interlinked exchange occurs when two parties exchange in more than one market. In the interlinked exchange, the terms of exchange in one market may or may not influence the terms of exchange in the other market. Interlinkage of markets at a point in time reflects the outcome of historical, political, social and economic factors. The emergence of interlinkage is attributed to the presence of uncertainty, information asymmetry, underdeveloped and incomplete markets in the agrarian economy. In the presence of imperfections, market interlinkages are regarded as alternative mechanisms that help increase efficiency (Stiglitz, 1986).

Asset inequality results in poor households being dependent on landowners for employment and accessibility to services such as credit and insurance (Bardhan, 1980). The social and exchange ties that develop under such circumstances helps the landowners include a variety of marketable and non-marketable services into the transaction bundle. On the one hand, interlinkage helps poor households to gain access to resources needed for survival, but on the other hand, interlinkage allows the landowners to maximise their surplus extraction by exploiting the poor. Ray and Sengupta (1989) clearly emphasise that interlinkages would only occur if the benefits to both parties from the linked deal outweighed the benefits from dealing in both markets

independently. The total advantage for both the agents usually exceeds the sum of the advantages of acting independently in each market. Interlinking through markets becomes a rational outcome of the optimising choices of the two parties, given their respective constraints and strategies available to them.

Bihar is one of the underdeveloped state, it has always lagged in economic and social development. The economy of Bihar is largely dominated by agriculture sector because of the involvement of the large number of population engaged in farm sector for their livelihood. In terms of credit, Bihar has one of the lowest share of institutional credit (22 per cent) and the highest share of non-institutional credit (78 per cent) in India (AIDIS, 2014). Lack of development leads to a greater possibility of the prevalence of interlinked transactions in rural Bihar. The present study rely on previous empirical studies to understand the nature and extent of historical interlinked transactions in Bihar.

Methodology and Data Sources

To know about the prevalence of interlinked transactions at present, the research methodology of the present study is based on the collection of micro-level data through field surveys. The field survey for the study is conducted in Arwal and Rohtas districts of Bihar. These two districts are selected based on four indicators. The indicators used for selecting the districts are the percentage of villages electrified in the district, number of bank branches per lakh district population, gross irrigated area in the district and

productivity of paddy. Rohtasis among the top three districts, and Arwal was among the bottom in three out of four indicators. Therefore, Rohtas represented as a developed district, and Arwal represented as an underdeveloped district. These two contrasting agro-economic districts are chosen to observe the differences in their rural land, labour and credit markets. In Arwal and Rohtas districts, 4 blocks have been surveyed. The blocks are chosen in such a manner so that they represent the overall characteristics of the districts. The two blocks selected from the Arwal district are Kurtha and Sonbhadra Banshi Suryapur, and the two blocks selected from Rohtas District are Dehri and Tilouthu. Two villages from each block and four villages from each sample district have been surveyed. The survey covers a total of eight villages. 50 households from each village and a total of 400 households are selected. The villages are selected to represent the overall characteristics of their blocks and districts. Villages Sachai and Pratappur are selected from the Kurtha block. Villages picked from Sonbhadra Banshi Suryapur block are Gonpura and Pondil. Sidhaulti and Sanath Bigha are the villages surveyed from Dehri. Villages Hurka and Lewara are chosen from the Tilouthu block.

During the village survey, a list of all the households and their land was prepared. The households were categorised based on the amount of land they held. The categories of the households according to the land owned are (i) agricultural labourers (landless), (ii) marginal farmers (owning 0.01 - 2.49 acres of land), (iii) small farmers (owning 2.50 - 4.99 acres of land), (iv) medium farmers (owning 5.00-7.49 acres of land) and (v) large farmers

(owning 7.50 acres and above). After compiling the entire list, households are selected from it for the collection of micro-level data. Fifty households are selected from each village to represent the five landownership categories. Disproportionate stratified sampling is used for deciding the number of households to be surveyed in each land ownership category. The probability of each household being selected is proportional to the size of its stratum. The fieldwork was done from July 2019 to December 2019. Data collection from the households was done by conducting personal interviews with a structured questionnaire.

The Extent of Interlinked Transactions

A Large-scale survey conducted in randomly selected villages of West Bengal, Bihar and Uttar Pradesh in 1975-76 by Bardhan and Rudhra shows a high occurrence of interlinked transactions in the rural economy. According to the survey, in Bihar 50 per cent of the tenants take consumption loans from the landlord and 41 per cent of the tenants take production loans from the landlord. 70 per cent of the casual labourers take consumption loans from their employers (Bardhan and Rudhra, 1978). Bell and Srinivasan conducted another empirical study in Andhra Pradesh, Bihar and Punjab in 1980-81. According to the study, in Bihar 26 per cent of the labourers and 16 per cent of the tenants were engaged in interlinked transactions (Bell and Srinivasan, 1989). These studies conducted in the 1970s and the 1980s show that Bihar's rural economy is closely interlinked, although there has been a steady decline in the prevalence of such transactions over time.

Table 1: The Extent of Interlinked Transactions

Type of Interlinkage	Interlinked Creditor		Interlinked Debtor		Total	
	No.	Per cent	No.	Per cent	No.	Per cent
Labour-Credit	9	2.25	20	5	29	7.25
Sharecropping-Credit	2	0.5	12	3	14	3.5

Source: Field Survey

The study examined the prevalence of present-day interlinked transactions in Table 1. The occurrence of interlinked transactions has drastically reduced over the years. According to the survey, a total of 29 households, or 7.5

per cent of total households, are involved in labour-credit transactions. Among them, 2.25 per cent of the total households take credit from their employers in return for the guarantee of providing their labour services in

the future, and 5 per cent of the employers give credit to the labourers. Only 3 per cent of the total households take credit through interlinked sharecropping-credit transactions, and 0.5 per cent of the landlords give credit to their tenants. 14 households are involved in sharecropping-credit transactions, constituting 3.5 per cent of total households.

Reasons for Reduction in Interlinked Exchange

In this section, we look at the reasons which have led to the drastic reduction in interlinked transactions. While many factors have contributed to the decrease in interlinked transactions, some were the result of steady penetration of market forces through a natural process, and others were the result of growth and development through direct government intervention in the form of welfare policies.

Patron-client networks have been existent in the Indian village communities in the form of the Jajmani system. Clients in the rural economy are villagers who do not own tangible goods and are at risk from natural (diseases, famines, accidents, and fatalities) and manufactured (threats of violence, injustice, and exclusion) changes to the environment (Powell, 1970). Clients contact a figure of authority to act as their “patron” to mitigate these risks and acquire access to tangible income-generating assets through him. On the other hand, the patron owns the assets in the village (for example, land) and has the financial means to protect peasants from external threats. As a result, a relationship of exchange develops in which the patron offers commodities and services related to his clients’ material and physical well-being, and the clients reciprocate by giving the patron secure access to their skills (Powell, 1970; Scott, 1972).

Over time, the ancient system of obligatory payments, incentives determined by customs, communal sharing, and insurance has been steadily dismantled by market forces. The size of agricultural landholding has steadily declined. The average area operated per holding has decreased from 2.20 hectares in 1970-71 to 0.833 hectares in 2018-19. Households with smaller landholdings depend more on family labour. They do hire workers

on a seasonal basis, but the contribution of the hired labourer to the total production activity is small. The adoption of technology has further reduced the dependence of the landowners on the labourers. These factors have reduced the prevalence of interlinked transactions.

Development of infrastructure like roads has also played a role in making roads for the market forces into the rural economy. Connectivity has reduced the dependence of the poor households on the landlords and significantly reduced the formation of interlinked transactions (Shami, 2012). Labourers can easily migrate to urban centres for employment opportunities. The farmers have better accessibility to input and output markets due to a reduction in the cost of transportation. The development of infrastructure increases accessibility to the outside markets and reduces the prevalence of interlinked transactions. Availability of alternatives also reduces exploitation within an interlinked deal due to the increase in the bargaining power of the poorer households.

Employment guarantee schemes like MGNREGA have been demonstrated to help the vast majority of rural residents by ensuring their employment. While the low wage rate acts as a barrier to leakage, it also has the downside of reducing the program’s impact on poverty reduction. Nonetheless, these employment programs offer the advantage of keeping disadvantaged families from sinking deeper into poverty. Furthermore, the availability of guaranteed employment, even if only for a limited number of days per year, should serve as a realistic alternative for poor households, limiting the extent to which landlords can take surpluses from their peasant exchange.

Gaiha et al. (2010) found that Maharashtra’s employment guarantee scheme had a favourable influence on agricultural wages by increasing the rate by 18 per cent. This was attributable to the year-round growth in demand for labour and the enhanced negotiating power that it provided the peasants as a group. These initiatives corresponded with slack seasons, and the rural poor could rely on them to get them through to the next cropping cycle. These initiatives have the potential to have a significant stabilising influence on poor

households' income. A study of rural households in India by Ravallion (1991) concluded that landless households in villages with rural works projects had 50 per cent less volatility in their income than landless households in villages without similar schemes. This consistent income reduced the households need for taking consumption loans to see them through the lean months (Ravallion, 1991).

Land reforms are one of the most widely used tools for changing power dynamics in the rural economy. Land reforms at their most extreme attempt to redistribute land to the landless. At the very least, these amendments aim to improve tenant security by tightening eviction conditions and imposing a ceiling on the amount of rent that can be charged. Each sort of land reform has a different influence on rural households and their relationship with their local landlord. For example, redistribution gives disadvantaged households ownership of a tangible asset that can be utilised to create income as well as acquire access to formal credit and insurance markets. This allows the household to be relatively self-sufficient in terms of its economic needs. Due to the significant social value of this property, land ownership should also benefit a household's social status (Deininger and Binswanger, 1999).

On the other hand, reforms to tenancy agreements strengthen households' security of tenure and help them save money, but they remain reliant on the landlord for services like credit and insurance. Nonetheless, reforms in tenancy agreements have the advantage of strengthening tenants bargaining power against the landlord by removing the inherent fear of eviction.

After independence, several land reforms, such as the abolition of the Zamindari system and tenancy reforms to regulate rent and provide ownership to the tenants, were enacted by the Indian Government. Despite the possible benefits in terms of equity and efficiency and reduced dependence on the landlords, the land reform policies have had limited success. Governments have made various efforts to minimise poor households' reliance on moneylenders and landlords. Microfinance programs, for example, have been established

to meet the credit needs of poor households. These programs aim to offer low-income families small loans through self-help groups that they can use to start micro-enterprises or invest in their areas. It is intended that these investments will help disadvantaged households to develop a sustainable and consistent source of income, allowing them to escape poverty. Furthermore, these programs aim to lessen the need for disadvantaged households to engage informal moneylenders and landlords in order to avoid falling prey to exploitative and high-interest debt traps (Marcus et al., 1999).

The benefits of these programs for poor households can potentially be divided into two categories, that are, poverty reduction and household vulnerability reduction (Swain and Floro, 2012). While poverty reduction strives to raise household income, the reduction in vulnerability aims to keep them from sinking further into poverty. Credit through microfinance helps in smoothing consumption, providing access to funds in times of need, and assisting households in participating in activities that can help them earn income. According to Swain and Floro (2012), while there is clear evidence that micro credit positively impacts the household's vulnerability, the evidence on poverty reduction is mixed. It is not unusual for households to use loans received through micro finance for consumption rather than investments, as consuming is a more pressing need for impoverished households (Mahajan and Ramola, 1996). Therefore, while the credit reduces the immediate dependence of the debtor households on the landlord and the moneylenders, as these loans are not used for productive purposes, they do not have a long-term impact on the debtor households.

Hashemi and Rosenberg (2006) assert that to remain financially sustainable and limit the risk of default, many microfinance institutions favour households with a source of income other than the loan. The lowest of the poor are frequently excluded from this situation. Furthermore, because most institutions use a group lending technique to reduce the risk of default, this may operate as a barrier to the membership for severely poor households, as other members may be unwilling to act as a

guarantee due to their high default risk. Furthermore, socially excluded and marginalised households may have difficulty gaining participation in groups for the purpose of borrowing. Surprisingly, Dunford and Denman (2001) believe that conditions including limited loan quantities, high-interest rates, and short repayment schedules deter impoverished households from approaching these institutions. Furthermore, disadvantaged households with no source of income may be unwilling to take out these loans for fear of defaulting.

Conclusion

The occurrence of interlinked transactions has drastically reduced over the years. Over time, the ancient system of obligatory payments, incentives determined by customs, communal

sharing, and insurance has been steadily dismantled by market forces. Personalised transactions have given way to impersonal transactions. Development of infrastructure like roads has played a role in making inroads for the market forces into the rural economy. Government policy initiatives such as the increase of credit supply by providing microfinance to the vulnerable households have also reduced the dependence of the poor households. Employment guarantee programmes have helped disadvantaged families avoid falling further into poverty. They have strengthened the bargaining power of the labourers, restricting the extent to which landowners may extract surplus from the exchange with the labourers.

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