# Kapanimbargi Village at a Glance

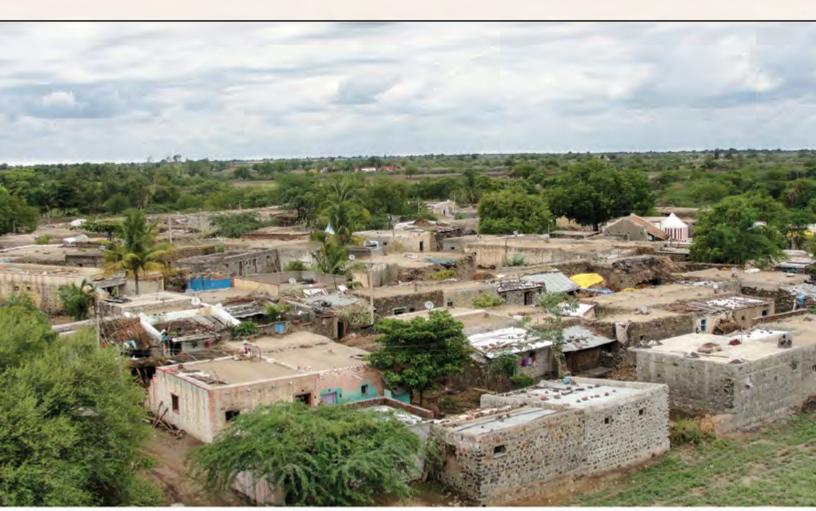
BY Birukal, GD Nageswara Rao, VR Kiresur and MCS Bantilan

#### I. INTRODUCTION

Forty-two villages were selected (18 in semi-arid tropics (SAT) of peninsular India, 12 in humid tropics of East India and 12 in Bangladesh) based on certain relevant characteristics, as part of 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). The aim of the project was 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 in 1975 under the erstwhile Village Level Studies (VLS) project of the then Economics Program of ICRISAT, and the other 12 were included in the expanded VDSA project during 2009. Kapanimbargi is one of these 12 new villages.

Kapanimbargi (17°11.33′ N and 75° 48.12′ E; 476 m altitude) is situated in the Indi taluka of Bijapur district in Karnataka State, one of the peninsular states of India. It is reported that during Bajirao Peshwa's regime (1719-1740), the land comprising the present village and surrounding villages was given as a gift to a jagirdar who worked as an astrologer to the Peshwa. Later, a saint called "Kapilamuni" visited and stayed in the village,



after which the village was named "Kapilanivas". Two small rocks, said to have been placed by the saint at the center of the village, can be seen even now near the Hanuman temple. Over time, the village name was changed from "Kapilanivas" to "Kapanimbargi".

The village truly represents the SAT, with the diurnal temperature ranging from 38°C to 44°C in summer and 17°C to 27°C in winter. Night temperatures may even dip as low as 6°C. The annual normal rainfall of the village is 618 mm, distributed erratically. The major soils of the village are red, followed by black and shallow black with murrum. The village economy is mainly dependent on agriculture, farm and non-farm labor within the village and emigration income.

Kapanimbargi is situated one km away from the Solapur-Bijapur National Highway (NH13), about 18 km from Indi taluka headquarters, 45 km from Bijapur district headquarters and 430 km from Hyderabad. The village can be reached by road from Hyderabad via Solapur and Zalki, or via Gulbarga and Bijapur. It is well connected by roads to important cities and towns. A railway station exists 20 km away from the village. Nearly 80% of the households have access to electricity, and about 40% of the households have pucca houses. Villagers source their drinking water from eight public hand pumps. The three main languages spoken by the villagers are Kannada, Marathi and Hindi, with Kannada predominating.

# II. HISTORICAL BACKGROUND / DEVELOPMENT OF THE VILLAGE

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





Social: There are 320 households, with a population of 1995, residing in the village. These households are scattered,, with about 30% located in the farm fields. The villagers can be broadly categorized into four caste groups, namely, Other Backward Caste (OBC, 248 households), Scheduled Caste (SC, 55 households) Scheduled Tribe (ST, 11 households), and Forward Caste (FC, 5 households). At present, there are 21 castes in the village, of which Maratha is the dominant caste both in terms of numbers and political strength. Most people practicing caste occupations have left their traditional occupations and switched over to new jobs, thanks to improvement in transport and communication facilities. Presently, about 65% of the 320 households in the village own farm land.

**Political:** The village is politically administered by a Group Gram Panchayat at Nandargi, which is about three km from the village. This Gram Panchayat administers five villages and comprises 19 members from 6 wards, including the President. The Waddar caste (a lower caste) is the most politically active caste group in the village; being politically aware due to the fact that many members work outside the village, thus giving them exposure to more information. The present Gram Panchayat body, elected in 2009 for a five-year term, consists of four members from Kapanimbargi village including the President. The village panchayat coordinates all development activities. A village accountant from the Revenue Department maintains the land records, and one agricultural assistant (Gram Sevak) performs agricultural extension activities. All panchayat ward members, as well as the president of the Gram Panchayat, belong to, or are strong supporters of, political parties even though they were not elected on any party symbol.





**Economic:** The village economy is mainly dependent on agriculture, farm and non-farm labor within the village and out-migration income. The important crops grown in the village are pigeonpea, pearl millet, groundnut, greengram, sunflower, cotton and maize during the *kharif* (rainy season), sorghum, wheat, chickpea, groundnut and maize during *rabi* (postrainy)/ summer. Grape is the most important horticultural crop of the village, followed by sugarcane, pomegranate, banana, lemon, ber (*Ziziphus mauritiana*), and flowers.

Earlier, only the Brahmin community owned land, but over a period of time, people of other castes have also been able to acquire agricultural lands and practice farming. Villagers with some tracts of land, and whose consumption needs cannot be fully met through agriculture, usually resort to seasonal emigration in search of various non-farm activities. Such activities are more often undertaken by households who are either landless or who have very little land at their disposal. The migration includes daily commuting and seasonal migration (where the household migrates for a season outside the village for various types of contract jobs). Seasonal migration usually takes place for a period of 4-6 months.

Most people practicing caste occupations have left their traditional occupations and have switched over to new jobs. A large section of the villagers moved outside the village in search of employment, and this has led to increased awareness about lucrative employment opportunities that exist outside the village. Some villagers who have obtained a little education have managed to secure government jobs as a direct result of government pro-poor programs.

**Technological:** There has been a shift in emphasis by farmers from cultivation of traditional crops to commercial and horticultural crops like cotton,

grape, pomegranate, ber and lemon. Soil and climatic conditions in the village are well suited to growing horticultural crops. Farmers with access to irrigation cultivate horticultural crops, which fetch them relatively higher incomes as compared to traditional crops. During summer, a few farmers who have irrigation facilities grow groundnut, and vegetables. At present, almost all the farmers are using improved seeds, chemical fertilizers, power sprayers, combined harvesters, and threshers. Use of tractors is common for land preparation, harvesting, threshing and for transportation. The irrigated area has increased over time due to the drilling of a greater numbers of borewells; also the use of sprinklers (for groundnut, onion and chickpea) and drip irrigation (for grape, pomegranate, ber, lemon and flowers) is on the rise. In addition to farmyard manure, farmers use vermicompost. Farmers acquire knowledge about new technologies mainly from more progressive farmers, input suppliers and radio programs, in addition to relatives/friends, newspapers, television, seed companies and from markets. Most households have mobile phone connectivity that helps them access the latest information on market prices and latest agricultural information.





**Institutional:** Presently, the village has one government school (Standards 1-8), which was started in the year 1956, and two Anganwadis established in 1990 and in 2010. The Gram Panchayat office was established at Nandargi in 1993. The village post office was established in 1963. To meet their credit requirements, the villagers mainly access the Primary Agricultural Credit Society (PACS) established in 1957 at Nandargi, three km away from the village. Of 3338 members of PACS, 180 are from Kapanimbargi. In addition, the villagers can access two commercial banks (one each at Balloli and Horti) and one private bank at Horti. The other institutional facilities available in the village are four Self Help Groups (SHGs), one Dairy, one Village Accountant's office, two Bhajan Mandals, two Dollu Sanghas and six Youth Clubs.

**Infrastructural:** The village was electrified in 1976; about 90% of the houses have access to electricity and street lights have been provided by the panchayat on all roads within the village. Farmers receive free electricity for irrigation pump sets used for agricultural purposes. Drinking water needs are met through eight public hand pumps. One overhead water tank constructed in 2001 is not functioning. Two irrigation tanks and two check dams help recharge the groundwater and can irrigate about 50 hectares of land. The approach road linking the village to the Solapur-Bijapur National Highway (NH-13) was cemented in 2010 by the Government of India under the Prime Minister's Gram Sadak Yojana (PMGSY). The nearest railway station is Nimbal (10 km away from the village) where only ordinary passenger trains halt, while at Indi Railway Station (18 km away) all trains including express trains halt. In 2010, the Gram Panchayat also constructed drainage channels and cemented a few internal roads under the Gram Swaraj Yojana. The villagers have access to the state road transport corporation bus services and other modes of transport on this highway. In addition, autorickshaws, private jeeps and mini buses are also available in the village. A Primary Health Centre (PHC) is available

in Horti, 8 km away, to meet the basic health care requirements. There is a weekly market on Mondays at Horti, where villagers can buy groceries and other provisions. A Co-operative Milk Producers' Society, established in the village in 2005, collects milk from the villagers and supplies it to Bijapur city. There are two public telephone booths in the village, and most households have mobile phone connectivity.

**Educational:** The awareness towards education has increased, and literacy and educational status of the villagers has improved significantly due to provision of free education facilities in the village. One government school was established in the village in 1956, which provided education up to Standard 7; this was upgraded to Standard 8 in 2007. Presently, 250 students (124 boys and 126 girls) are studying in this school. For higher classes (Standards 9 and 10), the village students travel to Nandaragi, Horti or Balloli. The two Anganwadis serve 86 children, providing basic education along with nutritious food. All the government immunization/ vaccination schemes are administered through these Anganwadis. The mid-day meal scheme successfully operating in the school has increased the enrolment rates and nutritional security of the children. Newspapers, radio, television and cell phone connectivity are the other educational tools available in the village.

Religious: All the villagers are Hindu, except one family, which is Muslim. Ugadi, Vinayaka Chathurthi, Dussera and Diwali are the very important festivals celebrated in the village. The villagers are highly religious; they worship the gods Hanuman and Shiva, actively participating in the Shankarlinga Jatre (fair) performed in the village every year during September, and the Hanuman Jayanti during April. Every year, about 10-15% of the villagers go to Pandarpur and Tuljapur to take darshan of and offer prayers to Panduranga Swamy and Bhavani (Durga) Mata.



#### III. BASIC STATISTICS OF THE VILLAGE

### A) LOCATION / ACCESSIBILITY

1. Village: Kapanimbargi 2. Taluka: Indi 3. District: Bijapur 4. State: Karnataka 5. PIN: **586 117** 

6. GPS values: (a) Latitude: 17° 11.33′ N (b) Longitude: **75° 48.12**′ **E** (c) Altitude(m): 476

7. Nearest town: Indi distance from village: 18 km

Nearest State Highway: **SH14** distance from village: 8 km

9. Nearest National Highway: NH13 distance from village: 1 km

10. Name of the Village Panchayat in which the village falls: **Nandargi** 

#### B) DEMOGRAPHY (as on 31 December 2010)

Population (No): 1995 2. Households (No): 320 3. Voters (No): 1107 4. Farmer accounts/Khatas (No): 323

5. Classification of population:

| Category            | No.          | Farm Size* | No.  | Religion | No.  | Caste    | No.  | Literacy        | No.          | Gender                                       | No.    |
|---------------------|--------------|------------|------|----------|------|----------|------|-----------------|--------------|--|--------|
| SC                  | 240          | Landless   | 1672 | Hindu    | 1992 | Maratha  | 430  | Illiterates(<4) | 798          | Male   | 645    |
| ST                  | 56           | Marginal   | 96   | Muslim   | 3    | Kurubar  | 429  | Literates(4-10) | 417          | Female                                       | 570    |
| OBC                 | 1664         | Small      | 86   |          |      | Lingayat | 245  | Matriculates    | 730          | Children                                     | 780    |
| General             | 35           | Medium     | 86   |          |      | Rajput   | 218  | Graduates       | 42           | (<14y)                                       |        |
|                     |              | Large      | 55   |          |      | Waddar   | 210  | Postgraduates   | 8            |  |        |
| Caste Group-wise Po | pulation (%) |            |      |          |      | Uppar    | 102  |                 | Literac      | cy Level-wise Population                     | on (%) |
|                     |              |            |      |          |      | Navi     | 101  |                 |              | 37 40  |        |
| 83                  |              |            |      |          |      | others#  | 260  |                 |              | 21   |        |
| SC ST OBC           | ■ General    |            |      |          |      |          |      |                 | ■ Illiterate | es (<4) ■Literates (4-10) duates ■ Post-grad |        |
| Total               | 1995         |            | 1995 |          | 1995 |          | 1995 |                 | 1995         |  | 1995   |

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

# 6. Classification of households:

| Male headed (No): 296     |              |            |     | Fema     | le heac | ded (No): <b>24</b> |     |                      |                |
|---------------------------|--------------|------------|-----|----------|---------|---------------------|-----|----------------------|----------------|
| Category                  | No.          | Farm Size* | No. | Caste    | No.     | Religion            | No. | Main Occupation      | No.            |
| SC                        | 55           | Landless   | 107 | Maratha  | 68      | Hindu               | 319 | Farming              | 141            |
| ST                        | 11           | Marginal   | 40  | Kurubar  | 67      | Muslim              | 1   | Caste occupation     | 30             |
| OBC                       | 248          | Small      | 77  | Lingayat | 38      |                     |     | Agril. labor         | 106            |
| General                   | 6            | Medium     | 52  | Rajput   | 33      |                     |     | Non-agril. labor     | 38             |
|                           |              | Large      | 44  | Waddar   | 32      |                     |     | Others <sup>\$</sup> | 5              |
| Farm Size-wise Household  | s (%)        |            |     | Uppar    | 17      |                     |     | Main Occupation-wise | Households (%) |
| 16                        |              |            |     | Navi     | 17      |                     |     |                      | 44             |
| 24 13                     |              |            |     | others#  | 48      |                     |     | 33                   |                |
| Small Landless Medium Mad | rginal Large |            |     |          |         |                     |     | Farming Agril. lal   | oour Others\$  |
| Total                     | 320          |            | 320 |          | 320     |                     | 320 |                      | 320            |

<sup>\$</sup> includes salaried, moneylenders, middlemen, service sector, etc.

<sup>\*</sup>Bedar, Harijan, Dashavantu, Madiga, Golla, Jangama, Gorava, Samagar, Brahmin, Bhajantri, Barber, Madiwalar, Talawar, Muslim.

<sup>\*</sup>As in B(5) above.

<sup>\*</sup>Bedar, Harijan, Dashavantu, Madiga, Golla, Jangama, Gorava, Samagar, Brahmin, Bhajantri, Barber, Madiwalar, Talawar, Muslim.

# C) LAND USE PATTERN (2009-10)

| Distribution of Geographical Area                            |     |
|--|-----|
| Туре   | Ha  |
| Agricultural land  | 784 |
| Waste lands  | 36  |
| Land used for roads, buildings and non-agricultural purposes | 3   |
| Land occupied by water resources (tank, river, etc.)         | 3   |
|  |     |
|  |     |
|  |     |
|  |     |
|  |     |
|  |     |
| Total Geographical Area                                      | 826 |

| Cropped Area              |        |
|---------------------------|--------|
| Season                    | Ha     |
| Kharif                    | 425.1  |
| Rabi                      | 323.89 |
| Summer                    | 32.39  |
| Annual/Perennial          | 94.74  |
| <b>Gross Cropped Area</b> | 876.12 |
| 3. Irrigated Area         | Ha     |
| Kharif                    | 85     |
| Rabi                      | 94     |
| Summer                    | 32     |
| Annual/Perennial          | 95     |
| Gross Irrigated Area      | 306    |

# D) LAND RESOURCES

#### 1. Soil distribution

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

| ii boli dibalibation                       | 2. Illigation sources (as on 51 December 2010) |           |           |             |                                    |                        |
|--|--|-----------|-----------|-------------|------------------------------------|------------------------|
| Soil type                                  | % Area   | Sources   | Total No. | Working No. | Approx. depth (m) of working wells | Irrigated area (Ha yr) |
| Red  | 40   | Borewells | 300       | 180         | 182                                | 121                    |
| Black                                      | 25   | Openwells | 260       | 170         | 14                                 | 101.2                  |
| Shallow black with murrum                  | 15   |           |           |             | Approx. land area covered (Ha)     |                        |
| Saline and alkaline ( <i>Bili Masari</i> ) | 10   | Ponds     | 6         | 4           | 0.40                               | 3.2                    |
| Clay (Karlu)                               | 5  | Tanks     | 2         | 2           | 40.5                               | 81                     |
| Red with pebbles (Garusu)                  | 5  |           |           |             |                                    |                        |

3. Rainfall:

(a) Quantity (mm yr<sup>-1</sup>):

Normal: **618** 

Actual (Jun '09-May '10): **744** Actual (Jun '09-May '10): **41** 

(b) No. of rainy days:

Normal: 38

# E) CROP PRODUCTION (2009-10)

| Kharif       |          | Rá       | Rabi     |           | ner      | Annual/Perennial |          |
|--------------|----------|----------|----------|-----------|----------|------------------|----------|
| Crops        | Area(Ha) | Crops    | Area(Ha) | Crops     | Area(Ha) | Crops            | Area(Ha) |
| Pigeonpea    | 121.46   | Sorghum  | 161.94   | Groundnut | 32.39    | Grapes           | 64.78    |
| Maize        | 113.36   | Wheat    | 80.97    |           |          | Sugarcane        | 8.10     |
| Groundnut    | 48.58    | Chickpea | 48.58    |           |          | Pomegranate      | 6.07     |
| Pearl millet | 40.49    | Maize    | 22.27    |           |          | Lemon            | 6.07     |
| Onion        | 32.39    | Onion    | 10.12    |           |          | Ber              | 4.05     |
| Greengram    | 20.24    |          |          |           |          | Flowers          | 4.05     |
| Cotton       | 16.19    |          |          |           |          | Banana           | 1.62     |
| Moth bean    | 12.15    |          |          |           |          |                  |          |
| Sunflower    | 8.10     |          |          |           |          |                  |          |
| Horse gram   | 8.10     |          |          |           |          |                  |          |
| Vegetables   | 4.05     |          |          |           |          |                  |          |
| Total        | 425.10   |          | 323.89   |           | 32.39    |                  | 94.74    |

#### F) ASSETS (as on 1 June 2010)

| Productive Assets                |                 |            |     |  |  |  |
|----------------------------------|-----------------|------------|-----|--|--|--|
| Livestock                        | Heavy Machinery |            |     |  |  |  |
| Туре                             | Type No.        |            | No. |  |  |  |
| Cow(indigenous)                  | 168             | Tractor    | 8   |  |  |  |
| Cow(exotic)                      | 10              | Thresher   | 8   |  |  |  |
| Buffalo                          | 192             | Cart       | 25  |  |  |  |
| Bullock                          | 64              | Auto       | 3   |  |  |  |
| Goat                             | 520             | Truck      | 1   |  |  |  |
| Poultry                          | 648             | Van        | 5   |  |  |  |
|                                  |                 | Jeep       | 6   |  |  |  |
|                                  |                 | Floor mill | 9   |  |  |  |
| Milk sale (L day <sup>-1</sup> ) | 110             |            |     |  |  |  |

| <b>Consumer Assets</b> |     |  |  |  |
|------------------------|-----|--|--|--|
| Туре                   | No. |  |  |  |
| Television             | 120 |  |  |  |
| Refrigerator           | 2   |  |  |  |
| Washing machine        | 1   |  |  |  |
| Microwave oven         | 1   |  |  |  |
| LPG connection         | 9   |  |  |  |
| Dish Antenna           | 45  |  |  |  |
| Motorbike/Scooty       | 25  |  |  |  |
| Car/Jeep               | 6   |  |  |  |
| Truck                  | 1   |  |  |  |
| Computer               | 2   |  |  |  |

| Buildings              |     |  |  |  |
|------------------------|-----|--|--|--|
| Туре                   | No. |  |  |  |
| Houses-Pucca           | 15  |  |  |  |
| Houses-Kuchcha         | 215 |  |  |  |
| Houses-Thatched        | 90  |  |  |  |
| Cattle sheds           | 80  |  |  |  |
| Irrigation pump houses | 8   |  |  |  |
|                        |     |  |  |  |
|                        |     |  |  |  |
|                        |     |  |  |  |
|                        |     |  |  |  |
|                        |     |  |  |  |

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

1. Type of food (No. of households): (a) Pure vegetarian: **175** (b) Non-vegetarian: **145** 

2. Type of clothes: (a) Men: **Dhoti, Nehru Shirt and Cap** (b) Women: **Saree and Blouse** 

3. Type of houses (No.): (a) Pucca: **15** (b) Kuchcha: **215** (c) Thatched: **90** 

# H) INFRASTRUCTURE (31 December 2010)

1. Village electrification: **Yes** No. of houses with access to electricity: **186** 

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

3. Is there a tar/metal/cement road inside the village? Yes Length of road (km): 0.75

4. Public transport facility:

Public/private bus facility to village: **Yes**No. of trips/day from town to village: **10**Other modes of travel available? **Yes**Available modes: **Auto / Jeep / Tum Tum** 

5. Drinking water facility: **Yes**Tap connections available? **No**Source(s): **Open well / Borewell** 

6. Public toilet/urinal facility: **No**No. of private toilets: **1** 

7. Public health facility: **No** Distance to nearest PHC/Private Doctor (km): **8 (Horti)** 

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

9. Banking facility: **No** 

Outside village: PACS: 1 (Nandargi) Vijaya Bank: 1 (Balloli)

Syndicate Bank: 1 (Horti) Private Institution: 1 (Horti)

#### 10. Educational facilities:

| Level                         | Number of Institutions | Enrolment (No.) |        |  |
|-------------------------------|------------------------|-----------------|--------|--|
| Level                         | Number of institutions | Male            | Female |  |
| Pre-primary (Anganwadi)       | 2                      | 50              | 36     |  |
| Primary (1-4 years)           | 1                      | 67              | 67     |  |
| Secondary (5-7 years)         | 1                      | 40              | 46     |  |
| Higher Secondary (8-10 years) | 1                      | 17              | 13     |  |

#### 11. Agricultural input shops:

| Input                     | Available in village? | If no, nearest available place | Distance from Village (km) |
|---------------------------|-----------------------|--------------------------------|----------------------------|
| Seed                      | No                    | Balloli, Horti, Zalki          | 5, 8, 8                    |
| Fertilizer                | No                    | Horti, Zalki                   | 8, 8                       |
| Pesticide                 | No                    | Zalki, Bijapur, Solapur        | 8, 45, 55                  |
| Machinery - Purchase      | No                    | Bijapur, Solapur               | 45, 55                     |
| 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: 2

13. Storage godowns/warehouses: No

14. Other business units (number):

Grocery shop: 2 PDS Shop: 1 Kerosene shop: 1

Hotel/Canteen/Dhaba: 4 Floor Mill: 9 Chilli/spices grinding shop: 2

Pan shop: 5 Carpenter: 1 Mason: 38 Cycle repair shop: 1 Money lender: 66 Dhaba: 2

15. Other institutions (number):

SHG: 4 Dairy: 1 Post Office: 1 Youth Club: 6

Bhajan Mandal: 2 Dollu Sangha: 2

16. Places of worship (No.): Temple: 8 Mosque: 1

#### I) GOVERNMENT WELFARE PROGRAMS / POLICIES (as on 31 December 2010)

| SN | Government Program  | Beneficiaries (No. of households) |
|----|---|-----------------------------------|
| 1  | Mahatma Gandhi National Rural Employment Guarantee Scheme | 170                               |
| 2  | Subsidy for construction of private toilet                | 6                                 |
| 3  | Indira Awas Yojana  | 31                                |
| 4  | Grameena Ashraya Yojana                                   | 26                                |
| 5  | Widow Pension   | 56                                |
| 6  | Pension for Physically Handicapped                        | 32                                |
| 7  | Sandhya Suraksha Yojana                                   | 80                                |
| 8  | Old Age Pension   | 45                                |
| 9  | Prime Minister's Gram Sadak Yojana                        | All                               |
| 10 | Gram Swaraj Yojana  | All                               |

# **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).

#### ICRISAT-Patancheru

Patancheru 502 324, Andhra Pradesh, India Tel +91 40 30713071 Fax +91 40 30713074 icrisat@cgiar.org

www.icrisat.org