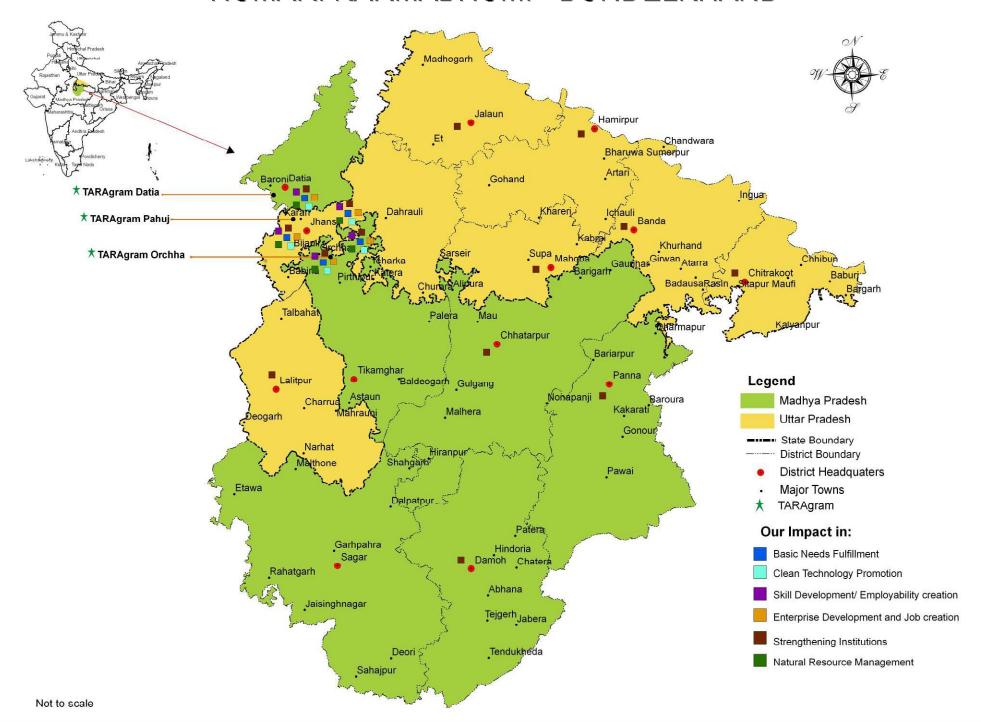
## **HUMARI KARMABHUMI - BUNDELKHAND**



# **About Development Alternatives**

Bundelkhand, in Central India, is one of the most backward regions in the country. This semi-arid region suffers from severe drought which has been aggravated by climate change. This has impacted the traditional occupations. Agricultural productivity has gone down and the livestock affected by lack of fodder and water. With hardly any industry, lack of proper infrastructure and low awareness on their rights and entitlements, the people of Bundelkhand are marginalised and are resorting to migrant labour as they have no livelihood options. This land is the area that Development Alternatives has committed itself to - its Karmabhoomi.

Persistent poverty and environmental degradation defines the challenges for which Development Alternatives designs and delivers eco-solutions. For the last 25 years, it has worked on the principle that people must be enabled to take charge of their lives. The organisation believes that the key to lifting millions out of poverty is enhancing the productivity of human, natural and financial resources leading to the creation of livelihoods on a large scale.

The areas that Development Alternatives works in are:

- I. Basic Needs Fulfilment
- II. Strengthening of Institutions
- III. Natural Resource Management
- IV. Promotion of Clean Technology
- V. Enterprise development
- VI. Skill Development & Employability

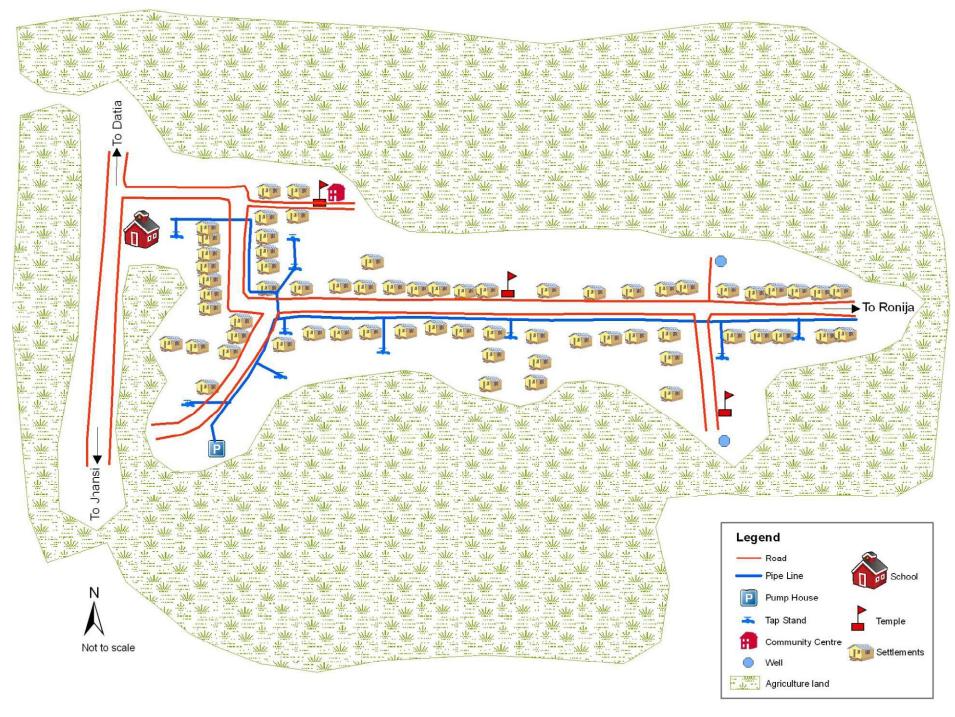
### **HUMARA GAON**

Interventions in Bundelkhand were introduced by DA based on the pressing needs felt by the rural communities. The support has a clear motive of creating sustainable livelihoods with a focus on upholding environmental aspects of the region. At every stage, DA works with the participation of the village community to ensure ownership of the initiatives.

The term Humara Gaon which translates as 'Our Village', encompasses more than just an association. It symbolises the unified steps of the community members towards creating a model village, where the people take charge of their lives while simultaneously realising their responsibilities to themselves as well as the environment.

The technology villages, TARAgram Orchha and TARAgram Pahuj set up by DA are Sustainability Resource Centres for Innovation, Action, Training and Outreach in low carbon and climate resilient livelihood initiatives in Bundelkhand. TARA Nirman Kendra provides eco-friendly solutions for rural habitat and infrastructure.

## **GOPALPURA**



# Humara Gaon Gopalpura

### **HUMARA PARICHAY (About Us)**

Location Badagaon, Jhansi, UP
Households 52
Population 321
Main Occupation Agriculture

Main Occupation Agriculture, Labour

Main Crops Groundnut and Wheat

Distance from 4 KM TARAgram Pahuj

### **HUMARA PRAYAS (Our Efforts)**

- Interventions began with a focus on Safe water and Sanitation and today there are 10 water sources for all the households
- Piped water system being managed by the village itself
- Water harvesting training imparted to community leaders and Panchayati Raj Institutional representatives
- \* Three check dams constructed with support from NREGS
- Field bunding, farm ponds and other structures undertaken
- Livelihood support through Natural Resource Management activities
- \* Promotion of agri-horti model under agro-forestry
- Total village sanitation and drainage management
- \* Women learn to read and write Hindi under the TARA Akshar literacy programme

### **HUMARA GAURAV (Our Pride)**

There is an unmistakable glint of satisfaction in the old, seasoned eyes of Malkhan Singh, the village head, as he speaks about the transformation of his village Gopalpura ever since Development Alternatives (DA) intervened with Arghyam Foundation.

Reeling under acute water shortage for years, the villagers would wake up long before the first ray of dawn hit the sleepy village. Women and young girls walking long distances in search of drinking water was a common sight.

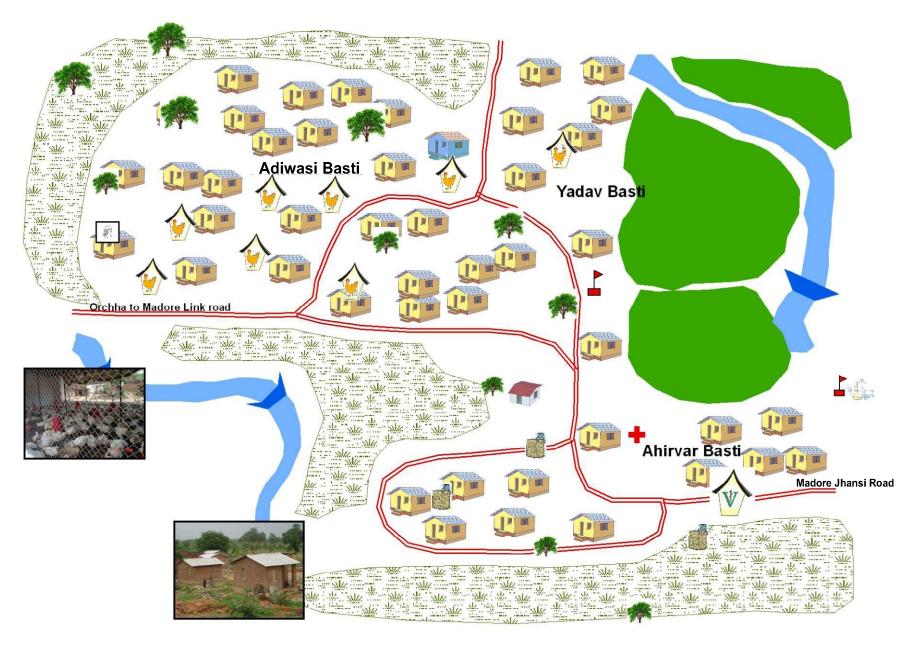
The plight of the villagers pained Malkhan Singh. He longed for a way out. His prayers were answered when DA approached the village with a promise of water security and other basic needs fulfillment. Visionary as he was, Malkhan Singh was quick to realise the potential in this partnership. There was no stopping him then. Unmindful of the initial apprehension of the villagers, Malkhan Singh promised to stand by DA in its ventures. Through his charismatic personality he was able to attract and convince his co-villagers and others of the usefulness of the development activities being carried out in the village. Malkhan Singh became the agent of change for the growth of his village.

When farmers announced a 30-35 per cent more production out of the varieties and practices tried and promoted for Rabi (the winter crop), it was a milestone and encouragement for all to move forward with greater zeal.

Today, Malkhan Singh is a proud man and so are the villagers, as they reap the benefits.



# **MADORE**







# **Humara Gaon Madore**

### **HUMARA PARICHAY (About Us)**

Location Niwari,
Tikamgarh, MP
Households 352
Population 1650
Main Dairy,
Occupation Agriculture,
Poultry &
Labour

Wheat and

Groundnut

Distance from 14 KM

TARAgram Orchha

Main Crops

### **HUMARA PRAYAS (Our Efforts)**

- 53 'pucca' eco-houses with toilets built
- 120 poultry farms for SC/ST families set up through the District Poverty Initiatives Project (DPIP)
- \* A centralised collection system for housing loan repayment mechanism through poultry farming (Pradaan)
- \* Two community buildings built
- \* Two hand pumps and five solar lights set up
- \* 35 domestic water tanks built
- 100% drinking water accessibility for villagers
- \* 90% agricultural land irrigated through canal

### **HUMARA GAURAV** (Our Pride)

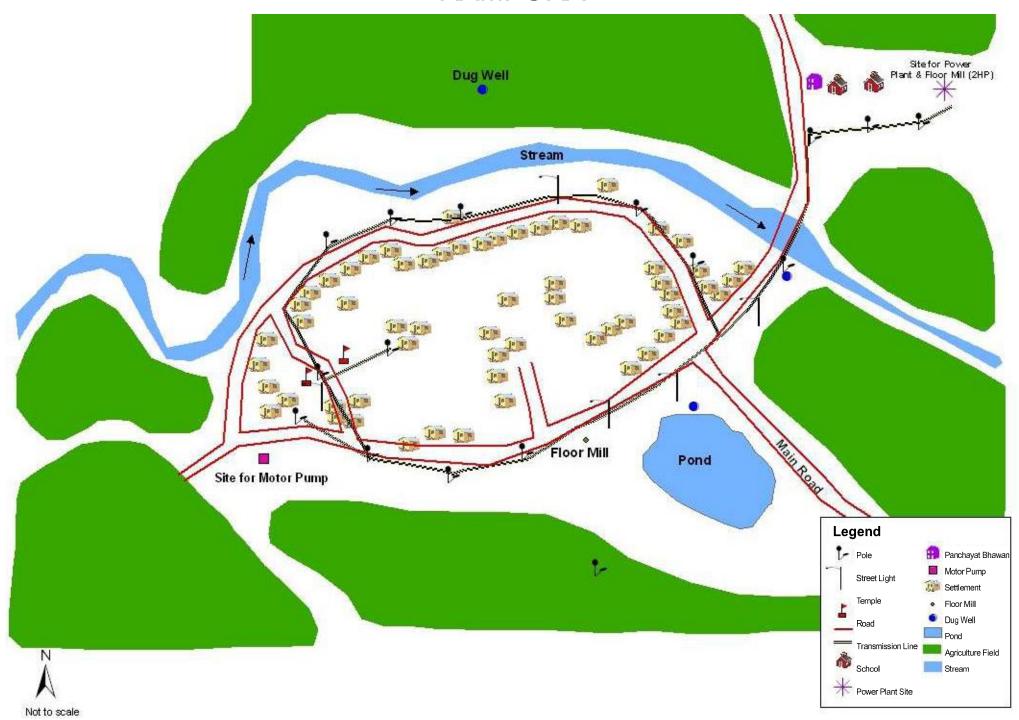
It was in 2004 that Development Alternatives and CAFART started the Rural Housing Programme in Madore with the purpose of creating replicable livelihood and housing models.

Today, sitting on a family cot, Parvati Devi, a middle-aged entrepreneur, inspects the consignment of chicken feed for her poultry farm, not very far away from her 'pucca' house. She has content written all over her wrinkled face as she speaks about the transformation her village has gone through ever since **Development Alternatives** and **Pradaan** mediated. Through the Gaushala intervention, a bio-gas run grinding mill was started with the initiative of women SHGs, who grind spices, package them and sell them in a village store.

The village today stands testimony to progress with strong community institutions like women Self Help Groups (SHGs) and the TARA Karigar Mandal (TKM), a group of 20 local masons that have been trained in eco construction and are now able to replicate these technologies in other areas. With guidance, some masons have created a market for eco-construction too. The training has provided economic support, independence and a sense of responsibility in the village.



# **RAMPURA**



# **Humara Gaon Rampura**

### **HUMARA PARICHAY (About Us)**

Location Badagaon,
Jhansi, UP
Households 69
Population 325
Main Agriculture and

Main Agriculture and Occupation Animal Husbandry
Main Crops Maize, Wheat,

Groundnut, Til, Mustard, Urad, Gram, and Pea

17 KM

Distance from TARAgram Orchha

### **HUMARA PRAYAS (Our Efforts)**

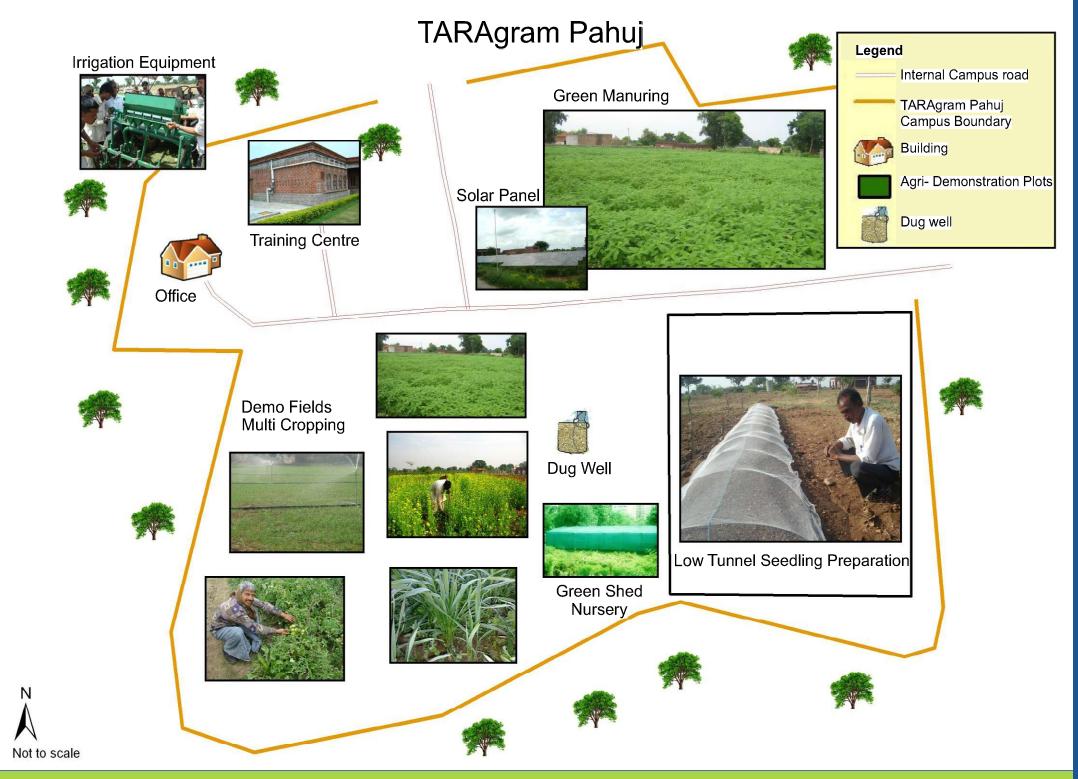
- \* The first step was electrifying the village with **Solar energy**. Today, the Solar Power plant of 8.7 kWp (60 panels, 145 Wp each) generates up to 1050 unit / month.
- \* 44 households connected, with meter and MCB for safety of household / circuit, and paying for electricity regularly as per the tariff
- \* 1 enterprise (flour mill of 3HP) established by an entrepreneur
- \* 13 street lights under use from dusk to dawn
  - \* Trained Village Energy Committee (VEC) members for total management of operations
  - \* Agro-forestry, plantations, medicinal plants and improved agriculture practices promoted for low carbon emissions
  - One computer running on solar energy to provide basic computer education to school children.
     42 children from Rampura and 11 from surrounding villages get basic computer education
  - \* A Jal TARA water filter installed in the school premises
  - \* 24 batteries (of 2 volt and 2500 Ah) to store energy and supply for 2 consecutive non-sunny

### **HUMARA GAURAV** (Our Pride)

Rampura village was unelectrified till 2008, but with Development Alternatives' intervention and SCATEC Solar's support, it is now the **first community managed solar powered village of India**. Passing through the dusty bylanes of village Rampura, one can't help but notice the bustling community life. Light bulbs illuminate the mud houses, the sound of an advertisement blaring from a television in the nearby barber shop and a flour mill at the heart of village noisily grinding wheat. This village is different! This village has electricity! And the man behind this transformation is **Ghanshyam Yadav**, an unassuming farmer in his mid fifties.

It was the result of Yadav's untiring efforts, as he joined hands with DA and SCATEC Solar, Norway that Rampura has solar electricity today. He was instrumental in the setting up the Village Energy Committee with representation from the local community along with the experts to work towards the development of the area. This committee planned, implemented, monitored and controlled the project activities. It has helped to construct, operate and maintain the centre as well as mobilise the rural masses for various community activities.

The village draws its name from Lord Rama and Ghanshyam Yadav certainly stands tall in his efforts to eliminate the demons of darkness - neglect, underdevelopment and backwardness.



# TARAgram Pahuj Sustainability Resource Centre

### **HUMARA PARICHAY (About Us)**

### Location

TARAgram Pahuj is a Sustainability Resource Centre for Innovation, Action, Training and Outreach of Development Alternatives located near Pahuj dam, in Village Ambabai, Uttar Pradesh and spread over 7.5 acres of land.

### Purpose

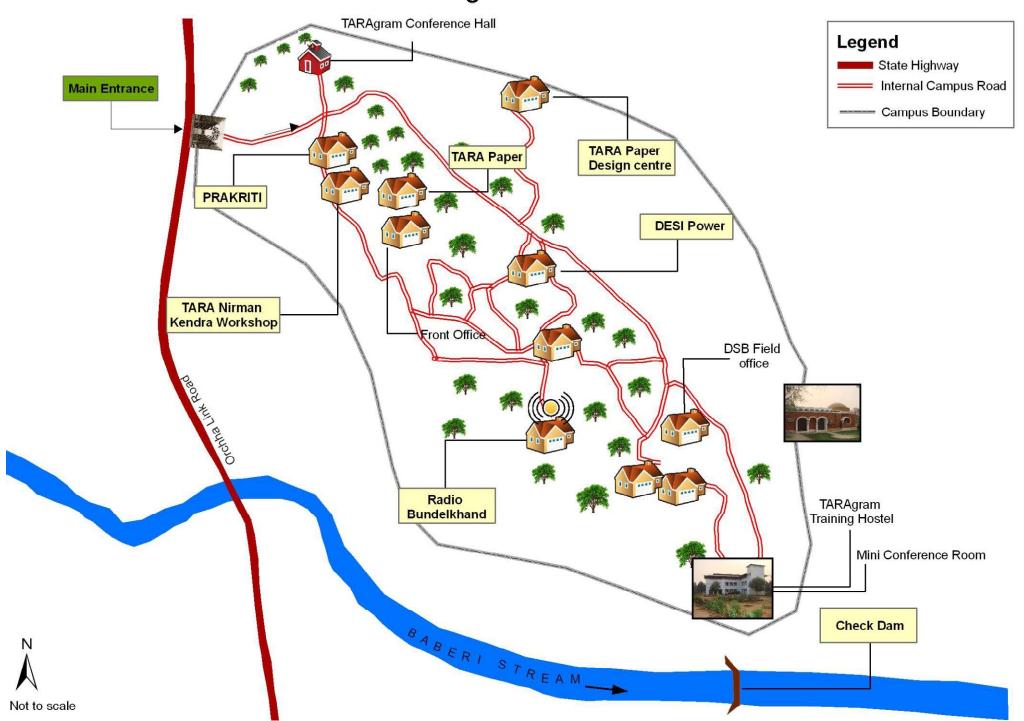
The objective is to generate awareness and build capacities of the local communities by demonstrating models of improved farming practices, water conservation and harvesting and land use planning by utilisation of available resources organically. The centre envisions strengthening livelihoods of rural people, predominantly agrarian, with formation of different kinds of community institutions. The guiding premise for these interventions is participatory, gender just and an ecosystem approach.



### **HUMARA PRAYAS (Our Efforts)**

- \* Land Use and Field Bunding: Bunds were made onto the sloping and undulating terrain. Bunding reduces soil erosion by intercepting runoff and conserving soil moisture.
- Green Manuring: Dhaincha (Sesbania Bispinosa), a fast-growing, drought-resistant leguminous shrub, capable of fixing atmospheric nitrogen, is used for increasing soil fertility. All the agricultural waste generated in the campus is used for making compost.
- Micro Irrigation Systems: Sprinklers and a drip irrigation system piloted in the campus for water efficiency in different cropping systems suited for the region.
- \* Farm Pond: As a water management technique, a farm pond constructed in the low lying area in the campus, strategically positioned to receive runoff from the surrounding catchment areas for recharging and enhancing soil moisture.
- \* Green Power for Irrigation and Office: A solar pump installed to demonstrate and create awareness among villagers on the use of renewable energy for irrigation purposes.
- \* Water Harvesting: Roof-top rainwater harvesting models system demonstrated on the campus, also used for training purposes
- Water Quality: DA's Jal-7ARA water filter installed for drinking water, to generate awareness as well as for training purposes.
- \* Use of Improved Varieties: Demonstration of drought-resistant variety of different cropping system cultivated to share the knowhow about the package and practices with the farmers
- \* Agriculture–Horticulture Practices: Models of different practices demonstrated for farmers for adoption, for awareness generation and technology transfer including green fodder management and soil conservation/management
- \* Institution building in the area has been carried out through formation of a farmers' club, SHG federations and practicing the best agricultural practices
- \* Energy efficiency measures include energy/waterefficient pumping; creating a resource-efficient base; irrigation services; energy efficient cooking and lighting devices/practices
- \* Marketing strategies followed here include postharvest value creation; and enterprises like a nursery
- Trainings have been given on issues related to computer education; electrical/ mechanical/ trade-based skill development; sales/marketing trade-based training; employability training for the services sector; product demonstration; and enterprise development training

# **TARAgram Orchha**



# TARAgram Orchha Sustainability Resource Centre

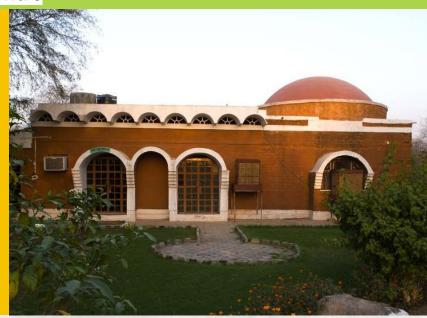
### **HUMARA PARICHAY (About Us)**

### Location

Located on the banks of Baberi stream, this Sustainability Resource Centre for Innovation, Action, Training and Outreach is accessible to both Uttar Pradesh as well as Madhya Pradesh and is very close to the beautiful and historic town of Orchha.

### **Purpose**

Set up in 1995 as a technology village by Development Alternatives, TARAgram Orchha, has over the years, demonstrated the economic viability of sustainable production systems. It is based on the concept of sustained low-carbon economic growth amongst rural communities through the application of clean technology solutions.



### **HUMARA PRAYAS (Our Efforts)**

- \* Check Dam constructed near the campus by The DA Group in 1998 to ensure water supply to the enterprise units and for internal consumption. It maintains moisture in an 100 acre area across a 3-km long trail. The water requirement on the campus of more than 100,000 litres per day is fulfilled, in spite of there being no ground water in this area.
- \* Radio Bundelkhand: The first Community Radio in Madhya Pradesh, Orchha set up in 2008 with support from the UNESCO now run by local communities of Bundelkhand, facilitated by Development Alternatives.
- 1ARA Handmade Paper recycling unit started in 1995 and supported by IDRC, where 40 Sahariya tribal women are working
- Energy efficient Building Material Research cum Production Centre (1ARA Nirman Kendra) started in 1995, supported by SDC, HUDCO and BMTPC. TNK demonstrates and produces a range of innovative, affordable building products for house construction using 1ARA technologies, which utilise local crushed-stone waste.
- \* India's first commercial 100 kW Biomass Gasifier-based power plant (DESI Power) set up to ensure
- uninterrupted power supply to all production units, supported by Decentralised Energy System India Pvt. Ltd. (a joint venture between DASAG International of Switzerland and the DA Group).
- \* The TARA Livelihood Academy provides training and capacity building services to various stakeholders and jobs and enterprises for women and youth
- purification technology provides clean drinking water, with no chemical processes or energy use, to the campus in Orchha



# BAGAN Legend Hay Road Wage Noad Ones Dan Pies Line Pies Line Pies Line Vision Vision

# **Humara Gaon Bagan**

### **HUMARA PARICHAY (About Us)**

Location

Badagaon,
Tikamgarh, MP

Households

109

Population

502

Main

Occupation

Main Crops

Groundnut
Wheat,
Mustard and

Mung

Distance from 16 KM TARAgram Orchha

### **HUMARA PRAYAS (Our Efforts)**

- Institutions like Self Help Groups (SHGs), Yuva Mandal have been formed and their cumulative savings is more than Rs 26,000
- Awareness levels of villagers on water conservation perceived to be very high
- \* Water management led to 100% households being provided clean drinking water
- 100% coverage of pipeline water supply with seven storage tanks
- The community monitors the water quality
- Sanitation drives by DA have resulted in construction of three toilets and a covered drainage system with community soak pit for around 50% of the households
- Cash crops have been introduced for improved agricultural income
- \* About 80% drudgery of women has reduced, and the major gainers are the girl children as the time spent on getting water from far off places has reduced considerably

### **HUMARA GAURAV (Our Pride)**

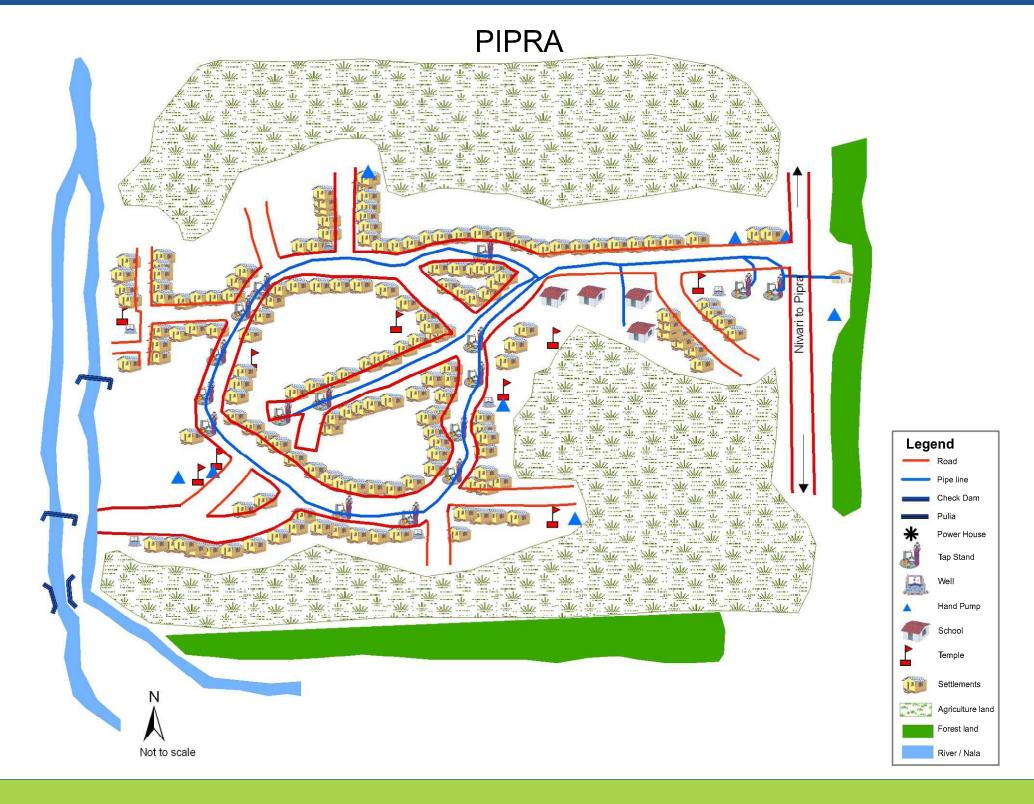
In Village Bagan 109 families were facing a severe water crisis even for drinking purposes.

Against this background, the DA team organised a meeting in Bagan for the people of the village. It was decided that in order to solve the acute water problem, a Samagra Jal Vikas Samiti or a Village Water Committee would be formed. The aim of this Samiti was to solve the existing water problem and put in systems for long-term management and ownership.

In a community driven initiative, the villagers underwent shramdaan (free labour). Monetary help was given through the Arghyam Project. The Panchayat provided land for the pump house which was connected to a pipeline to supply water to the village.

Today, the village has the facility of a tap in every Mohalla (locality) with a total of 11 taps and the water problem of the village has been reduced to a great extent.





# **Humara Gaon Pipra**

### **HUMARA PARICHAY (About Us)**

Location Niwari,
Tikamgarh, MP
Households 336
Population 2586
Main Dairy,
Occupation Agriculture
& Labour

Soybean, Groundnut, Wheat, Gram

& Mustard
Distance from 25 KM
TARAgram Orchha

Main Crops

### **HUMARA PRAYAS (Our Efforts)**

- Our endeavours to bring about changes in the community have led to construction of four Eco-Houses with Rat-trap Technology under FEM Project and one cluster level office building
- \* Under the initiative for water and sanitation measures, Pipra now boasts of one check dam constructed as part of water conservation practices by the Public Health and Engineering Department (PHED)
- \* Up-gradation of a well for drinking water purposes at a separate hamlet has led to 100% households being catered to through the community based solar water distribution system
- \* Micro-level planning under MGNREGS, Madhya Pradesh has led to large-scale improvement in livelihoods
- Jal-TARA water filter demonstration carried out in schools for children to make them understand the need for hygiene and water management
- \* TARA Akshar literacy programme is being organised for the rural women so that they can become functionally literate

### HUMARA GAURAV (Our Pride)

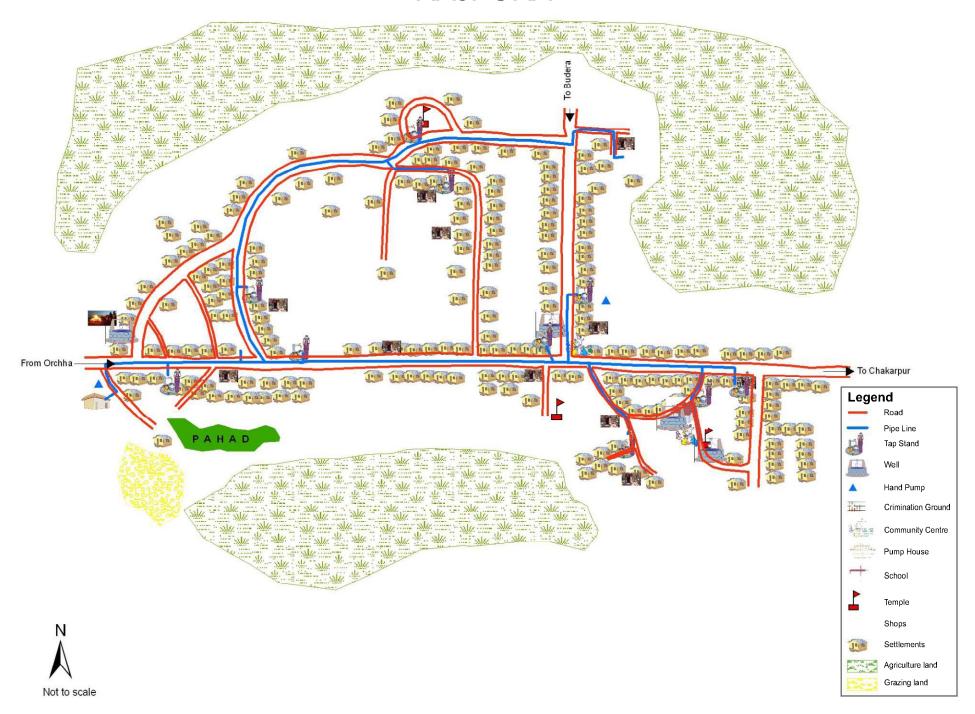
Pipra is a small village where a severe drought in Bundelkhand for the last four years has resulted in water scarcity for both humans and cattle. There was no water for irrigation and the population had started migrating to other areas.

Development Alternatives started their interventions in Pipra by forming Self Help Groups (SHGs). Assessing the grave situation, Development Alternatives, with the support from the Arghyam Foundation, introduced a project for Integrated Domestic Water Management (IDWM) in the village. The village school headmaster played an important role in influencing public opinion.

The project was undertaken in a participatory manner, with the villagers playing a pivotal role in deciding interventions, implementing them and maintaining them. Support was garnered through prominent members of the village. Today, the check dam and the wells are ensuring drinking water for people and livestock as also adequate water for irrigation.



# **RAJPURA**



# Humara Gaon Rajpura

### **HUMARA PARICHAY (About Us)**

Location Niwari,
Tikamgarh, MP
Households 176
Population 1162
Main Agriculture
Occupation & Labour
Main Crops Groundnut,
Wheat, Mustard
and Mung

25 KM

Distance from TARAgram Orchha

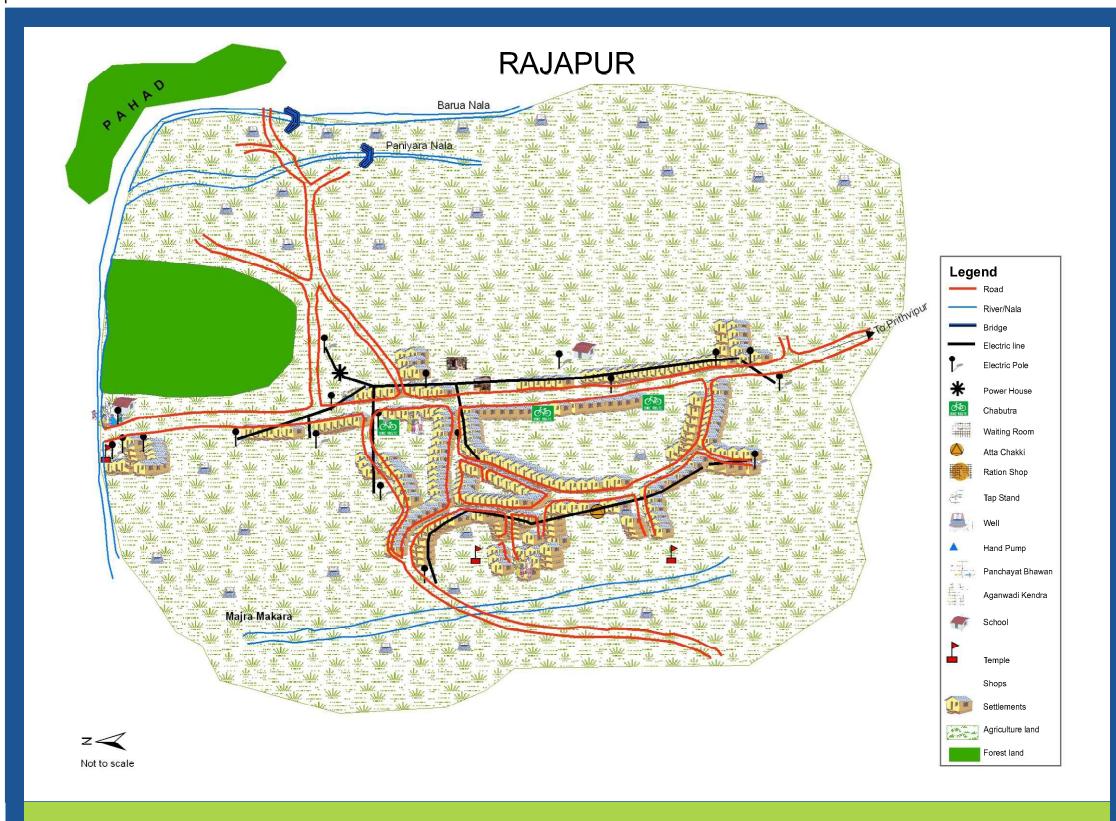
\* Agricultural practices like horticulture models with inter-cropping demonstrated

- \* Panchayati Raj Institutional (PRI) support for infrastructure improvement has taken place in the form of village roads, drains and plantations
- \* Demonstration of safe sanitation practices conducted on the need for latrines, drains, soak pits, as well as on a community waste water collection pit
- \* Capacity building programme has been organised for water quality monitoring, soil and water conservation, wastewater management, operations and management (O & M), rainwater harvesting, livestock management, etc.
- Piped water supply system has been installed with 19 stand posts, facilitated by a deep well drilling technology (approximately 1000m from the village) and a pipeline which is spread throughout the village for 1758 mt, catering to all the 176 households
- \* There is one 40,000 litre surface water reservoir (SWR) for regular drinking water facilities with 19 community tap stands in the village
- \* 50 acres of land covered under water conservation through field bunding
- \* Jal-TARA water filter demonstrations for school children have been made to spread the need for hygiene and water conservation
- 170 household toilets constructed, including 9 pre-cast toilets, leading to 95% of the hhs having toilets
- \* Seven SHGs formed comprising 84 women

### **HUMARA GAURAV (Our Pride)**

Parvati is a middle-aged woman in Rajpura village where most of the farming in the region is rain fed. Her husband Dayaram is a farmer. Dayaram has a small piece of land where he can grow only one crop in a year due to scarcity of water. However, there is something startlingly different about this household, namely Parvati. She has defied prevailing cultural norms by taking an initiative to improve the standard of living of her family. Parvati is building a toilet within her home.

Under the Arghyam project, Development Alternatives (DA) is working in Rajpura to ensure water security and create awareness on hygiene and sanitation issues. The aim is to move in the direction of making the village 'open defecation free'. In order to do so, the villagers are facilitating the construction of toilets in the village, thereby replacing fields as relieving grounds. The awareness campaign has sensitised many families about the connection between health and sanitation. Parvatilis a path breaker in her village, and a name to reckon with.



# **Humara Gaon Rajapur**

### **HUMARA PARICHAY (About Us)**

Location Niwari, Tikamgarh, MP Households 373 2163 Population Main Agriculture & Labour Occupation Soybean, Main Crops Groundnut, Wheat and Mustard

Distance from 40 KM TARAgram Orchha

### **HUMARA PRAYAS (Our Efforts)**

- \* Ten community institutions like Self Help Groups have been formed (SHGs)
- Construction of a check dam has led to large-scale water management in the village
- Participation by the villagers has led to construction of a community building in the village
- Demonstration of high-yield soybean seeds through the ATMA Project has raised the yields considerably

### HUMARA GAURAV (Our Pride)

DA's intervention has begun from 2000 onwards through the UNDP project. As a result of this alliance, 2-3 SHGs have been formed and its members are engaged in bamboo-based livelihood activities and making Daliya (baskets), Soopa (hand held chaff sifter) and Bijna (Hand Fan) and other goods of local use. In 2001, a Swa-Shakti project on women empowerment was started in the village under which four SHGs have been formed comprising very poor families. Land measuring 1 to 2.5 acres has been allotted for agricultural purposes. During the weekly meeting of the SHGs, most of the SHGs members said that if a check dam is constructed at Panyara Nala, which is very near to their agricultural field, the water level will increase and so will the well water level. The farmers were able to farm only one crop in the autumn (Kharif) harvest. As a result of the initiative, a check dam was built and the farmers are now also harvesting the spring (Rabi) crop.

# DHIKOLI 45 km 45 km



# **Humara Gaon Dhikoli**

### **HUMARA PARICHAY (About Us)**

Not to scale

Orchha

Location Babina, Jhansi, UP Households 391 1887 Population Main Agriculture, Occupation Labour Groundnut, Main Crops Wheat and Chick pea 32 KM Distance from **TARAgram** 

### **HUMARA PRAYAS (Our Efforts)**

- DA's intervention in collaboration with ICRISAT has led to the establishment of institutions like the Watershed Committee, a Farmer's Club, and 11 Women Self Help Groups (WSHGs) to carry out action at all levels of conservation
- Livelihood Activities have been introduced for vegetable production, crop trials for enhanced crop production, vermi-composting practices
- \* Agro-forestry activities have been introduced on 30 acres of land, covering 200 farmers
- \* A weather station has been installed and gauging structures are in place to monitor the weather patterns

### **HUMARA GAURAV** (Our Pride)

Jaipal Singh Thakur, a 45-year-old farmer changed the future of the entire Dhikholi village when he participated in the launch of the ICRISAT sponsored Model Watershed. In the village and farmers' meetings, the overall morale was higher because of his presence and encouragement. To improve the crop production in the area, farmers were being motivated to adopt the high-yielding seeds and improved farming practices. Jai Pal Singh Thakur came forward and demanded resource and technical support for the same. He established a nucleolus trial of chick pea on 1 acre of land holding, introduced high-yielding variety seeds of chick pea (JG-11) and treated it with rhizhobium; adopted line sowing methods; and applied balanced doses of manure and fertilisers. This enterprising farmer motivated the other farmers by showing the results of demonstration and distributed the seeds among other farmers. The result of the entire exercise was 8 quintals of chick pea, a great improvement from the harvesting of 3-4 quintals through normal practices.

Jaipal Singh Thakur has motivated the other farmers through results, demonstrations and seed distribution. Since he became the lead farmer for the farming community, Dhikholi has transformed into a model village.