

# From Livelihoods to Culture: A Rural Ecosystem Study of Patam Village in Munger, Bihar

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**Abstract:** *The study explores the social, cultural, economic, political, and ecological dimensions of Patam village in Munger, Bihar. It highlights the village's demographics, livelihood practices, cultural traditions, and developmental challenges such as unemployment, poor healthcare, and corruption. Employing participatory rural appraisal methods and secondary data analysis, the research provides insights into community needs, resource utilization, and systemic inequalities while proposing actionable recommendations for sustainable development.*

**Key Words:** *Ecosystem Studies, Gender Roles, Caste Dynamics, Developmental Issues, Economic Inequality, Bihar.*

## 1. INTRODUCTION:

Patam is a medium-sized village in Jamalpur Block, Munger district of Bihar, with a population of 452, as per the 2011 Census. The village has 240 men and 212 women, with 62 children aged 0-6, making up 13.72% of the total population. The average sex ratio is 883, lower than Bihar's 918, but the child sex ratio is higher at 938, compared to Bihar's 935. Patam's literacy rate is impressive at 86.15%, with men's literacy at 96.15% and women's at 74.73%. The village is governed by a Sarpanch under the Panchayati Raj system. While education is valued, the village has limited facilities, with one Upper Primary school and an Anganwadi. Healthcare access is poor, with no primary health centre. Agriculture, livestock rearing, and construction work are key occupations. The village faces challenges like unemployment, poor healthcare, and natural calamities, but it maintains cultural vibrancy through festivals and traditions.

## 2. OBJECTIVES:

- 1) To learn about the village's social structure, population trends (past and present), and rural lifestyle.
- 2) To understand the village's economy, how people earn their livelihood, and their standard of living.
- 3) To explore the village's natural resources, how they have changed over time, and the people's connection with these resources.
- 4) To understand the village's culture, traditions, politics, and unique practices.
- 5) To identify and analyse the community's development challenges and needs.

## 3. RESEARCH LOCATION AND METHODOLOGY:

The study was conducted in Patam village, situated in Jamalpur Block of Munger district, Bihar. The village has a population of 452 people living in 96 houses, with 62 children aged 0-6, making up 13.72% of the total population. Patam has an average sex ratio of 883 and a child sex ratio of 938, both compared to Bihar's averages of 918 and 935, respectively. The village has a higher literacy rate (86.15%) than the state average of 61.80%, with male literacy at 96.15%. Research involved field visits, observations, and interviews with residents and local officials, guided by the village's demographic and cultural characteristics.

### Data Collection Methods:

**I. Primary Data Collection:** Primary data was collected using various PRA (Participatory Rural Appraisal) methods to understand the village's issues, resources, and activities. Social mapping involved 27 people (10 males, 17 females) drawing a village map near the anganwadi. Wealth ranking categorized households based on assets, done by two unbiased people. Historical timeline identified key events with 5 males and 1 female. Mobility mapping explored village connectivity with 13 participants. Resource mapping analysed resources with 7 females and 8 children. Seasonal and

livestock calendars examined activities and livestock trends with 10 females, 6 women, and 2 men. Other methods included daily calendar, crop calendar, and pairwise ranking to address main problems. Focus group discussions were held with 15 women.

**II. Secondary Data Collection:** Secondary data helps to know the total population, including males and females, literacy rate, and sex ratio of the village. It also checks if people are getting government scheme benefits properly. This data was collected from the anganwadi, high school, panchayat office, block office, agriculture office, and other government departments.

## 4. RESULT & DISCUSSION:

### 4.1 Social Dimension

Every village has its own social structure and beliefs that shape society. Along with social norms, factors like population, gender roles, caste, health, education, and transportation greatly influence people's lives. To understand a village, it is important to first learn about its social structure.

#### Village History

Patam village has a unique history tied to its name and establishment. The name originates from the past occupation of cultivating betel leaves (*pan*), which was the primary livelihood for early settlers. The village gradually grew as people seeking economic opportunities arrived and settled. Initially, a small number of people inhabited the area.

#### Demography

Patam is a medium-sized village in Jamalpur Block, Munger district, Bihar, with 96 families and a population of 452. The literacy rate is 86.15%, higher than Bihar's average. The village has a sex ratio of 883 and is led by a Sarpanch.

#### Religion and Caste

Patam village shows clear caste divisions, with specific communities in different wards. The population includes 82 Brahmans, 152 Muslims, 77 Scheduled Castes (SC), 0 Scheduled Tribes (ST), 126 Other Backward Classes (OBC), 88 Extremely Backward Classes (EBC), and 125 Backward Classes (BC). Despite this, people coexist harmoniously, sharing spaces like temples.

#### Gender Roles

In Patam village, men work 9 hours daily, mainly in agriculture and external activities, while women work 7 hours, focusing on household tasks and livestock. Women face more drudgery and earn ₹150 daily, half of men's ₹300.

#### Language

Their native language is Hindi, Maithili. So, people usually speak in Hindi and Maithili. Maithili, on the other hand, holds a special place in the hearts of the people as it is the mother tongue of many Hindus, with its melodious tones and expressive nature, allows people to communicate their thoughts and emotions with ease.

#### Health and Sanitation

Patam village has limited but functional health services. The Health Sub-Center (HSC), 1.5 km away, offers basic healthcare and vaccinations. A government hospital 12 km away needs improvement, while a private hospital 10 km away is well-equipped but expensive. ASHA workers, like Kamal Devi, facilitate maternal health services and vaccinations. Patam village has good sanitation facilities with 100% toilet coverage under the Swachh Bharat Mission. It is also supported by ITC CSR work, ensuring proper drainage systems in all households. Additionally, garbage is collected from every household, promoting a clean and healthy environment.

#### Education

Patam village has two Anganwadis. Anganwadi in Ward 12 faces corruption and poor infrastructure, while Ward 11 is better. The village has two middle schools, but one is not functioning well. The middle school has poor midday meals. SBN College and BRM Women's College have limited facilities.

### Affinity Groups

In Patam affinity groups such as SHGs (Aajeevika) and farmer collectives lack active participation, limiting their developmental potential.

### Transportation and Connectivity

Patam village has good roads, no bus service, local train at Patam Halt, and residents use bikes, cycles, Toto, and autos for transport.

## 4.2 Cultural Dimension

Patam village in Bihar has a vibrant cultural life, deeply rooted in traditions and religion, with festivals, marriage customs, and ceremonies reflecting community ties.

**Festivals:** Patam celebrates various festivals, with Chhath Puja being the most significant. Dedicated to the Sun God, it involves fasting, prayers, and rituals near rivers, often accompanied by folk songs. Basant Panchmi is marked by community contributions, lights, and a communal meal of khichdi. Holi, the festival of colors, lasts three days with rituals, cooking, and dancing. Other festivals like Diwali, Ramnavami, and Makar Sankranti also involve traditional rituals, food, and hospitality.

**Marriage:** Arranged marriages are the norm, though love marriages are increasingly accepted. Dowry remains prevalent, and wedding announcements are made through posters. While inter-caste marriages are rare, marriage ceremonies are lavish and often involve considerable spending.

**Food Pattern:** The agrarian lifestyle influences the food culture, with rice being the staple. Litti Chokha is a traditional dish, and khichdi is commonly prepared on Saturdays. Men prefer non-vegetarian foods, while women typically choose vegetarian dishes. Roti, dal, and sabji are common meals.

**Birth Ceremony:** Birth ceremonies are grand, with a Chhat Puja on the sixth day and a naming ceremony on the 27th day, involving a feast. Costs range from ₹10,000 to ₹12,000.

**Death Ceremony:** The death ritual involves specific customs, such as refraining from eating certain foods and not celebrating festivals for a year. The Baishnab caste plays a crucial role in funeral rites, and after a year, a puja is performed with offerings to the community.

**Temples:** Village temples in Patam, including two Durga temples, two Hanuman temples, one Chhatti Durga, and one Kali temple, are central to community life. They host fairs and celebrations, uniting all castes. In March, a 3-day "Ramdhun" is held at a Hanuman temple, and in March-April, a 5-day fair at a Durga temple.

## 4.3 Economical Dimension of Patam Village

Economy reflects the condition of a country, state, district, or village. In Patam village, agriculture and daily wage work are the main livelihoods. Some villagers work in government jobs, but most rely on daily wages. Many young people have migrated to other states for better livelihood opportunities.

### Livelihood and Occupation

Village livelihoods in Patam are diverse, with 50% of people dependent on agriculture, mainly growing wheat. Construction work and daily wages support 25%, while another 25% are involved in other occupations. Livestock rearing is a secondary source of income. Due to limited work opportunities, 45% of people migrate to other states. Unemployment is a major issue. Skilled construction workers earn ₹650-800/day, helpers ₹300-500/day, and women on farms earn ₹150 for 5-6 hours. Farmers often lease land, earning ₹10,000 per acre annually. MGNREGA offers some employment, but migration and small businesses remain key livelihood sources.

### Cost of Cultivation and Profitability

The economics of farming varies based on land ownership:

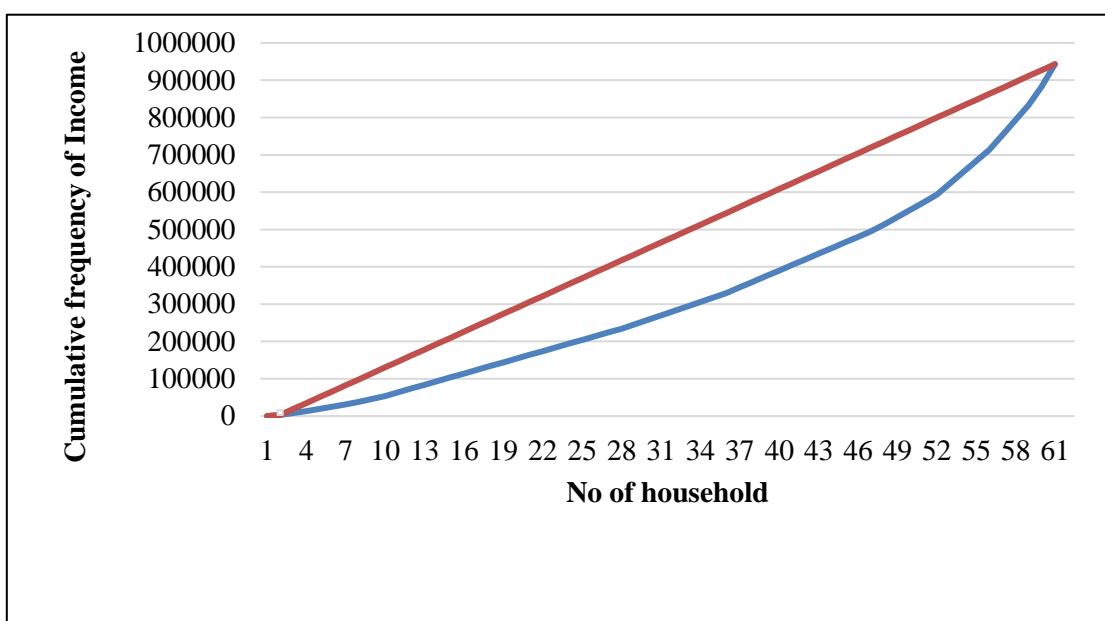
Farmers in Patam mainly grow wheat, mustard, and chickpeas. Wheat is cultivated once in winter, with a favorable temperature of 14-20°C. Mustard, requiring less water and 14-20°C, is also grown in winter, relying on borewells for

irrigation. Chickpeas need less water and cost ₹5000 per acre to cultivate, yielding 2 quintals per acre, sold at ₹70-80/kg, with profits of ₹5000. Insects sometimes destroy crops. Maize is a summer crop, requiring 30°C and costing ₹15,200 per acre, yielding ₹30,000, with a profit of ₹12,200. Insect issues persist. Farmers are shifting to year-round vegetable cultivation for higher profits.

**Non-Farming Activities**

In Patam village, 25% of residents rear livestock, mainly for personal use, with a few treating it as a secondary income source. Common livestock includes 300 cows, 35 buffaloes, 200 goats, and 100 hens. Milk from cows is sold at ₹35-50/litre, while goats are sold for meat at ₹600-900/kg. Villagers lack access to a veterinary hospital and spend significantly on livestock health. Monthly livestock rearing costs exceed ₹5000, including ₹6000 for straw, ₹5000 for fodder sacks, and ₹6000 for feed. Milk production is 4-5 litres daily, earning ₹3000-5000 monthly, leaving a profit of just ₹1000, indicating low returns.

**Poverty and Inequality**



**Chart 1: Lorenz Curve**

The Lorenz curve clearly shows the unequal distribution of income in Patam village. Wealth ranking reveals that over 35% of people earn between ₹8000-15000, 33% earn less than ₹8000, and 32% earn more than ₹15000. Among those earning above ₹15000, 15% have incomes exceeding ₹30000. This highlights the disparity, as some households earn over ₹35000 while others have as little as ₹3000. The Gini index of 0.43 confirms significant income inequality. This income gap reflects the economic disparity within the village, with a noticeable divide between the wealthy and the poor.

**Infrastructure and Access to Financial Services**

In Patam village, 75% of homes are Pucca, with government support through schemes like PMAY. Tap water, electricity, and LPG are available, though groundwater levels are decreasing. Sanitation is good with toilets and garbage facilities. Roads are paved, and banking services are nearby, improving accessibility for residents.

**4.4 Political Dimension**

In the past, Patam village faced high crime rates, including murder, robbery, and land grabbing, mainly due to bad political leadership. A decade ago, illegal gun factories in Munger made it known as the "City of Guns." However, crime rates are now decreasing due to better governance and political administration.

**Political Landscape of Bihar**

Bihar’s politics is dominated by regional parties, including RJD, BJP, JDU, INC, and smaller parties like LJP and Samata Party. The current ruling coalition is Mahagatbandhan, with Sadhana Devi from the LJP serving as the

chairperson of the Zila Parishad, winning by over 15,000 votes. Women actively participate in elections, including Panchayat elections.

### Panchayat System

Patam has a Panchayat Bhawan, but it often remains closed, and villagers struggle to access services. The Panchayat president is elected, but timely assistance is sometimes lacking. The village benefits from government schemes like PM-Kisan Samman Nidhi, low-rate fertilizers, and Kisan Credit.

### Government Schemes in Patam

Several government initiatives are being implemented for development:

1. **Mukhyamantri K Saat Nischay Yojana 2.0** – Focuses on education, healthcare, skill development, infrastructure, and agriculture.
2. **Mukhyamantri Kanya Utthan Yojana** – Provides financial support for girl children at various educational stages.
3. **Bihar Viklang Pension Yojana** – Provides a monthly pension for disabled individuals, benefiting 142 disabled people in Patam.
4. **Swachhata Madhya Ki Yojana** – Aims to improve cleanliness and sanitation.
5. **Jal Jeevan Hariyali Mission** – Focuses on water conservation and afforestation.

Additional schemes include PM Indra Awas Yojana for housing, Yuva Sakti Bihar Ki Pragati for youth empowerment, and Har Ghar Bijli Lagatar for electricity in every home. Patam also benefits from the Har Ghar Nal Ka Jal scheme, providing tap water to all households

### 4.5 Ecological Dimension

The ecological dimension focuses on the interplay between people and their natural environment, emphasizing the local ecosystem of patam village. This includes both living and non-living components, like flora, fauna, water bodies, and natural resources.

### Climate

Patam village experiences a subtropical, dry winter climate. Summer temperatures range from 35°C to 38°C, and winter temperatures drop to 12°C to 15°C. The warmest month is May (40°C), and the coldest is January (10°C). The village receives 1231 mm of rainfall, mostly during the monsoon (June to September). However, irregular rainfall due to climate change has affected agriculture.

### Soil

The village has mixed sandy alluvial soil and red soil, both fertile and ideal for crops like wheat, maize, and vegetables. The alluvial soil is highly porous, draining water quickly, while red soil, found near mountains, is less fertile but can be improved with farming techniques.

### Natural Resources

- **Pond:** Guhyea Talab is the only pond in the village, used for worship and occasionally for agriculture.
- **Grazing Land:** Large grazing land on the west side, used for livestock, mainly cows and goats.
- **Canal:** A roadside canal providing water during the rainy season.
- **Agricultural Land:** 100 acres of farmland, where Rabi (wheat, maize) and Kharif (paddy) crops are grown.

### Irrigation

Farmers rely on rain-fed agriculture, supplemented by 3 tube wells, 5 wells, and bore wells. Water scarcity is a problem, particularly for poor farmers who depend on others for irrigation.

### Flora and Fauna

- **Flora:** Betel leaves (Paan), mango (Amm), papaya (Papita), Tulsi, and Peepal trees are common.

- **Fauna:** Nilgai (Indian antelope) and herons are frequently seen in agricultural fields, sometimes damaging crops.

## 5. DEVELOPMENTAL ISSUES

Development refers to improving the well-being of individuals, which in turn improves society. Issues hindering development are referred to as development issues. These can range from gender inequality and poverty to the unequal distribution of wealth. According to a pairwise ranking the community identified unemployment as the biggest problem, followed by crime, health, higher education, corruption, and climate change

**Unemployment:** Unemployment is a significant issue in Bihar, especially in Patam village. Many educated youths struggle to find jobs, and as a result, they migrate to other states for employment. The main causes of unemployment include: 1. Lack of industrialization. 2. Poor infrastructure. 3. Low education levels. 4. Political instability. Unemployment leads to wasted skills and an increase in crime, as many youths resort to illegal activities for money.

**Crime:** Patam faces a rise in crime, particularly in wards 7 and 8, due to political influence and alcohol abuse. The presence of an illegal gun factory exacerbates the situation. Crime causes insecurity, discourages entrepreneurship, and leads to property loss.

**Health:** Patam only has a Health Sub-Center (HSC) with limited medical staff, causing villagers to travel to Munger or Bhagalpur for serious health issues.

**Higher Education:** High education costs and poor financial conditions force many villagers, especially girls, to drop out and support their families.

**Corruption:** Corruption affects access to government services. People often have to bribe officials to receive benefits or government aid. These issues hinder the community's progress, and addressing them is essential for the overall development of Patam village.

### Case: Resilient Widow's Journey Towards Success

Priti Kumari, a 21-year-old from Ward No. 12 in Patam village, was living a joyful life until tragedy struck. Married to Shekher Kumar in December 2021, their love blossomed despite life's challenges. However, her world shattered when Shekher passed away unexpectedly just months later. Left in shock and blamed by her in-laws, Priti faced immense grief and adversity. She relinquished her marital ties and returned to her parents' home, where she battled despair and thoughts of ending her life. Yet, with her family's unwavering support, Priti found the strength to move forward. Determined to rebuild her life, Priti resumed her studies and dreams of achieving financial stability and becoming a pillar of support for her family. Her resilience and courage inspire hope as she works towards creating a brighter future and proving that even in the face of loss, strength and determination can prevail.



Figure 1: Priti and husband shekhar at time of marriage

## 6. CONCLUSION AND WAY FORWARD:

The research on the rural community of Patam provides a clear understanding of its context and challenges. The village has its unique caste structure and norms. Construction and agriculture are the main occupations. However, the community faces significant issues, including water supply challenges and climate change, among others. Based on their primary concerns, the people of Patam have suggested the following recommendations for development:

## Employment

- **Foster economic growth:** Implement policies to encourage business development, innovation, and investment, leading to job creation.
- **Enhance skills training:** Provide vocational training and education programs to equip individuals with skills for emerging industries.
- **Support entrepreneurship:** Offer financial assistance, mentorship, and simplified administrative processes for startups to foster innovation and create jobs.

## Crime

- **Community engagement:** Actively involve the community in crime prevention initiatives.
- **Target root causes:** Address socioeconomic issues such as poverty, lack of education, and unemployment, which contribute to crime.
- **Strengthen law enforcement:** Provide training and resources to law enforcement agencies for better crime prevention and response.

## Higher Education

- **Affordable education:** Increase scholarships, grants, and financial aid to make higher education accessible.
- **Quality assurance:** Ensure high academic standards through accreditation and support for research and innovation.
- **Lifelong learning:** Promote upskilling and reskilling opportunities for ongoing professional growth.

## Health

- **Health awareness:** Organize health camps and programs.
- **Doctor availability:** Ensure timely access to qualified doctors.
- **Infrastructure and technology:** Improve healthcare facilities with modern infrastructure and technology.

These recommendations aim to address the pressing challenges and pave the way for holistic community development.

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