Strengthening National Rural Employment Guarantee Scheme (NREGS) through E-Governance

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ABSTRACT

Government of India through National Rural Employment guarantee Act 2005 aims to provide for enhancement of livelihood security of the households in rural areas of the country by providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult member volunteer to do unskilled manual work. With afore stated governance business scope, initially in 200 districts which got subsequently extended to 330 and finally to all rural districts across the country, NIC, along with Ministry of Rural Development and other stakeholders, conceptualized web enabled management information system (i.e.NREGASoft) to address the planning & monitoring needs of scheme. Long association & experience of NIC with rural development processes and engagement with computerization of RD schemes at various levels proved to be valuable factor in designing NREGASoft. The first version of NREGASoft was launched along with the launch of the scheme.

1. Introduction

NREGAsoft is a work flow; local language enabled e-Governance system and is available in offline as well as online mode to capture all the activities under NREGA at Center/State/District/Block and Panchayat level. NREGAsoft has been prepared and deployed at http://www.nrega.nic.in, by NIC in collaboration with Ministry of Rural Development. Each stakeholder can access revelant information through the portal. NREGAsoft captures Registration of workers, work demanded number of days of employment for whole family, funds transferred/utilized and number of works undertaken under the scheme various stake holders of the project are:

- Citizen
- Gram Panchayats, Block Panchayats Zilla Panchayats
- Workers
- Programme officers
- District Programme Coordinators
- Implementing agencies other then PRIs
- State RD Departments
- Ministry of Rural development and administrators in Government of India

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Figure 1: The Home Page: NREGAsoft

2. Vision and Objective of the Project

- NREGAsoft envisions facilitating e-Governance by enabling IT based implantation of NREG Scheme across State, District and three tiers of Panchayati Raj Institutions
- It envisages empowering the common man using the information technology as a facilitator.
- NREGAsoft provides information to citizen in compliance with the right to information Act (RTI Act). It makes available all the documents like Muster Rolls, registration application register, job card/employment register/muster roll issue register, muster roll receipt register which are inaccessible to public otherwise.
- Facilitate faster information exchange between the various stakeholders through the network.

3. Project Description

Taking forward the onus of crafting an efficient implementation of the NREGS, the NREGAsoft captures the information right from the registration of the worker. It provides linkages with the household survey known as BPL survey 2002 which captured information about each person and family in the rural area.

4. Various modules of the software are

- Worker Management Module of the software captures Registration, demand for work, work allocation and Muster rolls. The software has the provision for enabling of payment of wages through bank/post office as it captures the bank/post office account number, bank/post office name, branch name for the person who demanded job. The module calculates unemployment allowance, if any and also keep tracks of number of days of employment of a family. Job Card and Muster roll is shown in Figure 3.
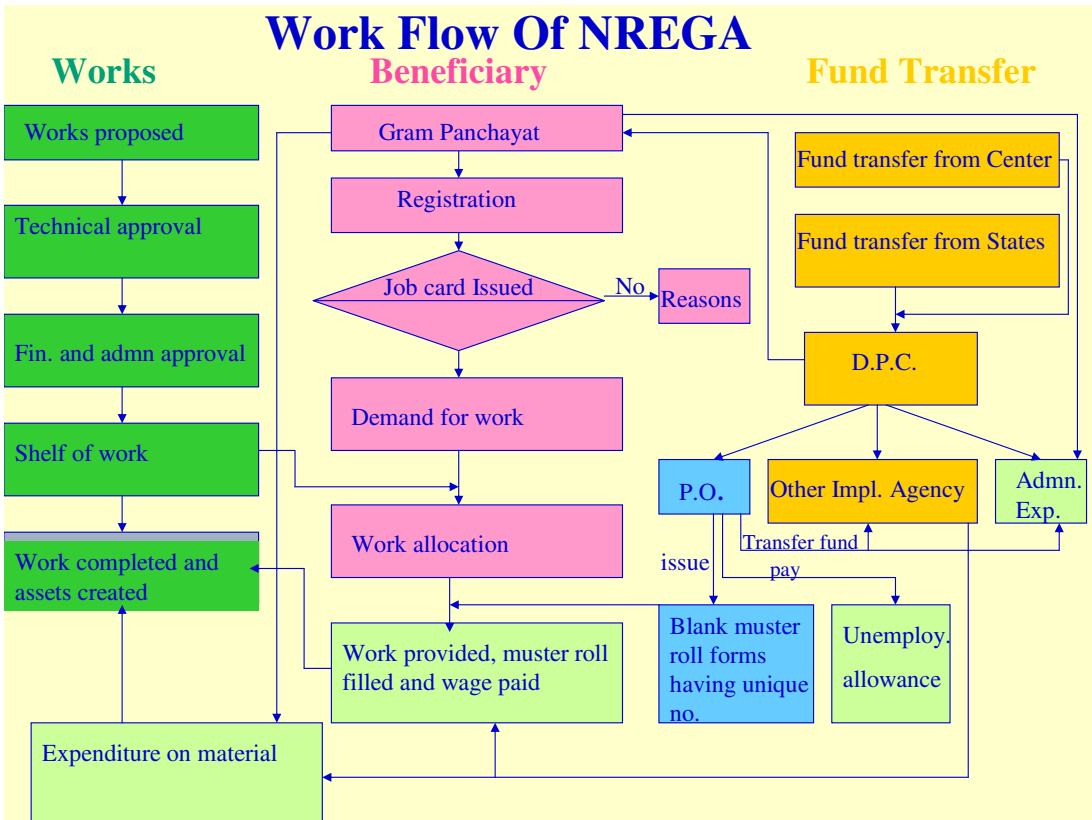
Figure 2: Work flow of NREGA

- Fund Management Module captures the funds transferred from MoRD/States to Districts and then to Programme officers/Panchayats and expenditure incurred by various implementing agencies on labour, material and contingency. Hence it keeps track of each and every paisa spent under the scheme.
- Works Management Module captures information about the various works undertaken as a part of the scheme at various level (GP, BP, ZP).It facilitates online approval of projects and keeps track of time taken for approval of project. Each project is provided a unique ID and status of work is maintained in the system
- Grievance Redressal System allows a worker/Citizen to lodge complaint and trace the subsequent response.
- Staffing Position module captures name, telephone numbers etc. of all the officials, planning and implementing agencies from Gram Panchayat to Ministry of Rural Development involved in NRAGA, thus strengthening communication and co-ordination among them
- Cost Estimation Module makes detailed estimation for the works taken up under NREGA e.g. construction of Tank, Well, Sluice Gate, Earthen road, Cement concrete road etc. This module calculate quantity of work to be done and calculate the per unit rate as per Schedule of Rates (SOR) for each sub activity of a work. This further helps engineers to fill the Measurement book and calculate wage per day for a particular muster roll.

Figure 3: Job Card and Muster roll

Figure 4: Works in progress under NREGAS

- Knowledge network/ Solution exchange provides a common platform to all stakeholders to exchange their views, pose queries to other stakeholder/Experts and get responses, exhibit their best practices.

- Alerts: The software also raises alerts to implementing agencies about the various irregularities, important activities, messages for funds to be received by the agencies etc.

5. Technology to meet the challenges

NREGAsoft is getting implemented in 614 Districts, 6000 blocks and around 2.3 lakhs Gram Panchayats with different languages, poor Infrastructure and poor Connectivity. Thus necessitated software which was cost effective and could overcome the language, connectivity and platform barrier.

- NREGAsoft is available in online as well as in offline mode overcoming the barrier of connectivity.
- It is Unicode enabled and supports all local language thus addressing the language barrier.
- Software is available in Microsoft technologies as well as open source technologies.

6. Benefits accrued

E-Governance for Masses

- The Software computerizes all the activity of NREGS right from the registration of the worker by the Gram Panchayat to the Muster roll prepared and payment made to the worker.
- Citizen can access all the information like the various reports, various documents/Registers at gram panchayats, analysis of implementation under NREGA.
- A worker can check his employment details, unemployment allowance, lodge complaint and can trace the subsequent response.
- It has a provision of payment of wages through bank/post office there by ensuring the correct payment to a worker

Assists Gram Panchayats in NREG Scheme Implementation

NREGS entrusts Gram Panchayats with a lot of responsibility as Registration, demand for work and allocation of work can be done only by Gram panchayats. Software assists Gram panchayats as follows:

- It keeps track of 100 days of the employment to a family.
- It generates all the Registers/ Documents as specified in the guidelines of NREGA.
- It ensures that a worker should not work on two worksites simultaneously.
- The software keeps track of the fund released from the MoRD/States to the Districts and then from Districts to blocks/Gram panchayats so it helps in reconciliation of accounts.
- It provides status of available funds in the accounts at panchayats/blocks/Districts level.
- It provides the details of unfulfilled demand, works which can be taken up and the unemployment allowance.

Assisting the officers, Administrators, Programme Managers

- The software has a strong Analysis system for the following:
  - Programme implementation status like locations with no registration, no demand for work, no allocation of work, no work in shelf, no on-going work etc
  - Fund transferred and availability of fund at each level
  - Work Approval time analysis
  - Gender, caste, wage earned on work analysis.
  - Work execution level analysis
  - Labour, material ratio analysis
  - Expenditure on work
  - Households getting more than 100days and less than 14 days employment
  - Persons earning wages more than twice the wage rate

- It can generate MPR at gram panchayat level, block level, district level and state level and all the figures in the report can be drilled down to lowest level.
- The staffing position module of the software enhance the coordination and communication among the various stake holder of NREGA

Data Management at Grass root level

NREGASoft was first of its kind eGovernance solution attempt which took data management practices below block level in online mode across the country in absence of eGovernance infrastructure availability at Gram Panchayat level where actually majority of events related to NREGS implementation takes place. The data management of NREGS, in majority of states is being done at block level. The majority of states started managing data using offline and a few with online. As connectivity scenario is improving further, some of the states are switching over to use online system. The states have adopted various kinds of models (in house using its own staff, using contract data entry operator, outsourcing data entry, arranging entire ICT infrastructure at block level through private parties etc) to address the need of content management.

Capacity Building Measures

The team at NIC Headquarter has been engaged in preparation of NREGASoft package and in deployment (training on domain issues, offline/online package and handholding) of the application, in active collaboration with NIC-State/ District Units across the country. Training methodology included face-to-face training at state and district level and utilization of VC and e-learning technologies.

Recognition

It is unavoidable to share some of the moments when collective work done by the Ministry,NIC and other stakeholders were recognized on various platforms and won appreciation. The package has been demonstrated to Hon'ble Prime Minister and senior functionaries of Government, Planning Commission officials , State RD secretaries. The package has also won several awards:

- Microsoft e-governance award 2006
- Skoch Challenger Award 2007-National Significance Category
- Dataquest e-Gov Champions award 2008

Also, it is satisfying to note that package has demonstrated that the data management could be done effectively from Blocks online now. Which has inspired & encouraged the design of many other e-governance projects that are in pipeline.

7. Current status of the implementation

The project is getting implemented in :

- Number of States : 27
- Number of Districts : 441
- Number of Blocks : 3,868
- Number of Panchayats : 1,13,465
- Number of families Registered : 5,56,17,880
- Number of Muster rolls filled : 85,50,714 (during 2006-2008)

8. Concluding Remarks

The collective efforts have achieved something and lot more need to be done in days to come. There are technology options under active consideration whose intervention could possibly make NREGS implementation better for Job seekers,, common man and society at large. These areas include use of smart Card and biometric devices for Authentication of job seekers/wage earners, e-Muster roll by using mobile

devices to capture daily attendance of worker, e-Payment by using smart card, biometric devices , ATM etc. Online & Offline Multimedia based training packages in local languages could be adopted for regular training programmes to enhance awareness of functionaries of local governments on NREGS in general and NREGASoft in particular. Rural Informatics has come to stay and prosper further to facilitate Rural Development in India.