

Reviving Rural India

MGNREGA Model Schemes

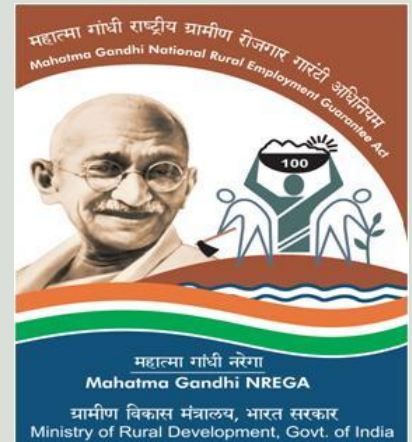
2012 December



TRIOs

-the development professionals

support to sustainable development



**The National
Rural
Employment
Guarantee
Act in the
state of
Gujarat**

Phasewise implementation of NREGA, Gujarat

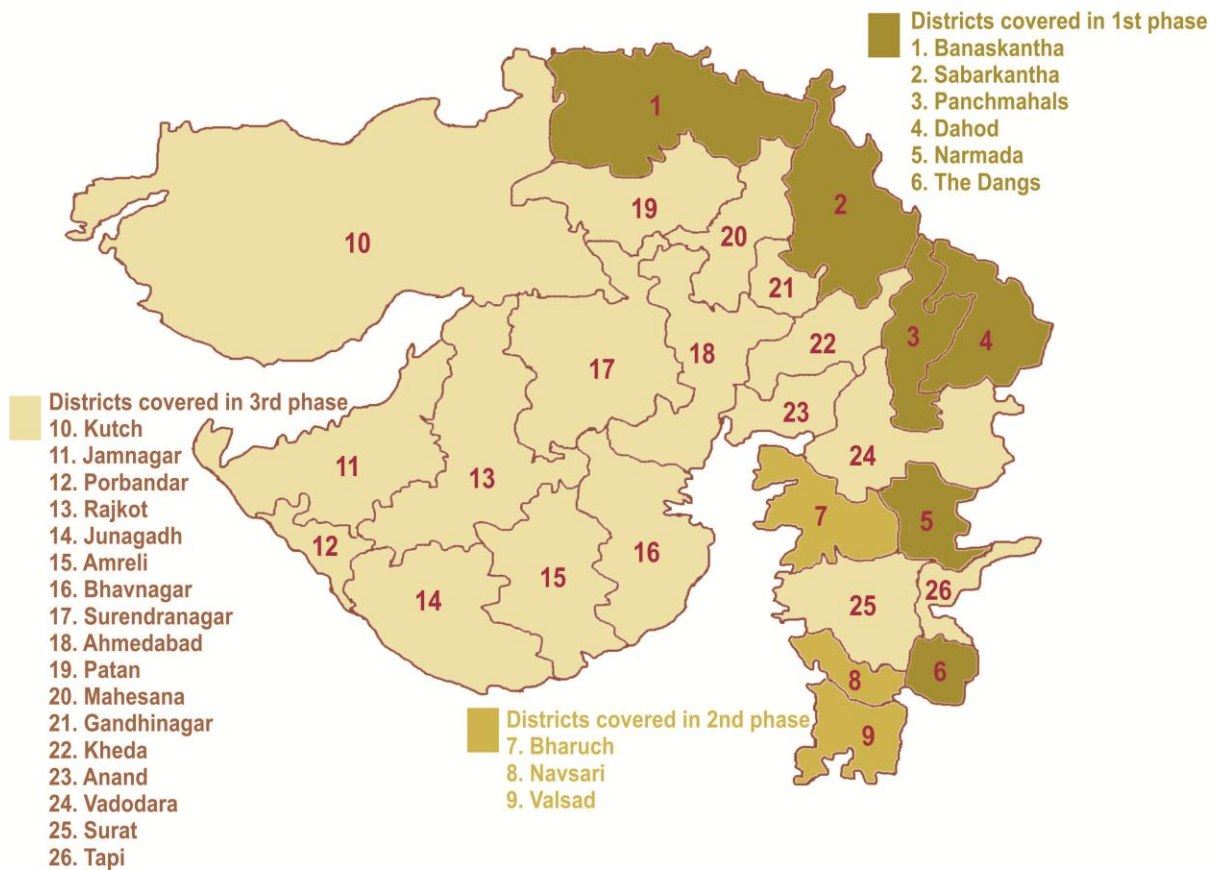


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We would finally like to thank all the people, the district and block, line department officials, the GRS, mates and the workers at the MGNREGS sites whose efforts, experiences, challenges and vision are what translated this collection of good practices and success stories into a reflection of the journey and impact of MGNREGA in the state of Gujarat.

**State Resource Centre Team
(TRIOs Development Support)**

Preface

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) launched in February 2006, is one of the largest employment guarantee schemes in the world. The scheme in 2008-09 extended its reach from 200 districts to all the rural districts of the country.

Its uniqueness lies in its people centric, bottom up, demand driven design. The success of the scheme lies in the systems set up to make this design functional and maximise overall benefits to the community.

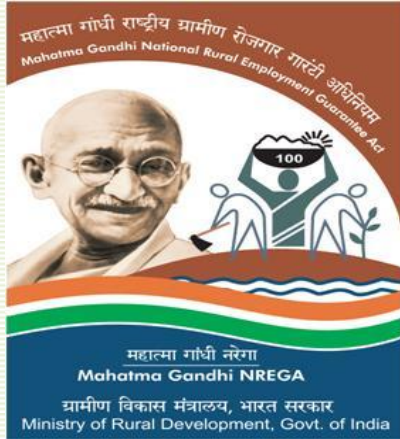
Gujarat State has taken up several steps in this direction. Among these is the State Resource centre (SRC), a Technical and Knowledge Based support unit to the Commissionerate of Rural Development. Gujarat is believed to be the first state to have established a SRC to strengthen the implementation of the MGNREGS.

The SRC provides technical assistance on four core sectors; **Monitoring and Evaluation, Financial Systems, Communications and Capacity Building**. The SRC has worked with the Commissionerate and other Departments and agencies in setting up innovative and transparent systems of financial management, e-governance, and communication materials, human resource management systems etc.

Part of this process was to capture human interest stories, impacts, good practices and success stories through field visits and discussions with implementing teams. The National television channel 'Doordarshan' has featured Gujarat's MGNREGS stories on regional news bulletin and in their rural development programme. Other communication materials developed at the state level have included a thematic brochure on GEO-ICT application, training handouts, and human interest stories revealing the positive impacts of MGNREGS. These were prepared and shared with news - papers and media agencies for publications.

This booklet is an edited compilation of those stories and articles, to inform the various initiatives taken by Rural Development Department and the achievements of the implementation and participants which collectively demonstrates the way MGNREGS is being implemented and its benefits in Gujarat.

MGNREGA in Gujarat



Despite an accelerated industrial development in recent years the economy of India is largely agrarian with seventy per cent of the population living in rural areas. Gujarat is one of the most industrialised states in India; however, agriculture continues to dominate the economy with 63% of the population living in rural areas.

The National Rural Employment Guarantee Scheme

Reduce lean season unemployment amongst unskilled agricultural labourers

Improve the rural infrastructure

Increase equal opportunities for women

Reduce urban migration

Diversify knowledge and skills amongst the workforce in rural areas

The MGNREGA is the Government's response to address poverty related to insecure livelihood in the rural areas.

According to government figures (Planning Commission India, March 2012) the percentage of people living below the poverty line in rural areas of Gujarat stands at 26.1%, highest amongst specific groups such as women headed households and minorities. The majority of the poor are landless agricultural workers.

The Gujarat State Agrovision 2010 acknowledges the need for the creation of sustainable assets and infrastructure at the village level for agricultural development. The MGNREGA work in Gujarat since its inception has focussed on water conservation, water harvesting, drought proofing, village roads etc.

“Gujarat Agrovision 2010 seeks to make specific provisions for resource poor farmers and agricultural labourers, particularly in tribal areas..... However, agriculture cannot develop in isolation. Development of agriculture depends a great deal on economic infrastructure such as roads, ports, and electricity as well as social infrastructure such as education, health, sanitation and water supply”.

According to The Hirway Report (2009) the high expenditure on water management under MGNREGA has had a positive impact on village economies and the farming sector in the state. In terms of creating assets, Gujarat has shown a completion of works rate of 80% for 2009-2011 against the national average is of 49%.

In the first five years of MGNREGA Gujarat has concentrated most of the budget on water management and land development. Up to 2011 over 80% of works concerned water conservation and harvesting, irrigation and drought proofing. In 2012 the emphasis has shifted to improving rural connectivity. A total of 21643 assets have been created in 2012-13 for flood control, rural connectivity, water conservation and harvesting, irrigation, land development, drought proofing, construction of Sewa Kendra's and other projects.

The Table given below shows the type and number of work completed under MGNREGS between the years 2009-2012. The highest concentration of work has been in the area of Water Conservation and Water harvesting, an indication that the state underscores water security as key to rural transformation.

Table 1: Number and type of work completed under MGNREGA in Gujarat State (2009-2012)

Sr#	Works under Different Categories	No. of Works		
		2009-10	2010-11	2011-12
1.	Rural Connectivity	2785	7648	7099
2.	Flood Control	2848	2824	4278
3.	Water Conservation & Water Harvesting	30775	18440	6625
4.	Renovation of Traditional work bodies	2077	1363	1286
5.	Drought Proofing	1244	5029	5063
6.	Irrigation canals	238	542	539
7.	Irrigation facilities to SC/ ST/ IAY/ LR	652	10389	8167
8.	Land Development	500	1533	2442
9.	Rajiv Gandhi Seva Kendra	0	..2	19
10.	Other works	556	2183	2401
TOTAL No. of Works Completed		41675	49953	37919

Source: www.nrega.nic.in

Along with the creation of sustainable assets the scheme has been able to generate 1601 lakhs of person/working days in the State since its inception. This has accounted for Rupees 237490 expenditure. A further 418 lakhs person/days at a cost of Rupees 99373 is projected for 2012-13.

The Table given below shows 100 percent increase in both the labour days generated and the financial expenditure between 2008-09 and 2009-10 and a subsequent downturn in the figures for labour days for the following two years despite a marginal increase in the financial expenditure. This is similar to the national trend but could also be attributed to the low labour demand. The permissible wage rate was lesser than the market wage rate and hence the demand was low. The permissible wage rate was revised to Rs. 134/ day by the central Government on January 2012. The effect of this wage rate will be reflected in the figures for 2012.

Table 2: MGNREGS, Gujarat: Financial Expenditure and Person days generated (2008-2012)

Financial Year	Financial expenditure (INR Lakhs)	Person days generated (INR Lakhs)
2008-2009	19615.34	213.07
2009-2010	73918.25	585.10
2010-2011	78935.80	491.84
2011-2012	65021.23	311.11
2012-2013 (Projected)	99372.71	418.00

Source: www.nrega.nic.in

A snapshot of at the benefits accrued to specific vulnerable groups, the Scheduled caste, Scheduled Tribes and women in the state in terms of employment generated under MGNREGA is given in the Table 3. Out of the 8.36 lakh household who demanded work, 8.22 lakh households were provided with employment in 2011-12 in the state. Nearly 40% of the person days generated in 2011-12 were by households from the Scheduled Tribe communities.

The effects of the concentrated efforts of the state Government on poverty reduction through MGNREGA can be seen in the creation of sustainable community owned assets, reduction in migration, greater control and access of women over economic resources and higher levels of transparency and accountability in the monitoring and financial systems.

These have been made possible through innovative practices adopted/ initiated by the State government through its various partnerships and technical assistance units forged specifically for the scheme in the state. To understand the need for the innovations and the partnerships it is important to look at the challenges and shortcomings that the State faced during the initial roll out years of the scheme.

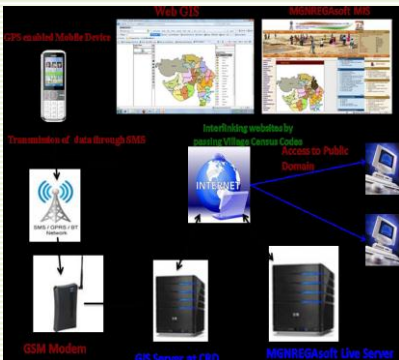
Table 3: MGNREGS Statistics 2011-20 12 for Gujarat State and for India

Work provided/ Person days	Gujarat	India
Total number of Households demanded work	8.36 Lakhs	510.26 Lakhs
Employment provided to Households	8.22 Lakhs	505.44 Lakhs
Person days generated (in Lakhs)		
SCs	24.52 [7.83%]	4795.61 [22.06%]
STs	126.58 [40.44%]	4020.21 [18.49%]
Others	161.90 [51.73%]	12924.45 [59.44%]
Women	144.61 [46.20%]	10461.15 [48.12%]
Total	313.00	21740.3

Source: www.nrega.nic.in

The next chapter deals with these issues.

Challenges and Solutions



Notwithstanding the many examples of the benefits of MGNREGS in Gujarat, there have been challenges and shortcomings. Since the inception of MGNREGS in the state in 2006, one of the major challenges faced has been to ensure that the schemes are effective in targeting the intended beneficiaries. Despite a high incidence of poverty, seasonal and lagging agriculture sector, lack of effective employment opportunities in the lean season and the high rate of temporary and distress migration in search of work, the initial take up was lower than anticipated.

Lack of awareness amongst potential beneficiaries about the scheme and its benefits and features was another major obstacle. There was need for a concentrated effort to spread awareness about the scheme through various mass information and awareness activities in the State.

The day rate paid in factories in the region is comparatively high and paid on a daily basis compared with the unwieldy systems for wage payment made the MGNREGS less attractive in the short term.

In addition to technical difficulties there were problems with accountability. Allegations of mismanagement and misuse of funds, non-payment and delay in payment of wages, issuance of false job cards, financial irregularities were made in submissions under the Right to Information Act, (at least fifty of which the Government of Gujarat has responded to).

The need of the hour was to further strengthen the monitoring system and set up transparent and real time tracking of transactions and monitoring systems for work allocation, work measurement, work site facilities and wage payments.

Since then the state has initiated several strategies to overcome the shortcomings in the implementation process.

The wage rates have been revised from Rs.50 to Rs.134 per day and a massive awareness program is in process to encourage participation. The Gram Panchayat meets once in every month to invite applications for job with a view to increase demand for work and a unique initiative of 'Amavas Divas' is taking place across the villages in Gujarat to create awareness about MGNREGS. Along with awareness raising measures, facilities, such as crèches and special conditions for nursing women, have played a significant role in demand generation for the scheme. Some districts like Sabarkantha, Banaskantha and Patan, have permanent mobile structures for worksite facilities. Initially the participation rate of women was just 2% but gradually, with awareness and IEC activities in the state, women have realised the benefits of the scheme and today their participation is more than 40%, higher than the 33% rate prescribed by the Ministry of Rural Development.

The State has introduced various technical applications to track schemes and manage finance in the MGNREGS in Gujarat which will help to reduce the potential for mismanagement. It will also speed up payment of wages and track the completion of works and the number of community assets created. Preparation of the labour budget with the support of the Geo ICT will make it more pragmatic and 'need based' ensuring impartial decisions are made on where projects are commissioned.

In the year 2012-13 special emphasis on individual works in land of Schedule Castes and Schedule Tribes, BPL and beneficiaries of land reforms will be taken up as per the guidelines and more than 25% of the work will be taken up as individual work.

There is a need to monitor and strengthen the participation of all the indigent sections in MGNREGS. At present specific monitoring is done only in relation to Schedule Castes (SC), Schedule Tribe (ST), Below Poverty Line (BPL) and women. This could be extended to those unreached communities to ensure that all groups are given equal opportunities in the selection of projects and recruitment of workers for MGNREGS.

The Following sections give an overview of the innovative solutions taken up by the State under MGNREGA in order to ensure community awareness building, increase transparency and accountability in systems and creation of sustainable community assets benefitting the most vulnerable sections of the community.

Amavas Divas: A unique initiative to boost participation

Amavas a moonless or a new moon day is of significance to various religions in India. Workers in rural areas generally avoid working on Amavas days. The Gujarat government has translated this day into an opportunity to promote awareness and participation of the rural community in MGNREGS through their ‘Amavas Divas’ Initiative.

The ‘Amavas Divas’ was conceptualised as village level information and awareness meetings facilitated by the Technical Assistants and Gram Rozgar Sewaks. The meetings would build awareness about the MGNREGS, demand for work, work job cards, work site facilities, wage payment mechanism, creation of community assets and employment generation. The meetings also provided a forum for the community members to discuss their concerns, needs and issues regarding the scheme and their specific worksite. The overall purpose was to

engender a sense of ownership and encourage participation among the rural community.

The state government through the SRC and the SIRD conducted training of trainers for the DDPC, Works Managers, Technical Assistants and the Gram Rozgar Sewaks to orient them on the objective and the requirements for the Amavas Divas. The preparation for the meetings also involved detailed plans being drawn up for the convening, conducting and reporting of all meetings and for the dissemination of reports.

Voices from the Community

Ramilaben, from Anara Gram Panchayat in Kheda: *“Generally women in our village are shy and we never come to attend such meeting, but this time we were curious to know about this Amavas Divas. As everybody was at home, we were free. We are given Chaupaniyas (Handouts) which has some picture and text indicating concept of good and bad village”*

Girdharbhai, Kheda district said *“It is a good juncture where villagers and officials from administration meet at one place and they listen to us and help us in understanding this scheme and our rights. They also show us movies (community development based movies) while conducting meeting, which is a good way to gather villagers”*

The activity was carried out in all the 26 districts of Gujarat State in the first four months of 2012. Approximate 8217 meetings were organised in 26 districts on the first Amavas Divas. Training for Trainers and other reorientation meetings along with zonal level meetings have also taken place. The programme had an immediate uptake and response and has helped create awareness of the schemes amongst the villagers. In those places where the meetings were held there was an immediate demand for jobs.

However the regularity of meetings has gradually declined over the months due to various issues. The Amavas Divas meetings facilitated by the GRS have been less successful. Until February the DRDA shared the Amavas Divas reports in the prescribed format but this has also stopped.

There is a need to strengthen the monitoring process of the meetings, build the capacities of the GRSs and also maintain the motivation level of the DRDA, Taluka and Village officials.

Innovative Use of Technology for E-Governance: A way ahead through Geo – ICT applications for MGNREGS in Gujarat

The greatest attraction of MGNREGS for the people intended to benefit is the promise of a reliable income during the lean months in the agricultural calendar. Very soon after its inception, it became clear that this central objective of the scheme was undermined by delays and confusion in the payment of wages. A highly bureaucratic system with payments passing through many handling stages was at fault.

The need was for a system that provided real time information for effective planning, tracking of work progress, timely and secure

payment of wages and validation of the assets created. The use of Geo-ICT applications in MGNREGS was an innovation introduced in Gujarat to accomplish this.

Geographic Information and Communication Technology (Geo-ICT) allows for effective planning, monitoring and measuring results as they are happening.’ Real time monitoring’ using integrated advanced technologies (Remote sensing, Geographic Information System, Mobile Applications, Photogrammetry and MIS). Using GIS based composite maps and GPS based mobile technology by every Gram Sabha it was possible to evaluate the quality of all the works done under the scheme at every stage of their progress.

Overall benefits

Validation of the assets generated

Avoidance of the duplication of works

Scientific planning of works,
Real time work progress
measurement

Payment to the beneficiaries in time

Optimum utilization of funds

Secured way of payment

Reduction of work load at Block
level

Gujarat was also one of the states selected by the Ministry of Rural Development to pilot an

Electronic Fund Monitoring System (E-FMS) through the Bhaskaracharya Institute for Space Applications & Geo-informatics (BISAG) and the Commissionerate of Rural Development, Government of Gujarat.

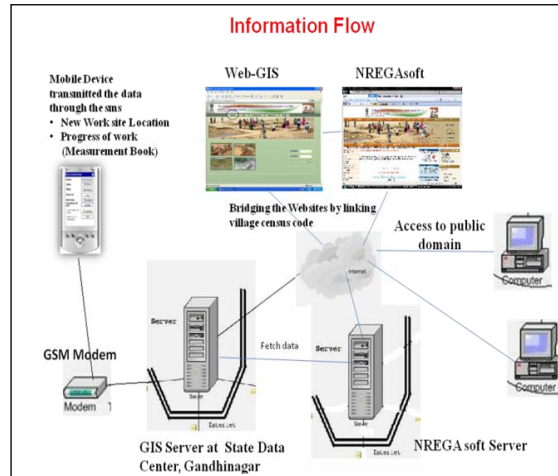
Gujarat was awarded a Bronze medal from the Government of India in the category of 'Innovative use of Technologies in e-governance' for Integrated Geo-Spatial ICT Solution for Scientific Planning and Monitoring of MGNREGS. The model geographic information system used in Gujarat for the state's program has been recommended by a central expert group as a "base model" to develop a national framework for utilization of the technology for NREGS. A dedicated working group was constituted by the Ministry of Rural Development, Government of India to roll out a country-wide action plan for the use of Geo-ICT tools in MGNREGS.

After the State Government took a policy decision for a decentralized MIS (Management Information System) operation (NREGASoft), including the creation of the E-Muster, E-Asset Directory and E-Measurement, these were pilot tested, for feasibility and usability in Sabarkantha District, one of the most backward districts in the state. After successful implementation in the district, the system was scaled up to state level.

NREGASoft: National Informatics Centre (NIC), along with Ministry of Rural Development (MORD) and other stakeholders, conceptualized web enabled Management Information System (MIS), NREGASoft, to address the planning & monitoring needs of the scheme. NREGASoft is a local language enabled, workflow based transaction level system designed for all activities of all stakeholders across the country. It is hosted on MGNREGA portal

(<http://nrega.nic.in>) and provides detailed information regarding implementation of the scheme.

NREGA-Soft is accessible by all stakeholders providing them a single window interface for all MGNREGA related activities.



This system has made good progress in ensuring transparency by making the various registers, muster rolls, documents, available in the public domain. It is fully compliant with the requirements of the MGNREGA and maintains accounts, generates required registers, documents in the mandated formats. It has also proved useful in tracking the Panchayat-wise shelf of the works/projects, pattern of demand for work, allocation of work, muster-roll, social audit data, track fund transfer to various implementing agencies, facilitate information exchange and provide a platform for registering grievances of the workers. Overall, this system has had a positive effect and has been able to provide definitive inputs for planning purposes.

E-Muster: Transparency and real time monitoring has been advanced in Gujarat by the introduction of e-muster. The e-muster prevents fudging of muster rolls and provides accurate information on the MIS. A

decentralised MIS, (management information system) enhances the real time tracking of MGNREGS activities. It captures the demand for work, allocation of work, work measurement and the attendance of workers in real time. It is on the basis of this information that wages are paid. This ensures faster processing of payments and decreases the chances of corruption and leakage of money. The result is that motivation to participate in MGNREGS work has increased. All Gram Panchayats in Gujarat now work according to this system. Through E-gram facility available at the Gram Panchayat office, the decentralized E-Muster operation is performed by the Gram Rozgar Sewak and other GP officials.

E-Assets Directory: The use of GIS helps to capture existing assets (created under NREGS) with their location, status and other information. Mobile based SMS reporting system for tracking MGNREGS work progress are useful for supervisors and administrators to take decisions based on real time activities. Geo-validation of assets also enables the authentication of claims made for claims of assets created under MGNREGS. Digitization with the geo reference enables the unique identification of each work on the map.

From the geo-asset directory composite village maps are generated and used for participatory planning by the scientific community. Labour budget for the year 2011-12 were prepared using these maps. The MGNREGS works progress in the entire state has been tracked by using the mobile application.

34,234 work progress assessment SMS have been received to date. The Asset validation exercise covers all villages and all 18,539 Gram Panchayats of Gujarat state. At present 1,95,418 assets created in 2009-10 & 2010-11

are under validation. 41,234 assets created earlier have been validated.

E-Measure: The use of mobile technology from grass root level has made it possible to monitor all works done under MGNREGS and thereby increase transparency, accountability and efficiency. Information sent from the work sites is received in the server at the State Data Centre in Gandhinagar. Each day, from the state owned web site, the information is sent to the NREGAsoft MIS a National Information Centre (NIC) owned website. At present the asset validation information is linked with the NIC site. BISAG, the nodal agency at the state level prepares the mobile application, modem application and the web application for this initiative.

E-FMS

NREGA-Soft is also capable of enabling interoperable to handheld devices having connectivity which can be used to address certain activities which are carried out in Panchayat offices. This could include estimates, attendance, measurements and payment. The existing features when coupled with electronic data capturing and electronic fund transfer will provide a robust end-to-end system that will not only hasten the processing but also address some of the other key concerns such as delay in release of wages, transfer of funds, management of the large number of bank and post office accounts etc.

A Real Time Transaction Based IT solution was prepared by NIC in consultation with MORD. The proposal from NIC contains solution for delay in recording of measurements and calculations and in crediting the accounts of workers (largely through Banks/ Post office accounts), in two distinct phases.

Phase-I will encompass the implementation of Electronic Fund Transfer (E- FMS system) leveraging the Core Banking infrastructure (NEFT/RTGS) of commercial banks.

Phase-II will encompass field-level electronic data capture through handheld devices. The handheld device will be used for demand registration, attendance, record the work measurements and will directly upload these to the central MIS (NREGA-Soft).

It has been decided by MORD to first take up Phase I (E-FMS) followed by Phase-II.

Table 4: Status of E-FMS implementation as on 20th November 2012

Sr#	Information	Details
1.	Name of the Pilot Districts	All 26 District
2.	Level of Implementation (Block/ GP)	Block
3.	Number & name of the Blocks / GPs	39 blocks (The name of pilot blocks & respective districts are mentioned in the Annexure-A)
4.	Name of Banks	State Bank of India
5.	Level of e-FMS A/c (State/ District/ Block)	State E-FMS Account

Source: Commissionerate of Rural Development

In Gujarat, about 41 lakh beneficiaries now have bank/post office accounts. Approximately 80% are post office accounts. Therefore the success of the 'E-FMS' in Gujarat depends on post offices having compatible CBS systems. Senior officials of Post offices have already made progress in bringing the IT software compatible with

bank and NREGAsoft software so that interface can be easily established.

The SBI is the nodal bank in Gujarat. The pilot project was successfully implemented at Vijaynagar taluka and gradually expanded to whole District of Sabarkantha. Now the same has been expanded in one taluka of each district.

Effectiveness of the Geo-ICT innovations in MGNREGS

The scheme has so far proved to be efficient in terms of increasing works completed, time, cost, usability and security of information.

The completion rate of schemes has increased due to quicker processing of information. Since the E-Muster, E-Measurement & E-Asset aspects of the Geo-ICT solution of MGNREGS works on the real time basis, the time taken for the information transition in to action is much less. Each day a summary report of the Technical Assistants work measurement information is reported to the supervisors as auto generated reports and this is helpful for the review of the system.

Geo-ICT solution is a user friendly initiative. Technical staff were provided with mobile phones and trained on to use the operations on the phone. Employees at the Gram Panchayat have access to the internet at the Gram Panchayat office. This is used to upload information on job demand, job allocation and job attendance. The use of mobile application and the existing ICT system in the Gram Panchayat has meant that travelling is reduced to a minimum.

The initiative enhances the function of the existing MIS system designed by NIC Eg. E-Muster. The information gathered through mobile technology had been linked with the existing MIS Ex. Geo-asset directory, work

progress measurement. The information captured through mobile are not required to be entered in the computer. This avoids duplication of the data entry.

The system is cost effective as open source technology had been used. The customized web application, mobile and modem applications are indigenously developed and maintenance is also performed by the internal team. Apart from the two experts for MIS & GIS hired on contractual basis, the initiative has been implemented entirely by existing staff. There have been no additional posts required. The information from the E-Measurement & the E-Assets are hosted on the server of the state data centre, which has the required data protection security features to ensure that information is confidential and cannot be tampered with.

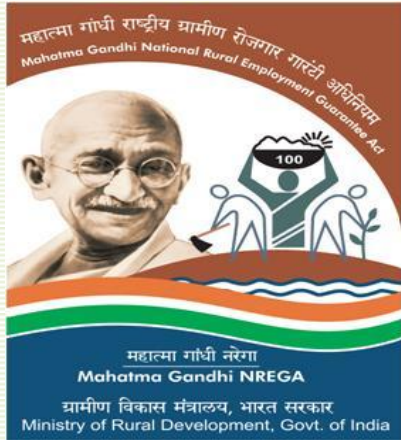
Partnerships

The initiative has presented a new model of partnership which has included various government departments all coordinated by the CRD.

1. **BISAG:** BISAG is an autonomous Institution under DS&T had been selected as a development partner. It supports in developing the mobile application, modem application & web application for the innovative Geo-ICT solution.
2. **GIL:** GIL is an agency which assists the Rural Development Department of Government of Gujarat to procure the hard ware instruments required to operationalize the Geo-ICT solution.
3. **SDC:** SDC is the State Govt. data hub, which hosts the entire State Government website's server. MGNREGS Geo-ICT solution website server is also hosted over there.
4. **NIC:** NIC, New Delhi, Gandhinagar are the existing partners, supports for the NREGAssoft MIS Development and maintenance. With their support customization happened.

Glimpses

Stories from the field



Changing the Lives of the Rural Poor in Gujarat

MGNREGS has completed 6 years in the state and has brought about significant changes in the lives of the rural poor in Gujarat. The scheme has been able to touch the lives of the most vulnerable communities and groups in the state, the women, Scheduled Caste, Scheduled Tribes, landless agricultural labourers by generating approximately 1601 lakhs of person/working days since its inception. Through the creation of community assets of water harvesting, rural connectivity, land development the scheme has also paved the way for generation of sustainable livelihood in the villages and infrastructural development.

Through the use of Geo-ICT in Planning of work and financial management the scheme has also been instrumental in setting up transparent and accountable systems which can be replicated and scaled up in other departments of the state and also used a base model for other states/regions.

The following sections in the report are a collection of change stories brought about through MGNREGS in the state of Gujarat especially in the lives of women, in creating sustainable assets and in arresting migration in the state. These stories were published in various local and national newspapers and magazines as a part of the awareness building and information dissemination on MGNREGA through the SRC.

Creating Community Assets



*The Community Well
Project: Narmada
District*

With rich forest area, hilly terrain and very low irrigation facility in Narmada region farmers depend on rain for agriculture activities. Although fertile land is available, it is usual for them to yield just one crop in a year due to poor rainfall.

Benefits Realised in Narmada

Benefits Realised in Narmada

Increase in income of rural household in the project region

Now two or three crops per year and can be cultivated where previously one was possible

Cash crops are new sources of income since adopting modern techniques and mechanization

The living standards have improved so that now farmers can spend more money on health and on their children's education.

Water security and drought proofing is hence the key to rural transformation here. Narmada district covers 2800 square kilometres, 42.5percent of which is forest and 45 percent cultivatable. There are two towns, 219 Gram Panchayats and 566 Villages. 90percent of the district's population lives in rural areas. Of these 80 percent are Tribal and Scheduled Caste.

The scheme in Narmada was started in 2005 and since then the construction of community wells has created one of the best utilised community assets under this scheme in the state.

To date 4,281 Community well constructions have been undertaken under MGNREGS of which 2,071 have been completed. The remaining are works in progress. The wells have so far benefitted marginal and small farms of 12,843 households mostly of ST and SC.

A notable aspect of the success of the Narmada scheme has been the convergence with projects of other Government departments. The provision of diesel engine oil from GGRC of Agriculture Department, TASP, BRGF and arrangements for electrical connection by linking up the group of well owners with MGVCCL.

The community members feel that the biggest change is that they can cultivate two to three crops in a year which has enabled them to move beyond subsistence level of living. Farmers have increased their expenditure on health and education. Children are able to continue to higher education and in some cases, children who discontinued their studies earlier have returned to school. Bank loans and other debts are repaid more quickly and they are able to upgrade their agricultural equipment.

MGNREGS has facilitated an increase in rural income, leading to higher rural investment and thus expansion of employment opportunities. This in turn has helped to reduce migration from the regions. In this respect, Narmada district demonstrates a model of best practices in implementation of MGNREGS.

Independent Incomes

MGNREGA paves a way to equality for poor women in Gujarat



Madhapar, a remote village just 10 kilometres from main of Rajkot city is the setting of an inspiring example of women's empowerment through MGNREGA.

Equity wisdom

"I feel lucky that I got an opportunity to work under this scheme. For the first time in my life I bought clothes to my kids with my income." Geetaben, work site caretaker

Initially it was difficult to create awareness and convince people to work under MGNREGA but later when people started observing the outputs and benefits with the scheme, they started demanding work." Nidhi, a GRS in Madhapar.

It is usual to find women workers on the sites of MGNREGS schemes but Madhapar worksite is unusual in that it has only women. As is typical in this region many other villages, men in the area migrate to town and cities for work and the women are left behind to take care of the home and family in the village. This makes women responsible for domestic chores and also providing livelihood for their family during the lean period. The scheme has provided them with a source of livelihood within/near their villages during the lean season.

From the outset MGNREGA held out a promise for women's empowerment. It views men and women equally with respect to

opportunities for employment as well as wage rates. The Act stipulates the same wages for men and women and The Act stipulates that at least 33percent of the workers must be women. The women in Madhapar are aware of their rights under the scheme and are proud that they have learnt to operate their post office accounts independently.

55 year old Devuben Pithabhai Makwana, a widow, was motivated by her daughter-in-law Rasilaben Makwana to join with the scheme *"After my husband's death, my son was the only bread earner for our family, but in May 2010 my daughter-in-law, got her job card and enrolled with this scheme. At times, we bring our kids here who are taken care of by the caretaker at the worksite. We don't get such facilities at other private worksites. We prefer to work here rather than going for some other work."*

Nidhi, a GRS in Madhapar said *"An 1800 meter kaccha road work has been completed by at least 18 women at Madhapar's first work site. Now we have started our second project"*

Afforestation work Dhunai village in Mandvi taluka of Kutch is another example in which where women have taken control. The MGNREGS scheme, on the outskirts of the village, is being done in collaboration with forest department. Every woman on the scheme now has a bank account.

For 65 year old Manjulaben, who belongs to a Gadhvi community in Kutch describes this scheme as godsend gift for her. Her community, by tradition, is not allowed to work in fields belonging to others, and being landless and unskilled it was impossible for Manjulaben to find work until the opportunity of tree planting works came to her.

“This is my only source of income. In this remote region we rarely get any opportunities to earn. Now at least I am getting a guaranteed 100 days employment. I live alone; I have to earn my bread to survive. Through this work I have gained self-confidence and I live in my village holding my head high. I come from a community which doesn't allow me to work in other person's fields. But this work is given to us by the government so nobody can question me about my earnings.”

In Shinol village in Sabarkantha 20 year old Heena Rathod has been working as Gram Rozgaar Sevak for four years under this scheme. The village administration feel that it is her dedication and active participation in village development that has facilitated rural connectivity in the village, afforestation work and other works through convergence with MGNREGS. Heena, who lost her father at early age, is getting married next year. She said that she will continue her work for

village development wherever she goes as this scheme has raised her confidence and made her an equal financial provider in her family.

Though women's participation in NREGA is still low compared to states such as Tamil Nadu, Andhra Pradesh and Kerala, there has been a visible increase in women's participation in MGNREGA in recent years.

In the financial year 2011-12, 38.88 lakh job cards and 191.97 lakh cumulative person days was generated and women accounted for approximately 47percent of the workforce and 88.85 lakhs of cumulative person/days generated. Overall the schemes in all 26 district of Gujarat have shown improvements but the backward districts such as Dahod, Narmada, Dang, Sabarkantha, Panchmahals, Banaskantha, Junagadh and Surendranagar have shown the most significant participation of women.

Adding Value

Economic and environmental benefits in Kheda District



Kaprupur Village is located 8 kms from Mahudha Taluka and 17kms from main Kheda District in Gujarat. Since 2009, under MGNREGS, 15,000 bamboo saplings have been planted on a 15 hectare piece of land. In addition to contributing to reforestation of the region this project is expected to result in a new phase of employment.

It is expected that after five years the project will yield an average of 225 tonnes of bamboo/ hectare which will be sold for approx. Rs.2000 per tonne.

Anita Parmar, APO from DRDA-Kheda said *“Production of bamboo is only the starting point. The real benefits accrue from value-added products. Handicrafts (mats, baskets, tools, toys and utensils) and furniture can be produced within a span of five years.”*

35 year old Anuben, MGNREGA worker said *“By planting bamboo we were paid under NREGA, and later after cutting the bamboo plants we will get training for making products out of bamboo which will also bring a flow of income.”*

More than the immediate the economic benefits, people in the area have started understanding how the bamboo plantation has helped in preventing soil erosion and embankment and contribute further towards sustainability.

36 year-old Manoj Makwana, GRS worked as a daily wage labourer said *“Initially we felt that how bamboo plantation will help us to become self sustainable, but later we also realised that soon our gram panchayat will reap the benefits of this project.”*

A total of 40649 labour days have been generated and a further 3129 labour days

were generated in building 26 bori-bunds on the river Mohri to enable government owned wasteland to be used. S. F. Saiyad, Director of the DRDA, Kheda said *“The wasteland in Kaprupur was suitable for bamboo plantation so we initially brought 5000 Balkusha species from Tamil Nadu and as 90 percent of the plants survived, later we planted 10,000 more.”* The scheme has stemmed the migration of rural labourers and enhanced their bargaining power. In Mahudha region labours are getting higher wages in the agricultural season than they would do in industrial work. Other villages in Mahudha are now looking at the success and the sustainability concept of the bamboo project under MGNREGS.

Adding Value

Bamboo is a versatile, renewable & environment-friendly material. A member of the grass family, Gramineae and the fastest growing woody plant, most bamboo species produce mature fibre in 3 years, faster than any other tree.

The Balkusha species in Kaprupur can be grown quickly and easily, and sustainably harvested in 3 to 5 years cycles. It adapts to most climatic conditions and soil types, acting as a soil stabilizer, an effective carbon sink helping to counter the greenhouse effect.

Arresting Migration



*100 days employment:
A boon for workers in
Great Rann of Kutch*



In the era of globalization, where migration is often seen as inevitable, MGNREGS has shown how this process can be reversed. Amrapar, a border village situated in Great Rann of Kutch, is a place where for the past two years the community has stopped migrating to urban areas in search of work. MGNREGA has generated employment for hundreds of workers within/near their village in this remote geographical location. A bund that was built to harvest the water and decline salinity has brought this remarkable change.

Amrapar is 250 kilometres from the main city of Bhuj. Nestled in the Khadir Island, Amrapar comprises of the villages of Dholavira, Ratanpar, Umrapar, Gadhada, Ganeshpar, Janana, Bhambhadka and Kalyanpar. A large part of this region is a shallow wetland, was often deserted as most of the community migrated to the urban areas for livelihood.

Today, the region has transformed. Nearly 1000 acres of agricultural land are covered with cumin and castor oil plants. This is a result of 4 kilometres of bunding work between the desert and the farms. This generated employment of Rs.9.77 lakhs in the financial year 2011-12. In the last two years at least 300 villagers from Amrapar have benefitted under this scheme with work such as digging, bunding and building bund pits.

VasramAhir, a 22 year-old mate for NREGA at Amrapar village said *“We started with digging & water conservation work in 2009 and we have now completed a 2.5 km bunding. This has really helped this region. Most of the people here are into marginal farming and labouring. They are reaping the fruits of the scheme with a visible growth.”*

The scheme here focused on protecting the farms from turning saline deserts. A farmer Ranabhai Ahir said *“This year cumin seed is cultivated on 1500 acre of agricultural land in this region. With the ‘aad bund’, there is 20% growth in production. Today people can earn from Rs.4000 to Rs.6000 by selling 40 kilogrammes of cumin seeds.”*

Villagers feel that this scheme has played a vital role in the decline of rural urban migration and will help to generate more employment opportunities during the drought period and the lean season. One of the community members said *“What can be better than work being provided to us within 5 kms reach of our village? In this rann (desert) region it becomes difficult to commute from one place to another in search of work. Now with the bund and other works of NREGA we have secured our livelihood with farming. When our 100 days gets completed with NREGA we shift to our fields. Earlier there was no such option of work thus we use to migrate from one place to another in search of work throughout the year.”*

Today 40% women in this region are registered under MGNREGA. They are to be earning members of the family. Amulaben, said *“We never imagined that one day we will also contribute to our family income. We have built the bund, which was much needed. It feels good. This scheme has given us hope for more work in future”.*

Yet, this success story is just one example; the implementation of the scheme in the remote rural areas is still a challenge with distance, connectivity and awareness generation as major barriers.



Strengthening of Irrigation Potential

*Towards Rural
Development*

Jasiben Kachrabhai Parmar, a Dalit woman in Ramana village of Dhansura taluka and her family since October 2012, can proudly claim credit for the construction of a well in their village. The new irrigation facility has raised the family's income by approximately Rs20,000 – 25,000 per agriculture season. They have planted cotton in their 10 bighas (approximate 5 acres) of land and they are anticipating a good harvest this year.

Ramana village is situated in Dhansura taluka of Sabarkantha district. It is the group gram panchayat with other villages namely Malekpur and Rupal. With a total population of 2255 covering 720 families there are only 5 dalit families residing in Ramana village. Other families belong to other backward class. As the only dalit family in the village without an irrigation well, Jasiben's well was proposed in to the labour budget of the year 2008 and approved by Gram Sabha and District Panchayat for implementation.

Since inception, MGNREGS has heralded significant change within the village. The initial focus was to create water resources within villages. Two checkdams were constructed and one storage tank (known as

Navin Talav), which resulted in augmentation of surface water as well as ground water. The second step was to create irrigation potential for farmers.

The geology of this region is of a thick layer of soil, over a layer of hard rock. Construction of a well consists of digging soft soil, constructing stone rings and digging hard rock. This was a gigantic task for Jasiben's family but the help of other villagers made the task easier. Labourers from the village participated in the difficult task like construction rings and the excavation of hard rocks.

The hard work paid off and the well of about 45 metres in depth and about 4 metres diameter is now in use. An old diesel engine has been installed to pump water along a 1400 metres long pipeline to carry water for irrigation to the agriculture land. The well is proving to be a lifeline for 18 members of 3 families. Enabling them to grow 3 crops in a year on their land and green fodder for their animals, MGNREGS has enabled Jasiben and her extended family to become independent and sustainable.

Bolstering Rural Connectivity

Road to Prosperity



The stalwart of Rural Development, Professor Robert Chambers¹ emphasized the benefit of road connectivity for augmenting rural development efforts. He says that rural road connectivity projects would particularly benefit marginal farmers and landless labour by increasing access to markets.

The MGNREGS also emphasises rural road connectivity as second only to water conservation programmes.

Most rural areas of Gujarat have comparatively good road connectivity with Taluka and district headquarters. The focus now is to create connectivity within and between villages for transportation of agriculture materials and products. Many peasant farming communities prefer to stay within the fields outside the main villages² therefore intra connectivity with the main village is essential for their access to amenities. Under MGNREGA from 2009 until September 2012, a total of 24460 rural road connectivity works have been carried out. This has generated about 370 lakhs of working days.

Fifty farmers willingly cleared the fences from their agriculture fields for the widening of a 2200 metre stretch of road connecting Panthawada Dairy and Sarva falia. These farmers also allowed for pits to be dug on their land so that soil could be taken to be used for increasing the road height.

¹ Professor Robert Chambers worked at Institute of Development Studies, Sussex, UK. He has pioneered PRA and participatory approaches for rural development in south Asian and African countries. He has authored many books including 'Putting the Last First', which is considered as a text book of participatory rural development.

² Peasant communities of North Gujarat ieChoudharies, Patel and some of Dalit prefer to stay in the field. In the same way, peasant communities of SaurashtraieKoli Patel also prefer to stay within their agriculture fields. Tribal from the tribal belt of Gujarat, stay at their agriculture fields.

Residents say that walking on the road was always difficult, especially for older people. Medical emergencies and child birth made the poor road conditions a particular concern for women.

Now with the improved road conditions, these problems will be eased. Shrimati Chuniben, a dalit women agricultural labourer feels that the road will be blessing for them.

There were 120 labourers doing earthwork for the road. Out of these 45 were women from the Rabari (Pastoralist community), 30 Dalit women, 25 women from a tribal community, and 10 women from other communities. Discussions with women revealed that, women are valuing MGNREGA work more because of its usefulness and because of higher wage rate.

The road will benefit about 200 families and a population of 5600 to transport their agriculture produce (bajara, castor, wheat, and mustard) to the market.

Model Village



*Pimpal sets a
Paradigm for NREGA
in Gujarat*

Patan district, in North Gujarat, is popularly known for its 'Patola Sarees' which has brought this small district on national and international map. Pimpal village is situated in Chanasma taluka 27 kms away from Patan. The Rural population of Pimpal spreads across 5 Villages. This area is characterized by hilly terrain, rocky soil, uncertain rainfall and the presence of large tracts of forest land. Agricultural land, forests and minerals are the main resources. Human resources are unskilled and under-developed, resulting in poor growth. The rural economy is based on agriculture and animal husbandry.

In February 2012 the village won an award from the GoI for best practice in the implementation of the country's largest MGNREGS. The story behind prosperity and growth of this village lies in the effort made by the villagers and responsive administration at village, taluka and district level for a place that once typified the term 'backward region'. Villagers feel that the district and taluka administration, and the active role of Sarpanch Kirti Patel has helped their village to emerge as a role model for other villages in the state.

The Taluka officials at Chanasma explained that since the targeted groups were the most vulnerable section of society, administrators worked together to make sure that wage were paid within seven to ten days to Taluka level and that allocation of Job cards was done without unnecessary delays. A 100% MIS entry and compulsory Pre Audit of vouchers helped to maintain financial propriety and Gujarat's GIS technology also helped the taluka to plan and monitor the scheme effectively.

Sarpanch Shri. Kirti Patel feels that *"This is just the beginning of transformation. Many*

development activities are happening in this village. We have won five awards under different categories including Swarnim gaam, Nirmal Gam in addition to our recent award from GoI. NREGA has really helped in improving the picture of this village. Everybody is employed here today. With maximum coordination, convergence & synergy we tried to bring about village development. The result is that today there is visible development."

Table 5: MGNREGA work in Pimpal

Year	Type of work	Person-days	Total Expense
2010-11	Protection wall	508	350654
	Kaccha Road	950	86759
	Amrutkunj	10	7361
	Afforestation	492	53358
	Compost Pits	54	4955
Total		2114	503081
2011-12	Afforestation	902	84789
	Compost pits	40	3766
	Kaccha Road	63	5861
	Afforestation	159	39051
	Rural road connectivity work	2074	190863
Total		3238	324330

Source: DRDA, Kheda

Homeopath Dr. C. Oza said that in just 3 months since she was transferred to Pimpal, she had witnessed that people are keen to learn new things. "Whether it is about family planning, vaccination or educating their kids women keep enquiring about it. This village has facilitated all kind of infrastructural and socio economic development with the help of various rural development schemes."



Annexure and Abbreviations

Annexure 1: Pilot blocks and respective districts of E-FMS

Sr#	District	Pilot Taluka
1.	Ahmadabad	Sanand
2.	Amreli	Amreli
3.	Anand	Ananad
4.	Banaskantha	Vadagam, Kankrej
5.	Bharuch	Bharuch
6.	Bhavnagar	Bhavnagar
7.	Dang	Ahwa
8.	Dahod	Garbada
9.	Gandhinagar	Dahegam
10.	Jamnagar	Jamnagar
11.	Junagadh	Sutrapada
12.	Kachchh	Bhuj
13.	Kheda	Nadiad
14.	Mahesana	Vadnagar
15.	Narmada	Sagbara
16.	Navsari	Jalalpore
17.	Panchmahals	Halol
18.	Patan	Chanaasma
19.	Porbandar	Ranavav
20.	Rajkot	Jamkandorna
21.	Sabarkantha	All 13 blocks
22.	Surat	Olpad
23.	Surendranagar	Limdi
24.	Tapi	Nizar
25.	Vadodara	Vadodara
26.	Valsad	Pardi

Annexure 2: Details of the Community Well Project

Source: DRDA, Narmada

Table 1: Summary statistics of the Community Well Project

Details	Total no. of works completed
Community Well constructions completed in 2010-11	729
Community Well functional through MGNREGS to date	2071
Households benefitted	12,843
Wells with diesel engines provided by TASP & BRGF	667
Wells with electricity connections applied for	907
Wells with pipeline connections	220
Acres of land irrigated by community wells (approx)	16,500

Table 2: Narmada District profile

S. No	Criteria	Details
1	Total House holds	104422
	Rural House holds	93110 (86.16 %)
2	Total Population	514404
	Tribal	401654 (78.08%)
	Schedule Caste	10038 (1.95 %)
	Rural	462298 (89.87%)
	Urban	52106 (10.13%)
	Population Density (Person per Sq.Km)	187
	Sex Ratio (No. of females per 1000 male)	949
3	Land use Pattern ('00ha)	
	Total Geographical Area	2755
	Reported Area	2801
	Forest	1174 (42.5%)
	Barren and uncultivable waste	61 (2%)
	Land put to non-agriculture use	309 (11%)
4	Size of Holding: The agriculture pattern is rain fed with only 25700 hectares of the total land is irrigated. There is no irrigation scheme in Dediypada Taluka	
	Size of Holding	No. of Holdings
	less than 1 ha	13672 (34%)
	Between 1&2 ha	10236 (25.45%)
	Above 2 ha	16308 (40.55%)

Table 3: Annual rainfall in Narmada District 2006-2010 (in Millimetre)

Sr#	Taluka Name	2006	2007	2008	2009	2010	Average
1	Nandod	1473	1378	1066	603	895	1083
2	Dediyapada	1812	1695	1160	1125	811	1321
3	Sagbara	1729	1381	1335	1141	948	1307
4	Tilakwada	1405	1100	909	457	725	919
Average		1605	1389	1118	832	845	1664

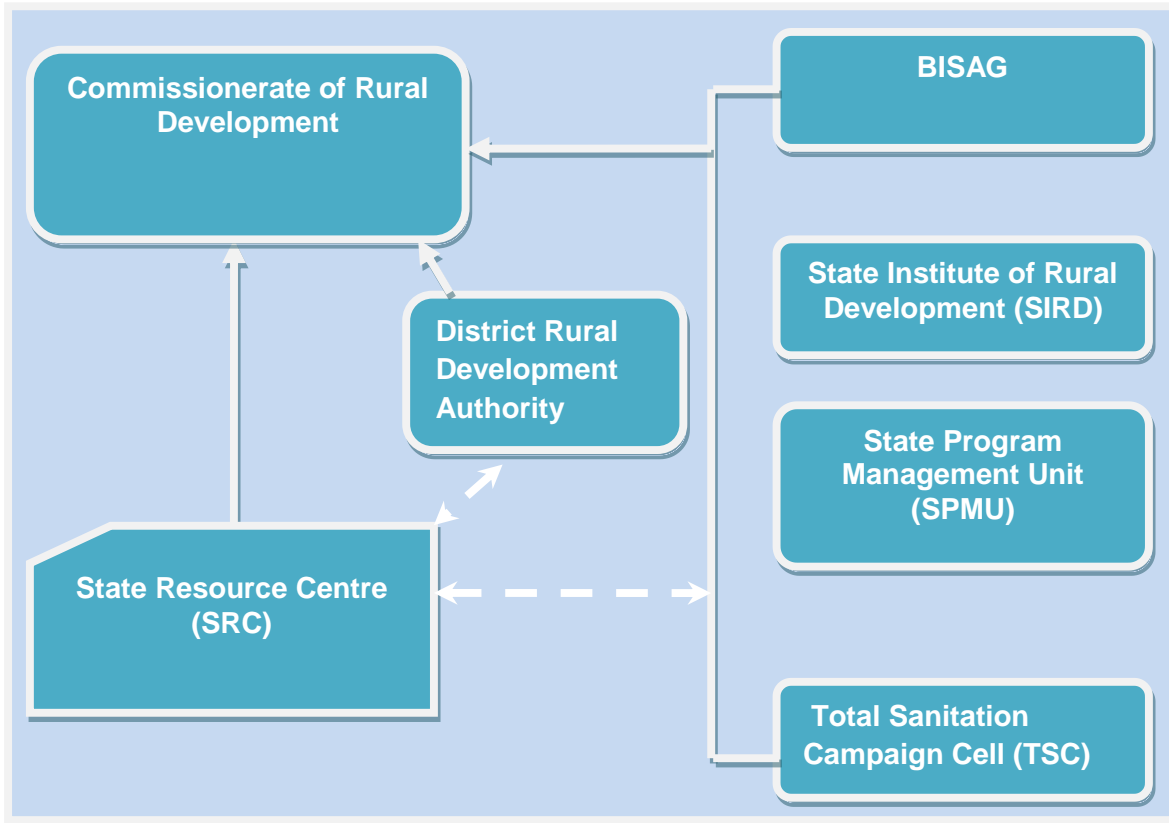
Table 4: Area covered under irrigation in Narmada District (in Hectare)

Sr#	Taluka Name	Total land covered Under agriculture	Total Irrigated Area					
			By well			Bore well		
			By canal	No. of wells	Area	No. of Bore well	Area	Total area
1	Nandod	51157	17500	1240	6010	1175	4790	28300
2	Dediyapada	37486	0	989	2678	275	350	3028
3	Sagbara	18910	600	658	2380	280	830	3810
4	Tilakwada	20700	10339	379	1620	180	2025	13984
Total		122253	28429	2766	11688	1910	7995	48122

Table 5: Block wise details of Community Wells constructed In Narmada District under MGNREGS 2010-11

Sr#	Blocks	Number of Community wells			
		Demanded by Gram Sabha	Sanctioned	Construction started	Construction completed
1	Dediyapada	1424	1424	504	504
2	Nandod	320	320	41	72
3	Sagbara	255	255	155	112
4	Tilakwada	78	50	48	41
TOTAL		2077	2049	748	729

Annexure 3: Relationship Flowchart- SRC-CRD



Abbreviations

APO	Assistant Program Officer
AWM	Assistant Works Manager
BC	Business Correspondence
BISAG	Bhaskaracharya Institute for Space Applications and Geo-informatics
BRGF	Backward Rural Grant Fund
CBS	Core Banking Solutions
CPMU	Central Program Management Unit
CRD	Commissionerate of Rural Development
DBA	Data Base Administrator
DDPC	Deputy District Program Coordinator
DRDA	District Rural Development Agency
DS&T	Department of Space and Technology
DSC	Digital Signature Certificate
E-FMS	Electronic- Financial Management System
F.Y.	Financial Year
FTO	Fund Transfer Order
Geo- ICT	Geographic Information Communication Technology
GGRC	Gujarat Green Revolution Corporation
GIL	Gujarat Informatics Limited
GIS	Geographic Information System
GoI	Government of India
GRS	Gram RozgarSevak
ICDS	Integrated Child Development Scheme
IEC	Information Education Communication
M & E	Monitoring and Evaluation
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MGVCL	Madhya Gujarat Vij Company Limited
MIS	Management Information System
MoRD	Ministry of Rural Development
NEFT	National Electronic Fund Transfer
NIC	National Informatics Centre
NREGA	National Rural Employment Guarantee Act

NREGAsoft	A web based software for MGNREGA
NREGS	National Rural Employment Guarantee Scheme
PPT	PowerPoint Presentation
PRI	Panchayati Raj Institution
RTGS	Real Time Gross Settlement
SBI	State Bank of India
SHG	Self Help Group
SIRD	State Institute of Rural Development
SPMU	State Program Management Unit
SRC	State Resource Centre
SRC	State Resource Centre
TA	Technical Assistant
ToT	Training of Trainer