

# Papda Village at a Glance

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## I. INTRODUCTION

The Economics Program of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) initiated Village Level Studies (VLS) in 1975 in six villages in Andhra Pradesh and Maharashtra states. This was to provide the most efficient way to understand farming systems in rural areas, and to identify the socio-economic and agro-biological and institutional constraints faced by the farming community in the semi-arid tropics (SAT). These studies were extended to two villages in Gujarat state in 1980 and two villages in Madhya Pradesh state in 1981 – Papda and Rampura Kalan. These studies were discontinued in all the ten villages in 1985 and were taken up again in 2009 by the Research Program on Markets, Institutions and Policies (RP-MIP) of ICRISAT under the project on “Village Dynamics in South Asia (VDSA)”, to track changes in rural poverty in household and village economies in South Asia.

Papda village (23° 26' 49.5'' N and 78° 17' 21.8'' E) is situated in Gairatganj tehsil of Raisen district (between 22° 47' and 23° 33' N and 77° 21' and 78° 49' E). Raisen district, once part of the princely state of Bhopal, takes its name from a massive fort built on a sandstone hill, with the town at its foot. Raisen was an important center of administration from the period of its foundation from Hindu times. Raisen district came into existence on 5 May 1950. The Buddhist monuments at Sanchi, a UNESCO world heritage site, are located in the district. The predominant language of the region is Hindi.

This village is situated on the Bhopal-Sagar state highway, 13 km from the tehsil headquarters Gairatganj, 63 km from Raisen district headquarters, 113 km from Bhopal and about 952 km from Hyderabad (via Bhopal). An approach road from the village connects to the state highway (SH 42) at a distance of 3 km at Alampur village. The nearest railway station is Sagar, 78 km away. The village has a population of 880 grouped into



164 households. Medium to deep black soils (Vertisols) and murrum are the predominant soils of the village. The majority of the houses are *kuchcha* (mud walls) with limited facilities. The average rainfall of Gairatganj tehsil is about 1220 mm.

## II. HISTORICAL BACKGROUND / DEVELOPMENT OF THE VILLAGE

During the last three decades, Papda village has progressed very slowly in terms of social, political, economic, technological, institutional and infrastructural, educational and religious advancement.

**Social:** Papda is a very small village with a population of 880, grouped into 164 households belonging to 16 caste groups. These castes are segregated into groups based on the social progression, namely, scheduled caste (SC), scheduled tribe (ST), other backward caste (OBC) and general or forward caste (FC). Chadar, Gurjar, Kurmi, Yadav, Nath and Brahmin are the major caste groups in the village. Yadav and Kurmi are influential in social, political and economic spheres compared to other castes. Caste norms are strictly followed in the village. People of FCs such as Brahmins and Gupta/Vysya and OBC do not allow persons from SC and ST families to work in their houses but employ them in their fields. SC/ST people are not allowed to enter into temples or to sit beside FC persons. They draw water from separate wells and hand pumps, built and maintained by the village panchayat. Traditional social customs are also still followed in this village. In general, women's participation in decision making is very limited. Men generally take all decisions regarding agriculture and domestic-related activities in most of the households. There is no gender-based wage discrimination in the village. Most of the women, particularly daughters-in-law, do not come out of their house if any male outsider visits their home; if this is unavoidable, they cover their faces with their sarees.

**Political:** Three villages—Papda, Kheda and Chironjiya—fall under the jurisdiction of Papda Gram Panchayat. After independence, Yadavs and Kurmis have been playing an important role in village politics. The Gram Panchayat consists of 15 wards, of which nine are in Papda and the rest in Kheda and Chironjiya villages. Of nine wards, seven are represented by women. Since the establishment of the Gram Panchayat until 2010, the Sarpanch (President) has been either from the Yadav or Kurmi castes. In 2010, for the first time, a woman from Kheda village belonging to SC has been elected as Sarpanch. The President of the Gram Panchayat is responsible for collecting house taxes and obtaining funds from the government for village development, such as improvement of education, maintaining sanitation, drinking water supply, and construction and maintenance of roads and street lights.

**Economic:** Papda village has experienced development over the last 10 years due to intensive agriculture, adoption of technologies and diversification of livelihoods. Agriculture is the main occupation, followed by wage employment (farm and non-farm), caste-based occupation and service sector. Households in Papda rely heavily on dryland agriculture. However, during the *rabi* (post-rainy season), farmers provide 1-3 irrigations to wheat and chickpea, using water from borewells, open dug wells and the river, to boost the productivity of these crops. Medium to deep black soils (Vertisols) are predominant in the village, and determine to a great extent the crops that are planted. After the adoption of soybean in the *kharif* (rainy season), double cropping became possible and the area under double cropping has increased. The important crops cultivated in the *kharif* are soybean, pigeonpea, black gram, green gram and paddy, while wheat, chickpea, green pea, lentil, linseed, *tewda* (a minor pulse), vegetables, mustard and coriander are grown in the *rabi*. A few farmers grow green gram in a limited area during summer.



The major drivers of economic development in Papda village are: (a) Adoption of improved cultivars, chemical fertilizers, plant protection measures and better crop management practices, (b) Farm and non-farm labor earnings of the majority of households, (c) Caste-based occupations, *beedi* making and sale of common property resources, (d) Seasonal migration to other states, particularly Punjab, to pick cotton, (e) Government schemes such as loans from banks at low interest rates using Kisan Credit Cards, Targeted Public Distribution System, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Pension for widow, old and handicapped persons, and financial subsidy for construction of houses, etc, and (f) Monthly salaried jobs, both full and part time.

**Technological:** Productivity levels of all crops have improved due to adoption of improved cultivars, chemical fertilizers, plant protection measures and better crop management practices. Nearly 80% area is planted with improved cultivars. The important improved cultivars adopted by the farmers include JS335 and JS9305 in soybean, Asha and Lakshmi in pigeonpea, Vijay, Lokman-1 and C-306 in wheat, and JG 11, 16, 315 and 412 in chickpea. Most of the farmers adopted water and soil conservation technologies when check dam, water tanks, wind breakers, strengthened bunds were constructed under a watershed project during 2001-08. After the withdrawal of the project, only a few farmers are continuing water and soil conservation practices. Presently, about 95% of the agricultural land is prepared using tractors and modern plows. Threshers are used on 95% of the area, modern seed drills on 90% and power sprayers on 60% area. Harvester-cum-threshers are hired from outside the village for harvesting and threshing of soybean, chickpea and wheat.



**Institutional:** Papda Gram Panchayat office has been functioning since 1952. The Gram Panchayat consists of 15 wards of which 9 are in Papda village and the remaining 6 are in the other two villages under the jurisdiction of Papda Gram Panchayat. A primary school was started in 1960, and was upgraded up to Standard 8 in 2003. One Anganwadi (pre-primary) center provides educational services to 52 boys and 36 girls. The post office was established in 1980. A Public Distribution System (PDS) has been functioning since the 1960s and 204 card holders are benefiting under the scheme. A Primary Agricultural Credit Society (PACS) is located at Gairatganj and very few farmers are eligible to get loans, since many are defaulters. Most of the villagers depend on three village moneylenders for credit. Farmers also avail loans from the State Bank of India (SBI) at low interest rates using Kisan Credit Cards. The MGNREGS program began in 2008 and more than 300 work cards were distributed to the villagers. A Watershed Development Program was functioning during 2001-08. Under this program, field bunds were strengthened on the farmers' fields, and three small tanks and check dams were constructed to benefit the majority of the villagers.





**Infrastructural:** There was no proper road to the village from the nearest town before 2000. A good tar road was constructed to connect the state highway (SH 42) in the year 2000 under the Pradhan Mantri Gram Sadak Yojana. This significantly improved the town's accessibility to farmers, and since then they have been selling agricultural produce in the nearest market town Gairatganj instead of selling in the village to middlemen at lower prices. The Gram Panchayat laid a 760 meter cement road inside the village using Government funds in recent years. 125 houses (of 164) and 8 borewells have electricity connections. During the 1980s, four open wells were the only source of drinking water. With the developmental work taken up by the Gram Panchayat, today, five hand pumps and four open wells are the main sources of drinking water in the village.

The first land-line telephone service (BSNL) was started during the 1990s in the village post office. At present, five landline phones are in use. Mobile phone services started in the village in 2005 and now more than 70% of the households have mobile phone connections for communication. There are 50 television sets, 40 dish antennae, 35 motorcycles, 6 LPG connections, 2 refrigerators, 2 cars and 3 *gobar* gas plants in the village. Until 1990, villagers were using horses and bullock carts for travel and transportation, but now travel by car, jeep and motorcycle and use tractors for transportation of farm inputs and outputs. In general, awareness among the households has increased through their active involvement in political and government programs and frequent visits to urban areas.

**Educational:** Awareness of educational opportunities has significantly improved in the village. Primary school (Standards 1 through 5) was started in 1960, which was upgraded up to Standard 8 in 2003. About 239 children are currently enrolled in Primary and



Secondary levels. There is one Anganwadi center (pre-primary school) in the village providing educational services to 52 boys and 36 girls. Private convent schools are also opened in Gairatganj tehsil. Children belonging to well-to-do families are moving to towns and cities for higher education. These educational facilities in the village have helped increase literacy levels upto 60%. Higher education has helped the villagers to enhance their knowledge, awareness and employment opportunities.

**Religious:** Nearly 93% of the households (153 of 164) in the village are Hindu and the remainder follows Islam. There are six temples in this village, and the villagers celebrate Holi, Raksha Bandhan, Ganesh Chaturthi, Deepavali, Dussera, Sankranti, Shivarathri and Rishi Panchami. Muslims celebrate both Muslim and Hindu festivals. The villagers worship Lord Rama and greet each other by saying "Jai Shri Ram" whenever they meet. Every Monday, about 15-20 women gather near the temple and sing *bhajans*. Throughout the whole month of March-April (Hindu New Year), most of the women take a holy dip in the River Beena early in the day. During Ganesh Chaturthi and Dussera, villagers sing *bhajans* in the temples and take out a procession of idols of Lord Ganesh and Durga in the streets of the village at the end of the festival. Villagers decorate bullocks with colors during Deepavali. Holi is another important festival celebrated here.



### III. BASIC STATISTICS OF THE VILLAGE

#### A) LOCATION/ACCESSIBILITY

- Village: **Papda** 2. Tehsil: **Gairatganj** 3. District: **Raisen** 4. State: **Madhya Pradesh** 5. PIN: **464884**
- GPS values: (a) Latitude: **23° 26' 49.5" N** (b) Longitude: **78° 17' 21.8" E** (c) Altitude (m): **535**
- Nearest town: (a) Name: **Gairatganj** (b) Distance from village (km): **13**
- Nearest State Highway: (a) Number: **SH 42** (b) Distance from village (km): **3**
- Nearest National Highway: (a) Number: **NH 86** (b) Distance from village (km): **13**
- Name of the Village Panchayat in which the village falls: **Papda**
- Details of the Sarpanch/Village Panchayat President: (a) Name: **Ms Gulab Bahi** (b) Cell No.: **09009808190**
- Details of the Gram Sevak: (a) Name: **Mr Seetharam Gour** (b) Cell No.: **09165361232**
- Details of the Village Accountant/Patwari: (a) Name: **Mr Raju Singh Shilpi** (b) Cell No: **09425080528**

#### B) DEMOGRAPHY (as on 30 September 2009)

- Population (No): **880** 2. Households (No): **164** 3. Voters (No): **503** 4. Farmer accounts (No): **225**

#### 5. Classification of population:

Category	No.	Farm Size*	No.	Religion	No.	Caste	No.	Literacy	No.	Gender	No.
SC	386	Landless	352	Hindu	822	Chadar/Chamar	253	Literates (<4)	464	Male	297
ST	7	Marginal	106	Muslim	58	Gurjar	128	Literates (4-10)	374	Female	262
OBC	462	Small	145	Christian	0	Kurmi	119	Matriculates	24	Children	321
General (FC)	25	Medium	132			Ahir/Yadav	73	Graduates	15	(<14y)	
		Large	145			Muslim/Nath	58	Post-graduate	3		
						Brahmin	20				
						Others#	229				
<b>Total</b>	<b>880</b>		<b>880</b>		<b>880</b>		<b>880</b>		<b>880</b>		<b>880</b>

**Caste Group-wise Population (%)**

■ SC ■ ST ■ OBC ■ General (FC)

**Literacy Level-wise Population (%)**

■ Illiterates (<4) ■ Literates (4-10) ■ Matriculates ■ Graduates ■ Post-graduates

\* <0.1 ha=Landless; 0.1-<1 ha=Marginal; 1-<2 ha=Small; 2-4 ha=Medium; >4 ha=Large.

# include Gupta, Barber, Darji, Dhobi, Lohar, Kumhar, etc.

#### 6. Classification of households:

Male headed (No): **152**

Female headed (No): **12**

Category	No.	Farm Size*	No.	Religion	No.	Caste	No.	Main occupation	No.
SC	76	Landless	74	Hindu	153	Chadar/Chamar	55	Farming	74
ST	1	Marginal	20	Muslim	11	Gurjar	26	Agril.labor	76
OBC	81	Small	28			Kurmi	21	Caste occupation	8
General (FC)	6	Medium	21			Ahir/Yadav	16	Others\$	6
		Large	21			Muslim/Nath	11		
						Brahmin	5		
						Others#	30		
<b>Total</b>	<b>164</b>		<b>164</b>		<b>164</b>		<b>164</b>		<b>164</b>

**Farm Size-wise Households (%)**

■ Small ■ Landless ■ Medium ■ Marginal ■ Large

**Main Occupation-wise Households (%)**

■ Farming ■ Agril. labour ■ Caste occupation ■ Others\$

\* <0.1 ha=Landless; 0.1-<1 ha=Marginal; 1-<2 ha=Small; 2-4 ha=Medium; >4 ha=Large.

# includes Gupta, Barber, Darji, Dhobi, Lohar, Kumhar, etc.; \$ includes salaried, moneylenders, middlemen, service sector, etc.

## C) LAND USE PATTERN (2009-10)

### 1. Distribution of Geographical Area:

Particulars	Ha
Agricultural land	626
Forest	86
Waste lands	28
Land used for roads, buildings and non-agricultural purposes	6
Land occupied by water resources (tank, river)	7
Grass land	12
<b>Total Geographical Area</b>	<b>765</b>

### 2. Cropped Area

Season	Ha
<i>Kharif</i>	313.2
<i>Rabi</i>	507.8
Summer	6.0
Annual/Perennial crops	0.4
<b>Gross Cropped Area</b>	<b>827.4</b>

### 3. Irrigated Area

Season	Ha
<i>Kharif</i>	0
<i>Rabi</i>	210.2
Summer	0
Annual/Perennial crops	0
<b>Gross Irrigated Area</b>	<b>210.2</b>

## D) LAND RESOURCES

### 1. Soil distribution

Soil type	% area
Medium to deep black	70
Murum	30

### 2. Irrigation sources (as on 31 December 2010)

Sources	Total No.	Working No.	Approx. depth (m) of working wells	Irrigated area (ha yr <sup>-1</sup> )
Borewells	30	8	75	28.4
Open wells	40	35	13	81.0
			<b>Approx. land area covered (ha)</b>	
Ponds	4	4	3.2	12.1
Tanks	5	5	6.0	7.7
River	1	1	30.3	81.0

**3. Rainfall** (Jun'09-May'10): (a) Quantity (mm/year): Normal: **1220** Actual (Jan-Dec 2010): **583**

(b) No. of rainy days: Normal: **60** Actual (Jan-Dec 2010): **38**

## E) CROP PRODUCTION (2009-10)

Kharif		Rabi		Summer		Annual/Perennial Crops	
Crops	Area (ha)	Crops	Area (ha)	Crops	Area (ha)	Crops	Area (ha)
Soybean	210.2	Wheat	246.1	Green gram	6.0	Fruit garden	0.4
Soybean+Pigeonpea	65.2	Chickpea	164.6				
Grass (fodder)	20.2	Green pea	35.0				
Black gram	10.0	Lentil	31.7				
Green gram	3.0	Linseed	13.8				
Maize	2.5	Tewda	7.2				
Paddy	2.1	Vegetables	5.4				
		Mustard	2.0				
		Coriander	2.0				
<b>Total</b>	<b>313.2</b>		<b>507.8</b>		<b>6.0</b>		<b>0.4</b>

## F) ASSETS (as on 31 December 2010)

### 1. Productive Assets:

Livestock		Heavy Machinery	
Type	No.	Type	No.
Cow (indigenous)	300	Tractor	16
Buffalo	60	Thresher	7
Bullock	70	Cart	50
Goat	450	Flour mill	7
Poultry	50		
Milk sale (L day <sup>-1</sup> )	150		

### 2. Consumer Assets:

Type	No.
Television	50
Refrigerator	2
Washing machine	1
LPG connection	6
Dish Antenna	40
Motorcycle/Scooter	35
Car/Jeep	2
Gobar gas plants	3

### 3. Buildings:

Type	No.
Houses-Pucca	4
Houses-Kuchcha	94
Houses-Thatched	2
Cattle shed	8

## G) BASIC NEEDS (as on 31 December 2010)

- Type of food (No. of households): (a) Pure vegetarian: **130** (b) Non-vegetarian: **34**
- Type of clothes: (a) Men: **Kurtha, Pajama/Dhoti; Pant, Shirt (Young)**  
(b) Women: **Saree, Blouse; Chudidhar (Young)**
- Type of houses: (a) Pucca-**4** (b) Kuchcha-**94** (c) Thatched-**2**

## H) INFRASTRUCTURE (as on 31 December 2010)

- Village electrification: **Yes** No. of houses having access to electricity: **125**
- Tar/metal/cement road to village: **Yes**
- Is there a tar/metal/cement road inside the village? **Yes** Length of road (m): **760**
- Public transport facility:  
Public/private bus facility to village: **No**  
Other modes of travel available? **Yes** Mode(s) available: **Auto, Jeep**
- Drinking water facility: **Yes** Sources: **Open wells, Hand pumps**  
Tap connections available? **No**
- Public toilet/urinal facility: **No**
- Public health facility: **No** Distance to nearest health facility (km): **3 (Alampur)**
- Veterinary health facility: **No** Distance to nearest facility (km): **13 (Gairatganj)**
- Banking facility: **No** Nearest banking facility (km): **6 (State Bank of India, Dhandiya)**

### 10. Educational facilities:

Level	Number of institutions	Enrolment (Number)	
		Male	Female
Pre-primary (Anganwadi)	1	52	36
Primary (Standard 1-5)	1	42	45
Secondary (Standard 6-8)	1	67	85

### 11. Agricultural input shops:

Input	Available in village?	If no, nearest available place	Distance from Village (km)
Seed	No	Gairatganj	13
Fertilizer	No	Alampur	3
Pesticide	No	Gairatganj	13
Machinery – Purchase	No	Gairatganj	13
Machinery – Custom hiring	Yes		

12. Agricultural output market:  
Weekly shandy in the village? **No**  
No. of wholesale traders/commission agents in the/visiting the village: **5**
13. Storage godowns/warehouses: **No**
14. Other business units (number):  
Grocery shop: **6**                      PDS Shop: **1**                      Flour mill/chilli grinding shop: **7**  
Carpenter: **2**                              Blacksmith: **2**                      TV/Radio mechanic: **2**  
Mason: **1**                                    Barber: **3**                              Cycle repair shop: **1**  
Potter: **1**                                    Money-lenders: **3**                      Motorcycle repair shop: **1**  
Toys seller: **1**                              Bangle seller: **1**
15. Other institutions (number):  
Post Office: **1**                              Dispute Resolution Committee: **1**  
Bhajan Mandal: **1**                              Drama Mandal: **1**
16. Place of worship (No):              Temple: **6**

### I) GOVERNMENT WELFARE PROGRAMS RECENTLY IMPLEMENTED (as on 31 December 2010)

S N	Government Program	Beneficiaries (No. of Households)
1	Pensions (Widow-14, Old age-11, Handicapped-4)	29
2	Kutil Yojana (Construction of houses for needy people )	2
3	Public Distribution System (PDS) [Yellow Cards-39, Blue Cards-101 and White Cards-64]	204
	a) Households of poorest section of population (Yellow card)	39
	b) Households who are below poverty line (Blue card)	101
	c) Households who are above poverty line (white card)	64
4	Mid-day meal scheme in school	239
5	Mid-day meal in Anganwadi	88
6	Construction of toilet	140
7	Janani Suraksha Yojana (Financial assistance to women after delivery for consumption of nutritious food)	10
8	Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)	300

## About ICRISAT



The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid tropics have over 2 billion people, and 644 million of these are the poorest of the poor. ICRISAT and its partners help empower these poor people to overcome poverty, hunger, malnutrition and a degraded environment through better and more resilient agriculture.

ICRISAT is headquartered in Hyderabad, Andhra Pradesh, India, with two regional hubs and four country offices in sub-Saharan Africa. It belongs to the Consortium of Centers supported by the Consultative Group on International Agricultural Research (CGIAR).

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