



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 relevant 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 stakeholders of the project are:

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

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An Act to provide for the 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 members volunteer to do unskilled manual work.

National Rural Employment Guarantee Act - 2005
Ministry of Rural Development
Govt. of India

HINDI VERSION | NREGA ACT 2005 | NREGA DISTRICTS | GUIDELINES | SEARCH:

Citizen | Panchayats GP/ PS/ ZP | Workers | Other Impl. Agency | District / Block Admin. | States | Bank / Post Office | MoRD | Administrator

ANDHRA PRADESH
ARUNACHAL PRADESH
ASSAM
BIHAR
CHHATTISGARH
GUJARAT
HARYANA
HIMACHAL PRADESH
JAMMU AND KASHMIR
JHARKHAND
KARNATAKA
KERALA
MADHYA PRADESH
MAHARASHTRA
MANIPUR
MEGHALAYA
MIZORAM
NAGALAND
ORISSA

Citizen

National Bulletin

Employment provided to households: 2.7 Crore
Persondays [in Crore]:

Total:	98.26
SCs:	29.37 [29.89%]
STs:	25.27 [25.71%]
Women:	47.79 [48.64%]
Others:	43.62 [44.4%]
Total works taken up:	17.34 Lakhs.
Works completed:	4.57 Lakhs.
Works in progress:	12.77 Lakhs.

NREGsoft MIS

- Report from MIS
- Send Backup File(Block Level)
- Send Backup File(Panchayat Level)
- Data sent and upload Status
- User Manual-MIS(NREGA)

Communication

- Detailed instruction on planning of work and preparation of labour budget
- Minutes of the round table on NREGA with IITS, IIMS etc.
- ICT Infrastructure at Block Level
- Minister's Speech - Part I^{NEW}
- Notice for Meeting
- Circulars
- Conference/Workshops
- Award Scheme for CSOs
- Invitation of Expression of Interest on National Help Line

Figure 1: The Home Page: NREGsoft

2. Vision and Objective of the Project

- NREGsoft 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.
- NREGsoft 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 NREGsoft 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.

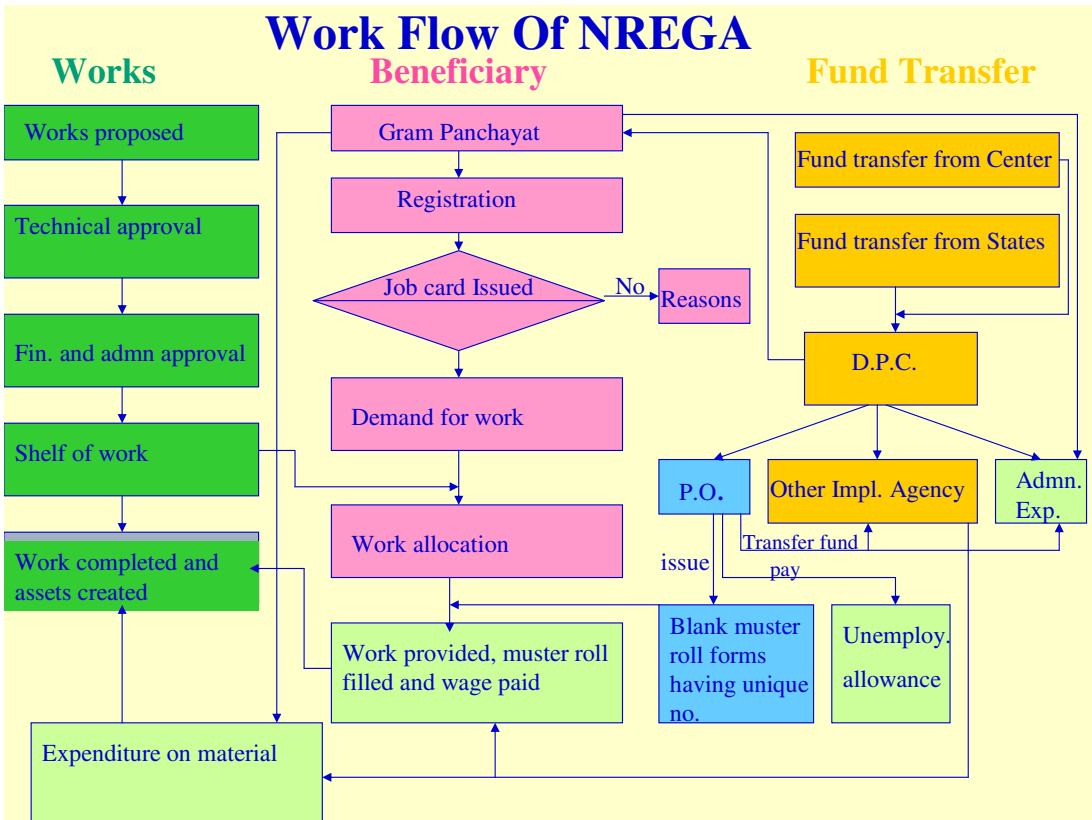


Figure 2: Work flow of NREGA

- 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.

Job card
National Rural Employment Guarantee Act
OB: 26-06-2005/44/13877

Job card No.: **BIRANCHI NAG** Family-Id: **13877**
 Name of Head of Household: **SE**
 Category: **66/2/2066**
 Date of Registration: **424**
 Address: **MADANPUR**
 Village: **MADANPUR**
 Fanchayat: **MADANPUR RAMPUR**
 Block: **KALAHANDI (ORISSA)**
 District: **KALAHANDI (ORISSA)**

Details of the Applicants of the household willing to work

S.No	Name	Gender	Age
1	BIRANCHI NAG	Male	43
2	JAMBUBATI	Female	38

Signature/Thumb impression of Applicant: _____ Seal & Signature of Registering Authority: _____

STATE/ORISSA: DISTRICT/KALAHANDI: BLOCK/MADANPUR RAMPUR
 Work: 2410004006/RC-Metal First coat-4912 Date From: 01/12/2006 Date To: 07/12/2006
 Payment by Bank: Branch Name: U.G.B.-MRAMPUR Branch Code: MRAMPUR Branch Code: 174
 Member Roll No.: 649120002 Date From: 01/12/2006 Date To: 07/12/2006
 Work Code: 2410004006/RC-Metal First coat-4912 Work Name: Metalling of Road From: Gopalpur To: Madanpur Lane No. No.: 059 Lane No. Date: 07/06/2006

S.No	Name / Reg No.	Category	Village	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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Category: Amount Paid: _____ Attendance Taken by (Signature): _____ Total Cash Payment: _____
 Amount Paid SC: _____ Amount Paid ST: _____ Amount Paid Other: _____
 Total Cash Payment: Cash: 5465 Average Per Labour: 355 Total man-days: 63

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.