

Belladamadugu Village at a Glance

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I. INTRODUCTION

The Village Dynamics in South Asia (VDSA) Project of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) supported by the Bill & Melinda Gates Foundation (BMGF) has chosen 42 villages as part of the project. These villages – 18 in the semi-arid tropics (SAT) of peninsular India, 12 in the 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 these, 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. Belladamadugu is one of these 12 new villages.

Belladamadugu (13°41.82' N and 77°08.95' E; 789.94 m altitude) is located in Madhugiri Taluk of Tumkur district, situated in the eastern part of Karnataka state. The village is 9 km away from Madhugiri (Taluk headquarters), 53 km from Tumkur (district headquarters), 123 km from Bengaluru (state capital) and 687 km from Hyderabad by road. To reach Belladamadugu, one can go to Bengaluru by bus/train/aeroplane and then move to Tumkur by bus/car on the Bengaluru-Pune National Highway (NH4) or train on Bengaluru-Miraj railway



line, and move towards North-East on the State Highway No 33, which connects Koratagere and Madhugiri. Madhugiri is famous for its giant rock overlooking the town and the fort nestling in its steep slopes. The giant rock is the second largest monolith of Asia. The place has old temples of Lord Sri Venkateswara Swamy and Lord Malleshwara built by the Vijayanagara feudatories in the Dravidian style.

In Kannada language, 'Bela' means *crops grown* and 'madugu' means *keeping the things*; thus 'Belladamadugu' means "*keeping the agricultural produce for their own consumption*".

The economy of Belladamadugu is agrarian based. Soils are red sandy (70%) and shallow red (30%). Farmers mainly grow groundnut, ragi and pigeonpea in the kharif season (June-September) and paddy, groundnut, fruits and vegetables in the rabi season (October-February). Horticultural crops like guava, sapota and arecanut are also grown by a few farmers. The annual normal rainfall of the village is 650 mm spread across nearly 44 rainy days. The village falls in the eastern dry agro-climatic zone. Nearly 90% of the households have access to electricity. About 50% 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, Belladamadugu village has progressed, in varying degrees, in terms of social, political, economic, technological, institutional, infrastructural, educational and religious advancement.

Social: The village has a population of 1225 grouped into 276 households. These households belong to 14 different castes grouped into four broad categories, namely, Other Backward Classes (OBC – 185

households), Scheduled Castes (SC – 55 households), Scheduled Tribes (ST – 35 households) and Forward Caste (FC – 1 household). The dominant castes in the village in terms of number of households are the Vokkaliga (138 households), Adikarnataka (40), Nayaka (34), Golla (19) and Adidravida (14). The castes belonging to OBC (67%) are dominant followed by SC (20%) and ST (12%). The single dominant caste is Vokkaliga. Earlier, this caste possessed most of the land, had good influence, and was rich and well educated compared to other castes. Presently, almost all castes own some land and all castes have laborers except Setti, Lingayat and Acharya. Golla and Kurubas, who belong to the backward caste, rear sheep and goats. This village is extremely backward, with agricultural labor being the primary occupation. Laborers mostly belong to SC, ST and OBC.

Political: For many years people belonging to the Vokkaliga caste were active in politics. All the conflicts of the villagers were resolved by leaders of the Vokkaliga caste at the Panchayat *katte* (the meeting of the village elders under a tree in the village square, which is an old system of governance where a group of recognized and respected leaders of the community hear a problem and pass a resolution) in the village. Over a period of time, due to the government's reservation policies, people belonging to OBC, SC and ST also began to actively involve themselves in politics. Women who were not at all seen in politics are now contesting in Panchayat elections and play an active role in the village development and other activities like participation in self-help groups.

Belladamadugu village comes under Dodda Veeragonda Halli (DV Halli) gram panchayat, which is 5 km away from the village. The panchayat body elected by the electorate of 16 villages has 19 members representing all the communities in the village administration in which 3 (1 woman, 1 general and 1 OBC) are from



Belladamadugu. The Gram Panchayat is responsible for village development and getting funds from the government for executing different welfare programs. The village Gram Panchayat is responsible for drinking water, village roads, drainage, street lights, housing, etc. The present Panchayat body (elected in May 2010) is headed by a woman who belongs to OBC and hails from Thaignondanahalli village.

Economic: Before independence, Belladamadugu village was very backward and people were poor. Agriculture and allied activities like livestock, piggery, sheep and goat rearing, and farm labor were the main occupations in the village. Laborers used to work for food grains as kind wage. The staple diet was ragi and sorghum. Pulses and rice were the luxury diets. Landless laborers used to work only within the village; migration was very less.

Over the years this picture has changed. Now, many households acquired land under the land tenancy act and agriculture is the major occupation, followed by farm and non-farm labor wages. More than 60% of the households primarily depend on agriculture. At present, villagers have different sources of income other than agriculture. Farmers are cultivating more commercial crops and are selling farm produce and milk, in addition to selling of common property resources like plates made of leaves. Common Property Resources (CPRs) are important in the livelihoods of the poorest households. Over time, leaf plate making has become a predominant occupation of almost all the households; they collect leaves from distances up to 50 km during January to March and later, when they have free time, about 150 households make the leaf plates (priced at about Rs 60 per 100 plates). Regular jobs in towns and cities, livestock business, petty shops, tailoring, beedi making, driving own auto, tractor services, sand mining, brick works and construction works have improved the economic

condition of many households. The area under irrigated crops such as paddy in both seasons has increased in the village. The household's income has improved by adopting new crop production technologies, growing commercial crops and increased area under irrigation through successfully drilled borewells. About 20 households commute daily to Madhugiri and Kymara. About 10 households have left the village permanently and settled in Bengaluru for salaried jobs. Occupational mobility of labor out of agriculture is low. Government schemes implemented in the village from time to time such as land distribution and housing schemes to poor households have helped the villagers in a big way.

Technological: Over the last 10 years, villagers have adopted many new technologies in agriculture. Earlier, farmers were irrigating crops by lift irrigation with the help of bullocks, ploughing land with desi ploughs, using only local seeds and farmyard manure. Now, the village has 52 bore wells and the average depth of these bore wells is now around 120 m with some farmers having drilled up to more than 200 m. Presently, almost all the farmers cultivate their land with tractor and power tillers, and use improved seeds and fertilizers. Manual threshing has been replaced by threshers in the case of ragi, paddy and maize.

Owing to this technological advancement, the productivity of all the crops has increased significantly. Since the last 5 years, growing of horticultural crops especially guava, sapota and arecanut has increased. Besides, cultivation of flowers, namely, chrysanthemum and jasmine, and vegetables, namely, chillies and tomato, under irrigated conditions is also on the rise. Due to the problems of pests and diseases, groundnut has been replaced by ragi during the kharif season. Generally, groundnut is grown as an intercrop with maize, cowpea, horsegram and pigeonpea.





Institutional: Belladamadugu village comes under DV Halli Gram Panchayat, which is 5 km away from the village. The Panchayat body has 19 members, of which 3 members are from Belladamadugu. The Panchayat is responsible for drinking water, village roads, street lights, housing, drainages, MGNREGS programs, etc. In 1982, an Anganwadi was set up to improve the nutrition and health of young children aged 1-6 years and women (pregnant and lactating). The first self help group (SHG) was formed in 2001 and now there are 14 groups in which 11 are female groups. About 200 villagers are involved in financial transactions through these groups. The village has one upgraded higher primary school (Standards 1-8). Households have been benefitted from several Government schemes such as housing scheme, pension scheme, Public Distribution System, scholarships, mid-day meal to students and loans from different banks for lower interest rates, etc.

Infrastructural: The village was electrified in 1974, first for irrigation pumpsets and three years later for households in the village. Street lights are provided by the panchayat on all the village roads. Drinking water facility is very good in the village. The village has one overhead tank set up in 1996 and three mini tanks that supply drinking water to all households. However, this water has high fluoride content in it and has become unfit to drink. Hence in 2002, the Government set up a reverse osmosis de-fluoridation water plant and made it accessible to everyone free of cost. In 1982, the village set up an anganwadi, a milk collection booth, an artificial insemination center and a panchayat owned flour and rice mill. A fair price shop was set up in 1990. In the year 2000, a 3-km tarred road was laid to the village from SH-58. But there is still no bus facility to the village and the people are dependent on autos for daily commuting. The villagers have good

communication facilities, viz., telephones (landline and mobile phones), television, radio and newspapers. As of now, more than 40 landlines and 300 mobiles are in use in the village, as against only 1 BSNL landline in 1998. The school is well equipped with computers and students are learning basic computer applications. Agricultural extension services are available through State Agricultural Department personnel and private input dealers.

Educational: In 1947 a lower primary school (Standards 1-4) with one room was established in the village, which was upgraded to secondary school (Standards 1-7) and further upgraded to higher school (Standards 1-8). For further education, children have to travel to Dabbeghatta (5 km) and Madhugiri (9 km). The awareness towards education has increased. Literacy and educational status of the villagers have improved significantly. Government schemes such as mid-day meal scheme, providing bicycles, scholarships, free supply of text books and uniforms has increased the enrolment rates of the school. In general, awareness among the households has increased through their active involvement in political, government programs and frequent visits to towns and cities.

Religious: Hindus (271 households) are the majority in the village, followed by Muslims (5). There are 9 temples for the Hindus. The villagers are religious and offer prayers everyday. Hindus worship the gods Malleshwara (Yetha Basavanna or Shiva), Ranganatha Swamy, Choudeshwari, Basavanna and Dandi Maramma. Every year, the villagers celebrate Ugadi, Ganesha Chaturthi, Dussera and Diwali. All the villagers celebrate annual fairs (Jatre) of Malleshwara, Junjeppa (Vishnu) and Ranganatha Swamy, Dandi Maramma of Madhugiri, Jillara Gunte of Anjaneya Swamy, and Ranganatha Swamy of Magodu.

III. BASIC STATISTICS OF THE VILLAGE

A) LOCATION/ACCESSIBILITY

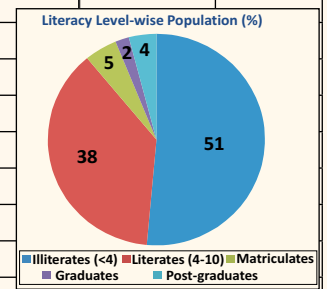
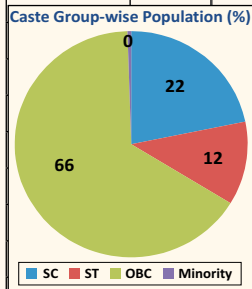
- Village: **Belladamadugu** 2. Taluk: **Madhugiri** 3. District: **Tumkur** 4.State: **Karnataka** 5. PIN: **572 112**
- GPS values: (a) Latitude: **13° 41.82'** (b) Longitude: **77° 8.95'** (c) Altitude (m): **789.94**
- Nearest town: (a) Name: **Madhugiri** (b) Distance from village (km): **9**
- Nearest State Highway: (a) Number: **SH 58** (b) Distance from village (km): **3**
- Nearest National Highway: (a) Number: **NH 4** at Sira (b) Distance from village (km): **34**
- Name of the Village Panchayat in which the village falls: **Dodda Veeragonda Halli**
- Details of the Sarpanch/Village Panchayat President:
 - Name: **Siddagangamma, W/o Nagaraju** (b) Cell No: **9164785035**
- Details of the Gram Sevak/Agricultural Assistant: (a) Name: **MP Chetana** (b) Cell No: **9880629062**

B) DEMOGRAPHY (as on 31 December 2010)

- Population (No): **1225** 2. Households (No): **276** 3. Voters (No): **890** 4. Farmer accounts/Khatas (No): **160**

5. Classification of population

Category	No.	Farm Size*	No.	Religion	No.	Caste	No.	Literacy	No.	Gender	No.
SC	267	Landless	127	Hindu	1193	Vokkaliga	598	Illiterates (<4)	630	Male	487
ST	146	Marginal	651	Muslim	32	Adikarnataka	198	Literates (4-10)	460	Female	494
OBC	806	Small	245			Nayaka	138	Matriculates	60	Children (<14y)	244
General	6	Medium	140			Golla	73	Graduates	25		
		Large	62			Adi Dravida	67	Post-graduates	50		
						Setti Balija	37				
						Kuruba	35				
						Muslim	33				
						Lingayat	28				
						Acharya	6				
						Setti	6				
						Bhajantri	4				
						Madivala	1				
						Jangama	1				
Total	1225		1225		1225		1225		1225		1225



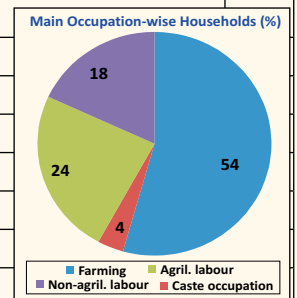
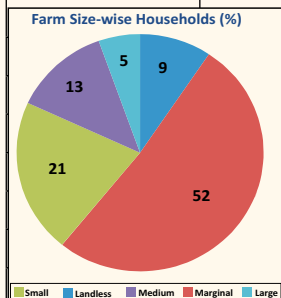
*<0.1 ha=Landless; 0.1-<1 ha=Marginal; 1-<2 ha=Small; 2-4 ha=Medium; >4 ha=Large.

6. Classification of households

Male headed (No): 265

Female headed (No): 11

Category	No.	Farm Size*	No.	Religion	No.	Caste	No.	Main occupation	No.
SC	55	Landless	26	Hindu	271	Vokkaliga	138	Farming	150
ST	35	Marginal	142	Muslim	5	Adikarnataka	40	Caste occupation	10
OBC	185	Small	58			Nayaka	34	Agril. labor	66
General	1	Medium	35			Golla	19	Non-agril. labor	50
		Large	15			Adi Dravida	14		
						Setti Balija	8		
						Kuruba	8		
						Lingayat	5		
						Muslim	4		
						Acharya	2		
						Setti	1		
						Bhajantri	1		
						Madivala	1		
						Jangama	1		
Total	276		276		276		276		276



C) LAND USE PATTERN (2009-10)

1. Distribution of Geographical Area	Ha
Agricultural land	364
Waste lands	2
Land used for roads, bldgs. & non-agril. purposes	24
Land occupied by water resources (tank, river)	74
Land occupied by hills, rocks, etc	32
Total Geographical Area	496

2. Cropped Area	Ha
Kharif	294.58
Rabi	41.12
Summer	4.00
Annual/Perennial crops	15.20
Gross Cropped Area	354.90
3. Irrigated Area	Ha
Kharif	36.40
Rabi	41.12
Summer	4.00
Annual/Perennial crops	15.20
Gross Irrigated Area	96.72

D) LAND RESOURCES

1. Soil distribution

Soil type	% area
Red sandy	70
Red	14
Shallow	15
Saline	1

2. Irrigation sources

Sources	Total No.	Working No.	Approx. depth (m.) of working wells	Irrigated area (ha/year)
Borewells	87	52	156.21	61.42
Open wells	60	10	9.15	9.00
			Approx. land area covered (ha)	
Tanks	2	2	48.6	26.30

3. Rainfall (Jun'09-May'10): (a) Quantity (mm/year): Normal: **650** Actual: **746**
 (b) No. of rainy days: Normal: **44** Actual: **43**

E) CROP PRODUCTION (2009-10)

Kharif		Rabi		Summer		Annual/Perennial Crops	
Crops	Area (ha)	Crops	Area (ha)	Crops	Area (ha)	Crops	Area (ha)
Groundnut	205.26	Paddy	18.40	Chrysanthemum	4.00	Coconut	6.00
Paddy	32.40	Groundnut	12.19			Arecanut	3.60
Ragi	21.5	Flowers & Vegetables*	8.10			Guava	1.20
Pigeonpea	14.3					Sapota	1.20
Horsegram	10.24	Fodder Maize	2.43			Mango (200 Nos)	3.20
Castor	5.5					Tamarind (500 Nos)	Scattered
Cowpea	3.28						
Onion	2.1						
Total	294.58		41.12		4.00		15.20

*includes chrysanthemum and jasmine, while vegetables include brinjal, chilli and tomato.

F) ASSETS (as on 31 December 2010)

1. Productive Assets:

Livestock		Heavy Machinery	
Type	No.	Type	No.
Cow (indigenous)	30	Tractor	4
Cow (exotic)	100	Thresher	1
Buffalo	15	Cart	1
Bullock	10	Auto	7
Sheep	610	Flour mill	1
Goat	115	Rice mill	1
Poultry	206		
Milk sale (lt/day)			
-Kharif season	550		
-Summer season	400		

2. Consumer Assets:

Type	No.
Television	82
Refrigerator	2
LPG connection	25
Dish Antenna	12
Motorbike	30

3. Buildings:

Type	No.
Houses-Pucca	140
Houses-Kuchcha	120
Houses-Thatched	16
Cattle sheds	80
Irrigation pump houses	30

G) BASIC NEEDS (as on 31 December 2010)

- Type of food (# of households): (a) Pure Vegetarian: **55** (b) Non-vegetarian: **221**
- Type of clothes: (a) Men: **Shirt, Lungi and Panche** (b) Women: **Sari and blouse**
- Type of houses: (a) Pucca: **140** (b) Kuchcha: **120** (c) Thatched: **16**

H) INFRASTRUCTURE (as on 31 December 2010)

- Village electrification: **Yes** No. of houses having access to electricity: **240**
- Tar/metal/cement road to village: **Yes**
- Is there a tar/metal/cement road inside the village? **Yes** Length of the road (km): **1.4**
- Public transport facility:
Public/private bus facility to village: **No**
Other modes of travel available? **Yes** Available mode(s): **Auto**
- Drinking water facility: **Yes** Source(s): **Borewell**
Tap connections available? **Yes** Number of connections: **80 (40-Public, 40-Private)**
- Public toilet/urinal facility: **No**
- Public health facility: **No** Distance to nearest PHC/Private Doctor (km): **9 (Madhugiri)**
- Veterinary health facility: **No** Distance to nearest facility (km): **6 (D. Kymara)**
- Banking facility: **No**

10. Educational facilities

Level	Number of institutions	Enrolment (Number)	
		Male	Female
Pre-primary (Anganwadi)	1	20	22
Primary (Standard 1-4)	1	23	19
Secondary (Standard 5-8)	1	31	28

11. Agricultural input shops

Input	Available in village	If no, nearest available place	Distance from village (km)
Seed	No	Madhugiri	9
Fertilizer	No	Madhugiri	9
Pesticide	No	Madhugiri	9
Machinery – Purchase	No	Madhugiri	9
Machinery – Custom hiring	No	Madhugiri	9

12. Agricultural output market:
Weekly shandy in the village? **No**
No. of wholesale traders/commission agents in the/visiting the village: **1**
13. Storage godowns/warehouses: **No**
14. Other business units (number):
Grocery shop: **2** PDS Shop: **1** Kerosene shop: **1**
Hotel/Canteen: **6** Flour Mill: **1** Chilli/spices grinding shop: **1**
Liquor shop: **1** Carpenter: **4** Cobbler: **2**
Money lenders: **10** Tailoring Shop: **2**
15. Other institutions (number):
SHGs: **14** Milk Dairies: **1** Bhajan Mandal: **2**
16. Place of worship (No): Temple: **9**

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

SN	Government Program	Beneficiaries (No. of households)
1	Housing (Indira Awaas, Ashraya, Ambedkar, Handicapped)	80
2	Public Distribution System (Below Poverty Line, Above Poverty Line, Anthyodaya)	327 (Cards)
3	Pensions (Old age, Widow, Handicapped, Sandya suraksha yojana)	72
4	Indira Awas Yojana	27
5	Grameena Ashraya Scheme	18
6	Grameena Ambedkar Scheme	3
7	Kutira Jyothi (Free household electricity)	20
8	Bhagyalakshmi Scheme (Rs 1 lakh bond to girl child)	25
9	Free cycle to 8 th Standard students	160
10	Mid-day meal program	154
11	Madilu Health Scheme (Post-delivery kit to mother and child)	20
12	Subsidy loans (seed, fertilizers and wooden plough) from Grameena bank	20
13	Ganga Kalyan Irrigation Scheme (SC & ST)	10
14	Various Scholarships	100
15	Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)	15

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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