Markabbinahalli Village at a Glance

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I. INTRODUCTION

In the Bill & Melinda Gates Foundation (BMGF)supported Village Dynamics in South Asia (VDSA) Project of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), 42 villages (18 in the semi-arid tropics (SAT) of peninsular India, 12 in Humid Tropics of East India, and 12 in Bangladesh) were selected, based on certain relevant characteristics, to track rural poverty in household and village economies in the region, to provide the most efficient way to understand the farming systems in rural areas, and to identify the socioeconomic constraints faced by the farming community. In the SAT region, 18 villages spread across 9 districts in 5 states were identified for the study, of which 6 were chosen way back in 1975 under the erstwhile Village Level Studies (VLS) project of the Economics Program of ICRISAT, while 12 new villages were included in the expanded VDSA project during 2009. Markabbinahalli is one of these 12 new villages.

Markabbinahalli (16°44.59′ N 76° 02.18′ E; 554.43 m altitude) is situated in Basavana Bagewadi taluka

of Bijapur district in Karnataka State. Bijapur is a drought-prone district located in the Northwestern part of Karnataka. The village is 25 km from Basavana Bagewadi (taluka headquarters), 45 km from Bijapur (district headquarters), 245 km from Hubli Airport, 520 km from Bangalore (state capital), and 365 km from Hyderabad (via Gulbarga, Jevargi and Devar Hippargi). To reach Markabbinahalli, one goes South of Devar Hippargi towards Basavana Bagewadi and then West just before Satihal village. Markabbinahalli connects to the nearest State Highway (SH 218) at Devar Hippargi, which is the nearest market town for the villagers, located 10 km away. The nearest railway station is Bijapur. The national highway NH 13 (Solapur-Mangalore) passes near Basavana Bagewadi or through Bijapur, which is 40 kms away from the village called Muttangi cross roads.

Nearly 300 years ago, Markabbinahalli was known as Jettarhalli. "Jettar" in Kannada means "illiterate" or "uneducated". In the 19th century, a disease called Marka (plague) struck the village, killing more than 100 villagers. All the survivors left the village and lived in the fields for a few years. After some years, they came back



and reoccupied the village, and became devotees of Goddess Marikamba for saving them from the disease. The village became known as "Marikambanahalli", later altered to "Markabbinahalli". All the villagers speak Kannada, while about 20% of the population (mostly Muslims) speaks Urdu.

The economy of Markabbinahalli is agrarian and completely dependent on rainfall, as there are no water sources available in the village for irrigation. Soils are deep to medium black. Farmers grow only dryland crops, mainly pigeonpea and cotton in the kharif season (June-September) and chickpea, sorghum, wheat, sunflower, and safflower in the rabi season (October to February). Markabbinahalli has characteristic features of the SAT, with temperature varying from 16°C to 44°C and normal rainfall of 655 mm, which is however erratic in nature. The highest monthly rainfall recorded was 149.2 mm in the month of September and the lowest was 3.4 mm in February. Though the River Dhoni flows just one km away from the village, the water is brackish and hence not useful for cultivation. Groundwater in the village is also saline. Nearly 80% of the households have access to electricity. About 30% of households have pucca houses. Drinking water is supplied through tap connections connected to an overhead tank.

II. HISTORICAL BACKGROUND / DEVELOPMENT OF THE VILLAGE

During the last three decades, Markabbinahalli village has progressed to varying degrees in terms of social, political, economic, technological, institutional, infrastructural, educational, and religious advancement.

Social: The village has a population of 2537 grouped into 392 households. These households belong to 20 different castes grouped into four broad categories, namely, Other Backward Caste (OBC–257 households), Scheduled Caste (SC–52 households), Scheduled Tribe (ST–3 households) and Minority (80 households). About 20% of the households are Muslim. Originally, these





Muslim households migrated from nearby villages into this village primarily to get wage employment on farms. The dominant castes in the village in terms of number of households are the Panchamasali or Veerashaiva Panchamasali (143 households), Muslims (80), Madar (25), Kurubar (23), Uppar (22), and Harijan (18). Prior to the Government reservation policy in politics, the participation by persons belonging to SC, ST, OBC and women was very limited or nil; of late, they have been actively participating in politics. Most of the households practicing caste-based occupations have left their traditional occupations due to reduced demand for their products/services as well as availability of new job opportunities due to improvement in transportation and communication networks.

Political: The village has a group Gram Panchayat established in 1954, covering the three villages of Markabbinahalli, Bisanal, and Bommanahalli, with its headquarters at Markabbinahalli. The panchayat comprises 13 members including the Sarpanch/ President, of which 6 (4 male and 2 female) are from Markabbinahalli. Reservations for SC, ST, OBC and women exist in the Panchayat elections, thereby enabling them to actively participate and providing equitable representation for all communities in the village administration. The Gram Panchayat is responsible for village development through collection of house tax, and from government funds obtained for different welfare programs. The present panchayat body (elected in May 2010) is headed by a lady, Ms Madhavi Sahibgouda Gundelgeri, who belongs to the backward caste and hails from Bommanahalli village. The politically active caste groups in Markabbinahalli are the Panchamsali (OBC) and Muslims (minority).

Economic: The village economy is agriculture based. The majority of the households depend on agricultural wage employment (41%) for their livelihood, followed by farming (39%), caste-based occupation (7%), non-agricultural labor (8%) and others (5%). Agriculture (farming and agricultural wage employment) is the main source of livelihood as indicated by the



dependence of more than 60% of households on this sector. During the last five years, there has been a significant change in the cropping pattern—a shift from kharif fallow to cultivation of pigeonpea and cotton. The practice of leaving the land fallow during the kharif season and growing crops on residual soil moisture in the rabi season was in vogue for several years. However, recently with the advancement in knowledge on technologies, farmers have started growing pigeonpea and cotton during the kharif season. Farmers have been predominantly growing pigeonpea, cotton, onion and sunflower during the kharif season and chickpea, sorghum, wheat, sunflower and safflower in the rabi season. Adoption of improved cultivars and use of modern crop production technologies has resulted in increased farm income in recent years.

Technological: The village economy, being agriculturebased, is completely dependent on rainfall as there is absolutely no water source available in the village for irrigation. The groundwater is saline and cannot be used for irrigation. The important crops grown in the village are chickpea, sorghum, wheat, sunflower, pigeonpea, safflower, and cotton. Adoption of Bt (in cotton only) and improved seed technologies, use of chemical fertilizers, plant protection measures, and mechanization (use of tractors, harvesters, and threshers) have contributed significantly to agricultural growth. More than 80% of the cropped area is covered with improved cultivars. Productivity of all dryland crops has increased since 2006, particularly in pigeonpea and chickpea, due to the adoption of improved cultivars. Mechanization has increased and about eight tractors are available for land preparation and other uses. Land preparation is done mainly by using tractors on about 90% of the cropped area. Farmers receive information mostly from progressive farmers, followed by input suppliers, relatives/friends, radio, newspapers, television, markets and extension agents. Farmers are also using threshers and combine harvesters for pigeonpea, safflower, and wheat.

Institutional: The village has two government schools, one providing education in Kannada medium from Standards 1 to 10, and the other in Urdu medium from Standards 1 to 7, in addition to two Anganwadis providing pre-primary education and food for children. There is a post office in the village, established in 1955. The Primary Agricultural Credit Society (PACS) established in 1968 in Satihal village situated about 3 km away from the village, caters to the farm credit needs of the farmers of Markabbinahalli. There is one huge warehouse facility in the village, which the farmers use to store their produce during the market glut till the market prices become remunerative for them to sell their produce. A Government Ayurvedic Hospital, established in 1985, is available in the village for treating common diseases. A primary health centre (PHC) is available in Devar Hippargi, 10 kms away from the village, which provides basic health care facilities. A veterinary hospital is available in Satihal, 3 km away from the village, which provides basic veterinary facilities. A fair price shop operates under the Public Distribution Scheme (PDS), initiated in the year 1960. The other institutional facilities available in the village are four Self Help Groups (SHG) for women, three Bhajan Mandals, two Dollu Sanghas and two Youth Clubs.

Infrastructural: The village was electrified in 1980 and presently about 80% of the houses have access to electricity. There are frequent power cuts in the village and about nine hours supply of electricity is assured per day. Street lights are provided by the panchayat on all the village roads. Drinking water is supplied through 25 public taps and 55 private individual taps connected by pipeline to one overhead tank. The project to supply drinking water to the villagers was supported by the Netherlands Government and implemented by the state government of Karnataka in the year 1999. Since there was no water source available in the village, a borewell was drilled about 7 km away from the village and a pipeline laid to connect the borewell and the





overhead tank situated in the village. One small tank is also available in the village, which is generally used for washing and cleaning, but in emergencies, for drinking purposes as well. There are no proper internal roads (tar/metal) and drainage facilities in the village. The internal roads are kuchcha, except about 0.1 km that is cemented. Almost all the drainage passes through the main roads. The village has access to the Karnataka State Road Transport Corporation bus service (KSRTC) from Bijapur town to the village. This KSRTC bus plies five times a day. In addition, autos, private jeeps and mini-buses also ply from the village to nearby towns.

The villagers have good communication facilities: telephones (landline and cellular), television, radio and newspapers. Agricultural extension services are available through State Agricultural Department personnel and private input dealers. There is a weekly market on Fridays in the village to buy provisions. In 2010 under the Prime Minister Grameena Sadak Yojana (PMGSY) of the Government of India, a tar road (pucca) was laid from the village to connect the main road joining Basavana Bagewadi and Devar Hippargi. In the same year, the Gram Panchayat also constructed some drainage tracks and a few internal cement roads under the Gram Swaraj Yojana. There are three community halls in the village, which are used for community social functions.

Educational: One government school was started in the village in 1880 in the Hanuman temple premises, providing education for Standards 1 to 5. This school was upgraded to Standard 7 in the year 1969, marked by the construction of a new school building, and later upgraded by one standard every year from 2007 to 2009. The medium of instruction in this school is Kannada. The village also has one Urdu school, which was started in 1918 in a mosque, to provide education up to Standard 4. A new building was built in 1972 and the Urdu school was upgraded to Standard 7. The village also has two Anganwadis, established in 1994 and 1997, both providing pre-primary education and



nutritious food to 148 children. The polio and other vaccination schemes of the government for children are administrated through these Anganwadis. The Adult Education program to address illiteracy in the 15-35 age group was implemented in the village during the 1980s. The mid-day meal scheme implemented by the government through the schools has increased the enrolment rates and enhanced the nutrition of the children. The awareness towards education has increased. Literacy and educational status of the villagers have improved significantly due to provision of facilities for higher education in the village.

Religious: Hindus (312 households) form the majority in the village, followed by Muslims (80). There are eight temples for Hindus, and one Mosque and a Dargah for Muslims. Every year, the villagers celebrate Ugadi, Ganesha Chathurthi, Dussera, Diwali, Basava Jayanthi, Bakrid and Ramzan. All the villagers celebrate "Mallikarjuna Devasthana Jatre" every year. Bijapur town has many places of historical, cultural, architectural and tourist interests, for example, the famous Gol Gumbaz and Jumma Masjid monuments. The taluka place of Basavana Bagewadi is an important centre of pilgrimage and birthplace of Saint Basaveshwara, the founder of the Veerashaiva religion.



III. BASIC STATISTICS OF THE VILLAGE

A) LOCATION / ACCESSIBILITY

- 1. Village: Markabbinahalli 2. Taluka: Basavana Bagewadi 3. District: Bijapur 4. State: Karnataka 5. PIN: 586 115
- 6. GPS values: (a) Latitude: **16°44.59′ N**
- (b) Longitude: **76° 02.18**′ **E** (c) Altitude (m): **554**
- 7. Nearest town: (a) Name: Basavana Bagewadi
- (b) Distance from village (km): 25
- 8. Nearest State Highway: (a) Number: SH 218
- (b) Distance from village (km): 10
- 9. Nearest National Highway: (a) Number: NH 13 (b) Distance from village (km): 40
- 10. Name of the Village Panchayat under which the village falls: Markabbinahalli
- 11. Details of the Sarpanch/Village Panchayat President:

 - (a) Name: Ms Madhavi Sahibgouda Gundelgeri (b) Cell No.: 9902049366
- 12. Details of the Gram Sevak/Agricultural Assistant: (a) Name: Mr Rajasab Bashasaab Rudrawadi (b) Cell No.: **9449010504**
 - (c) Tel (Off): **08358-244023**
- (d) Tel (Res): 9916756235

B) DEMOGRAPHY (as on 31 December 2010)

- 1. Population (No.): **2537** 2. Households (No.): **392** 3. Voters (No.): **1754** 4. Farmer accounts/Khatas (No.): **450**
- 5. Classification of population:

Category	No.	Farm Size*	No.	Religion	No.	Caste	No.	Literacy	No.	Gender	No.
SC	354	Landless	628	Hindu	1975	Panchamasali	995	Illiterates (<4)	920	Male	1054
ST	16	Marginal	281	Muslim	562	Muslim	562	Literates (4-10)	1325	Female	956
OBC	1605	SmaĬl	686			Madar	178	Matriculates	260	Children	527
Minority	562	Medium	562			Kurubar	140	Graduates	29	(<14y)	
		Large	380			Harijan	126	Postgraduates	3	, ,	
		ŭ				Uppar	105	Ŭ			
Caste Group-	wise Popu	lation (%)				Talwar	70		Literacy Leve	-wise Population	(%)
		` , <u></u>				Jangama	60			1	` '
						Maratha	55		10		
22	14	1				Banajiga	38				
						Navi	35			36	
						Badiger	34				
						Wadder	33				
	60					Hugar	30		53		
	63					Agasa	18				
						Kumbar	17				
SC ST OBC Minority					Bhajantri	17			Literates (4-10)		
					Valmiki	11		Graduates	■ Post-gradua	tes	
						Ambiger	7				
						Ganiger	6				
Total	2537		2537		2537	-	2537		2537		2537

^{*&}lt;0.1 ha=Landless; 0.1-<1 ha=Marginal; 1-<2 ha=Small; 2-4 ha=Medium; >4 ha=Large.

6. Classification of households: Male headed (No.): **359**

Female headed (No.): 33

Category	No.	Farm Size*	No.	Religion	No.	Caste	No.	Main Occupation	No.
SC	52	Landless	108	Hindu	312	Panchamsali	143	Farming	154
ST	3	Marginal	41	Muslim	80	Muslim	80	Caste occupation	28
OBC	257	SmaĬl	87			Madar	25	Agricultural labor	160
Minority	80	Medium	84			Kurubar	23	Non-agricultural labor	30
,		Large	72			Uppar	22	Others [§]	20
		Ü				Harijan	18		
Farm Size-wise	e Households	(%)				Jangama	15	Main Occupation-wise Ho	ouseholds (%)
						Talwar	15	5	
						Navi	8	8	
18	29					Hugar	6		
						Maratha	6		39
						Badiger	6		
21						Wadder	6	41	
	1	0				Banajiga	5		
	22					Bhajantri	3	7	
		<u></u>				Kumbar	3		
						Valmiki	3	■ Farming ■ Agril. labou ■ Non-agril. labour ■ Cas	
Small Landless	Small Landless Medium Marginal Large					Ambiger	2	a Non-agni. labour Cas	te occupation
						Agasa	2		
						Ganiger	1		
Total	392		392		392	Ŭ	392		392

^{*&}lt;0.1 ha=Landless; 0.1-<1 ha=Marginal; 1-<2 ha=Small; 2-4 ha=Medium; >4 ha=Large.

^{\$} Including salaried, money lenders, middlemen, service sector, etc.

C) LAND USE PATTERN (2009-10)

1. Distribution of Geographical Area

Particulars	На
Agricultural land	936.0
Waste lands	23.1
Land used for roads, buildings and non- agricultural purposes	15.5
Land occupied by water resources (tank, river)	22.1
Gouthan	4.5
Total Geographical Area	1001.2

2. Cropped Area

Season	На
Kharif	385
Rabi	526
Summer	0
Annual/Perennial crops	0
Gross Cropped Area	911

3. Irrigated Area

Season	Ha
Kharif	0
Rabi	0
Summer	0
Annual/Perennial crops	0
Gross Irrigated Area	0

D) LAND RESOURCES

1. Soil distribution

Soil type	% Area
Deep to medium black	90
Medium black sand loams	10

2. Irrigation sources (as on 31 December 2010)

Sources	Total No.	Working No.	Approx. depth (m) of working wells	Irrigated area (ha yr¹)
Bore wells	0	0	-	-
Open wells	0	0	-	-
			Approx. land area covered (ha)	
Tanks	1	1	0.8	0

3. Rainfall (June '09-May '10): (a) Quantity (mm yr⁻¹):

Normal: **655**

Actual: **990**

(b) No. of rainy days:

Normal: 41

Actual: 41

E) CROP PRODUCTION (2009-10)

Kharif		Rabi		Sum	mer	Annual/Perennial Crops	
Crops	Area (ha)	Crops	Area (ha)	Crops	Area (ha)	Crops	Area (ha)
Pigeonpea	262	Chickpea	235		0		0
Cotton	95	Sorghum	146				
Onion	28	Wheat	120				
		Safflower	25				
Total	385		526		0		0

F) ASSETS (as on 31 December 2010)

1. Productive Assets:

Livestock	Heavy Machinery		
Туре	No.	Туре	No.
Cow (indigenous)	100	Tractor	8
Cow (exotic)	9	Thresher	5
Buffalo	57	Cart	59
Bullock	116	Auto	3
Goat	1650	Truck	2
Poultry	709	Jeep	2
		Flour mill	4
Milk sale (L day ⁻¹)	0	Oil mill	1

2. Consumer Assets:

Туре	No.
Television	92
Refrigerator	5
Air-Conditioner	3
LPG connection	10
Dish Antenna	50
Motorbike	17
Jeep	2
Truck	5

3. Buildings:

J. Danaiigs.					
Туре	No.				
Houses-Pucca	307				
Houses-Kuchcha	80				
Houses-Thatched/Tin	5				
sheets					
Cattle sheds	10				
Storage godown	1				
Underground storage	122				
structure					

G) BASIC NEEDS (as on 31 December 2010)

Type of food (No. of households): (a) Pure Vegetarian: 250 (b) Non-vegetarian: 142
 Type of clothes: (a) Men: Dhoti/Pant and Shirt (b) Women: Sari and Blouse

3. Type of houses: (a) Pucca: **307** (b) Kuchcha: **80** (c) Thatched: **5**

H) INFRASTRUCTURE (as on 31 December 2010)

1. Village electrification: **Yes** No. of houses with access to electricity: **316**

2. Tar/metal/cement road to village: Yes

3. Is there a tar/metal/cement road inside the village? **Yes** Length of road (km): **0.1**

4. Public transport facility:

Public/private bus facility to village: **Yes**No. of trips/day from town to village: **5**Other modes of travel available? **Yes**Modes available: **Auto, Jeep**

5. Drinking water facility: **Yes**Tap connections available? **Yes**Sources available: **Bore well**Number of connections: **80**

6. Public toilet/urinal facility: No

7. Public health facility: **Yes**Private Doctors: **4**Number: **1 (Government Ayurvedic Hospital)**Distance to nearest PHC (km): **10 (Devar Hippargi)**

8. Veterinary health facility: **No** Distance to nearest facility (km): **3 (Satihal)**

9. Banking facility: **Yes** Number: **1 (PACS, Satihal, 3 km),**

1 (Syndicate Bank, Devar Hippargi, 10 km)

10. Educational facilities:

	Number of	Enrolment (Number)		
Level	institutions	Male	Female	
Pre-primary (Anganwadi)	2	74	74	
Primary (Standard 1-4)	2	107	109	
Secondary (Standard 5-7)	2	70	66	
Higher Secondary (Standard 8-10)	1	47	45	

11. Agricultural input shops:

Input	Available in village?	If no, nearest available place	Distance from village (km)
Seed	Yes		
Fertilizer	Yes		
Pesticide	Yes		
Machinery – Purchase	No	Bijapur	45
Machinery – Custom hiring	Yes		

12. Agricultural output market:

Weekly shandy in the village? Yes Operates on: Friday

No. of wholesale traders/commission agents in the/visiting the village: 4

13. Storage godowns/warehouses: Yes

Total capacity of all (tons): 500

14. Other business units:

Grocery shop:	9	PDS Shop:	1	Kerosene shop:	1
Hotel:	4	Flour Mill:	4	Chilli/spices grinding shop:	1
Meat shop:	2	Liquor shop:	2	Pan Shop:	2
Carpenter:	6	Blacksmith:	1	Goldsmith:	1
Cobbler:	1	Mason:	9	Cycle repair shop:	1
Monoylondors	20	Potty chap	1		

Moneylenders: **20** Petty shop: **4**

15. Other institutions (Number):

SHG: 4 Post Office: 1 Youth Club: 2
Bhajan Mandal: 3 Community Hall: 3 Mini Assembly: 1

16. Place of worship (Number): Temple: 8 Mosque: 1 Dargah: 1

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

SN	Government Program	Beneficiaries (No. of households)
1	Public Distribution System (PDS)	392
2	Old age Pension	114
3	Pension for physically handicapped	22
4	Widow Pension	49
5	Anganwadi	177
6	Mid-day Meal Scheme	460
7	Bicycles for students studying in Standard 8	92
8	Drought/Flood Relief	136
9	Prime Minister's Gram Sadak Yojana	392
10	Gram Swaraj Yojana	392

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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