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# Convergence in MGNREGA: Patterns & Challenges

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## Infrastructure for Climate Resilient Growth in India (ICRG) Programme

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## **CONVERGENCE IN NREGA: PATTERNS AND CHALLENGES**

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**Abstract:** An important feature of NREGA implementation in recent years has been the emphasis on convergence of the NREGA with the resources and technical support of other programmes conducted by the Ministry of Rural Development as well as other line departments. This paper has three objectives. Firstly, we assess the overall progress with convergence across Indian states, using available secondary data. Secondly, we utilise a rich village level primary data set that was collected for the purpose of the paper, to assess convergence patterns in a sample of ICRG villages. Finally, we provide a discussion of the challenges around convergence, based on key informant interviews conducted in Bihar, Chhattisgarh and Odisha. Overall, we see clear differences in rates of progress on convergence across work category and across states. This is evident whether one uses total expenditures under convergence, proportion of works under convergence or contribution from line departments. We also see clear evidence of convergence occurring in ICRG villages, where several line departments have been involved in convergence. However, we see less evidence of convergence in Odisha, and very little in Bihar. Our key informant interviews suggest that the main constraint for convergence is the difficulty of coordination across line departments. Where it has occurred successfully, it has been due to local leadership originating from the district and block officials, with the assistance of ICRG personnel.

**PRELIMINARY, NOT TO BE CITED.**

### **I. Introduction**

The National Rural Employment Guarantee Act (NREGA) aims to enhance livelihood security of households in rural areas in India by providing at least one hundred days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. While the primary objective of NREGA is to augment wage employment, its supplementary objective is also to strengthen natural resource management through asset creation in areas such as water harvesting, soil conservation, irrigation, flood protection, afforestation and plantation. By doing so, the ultimate aim of NREGA is to address the causes of chronic poverty such as severe and persistent droughts as well as to insulate local communities from the adverse effects of climate change. Given

these objectives, one important feature of the NREGA right from its inception has been to bring about inter-sectoral convergence in the manner NREGA works are operationalized, so that the NREGA becomes the focal entry point for convergence with other development programmes.

While convergence has been pursued both by the UPA and NDA governments, “the former pursued it largely as an advisory to the states; the latter has made it a central motive of the NREG and has outlined three levels of operationalization of convergence, which are: i) macro convergence with agriculture, ii) convergence at the level of micro-level planning under Integrated Participatory Planning Exercise (IPPE), and iii) convergence at the level of resources” (Pankaj 2017, p. 63). This was in line with the emphasis on asset creation in NREGA that occurred under the NDA government, where public investments made under the aegis of the NREGA would lead to clear improvements in livelihoods in rural India, and have positive effects on agricultural growth and poverty reduction. Ho

In this paper, we review the progress that has been made with convergence thus far, as well as examine the constraints and challenges to convergence. We do this by analysing the All India secondary data and then examining the progress and challenges to convergence as viewed through the lens of the Infrastructure for Climate Resilient Growth programme (ICRG) of the Ministry of Rural Development (MORD).

## **II. Features of Convergence**

In this section, we briefly review the key features of convergence in the NREGA. As the operational guidelines of the NREGA makes clear, “the objectives of MGNREGA namely creation of durable assets and securing livelihood of rural households can be facilitated through convergence of MGNREGA works with resources of other programmes/ schemes available with Panchayats and other line departments. These resources are not restricted to availability of funds but include technical expertise and knowhow that officials of the line departments may be endowed with” (MORD 2013, p. 131). While the Central Government sets out the broad contours of convergence, the decentralised nature of NREGA where planning and implementation occurs at the Gram Panchayat (GP) level implies that the specificities of convergence in a given context will depend on a) the objectives of the

convergence and b) the nature and quantum of resources for convergence. Four modes of convergence are possible – firstly, funds may be made available from other schemes, to meet cost of an identifiable part of the project resulting in enhanced durability of assets created using NREGA funds; secondly, funds may be made available from other schemes as the livelihood component for the NREGA; thirdly, convergence may occur through the provision of technical inputs from concerned line departmental officials, and finally, a fourth mode of convergence would be to fill gaps, which would be pooling together funds of MGNREGA and other schemes and deploying pooled funds for creation of an asset.

Figure 1 provides examples of possible schemes for convergence. It is clear that a wide range of schemes and line departments can be involved in convergence, from NRLM to PMGSY to NHM. This suggests that in principle, most schemes targeted to rural areas allow the possibility of convergence with the NREGA.

**Figure 1. Possible Schemes for Convergence**

For funds	For Technical & managerial expertise
Central / State Finance Commission Grants	Programme Staff for implementation of any of the schemes shown on the left
National Rural Livelihood Mission(NRLM)	
Integrated Watershed Management Programme (IWMP)	
Total Sanitation Programme (TSC)	
Backward Region Grant Fund (BRGF)	
Rashtriya Krishi Vikas Yojana (RKVY)	
RRR (Ministry of Water Resources)	
National Afforestation Programme (NAP)	
Pradhan Mantri Gramin Sadak Yojana(PMGSY)	
National Horticulture Mission (NHM)	
Schemes funded from State budget	

Source: MORD (2013)

The operationalization of convergence requires the coordination between converging programmes and NREGA at three stages of implementation: i) planning; ii) works execution and iii) management (institutional arrangement). We discuss each of these stages in turn.

#### *Planning*

The first step here is the identification of the projects that are to be executed in convergence mode that can then be discussed in the Gram Sabha in the project area. This occurs under the purview of the District Perspective Plan (DPP), which identifies the needs and gaps for different departmental projects. The convergence activities identified for execution under NREGA are then included in the annual shelf of works for NREGA and will be part of the labour budget. If source of funding is more than one; that is, other than NREGA; then both departments prepares a composite project defining activities with sources of funding.

#### *Works Execution*

The parent department of the converging programme provides the necessary technical expertise to the Gram Sabha so that convergence takes place in a complementary manner. At the district level, the overall head of the convergence project is the District Collector/DDO/CEO of the Zilla Parishad, who oversees the planning and implementation of convergence projects. The NREGA component of the work taken under convergence is implemented by the Gram Sabha or other implementing agencies as prescribed by the Act,

and with the 60:40 ratio for wages and material costs maintained at the Gram Panchayat (GP) level for all works taken up by the GP. An important requirement here is that works identified under the NREGA should be planned and executed within the parameters of the NREGA. At the same time, for convergence to be successful, it is necessary that convergence projects are given the required priority by the Gram Sabhas.

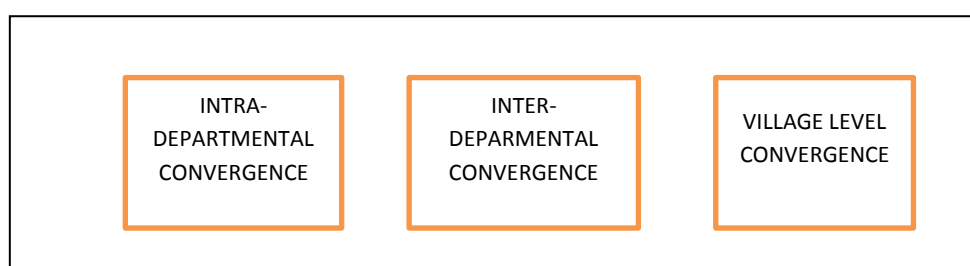
### *Management*

For effective convergence, there needs to be institutional arrangements for proper coordination at the District, Block and Village levels. The institutional platform for convergence will be the Gram Sabha in the first instance, followed by Gram Panchayat. At the district level, convergence would be executed under the leadership of the District Resource Group, where there would be representation from all line departments at the district level. The functions of the DRG were: ) to advise, formulate, appraise and monitor the implementation of NREGA works and the convergence model; ii) to identify common areas of convergence of work under different schemes; iii) to scrutinize the district plans and other schemes; iv) to examine the appropriateness as per the district hydro-geological, climatic conditions and adequacy of works in terms of likely demand and their feasibility; and v)

to ensure that sequencing of works selected by Gram Sabha under NREGA and the work taken up by the line department that is proposed for convergence are compatible with each other. Similar resource groups would be formed at the Block and Village level.

In principle, convergence can occur through three mechanisms: first, where more than one department is involved in the convergence works; second, where only one department is involved; and third, where convergence occurs at the village level (Figure 2). Examples of convergence are provided in Table 1, where it can be seen that convergence in NREGA is possible with a variety of line departments.

**Figure 2. Levels of Convergence**



Source: our illustration

Table 1. Examples of Convergence

Sector	Work under NREGA	Work from resources of other line departments
Horticulture	Pits, trenches along the boundary, watering	Saplings/seedlings for plantation, fertilizer, pesticide
Fisheries	Construction of tanks, desilting of old tanks	Fish seed, manure, artificial manure
Sericulture	Field preparation, planting, weeding, watering	Fertilizer, pesticide, drip irrigation
Sanitation	Digging for the creation of leach pits; earth work	Sanitation materials
Forestry	Contour trench, pits, fencing, watering	Nursery development, saplings
Agriculture	Land development field ponds	Seeds and tools for agriculture, fertiliser

### III. Patterns of Convergence at the All India level

What has been the progress with convergence across India thus far? In Table 2, we provide the total expenditure as well as total expenditure under convergence across different works categories in 2016-2017. In absolute terms, in 2016-2017, convergence has been mostly observed in rural connectivity with Rs 149689 lakh spent, works on individual land with Rs 134517 lakh spent, drought proofing with Rs. 61920 lakh expenditures, followed by water conservation and water harvesting with Rs 35723, anganwadi/other rural infrastructure with Rs 32942 lakh spent and land development with Rs 319235 lakh spent. However, in terms of proportions of total expenditure, the most successful has been anganwadi/other rural infrastructure, with 44 per cent of all expenditures under convergence, and 32 per cent in all labour expenditures. For most categories, one sees very little evidence of convergence as proportion of total expenditures, where less than 20 per cent of all expenditures have been in works under convergence.

**Table 2. Convergence By Work Category, 2016-2017**

Work Category	Expenditure (In Lakhs)			Expenditure under Convergence (In Lakhs)			Per cent expenditure under convergence		
	Labour	Material	Total	Labour	Material	Total	Labour	Material	Total
Anganwadi/Other Rural Infrastructure	20295	54233	74528	6469	26473	32942	32	49	44
Bharat Nirman Rajeev Gandhi Sewa Kendra	9171	76999	86170	1199	10478	11678	13	14	14
Coastal Areas	123	141	264	0	0	0	0	0	0
Drought Proofing	214074	87573	301646	42072	19847	61920	20	23	21
Fisheries	16184	1363	17548	1478	73	1551	9	5	9
Flood Control and Protection	169748	64085	233833	7743	1344	9087	5	2	4
Food Grain	4490	8216	12706	641	1562	2203	14	19	17
Land Development	418950	49842	468792	30468	1467	31935	7	3	7
Micro Irrigation Works	248708	39691	288399	18441	3043	21484	7	8	7
Other Works	47207	43409	90617	4934	6683	11616	10	15	13
Play Ground	15198	4430	19628	392	94	486	3	2	2
Renovation of traditional water bodies	601087	40866	641953	21098	1411	22510	4	3	4
Rural Connectivity	771346	531911	1303256	42549	107139	149689	6	20	11
Rural Drinking Water	11140	8276	19416	107	245	352	1	3	2
Rural Sanitation	46352	107532	153884	2058	4523	6580	4	4	4
Water Conservation and Water Harvesting	699455	100809	800264	31748	3975	35723	5	4	4
Works on Individuals Land (Category IV)	781027	213288	994315	127297	7220	134517	16	3	14
<b>Total</b>	4074554	1432665	5507220	338695	195576	534271	8	14	10

Source: <http://nrega.nic.in/netnrega/convergence>

Across states, we also see different rates of progress on convergence (Table 3). The most successful state so far in terms of total works under convergence is Madhya Pradesh, where 18337 ongoing works are under convergence and 8729 works have been completed under convergence. This is followed by West Bengal, where 7964 ongoing works are under convergence and 365 works have been completed under convergence. In contrast, for the vast majority of states, the total works taken up for convergence is very low.



**Table 3. Type of Convergence, By State, 2016-2017**

States	Type of convergence				Total works taken up under convergence	
	Total works under	Total works under	Total works under	Total works under	Ongoing	Completed
	financial convergence	technical convergence	livelihood convergence	capacity building convergence		
<a href="#">ANDHRA PRADESH</a>	0	0	0	0	0	0
<a href="#">ARUNACHAL PRADESH</a>	1	0	0	0	0	0
<a href="#">ASSAM</a>	4	5	2	0	0	0
<a href="#">BIHAR</a>	0	0	0	0	0	0
<a href="#">CHHATTISGARH</a>	167	42	17	8	171	0
<a href="#">GOA</a>	0	0	0	0	0	0
<a href="#">GUJARAT</a>	266	20	6	6	208	30
<a href="#">HARYANA</a>	19	53	0	57	48	14
<a href="#">HIMACHAL PRADESH</a>	7	1	1	0	2	0
<a href="#">JAMMU AND KASHMIR</a>	0	0	0	0	0	0
<a href="#">JHARKHAND</a>	18	17	11	2	0	0
<a href="#">KARNATAKA</a>	39	61	7	1	6	4
<a href="#">KERALA</a>	0	0	0	0	0	0
<a href="#">MADHYA PRADESH</a>	27134	6686	307	342	18337	8729
<a href="#">MAHARASHTRA</a>	1931	5	272	1	25	1899
<a href="#">MANIPUR</a>	0	0	0	0	0	0
<a href="#">MEGHALAYA</a>	7	7	237	2	258	0
<a href="#">MIZORAM</a>	29	213	89	5	115	128
<a href="#">NAGALAND</a>	4	193	2	0	136	53
<a href="#">ODISHA</a>	126	68	59	20	61	10
<a href="#">PUNJAB</a>	0	0	0	0	0	0
<a href="#">RAJASTHAN</a>	2181	1514	416	12	937	1269
<a href="#">SIKKIM</a>	12	0	278	0	287	2
<a href="#">TAMIL NADU</a>	0	0	0	0	0	0
<a href="#">TELANGANA</a>	0	0	0	0	0	0
<a href="#">TRIPURA</a>	179	1950	916	5	1732	254
<a href="#">UTTAR PRADESH</a>	10	8	3	3	3	0
<a href="#">UTTARAKHAND</a>	39	16	24	10	11	1
<a href="#">WEST BENGAL</a>	8409	111	3598	245	7964	365
All India	<b>40582</b>	<b>10970</b>	<b>6245</b>	<b>719</b>	<b>30301</b>	<b>12758</b>
Percentage	69.4	22.7	12.5	1.6	---	---

Source: <http://nrega.nic.in/netnrega/convergence>

We also see different levels of contribution to convergence by line departments across states (Table 4). The high performers have been Gujarat, Madhya Pradesh, Mizoram and Sikkim, with large contributions of line departments to convergence (there is an anomaly in the numbers reported for Madhya Pradesh and Mizoram in the NREGA website, with the percentages exceeding 100 per cent). For states such as Andhra Pradesh, Kerala, Tamil Nadu and West Bengal, the contribution from line departments have been low, in spite of large expenditures on convergence works. This is also evident from the data on State Convergence Plans, where again, we see that Madhya Pradesh and West Bengal have done well, in obtaining contributions from line departments (Table 5).

Overall, we see clear differences in rates of progress on convergence across work category and across states. This is evident whether one uses total expenditures under convergence, proportion of works under convergence or contribution from line departments. It should be noted that the three focus states of ICRG are Bihar, Chhattisgarh and Odisha. Among these three states, Chhattisgarh has performed the best by our measures of convergence, followed by Odisha, then Bihar.

**Table 4. Line Department Contribution to Convergence, By State, 2016-2017**

States	Total works taken up		Line department contribution		Percentage of expenditure of line dept for	
	with convergence		under convergence		convergence works (%)	
	(in lakh)		(in lakh)			
	Expenditure on ongoing works	Expenditure on Completed works	Expenditure on ongoing works	Expenditure on Completed works	Expenditure on ongoing works	Expenditure on Completed works
<a href="#">ANDHRA PRADESH</a>	50526	49741	0	0	0	0
<a href="#">ARUNACHAL PRADESH</a>	221	105	0	0	0	0
<a href="#">ASSAM</a>	333	736	0	0	0	0
<a href="#">BIHAR</a>	1702	659	0	0	0	0
<a href="#">CHHATTISGARH</a>	2288	6333	0	0	0.01	0
<a href="#">GOA</a>	0	0	0	0	0	0
<a href="#">GUJARAT</a>	831	2351	285	40	34.27	1.7
<a href="#">HARYANA</a>	158	3009	8	0	5.1	0.02
<a href="#">HIMACHAL PRADESH</a>	52	618	1	0	1.44	0
<a href="#">JAMMU AND KASHMIR</a>	180	1286	0	0	0	0
<a href="#">JHARKHAND</a>	915	2068	0	0	0	0
<a href="#">KARNATAKA</a>	1646	3501	3	0	0.21	0.01
<a href="#">KERALA</a>	363	17000	0	0	0	0
<a href="#">MADHYA PRADESH</a>	5456	29572	8256	3114	151.33	10.53
<a href="#">MAHARASHTRA</a>	1637	6924	1	75	0.08	1.09
<a href="#">MANIPUR</a>	0	0	0	0	0	0
<a href="#">MEGHALAYA</a>	48	228	0	0	0	0
<a href="#">MIZORAM</a>	21	962	42	36	201.86	3.71
<a href="#">NAGALAND</a>	0	639	0	0	0	0
<a href="#">ODISHA</a>	3948	8590	22	0	0.56	0.01
<a href="#">PUNJAB</a>	147	550	0	0	0	0
<a href="#">RAJASTHAN</a>	7525	20365	404	182	5.36	0.89
<a href="#">SIKKIM</a>	559	4531	210	1	37.52	0.03
<a href="#">TAMIL NADU</a>	646	13929	0	0	0	0
<a href="#">TELANGANA</a>	21165	1441	0	0	0	0
<a href="#">TRIPURA</a>	5797	38516	17	101	0.3	0.26
<a href="#">UTTAR PRADESH</a>	644	14113	6	0	1	0
<a href="#">UTTARAKHAND</a>	300	2231	1	0	0.46	0
<a href="#">WEST BENGAL</a>	26100	165949	4027	151	15.43	0.09
All India	<b>133206</b>	<b>395947</b>	<b>13284</b>	<b>3702</b>	<b>9.97</b>	<b>0.93</b>

**Table 5. Performance of State Convergence Plans (SCPs) in 2016-2017**

States	Performance of SCP		
	Total expenditure from MGNREGA for convergence project (in lakh)	Total expenditure from line dept. for convergence project (in lakh)	Total expenditure against on SCP (in lakh)
<a href="#">ANDHRA PRADESH</a>	100267	0	100267
<a href="#">ARUNACHAL PRADESH</a>	326	0	326
<a href="#">ASSAM</a>	1069	0	1069
<a href="#">BIHAR</a>	2361	0	2361
<a href="#">CHHATTISGARH</a>	8620	0	8620
<a href="#">GOA</a>	0	0	0
<a href="#">GUJARAT</a>	3182	325	3507
<a href="#">HARYANA</a>	3167	9	3175
<a href="#">HIMACHAL PRADESH</a>	670	1	671
<a href="#">JAMMU AND KASHMIR</a>	1465	0	1465
<a href="#">JHARKHAND</a>	2983	0	2983
<a href="#">KARNATAKA</a>	5147	4	5151
<a href="#">KERALA</a>	17363	0	17363
<a href="#">MADHYA PRADESH</a>	35028	11371	46399
<a href="#">MAHARASHTRA</a>	8561	77	8637
<a href="#">MANIPUR</a>	0	0	0
<a href="#">MEGHALAYA</a>	276	0	276
<a href="#">MIZORAM</a>	983	78	1061
<a href="#">NAGALAND</a>	639	0	639
<a href="#">ODISHA</a>	12538	22	12560
<a href="#">PUNJAB</a>	697	0	697
<a href="#">RAJASTHAN</a>	27890	586	28476
<a href="#">SIKKIM</a>	5090	211	5302
<a href="#">TAMIL NADU</a>	14575	0	14575
<a href="#">TELANGANA</a>	22605	0	22605
<a href="#">TRIPURA</a>	44313	118	44432
<a href="#">UTTAR PRADESH</a>	14757	6	14763
<a href="#">UTTARAKHAND</a>	2531	1	2533
<a href="#">WEST BENGAL</a>	192050	4179	196229
	<b>529153</b>	<b>16988</b>	<b>546141</b>

Source: <http://nrega.nic.in/netnrega/convergence>

#### IV. A Village Level Analysis of Convergence

In this section, we analyse the village survey data that was collected by Sunai, a research consultancy firm, under the guidance of IPE and The University of Manchester research team. 20 villages were purposely selected from each of the three states – 60 villages in total. These villages were such that ICRG works were either completed there, or were in progress. The villages were from different blocks as well as different districts, and so could be seen as providing a representative sample of the type of villages in which ICRG was being implemented. In each of the 60 villages, the Sunai team conducted extensive surveys using a structured village level questionnaire (see Appendix A). The surveys covered demographic information of the village, the nature of climate vulnerability in the village, the economic conditions as well as the nature of ICRG works and the features of NREGA convergence.

##### **Bihar**

We begin with an analysis of the Bihar village data. The data here is patchy with many missing information on key variables. We have reasonably complete data for 18 villages. Tables 6 and 7 provide basic demographic information and social structure respectively. The number of hamlets per village varies from 1 to 10, the number of households vary from 152 to 902, and the total population from 1120 to 10000. With respect to social structure, OBCs dominate in terms of population share. Except for Purshotampur, where the share of SCs is 60 per cent, their share in total population of the village rarely exceeds 20 per cent. There are no ST households in any village, according to the survey.

Figures 3-5 provide vulnerability indicators, measures of economic prosperity and the remoteness of the villages. We can see the prevalence of drought is a severe problem for the sample villages, with most villages having more than 2 years of drought in the past 4 years. Flooding seems to be less of a problem in the villages. We also see significant variation in agricultural wages in the 18 villages, and in most villages, agricultural wages of men exceed those of women. Thus, the villages in the sample have different economic conditions, and in some cases, the villages are very poor. Most villages are around 20-40 kms away from district headquarters, with one village being 80 km away.

With regard to NREGA implementation, most villages have seen NREGA implementation early in the programme's lifecycle, with NREGA first being implemented in the period

between 2006 and 2008 (Table 8). NREGA performance in Bihar has been poor historically, and we can see no village where the percentage of households completing 100 days is more than 10 per cent. The maximum number of NREGA days per active household looking NREGA work is 48 in Jhanjhpati and a minimum is 20 days in Kaitha. The proportion of days worked by women also varies from 52 per cent in Kaitha to 2 per cent in Devgan (Table 9).

As is clear from Table 10, there has been very little ICRG work in these villages so far. The exceptions are Pursotampur village, where there has been water channel, pond, canal and dam work ad Kaitha and Devgan where there has been tree plantation work. Given the scant nature of ICRG work in these villages, a substantial analysis of convergence is not possible in the case of Bihar. Tables 11 and 12 provide information on the line departments involved, the type of convergence and contribution from line departments and ICRG. Wherever convergence has happened, it has been financial in nature, where the contribution of NREGA has been to provide the labour component of the specific ICRG project. Both line departments and ICRG has provide technical support. The overall message here seems to be a lack of progress in ICRG works, which does not allow us to analyse the nature of convergence in Bihar that has occurred in the ICRG villages.

**Table 6. ICRG villages – Bihar sample – some basic demographic information**

District	Block	Gram Panchayat	Village	Number of Hamlets	Number of Households	Population of Village
Madhubani	Khutauna	Jhanjhpathi asha	Jhanjhpathi	5	800	5000
West Champaran	Sikta	Kathiya mathiya	Pursotampur	1	152	1450
Muzaffarpur	Bandra	Pirapur	Pirapur	8	570	3235
Muzaffarpur	Katra	Dhanour	Dhanour	10	1850	11374
Muzaffarpur	Katra	Pahsoul	Pahsoul	10	3250	13065
Muzaffarpur	Bochaha	Manjhouli	Manjhouli	9	1740	13500
Begusarai	Garhpura	Koriyama	Koriyama	7	782	7200
Begusarai	Chhourahi	Sihma	Sihma	7	611	7071
Madhubani	Fulpras	Dharmdiha	Dharmdiha	2	755	1650
Pashchim Champaran	Mainatard	Sakroul	Sakroul	3	902	10000
Pashchim Champaran	Mainatard	Madhuri	Purshotampur	2	500	1700
Pashchim Champaran	Pipraati	Dumri bhagarwa	Lachhanahi	3	443	2168
Pashchim Champaran	Madhubani	Kathar	Tunihawa gaon	3	195	1120
Banka	Fullidumaur	Kaitha	Kaitha	1	250	2800
Muzaffarpur	Katra	Sonpur	Devgan	4	555	2500
Nalanda	Nagarnousa	Kachiyawan	Kachiyawan	1	350	5000
Nalanda	Nagarnousa	Ariyawan	Nagwa	1	300	1560
Gaya	Tankuppa	Gajadharpur	Gajadharpur	5	664	3320
Katihar	Aajamnagar	Maheshpur	Rataniya	7	395	1300

**Table 7. ICRG Villages – Bihar – Social Structure**

Village	Forward Castes	OBC	SC	ST	Others
Jhanjhpathi	0	63	13	0	25
Pursotampur	0	66	1	0	33
Pirapur	12	53	18	0	18
Dhanour	38	32	28	0	2
Pahsoul	5	49	12	0	34
Manjhouli	5	86	6	0	3
Koriyama	6	65	26	0	3
Sihma	29	34	17	0	20
Dharmdiha	33	50	17	0	0
Sakroul	0	33	33	0	34
Purshotampur	10	20	60	0	10
Lachhanahi	4	78	18	0	1
Tunihawa gaon	10	77	8	0	5
Kaitha	0	100	0	0	0
Devgan	1	31	45	0	24
Kachiyawan	1	89	10	0	0
Nagwa	0	87	13	0	0
Gajadharpur	0	55	45	0	0
Rataniya	1	72	1	0	25



Figure 3. ICRG Villages – Bihar – Vulnerability Indicators (Whether has been a drought or a flood in the past 4 years; from 0 – no drought or flood to 4 – drought or flood in each of the 4 years)

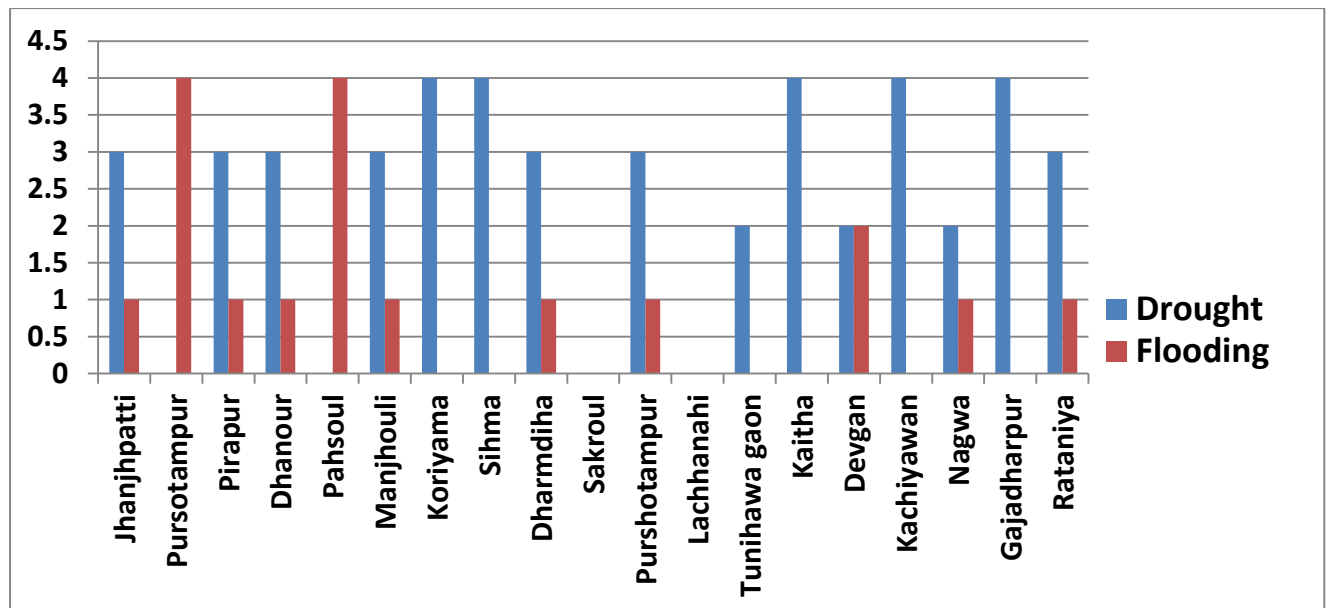
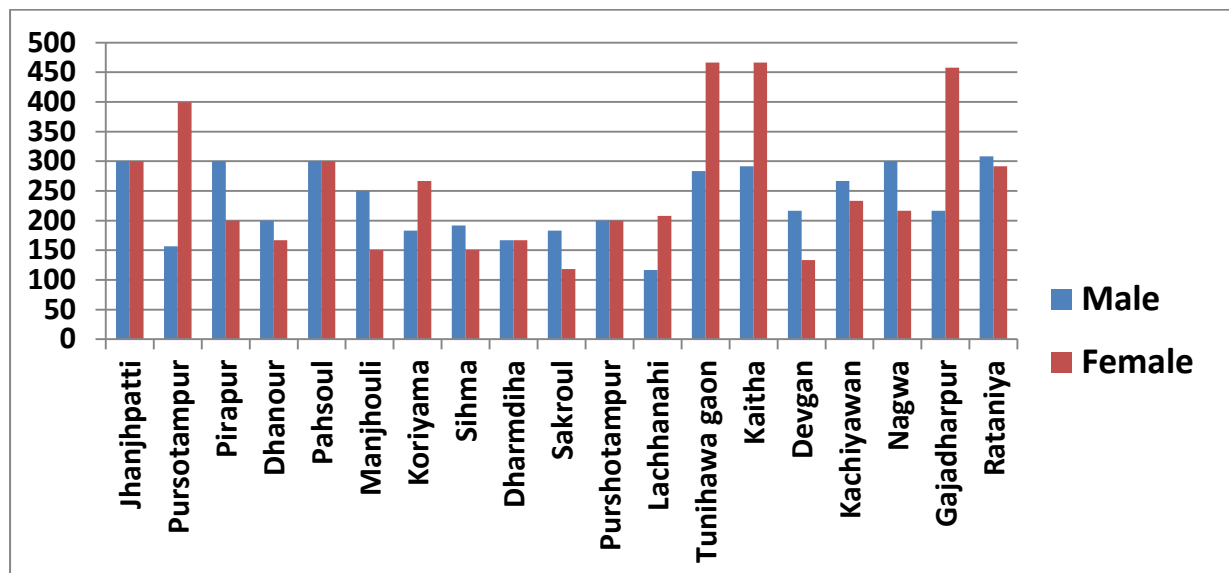
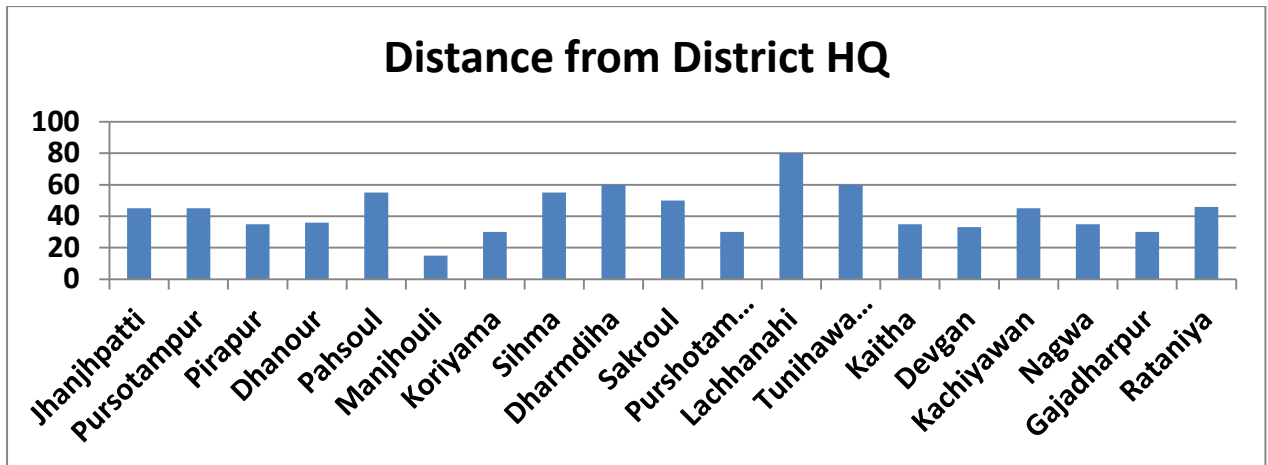


Figure 4. ICRG Villages – Bihar – Economic Prosperity (as measured by Agricultural Wages, in Rupees)



**Note:** Agricultural Wages averaged over Rabi, Sowing and Transplanting, Kharif, Sowing and Transplanting, Rabi, Harvesting, Kharif, Harvesting, Rabi, Other Agricultural Work and Kharif, Other Agricultural Work.

Figure 5. ICRG Villages – Bihar – Remoteness Indicator (Distance from District Headquarters, in kms.)



**Table 8. ICRG Villages – Bihar – Year NREGA was first implemented**

<b>Village</b>	<b>Year</b>
Jhanjhpatti	2007
Pursotampur	NA
Pirapur	2006
Dhanour	2007
Pahsoul	2006
Manjhouli	NA
Koriyama	NA
Sihma	2007
Dharmdiha	2008
Sakroul	NA
Purshotampur	NA
Lachhanahi	2007
Tunihawa gaon	NA
Kaitha	2007
Devgan	2006
Kachiyawan	2005
Nagwa	2005
Gajadharpur	NA
Rataniya	NA

**Table 9. ICRG Villages – Bihar – NREGA performance**

Village	Per cent of households completing 100 days	NREGS days per household	Per cent NREGS days worked by women
Jhanjhpati	3	48	19
Pursotampur	0	28	33
Pirapur	1	22	35
Dhanour	0	41	51
Pahsoul	8	43	40
Manjhouli	NA	NA	NA
Koriyama	NA	NA	NA
Sihma	NA	NA	NA
Dharmdiha	NA	NA	NA
Sakroul	NA	NA	NA
Purshotampur	NA	NA	NA
Lachhanahi	NA	NA	NA
Tunihawa gaon	NA	NA	NA
Kaitha	2	20	52
Devgan	13	37	2
Kachiyawan	5	31	41
Nagwa	NA	NA	NA
Gajadharpur	NA	NA	NA
Rataniya	NA	NA	NA

**Table 10. ICRG Villages – Bihar – Type of ICRG Work**

<b>Village</b>	<b>Type of ICRG work</b>
Jhanjhpati	No work has been done
Pursotampur	Water channel, Pond, canal, Dam
Pirapur	Pond cleaning
Dhanour	NA
Pahsoul	No work has been done
Manjhouli	No work has been done
Koriyama	NA
Sihma	No work has been done
Dharmdiha	No work has been done
Sakroul	No work has been done
Purshotampur	No work has been done
Lachhanahi	No work has been done
Tunihawa gaon	No work has been done
Kaitha	Tree Plantation
Devgan	Tree Plantation
Kachiyawan	NA
Nagwa	NA
Gajadharpur	NA
Rataniya	NA

**Table 11. ICRG Villages – Bihar – Line Departments involved in Convergence**

<b><u>Village</u></b>	<b><u>Line Departments Involved</u></b>
Jhanjhpati	Water Resources department
Pursotampur	Pradhan Mantri Awas Yojna
Pirapur	Rural Development department
Dhanour	None

**Table 12. Type of Convergence and Contribution from Line Departments and ICRG**

<b><u>Village</u></b>	<b><u>Type of Convergence</u></b>	<b><u>Contribution from Line Departments</u></b>	<b><u>Contribution from ICRG</u></b>
Jhanjhpati	Financial	Technical support	Technical support
Pursotampur	Financial	Technical support	Technical support
Pirapur	Financial	Technical support	NA
Dhanour	Financial	Irrigation Facility	NA

## Chhattisgarh

We next turn to an analysis of the Chhattisgarh village data. Here, the data is better quality and we have more complete information on key variables. We have reasonably complete data for 19 villages. Tables 13 and 14 provide basic demographic information and social structure respectively. Quite a few villages are large in terms of population, with the average number of hamlets, households and population being 7, 329 and 1602 respectively. With respect to social structure, we see a very different picture than Bihar – here, in many villages, STs dominate in terms of population share, and in some case, around 80-90 per cent of the population. The SC share is low in most villages, and does not exceed 25 per cent. The OBC population share is also low, except Khapri (46 per cent), Singarpur (38 per cent) and Rampur (40 per cent).

Figures 6-8 provide vulnerability indicators, measures of economic prosperity and the remoteness of the villages. As in the case of Bihar, we can see the prevalence of drought is a severe problem for the sample villages, while there is low risk of flooding. We also see far less variation in agricultural wages in the 19 villages, with the average wage being 157 for men and 130 for women. We see more evidence of remoteness in Chhattisgarh than Bihar, with distance of two villages from the district headquarters being more than 100 kms, with six more villages exceeding 40 kms.

With regard to NREGA implementation, like Bihar, most villages have seen NREGA implementation early in the programme's lifecycle, with NREGA first being implemented in the period between 2006 and 2008 (Table 15). This is not surprising as the several of the districts in Chhattisgarh being very poor. However, NREGA performance in Chhattisgarh is better than in Bihar and we can see that in most villages, households have had at least 30 days of work. There is also more participation by women in the NREGA, with almost half of participation by women on average (Table 16).

In contrast to Bihar, several of the villages in the Chhattisgarh sample has seen ICRG work. We see a diversity of ICRG work in Table 17. Ponds seem to be the most common ICRG work, followed by check dams and land development. The PRI department has been involved in most convergence activities. However, there has been involvement of many other departments as well, including the Agriculture, Horticulture and Forest departments

(Table 18). In most projects, there has been three departments involved, which shows clear evidence of coordination across line departments in ICRG works. While the nature of the convergence has been exclusively financial, the contribution from line departments has been seeds, plantations and horticulture. The ICRG contribution has been mostly training and technical help with some evidence of community mobilisation and field preparation (Table 19).



**Table 13. ICRG villages – Chhattisgarh sample – some basic demographic information**

District	Block	GP	Village	Number of Hamlets	Number of Households	Population
Koriya	Sonhat	Bhainswar	Bhainswar	16	350	2500
Koriya	Bharatpur	Kuwari	Kuwari	3	400	1350
Sarguja	Batauli	Suwarpara	Suwarpara	14	450	2300
Jashapur	Duldula	Bangurukela	Bangurukela (Turri)	1	29	160
Sarguja	Batauli	Jhaugaowa (Umapur)	Jhaugaowa	4	250	1950
Mungeli	Lormi	Masni	masni	8	500	2279
Bilaspur	Takhatpur	Khapri	Khapri	12	216	2369
Bilaspur	Marwahi	Salhekhuta	Salhekhuta	7	290	1502
Rajnandagaon	Chhuhikhadan	Singarpur	Singarpur	6	469	1424
Kabirdham	Pandariya	Kukdur	Kukdur	2	443	1585
Kabirdham	sahashpur Lohna	Rampur	Rampur	5	242	1233
Jashapur	Phrasabahal	Daltoli	Daltoli	2	129	621
Kabirdham	Bodla	Kamadabri	Kamadabri	7	298	915
Jashapur	Manora	Gedha	Gedha	5	200	556
Korba	Pandi Upawara	Gurusiya	Gurusiya	7	528	1903
Korlea	Pali	Damiya	Damiya	4	326	1052
Mungeli	Pathariya	Marrakona	Marrakona	13	377	2500
Rajnandagaon	Rajnandagaon	Barbaspur	Barbaspur	7	396	1527
Surajpur	Pratappur	Dhumadanda	Dhumadanda	7	375	2720

**Table 14. ICRG Villages – Chhattisgarh – Social Structure**

<b>Village</b>	<b>Forward Castes</b>	<b>OBC</b>	<b>SC</b>	<b>ST</b>	<b>Others</b>
Bhainswar	2	35	10	52	1
Kuwari	2	25	3	71	0
Suwarpara	1	5	24	70	0
Bangurukela (Turri)	0	30	0	70	0
Jhaugaowa	0	5	5	90	0
masni	5	75	5	15	0
Khapri	10	46	22	19	4
Salhekhuta	0	1	11	82	6
Singarpur	2	38	0	60	0
Kukdur	0	13	3	84	0
Rampur	15	40	0	45	0
Daltoli	10	14	0	76	0
Kamadabri	0	10	10	80	0
Gedha	0	1	5	94	0
Gursiya	0	18	10	69	3
Damiya	0	18	17	65	0
Marrakona	0	71	20	9	0
Barbaspur	0	84	6	10	0
Dhumadanda	1	20	19	60	0

Figure 6. ICRG Villages – Chhattisgarh – Vulnerability Indicators

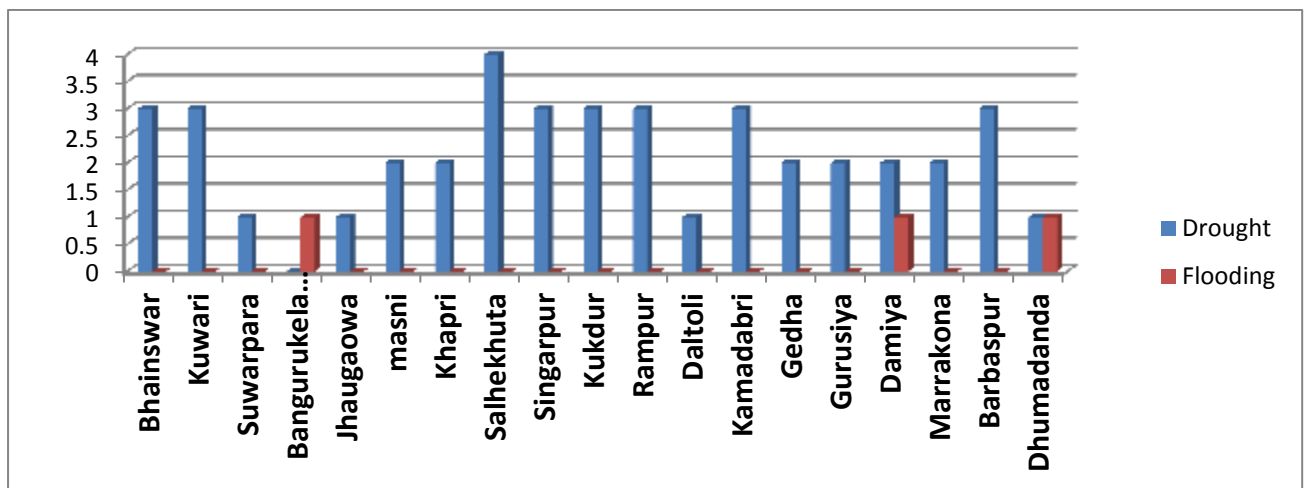
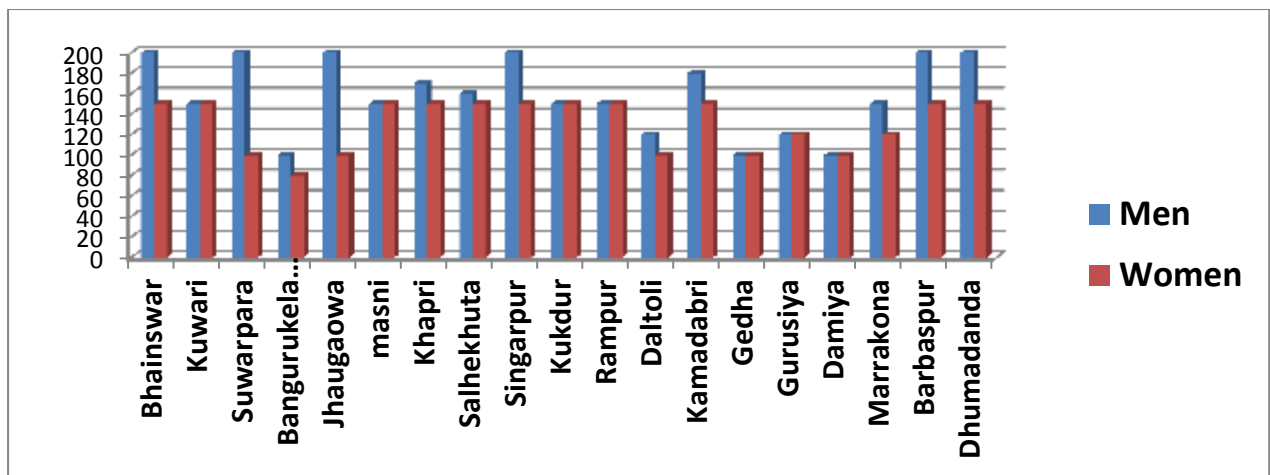
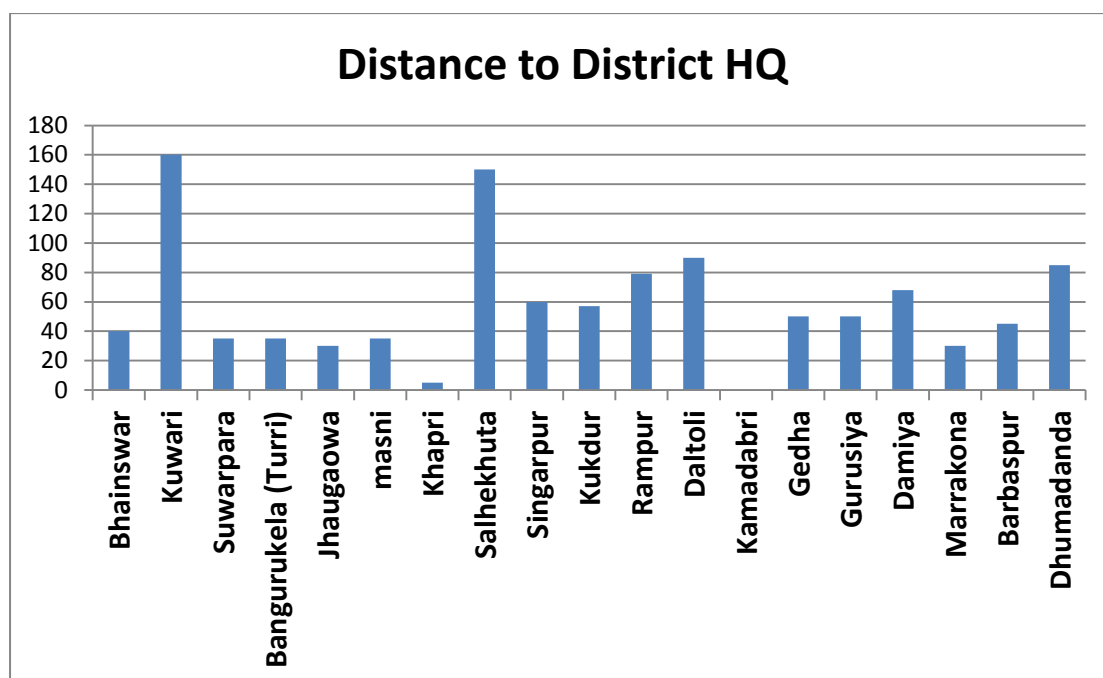


Figure 7. ICRG Villages – Chhattisgarh – Economic Prosperity (as measured by Agricultural Wages)



**Note:** Agricultural Wages averaged over Rabi, Sowing and Transplanting, Kharif, Sowing and Transplanting, Rabi, Harvesting, Kharif, Harvesting, Rabi, Other Agricultural Work and Kharif, Other Agricultural Work.

**Figure 8. ICRG Villages – Chhattisgarh – Remoteness Indicator (Distance from District Headquarters, in kms.)**



**Table 15. ICRG Villages – Chhattisgarh – Year NREGA was first implemented**

Village	Year
Bhainswar	2005
Kuwari	2005
Suwarpara	2007
Bangurukela (Turri)	NA
Jhaugaowa	2006
masni	2006
Khapri	2007
Salhekhuta	2006
Singarpur	2006
Kukdur	2006
Rampur	2006
Daltoli	2007
Kamadabri	2006
Gedha	2012
Gursiya	2007
Damiya	2008
Marrakona	2006
Barbaspur	2006
Dhumadanda	2006

**Table 16. ICRG Villages – Chhattisgarh – NREGA performance**

Village	Per cent of households completing 100 days	NREGS days per household	NREGS days worked by women in total NREGS days (per cent)
Bhainswar	4.6	47.4	23.9
Kuwari	9.0	23.8	54.3
Suwarpara	0.0	36.5	36.8
Bangurukela (Turri)	NA	NA	41.8
Jhaugaowa	5.1	23.9	51.7
Masni	NA	NA	63.6
Khapri	26.0	16.8	46.9
Salhekhuta	16.1	38.3	52.3
Singarpur	9.8	59.3	47.0
Kukdur	3.7	24.1	46.0
Rampur	NA	NA	NA
Daltoli	NA	NA	43.5
Kamadabri	5.4	36.2	51.0
Gedha	NA	NA	44.3
Gurusiya	3.0	15.7	47.5
Damiya	13.2	45.8	47.5
Marrakona	21.9	45.3	47.3
Barbaspur	0.0	24.6	59.0
Dhumadanda	12.7	56.6	45.2

**Table 17. ICRG Villages – Chhattisgarh – Type of ICRG Work**

<b>Village</b>	<b>Type of ICRG work</b>
Bhainswar	NA
Kuwari	Pond, Stop dam, Check Dam, Boulder Check Dam, Dug well
Suwarpara	No work has been done yet but is under progress
Bangurukela (Turri)	Pond, Well, Land development, Ponds Renovation, Check dam, goat shed, LBCD
Jhaugaowa	Check Dam, Farm pond, Land development
Masni	Pond, well, Check dam, Plantation
Khapri	No work done
Salhekhuta	No work was going on at that time
Singarpur	Land Development, Pond, Dabri, Check dam,
Kukdur	Ponds, Pond renovation (under process)
Rampur	Dug well, Pond, Pond Renovation
Daltoli	Well, Pond renovation, Ponds, Goat Ranch, Road
Kamadabri	Under Progress
Gedha	Pond, well, land development, dug well
Gurusiya	Pond, dug well, check dam
Damiya	Pond, Dug well, minor canall, pond renovation, stop dam
Marrakona	No work has been done yet but is under progress
Barbaspur	WBM, Stop dam, Scale pit, Check dam
Dhumadanda	All schemes are under progress

**Table 18. ICRG Villages – Chhattisgarh – Line Departments involved in Convergence**

Village	Line Departments Involved in Convergence		
	Department 1	Department 2	Department 3
Bhainswar	Agriculture Department	Horticulture Department	PRI Department
Kuwari	PRI Department	Agriculture Department, Horticulture Department, Veterinary department	Forest department, Revenue department
Suwarpara			
Bangurukela (Turri)	PRI Department	Horticulture Department, Agriculture department	Forest department and NABARD convergence
Jhaugaowa	PRI Department	Revenue Department	Agriculture Department, Horticulture Department, Forest Department
Masni	PRI Department	Agriculture Department, Fishery Department, Forest Department, Horticulture	Revenue Department
Khapri	PRI Department	Revenue Department	Agriculture Department, Horticulture Department, Forest Department, Fishery
Salhekhuta	PRI Department	Agriculture department, Horticulture department, Forest department	
Singarpur	PRI Department	Agriculture Department	Horticulture Department
Kukdur	PRI Department	Agriculture department, Horticulture department, Forest department	Revenue Department
Rampur	PRI Department	Agriculture department, Horticulture department, Forest department	
Daltoli	PRI Department	Agriculture department, Horticulture Department	Forest Department
Kamadabri	Agriculture Department, Horticulture department	Line Department, Technical help	
Gedha	PRI Department	Agriculture department, Horticulture department	Forest department
Gurusiya	PRI Department	Agriculture department, forest department	Revenue Department
Damiya	PRI Department	Agriculture department, Horticulture department, Forest department, Fishery department, NRLM	Revenue Department
Marrakona	Agriculture department	Horticulture department	
Barbaspur	PRI Department	Agriculture department, Horticulture department	Revenue Department
Dhumadanda	NA	NA	NA

**Table 19. ICRG Villages – Chhattisgarh – Type of Convergence and Contribution from Line Departments and ICRG**

Village	Type of Convergence	Contribution from Line Departments	Contribution from ICRG
Bhainswar	Financial	Seeds from agriculture	Technical help
Kuwari	Financial	Seeds from agriculture, plantation for forest	Community mobilization
Suwarpara	Financial	Awareness in village	training
Bangurukela (Turri)	Financial	Seeds for agriculture, Plantation by Forest Department, Pisciculture, horticulture	Community Mobilization and information
Jhaugaowa	Financial	Seeds from Agriculture Department, Plantation by Forest department	Technical help
masni	Financial	Goat Ranch, Pisciculture, Horticulture, Plantation of forest department	Motivation, Field Preparation
Khapri	Financial	Technical help	Mobilization
Salhekhuta	Financial	Plantation by forest, Seeds from Agriculture.	Technical help
Singarpur	Financial	Seeds from agriculture, plantation of forest	Technical help
Kukdur	Financial	Goat Ranch by horticulture, Plantation by forest department	Motivation and Mobilization
Rampur	Financial	Plantation by forest, goat ranch by horticulture department	Field preparation
Daltoli	Financial	Seeds for agriculture, goat ranch, pisciculture, plantation by forest department	Motivation, Field Preparation, Mobilisation and information
Kamadabri	Financial	Training programs in the village	
Gedha	Financial	Seeds for agriculture, Plantation by forest department	Community Mobilization
Gurusiya	Financial	field preparation	Technical help
Damiya	Financial		Technical help, Mapping, DPR, mobilization,
Marrakona	Financial	No work done yet	Awareness Program in the village
Barbaspur	Financial	Plantation of forest and horticulture	Technical help
Dhumadanda	Financial	In progress	Training program in the village



## Odisha

Finally, we undertake an analysis of the Odisha village data. Here, the data is also of good quality and we have fairly complete information on key variables. We have reasonably complete data for 23 villages. Tables 20 and 21 provide basic demographic information and social structure respectively. We see a large variation in the number of hamlets per village, ranging from 1 to 9. However, there is less variation in the number of households and total population. SCs formed the bulk of the village population, except Sankarl palli, where 65 per cent of the population were forward castes and Manikaduma where 61 per cent of the population were OBCs.

Figures 9-11 provide vulnerability indicators, measures of economic prosperity and the remoteness of the villages. Unlike Bihar and Chhattisgarh, we see the prevalence of both flood and drought in the sample villages in Odisha. We also see a wide variation in economic prosperity in these villages, with agricultural wages in Silidila and Kumla Bhahali around four times the levels witnessed in Tertaliya. Some of the villages are far from the district headquarters but some are near as well.

With regard to NREGA implementation, most villages have seen NREGA implementation early in the programme's lifecycle, though there are exceptions – for example, Sargihajur, where NREGA was started in 2013 (Table 22). On the whole, NREGA performance in Odisha is quite good, with high amount of NREGA days per active household in several villages, and a strong participation of women in the NREGA (Table 23).

Several of the villages in the Odisha sample have seen ICRG work with land development and water harvesting structures quite common (Table 24). We see the involvement of several line departments in Odisha though not as much as Chhattisgarh (Table 25). The Panchayati Raj department seems to be prominent in most of the convergence activities, with Agriculture and Horticulture also participating in several ICRG works. The type of convergence is quite diverse, ranging from technical help, plantation, seeds, etc. We also see active participation of line departments in the convergence in terms of technical help, community mobilisation and provision of information. ICRG also seems to be quite involved, in terms of training in climate change and training for Panchayati Raj Institution members (Table 26).

**Table 20. ICRG villages – Odisha sample – some basic demographic information**

District	Block	Gram Panchayat	Village	Number of Hamlets	Number of Households	Population
Kalahandi	Lamjigarh	Champadipur	Sargihajur	5	50	210
Kalahandi	Narla	Kurmel	Khirmal	1	90	500
Kalahandi	Narla	Gahantmal	Gahantmal	5	198	691
Kalahandi	Golmunda	Rangaspali	Sankarl pali	3	170	596
Kalahandi	Kalmunda	Purakela	Budhipadr	5	210	861
Balangir	Deogaon	Makundpur	Bandhapalli	4	162	775
Balangir	gudvella	Biraminda	Karlakhaman	2	85	311
Balangir	Titlagarh	Adabhal	Ghanthasahada	4	175	1125
Balangir	sinthala	Dharabharh	mauri	2	138	650
Mayurbhanj	Udala	Patsari pur	Tertaliya	5	139	560
Mayurbhanj	samkantha	Cochila ghati	Godi pokhri	2	142	632
Mayurbhanj	Bisor	Kadmabeda	Musawri	1	145	743
Mayurbhanj	Jashipur	Rugudi	Khandabandha	6	182	903
Mayurbhanj	Karanjiya	Kerkera	Manikaduma	1	70	475
Nuapada	Boden	Karlakote	Sargimunda	9	130	975
Nuapada	Khariar	Dabri	Bhairajpur	3	160	676
Nuapada	Khariar	Kirikota	Kirikita Gorlapada	8	426	1226
Nuapada	boden	Bhainsadani	Bhainsadani	4	109	507
Keonjhar	Banspal	Talakainsiri	Talakainsiri	4	145	795
Keonjhar	Saharpada	Barbil	Baneguda	7	166	863
Keonjhar	Ghatagaon	Saraspasi	Bhalukipatala	6	134	1209
Keonjhar	Patna	Kendeiposi	Silida	3	245	1143
Keonjhar	Patna	Palanghati	Kumla Bahali	8	320	1281

**Table 21. ICRG Villages – Odisha – Social Structure**

Village	Forward Castes	OBC	SC	ST	Others
Sargihajur	60	1	39	0	0
Khirmal	97	3	0	0	0
Gahantmal	3	40	50	7	0
Sankarl pali	65	10	25	0	0
Budhipadr	0	15	70	15	0
Bandhapalli	0	40	35	25	0
Karlakhaman	0	25	70	5	0
Ghanthasahada	0	20	80	0	0
mauri	0	10	90	0	0
Tertaliya	0	30	60	10	0
Godi pokhri	0	0	95	5	0
Musawri	0	30	70	0	0
Khandabandha	0	25	50	15	10
Manikaduma	0	61	0	39	0
Sargimunda	0	14	71	15	0
Bhairajpur	30	0	60	0	10
Kirikita Gorlapada	0	2	95	2	1
Bhainsadani	0	35	60	5	0
Talakainsiri	0	15	85	0	0
Baneguda	0	15	40	45	0
Bhalukipatala	0	29	70	1	0
Silida	0	0	0	0	100
Kumla Bahali	0	0	0	0	100

**Figure 9. ICRG Villages – Odisha – Vulnerability Indicators**

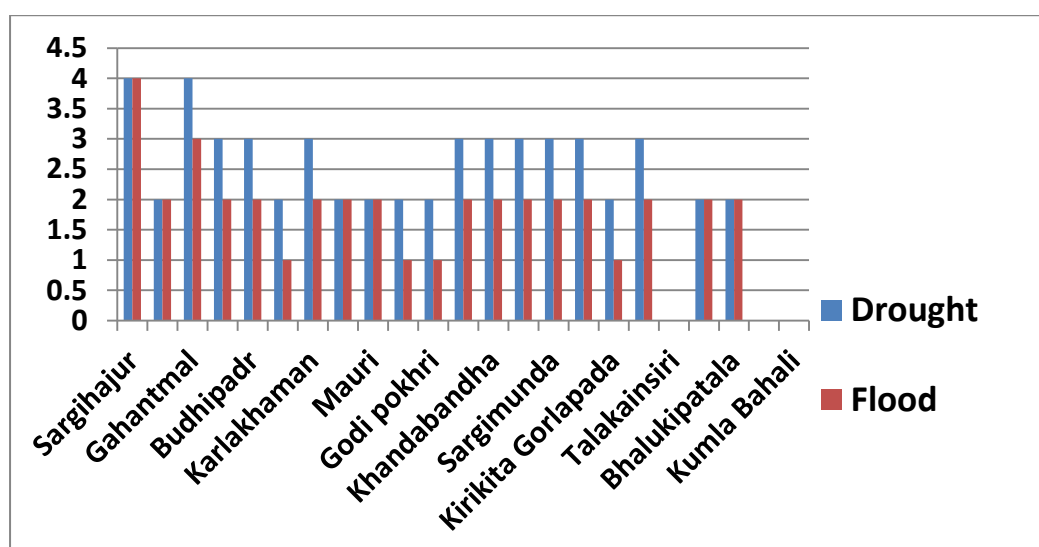


Figure 10. ICRG Villages – Odisha – Economic Prosperity (as measured by Agricultural Wages)

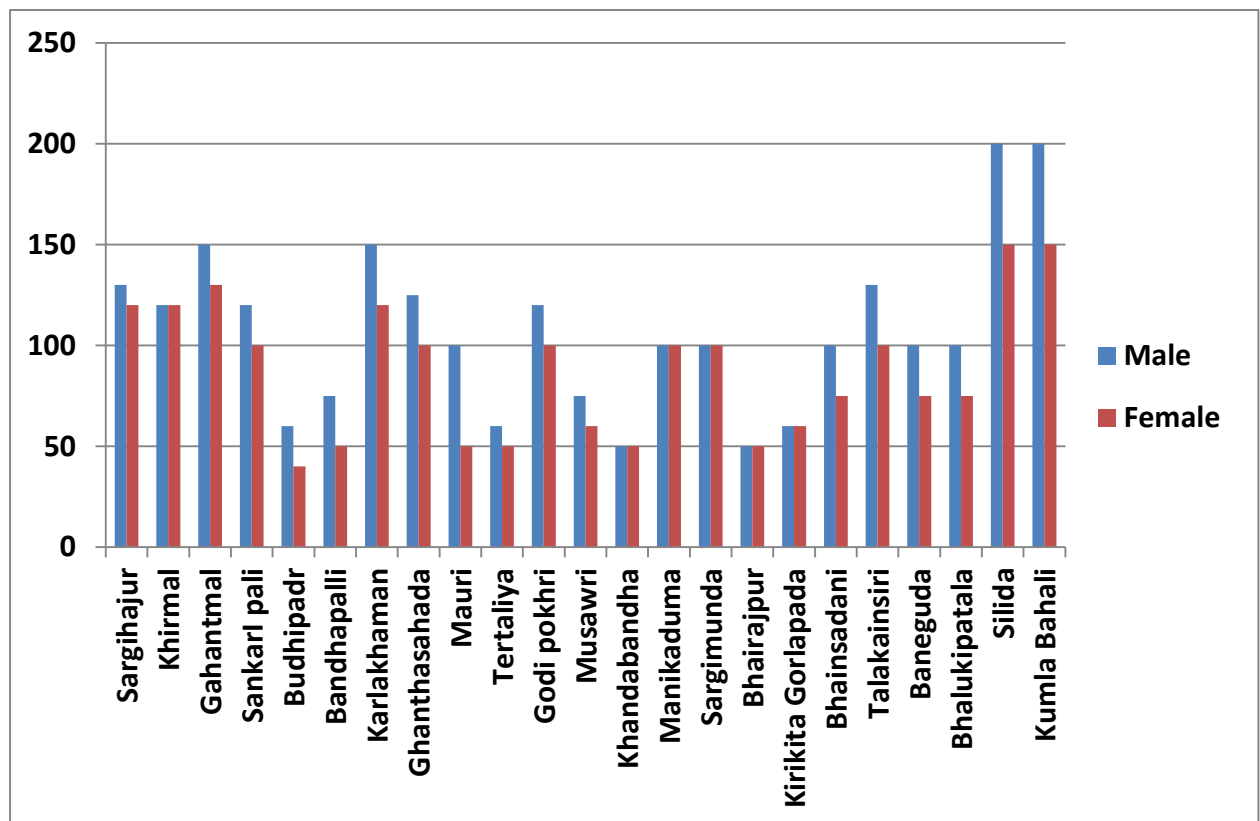
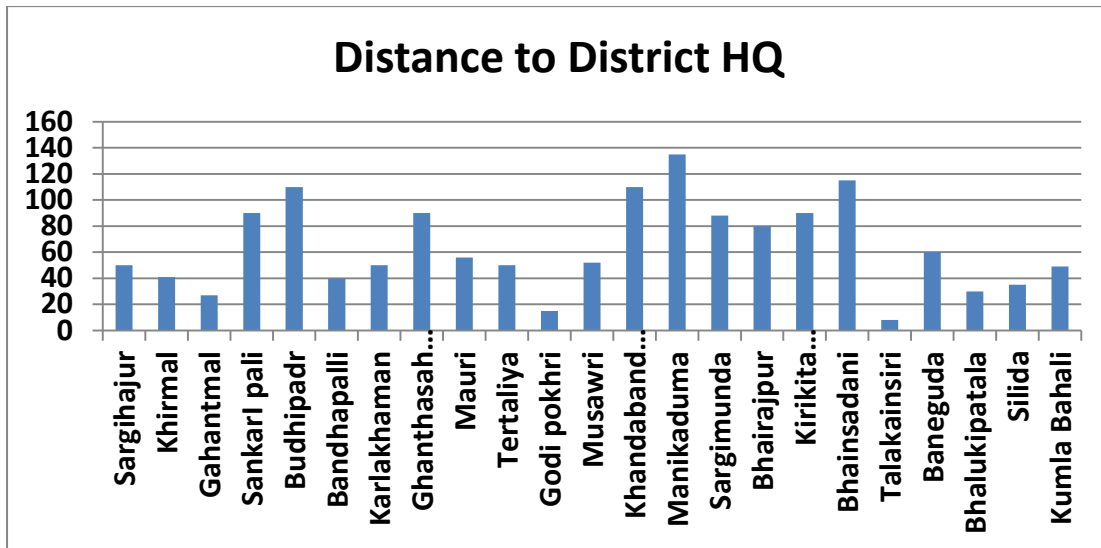


Figure 11. ICRG Villages – Odisha – Remoteness Indicator (Distance from District Headquarters, in kms.)



**Table 22. ICRG Villages – Odisha – Year NREGA was first implemented**

<b>Village</b>	<b>Year</b>
Sargihajur	2013
Khirmal	2006
Gahantmal	2008
Sankari pali	2006
Budhipadr	2007
Bandhapalli	2006
Karlakhaman	2013
Ghanthasahada	2007
Mauri	2010
Tertaliya	2007
Godi pokhri	2005
Musawri	2005
Khandabandha	2007
Manikaduma	2009
Sargimunda	2006
Bhairajpur	2007
Kirikita Gorlapada	2006
Bhainsadani	2006
Talakainsiri	2009
Baneguda	2007
Bhalukipatala	2007
Silida	2005
Kumla Bahali	2005

Table 23. ICRG Villages – Odisha – NREGA performance

Village	Per cent of households completing 100 days	NREGS days per household	NREGS days worked by women in total NREGS days (per cent)
Sargihajur	4	37	70
Khirmal	0	68	60
Gahantmal	NA	NA	NA
Sankarl pali	8	29	71
Budhipadr	4	12	60
Bandhapalli	3	25	58
Karlakhaman	14	95	1
Ghanthasahada	7	43	65
Mauri	9	43	53
Tertaliya	2	20	55
Godi pokhri	8	80	63
Musawri	1	56	59
Khandabandha	4	36	66
Manikaduma	20	163	62
Sargimunda	9	54	15
Bhairajpur	28	115	77
Kirikita Gorlapada	12	47	69
Bhainsadani	16	30	56
Talakainsiri	0	19	56
Baneguda	8	59	41
Bhalukipatala	NA	NA	NA
Silida	4	29	71
Kumla Bahali	13	1	36

Table 24. ICRG Villages – Chhattisgarh – Type of ICRG Work

Village	Type of ICRG work
Sargihajur	No work available as yet
Khirmal	No work available as yet
Gahantmal	No work available as yet
Sankarl pali	No work started here; in process
Budhipadr	Started from from August 2017
Bandhapalli	Water harvesting structure (WHS),Renovation
Karлакhaman	Tank renovation
Ghanthasahada	No work available as yet
Mauri	WHS
Tertaliya	No work available as yet
Godi pokhri	Land development, Dug well
Musawri	Land development
Khandabandha	Land development, farm pond
Manikaduma	Rainwater harvesting, pond,
Sargimunda	Pond
Bhairajpur	WHS, Canal, LBCD, guardwall plantation
Kirikita Gorlapada	WHS, vegetative bonding.
Bhainsadani	No work available as yet
Talakainsiri	Land Development, irrigation structure in process
Baneguda	Land development, farm pond,, Cross dam, Plantation,
Bhalukipatala	Rainwater harvesting, Field bounding,
Silida	No work available as yet
Kumla Bahali	Land development, Field bounding



Table 25. ICRG Villages – Odisha – Line Departments involved in Convergence

Village	Line Departments involved in Convergence		
Sargihajur	PRI department; Agriculture department; Forest department Water shed department	Horticulture department	
Khirmal	PRI department; Agriculture department	horticulture department; forest department	
Gahantmal	Agriculture department, horticulture department, forest department	PRI department ; Soil Conservation Department	
Sankarl pali	PRI department	Soil Conservation department	horticulture department, forest department, Agriculture department
Budhipadr	Agriculture department, horticulture department, forest department	PRI department, Irrigation department	
Bandhapalli	PRI department	Agriculture department; fishery	Horticulture department, Odisha Livelihood Mission, Forest Department
Karlakhaman	Panchayati raj Department	Forest department (Catchment area plantation)	Horticulture department (individual land)
Ghanthasahada	Panchayati Raj Institution department	Agriculture department	Horticulture department, Forest department
Mauri	Panchayati Raj Institution department, MGNREGA	Agriculture Department	Horticulture Department, Forest Department
Tertaliya	Panchayati Raj Institution department	Fishery department	Horticulture, Convergence NABARD
Godi pokhri	Panchayati Raj Institution department	Agriculture Department	Horticultre Department, Krishi Vigyan Kendras
Musawri	Panchayati Raj Institution Department	Horticulture Department, Fishery Department, Agriculture	Block Office
Khandabandha	Panchayati Raj Institution Department	Forest department, Agriculture, Horticulture Department	Block Office
Manikaduma	Panchayati Raj Institution Department	Agriculture department	Horticulture Department, ITDA,
Sargimunda	Panchayati Raj Institution Department, Gram Panchayat	Agriculture department, Horticulture department (mango tree plantation)	Financial System
Bhairajpur	Gram Panchayat, CPR department	Block office	Agriculture Department, Horticulture department, Fishery department, Forest department, watershed
Kirikita Gorlapada	Panchayati raj Department	Block office	Agriculture department, Forest department, Horticulture department
Bhainsadani	Panchayati Raj Institution Department	Forest department, Catchment Area, Horticulture Department	Agriculture Department
Talakainsiri	Panchayati raj Department	Agriculture department	Horticulture Department
Baneguda	Panchayati Raj institution Department	Agriculture Department, Horticulture department	ITDA
Bhalukipatala	Panchayati Raj Institution department	Agriculture Department	Horticulture department, Odisha Livelihood Mission,
Silida	Panchayati Raj Institution department	Horticulture department	Agriculture Department, Odisha Livelihood Mission
Kumla Bahali	Panchayati Raj Institution department	Agriculture Department, Horticulture department	Forest Department

**Table 26. ICRG Villages – Odisha – Type of Convergence and Contribution from Line Departments and ICRG**

Village	What is the nature of the convergence?	What specific support will each line department provide to the ICRG work?	What specific support did ICRG staff provide for the project?
Sargihajur	financial help through the government department	meeting in the village	Training for PRI members about saving water
Khirmal	Financial help	Awareness program	Training program for PRI members
Gahantmal	Provide facilities for agricultural training	attend meetings,	Training and awareness program
Sankarl pali	Technical help	Training, meeting, awareness program	Training Program for PRI members
Budhipadr	NA	Awareness program in village and training of PRI members in block and Gram Pranchayat	Agricultural training
Bandhapalli	NA	Provides village meeting	Only Awareness programs are provided. No technical support
Karlakhaman	Forest Department , horticulture, agriculture, Revenue department (forest)	Community mobilisation, Information	field preparation
Ghanthasahada	Agriculture department provides training in for new technooogy for cultivation; Horticulture Department in plantation	Provide village meeting	Panchayati Raj Institution members training
Mauri	Agricultural department provide seeds and advanced training for cultivation	Conduct meetings in the village	No training has been provided
Tertaliya	farm pond, seeds by agriculture department, technical help	Technical help	technical help, Awareness program, community mobilization
Godi pokhri	Training for Agriculture	Awareness about work under MGNREGA	Field preparation
Musawri	Technical help, Seeds from agriculture department and horticulture department	Technical help, village meeting, information and mobilization	Awareness, Climate change, Horticulture
Khandabandha	Seeds from Agriculture department, Plantation for forest, Horticulture department	Community mobilization	Field Preparation
Manikaduma	provides seeds	Training, meeting	Training only for Panchayati Raj Institution Members
Sargimunda	training, plantation, seeds	Training	Horticultutre, Climate change
Bhairajpur	Technical help, Horticulture, Agriculture, Revenue department, forest department	Training, meeting, awareness program community mobilization, information	Training on climate change
Kirikita Gorlapada	Technical help, Plantation (Forest Department) and Horticulture Department, Seeds from Agriculture Department	Meetings, trainings, Awareness programs, Information	Climate change, Field prepartation
Bhainsadani	Forest Department, Plantation, Agricultural seeds, horticulture, pisciculture	Community mobilisation, Information	field preparation
Talakainsiri	Agriculture, Horticulture, Forest	Conduct meetings in the village	Training for Panchayati Raj Institution Members
Baneguda	Seeds for agriculture	Community Mobilisation	Training
Bhalukipatala	Plantation by forest department, Seeds from Agriculture department	Commuity Mobilisation and informantion	Conducts meetings in the village
Silida	Agriculture, Fishery	Meetings	Panchayati Raj Institution training in block
Kumla Bahali	Seeds from Agriculture, Plantation for Forest department	Training program	field preparation and techinques

## V. V. Challenges to Convergence

This section is based on a set of 40 interviews conducted in person by the author in the state of Bihar and Odisha in May 2017, and Chhattisgarh in December 2017, along with telephonic interviews conducted in February-March 2018 in the states of Chhattisgarh and Odisha. The key informants were a) block development officers, CEO Zilla Parishads and other block and district level officials (PD DRDA, APO); b) NREGS functionaries – Gram Rozgar Sevaks, Junior and Senior Engineers; and c) ICRG technical staff and ICRG district coordinators.

One common finding from the key informant interviews is that convergence is seen as a crucial input to NREGA's asset creation function, especially around Natural Resource Management (NRM) assets. Without the important assistance that line departments can provide to NREGA officials in providing both technical support and financial resources, the type of assets that are durable and at the same time, livelihood enhancing, are unlikely to be created. This is especially in the light of the 60:40 rule in NREGA, where the materials component cannot exceed 40 per cent of total costs. Under the aegis of convergence, it is possible for NREGA projects to be undertaken, where critical inputs needed for the projects to be successful can be obtained from departments such as Fisheries, Horticulture and Forest that may have otherwise counted as material costs and exceeded the 40:60 rule. One example of this was the provision of fish seeds in a pond built under the NREGA program in Chattisgarh that was visited during the field trip in December 2017, where the fish would be reared and sold by the villagers later. This would not have been possible without the involvement of the Fisheries department. Similarly, a pipe constructed to take water from a river upstream for drinking and cooking water for a village which was visited in Odisha would not have been possible without the material costs of the pipe being provided by the Agricultural department. In both cases, the projects were planned by the Gram Panchayat in consultation with the line department representatives, and executed with the technical assistance and resources provided by specific line departments.

However, in the interviews conducted, it was also clear that successful convergence was only possible when there was close coordination between the Gram Panchayat, the NREGS project functionaries and line department officials. In the most successful cases, this occurred in weekly or fortnightly meetings called by the Block Development Officer or the CEO Zilla Parishad. Here, a senior level bureaucrat took the initiative to call the meetings and made sure all the relevant functionaries attended. Plans for convergence were developed in one of the meetings and then followed up subsequently. On the other hand, where there was no such coordination, convergence

either did not occur or was not successful. Therefore, leadership at the local level was crucial for the success of convergence.

There was also a risk that convergence be driven by local bureaucrats and not be “owned” by the local government officials. This then contradicted one central tenet of the NREG – the participatory nature of the program, where the conception and implementation of NREGA projects would be driven by local government officials, and be participatory in nature. There was then a trade-off between bottom up local government accountability and top down bureaucratic involvement. In the best cases, this trade-off was managed well, with the right balance between accountability and efficiency. But there were many cases where local government did not have a strong voice and convergence essentially became a mechanism for line departments to spend their budgets and where their interest in convergence was primarily driven by the need to supplement their resources with the costs of labour being provided by the NREGA.

#### **VI. Conclusions (to be expanded)**

An important feature of NREGA implementation in recent years has been the emphasis on convergence of the NREGA with the resources and technical support of other programmes conducted by the Ministry of Rural Development as well as other line departments. This paper has three objectives. Firstly, we assess the overall progress with convergence across Indian states, using available secondary data. Secondly, we utilise a rich village level primary data set that was collected for the purpose of the paper, to assess convergence patterns in a sample of ICRG villages. Finally, we provide a discussion of the challenges around convergence, based on key informant interviews conducted in Bihar, Chhattisgarh and Odisha. Overall, we see clear differences in rates of progress on convergence across work category and across states. This is evident whether one uses total expenditures under convergence, proportion of works under convergence or contribution from line departments. We also see clear evidence of convergence occurring in ICRG villages, where several line departments have been involved in convergence. However, we see less evidence of convergence in Odisha, and very little in Bihar. Our key informant interviews suggest that the main constraint for convergence is the difficulty of coordination across line departments. Where it has occurred successfully, it has been due to local leadership originating from the district and block officials, with the assistance of ICRG personnel.

## **APPENDIX A: ICRG - UNIVERSITY OF MANCHESTER – VILLAGE QUESTIONNAIRE**

## I. BACKGROUND AND VILLAGE INFORMATION

I.1: Interview Date

I.2: Interviewer Name

I.3: State

I.4: District

I.5: Block

I.6: Gram Panchayat

I.7: Village

I.7.1: Is this an ICRG village? Yes=1, No=0

I.8: Name of Pradhan

I.9: Phone number of Pradhan

I.10: Name and Designation of Other Key Person

I.11: Phone Number of Other Key Person

I.12: Number of Hamlets

I.13: Number of Households

I.14: Population of Village

i.15: Caste Composition (per cent of households)(as per Census data or village records)

Caste Name	Percentage
Brahmin	
Other Forward Caste (not Brahmin)	
OBC	
SC	
ST	
Others (including Muslim and Christian)	

I.16: Religious Composition (per cent of households)

Caste Name	Percentage
Hindu	
Muslim	
Christian	
Others	

i.17: Land Holdings (from village records)

Caste Name	Percentage of Total Agricultural Land in Village
Brahmin	
Other Forward Caste (not Brahmin)	
OBC	
SC	
ST	
Others (including Muslim and Christian)	
Total Agricultural Land (in bighas)	

I.18: If there is an available measure of the groundwater level in the village, please state the latest measure, date of latest measure and measurement method

Specify: \_\_\_\_\_

**I.19: Climactic Events:**

I.19.1 Did the Village experience the following in the past 4 years? (Yes=1, No=0)

Episode	2016-17	2015-16	2014-15	2013-14
Drought				
Flooding				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
I.19.2	<b>Severity of Flooding:</b> Do you think flooding in the village is severe, moderate, minor or non-existent?	Severe ..... 1 Moderate ..... 2 Minor ..... 3 Non-existent ..... 4	
I.19.2	<b>Severity of drought:</b> Do you think drought in the village is severe, moderate, minor or non-existent?	Severe ..... 1 Moderate ..... 2 Minor ..... 3 Non-existent ..... 4	
I.19.3	<b>Severity of monsoon rainfall variability:</b> Do you think monsoon rainfall variability in the village is severe, moderate, minor or non-existent?	Severe ..... 1 Moderate ..... 2 Minor ..... 3 Non-existent ..... 4	
I.19.4	<b>Severity of rainfall intensity:</b> Do you think rainfall intensity in the village is severe, moderate, minor or non-existent?	Severe ..... 1 Moderate ..... 2 Minor ..... 3 Non-existent ..... 4	
I.19.5	<b>Severity of waterlogging:</b> Do you think waterlogging in this village is severe, moderate, minor or non-existent?	Severe ..... 1 Moderate ..... 2 Minor ..... 3 Non-existent ..... 4	
I.19.6	<b>Severity of Heat stress:</b> Do you think heat stress (i.e. high temperature) in the village is severe, moderate, minor or non-existent?	Severe ..... 1 Moderate ..... 2 Minor ..... 3 Non-existent ..... 4	
I.19.7	<b>Source of Drinking Water:</b> Where do residents of the village get their drinking water from?	Tubewell ..... 1 Tap ..... 2 Well ..... 3 Pond/ditch ..... 4 Canal/River ..... 5 Other ..... 9 <b>(Please specify)</b>	
I.19.8	<b>Source of other Used Water:</b> Where do residents of the village get other water from?	Tubewell ..... 1 Tap ..... 2 Well ..... 3	

		Pond/ditch ..... 4	
		Canal/River ..... 5	
		Other ..... 9	
<b>(Please specify)</b>			

I.20: Do different castes/social groups stay together in same hamlet/mohalla/locality or do they stay separately?

Together =1, Separate = 0

I.21: If answer to I.20 is 0, does the village has separate mohalla/hamlet for SC, ST or both?

Separate for SC=1, Separate for ST=2, Both=3

**I.22: Composition of Village Administration**

Position	Caste (Brahmin=1, Other Forward Caste=2, OBC=3, SC=4, ST=4, Others=5)	Gender (Male=1, Female=0)	Reserved Seat? (not reserved=0, reserved for women-1, reserved for SC/ST=2)
Gram Rozgar Sevak/ PRS			
Pradhan			
MLA			
MP			

i.23:Employment

What is the normal average wage rate per day  
for casual agricultural labourers?  
(In Rupees)

Not Applicable=999

	Kharif						Rabi											
	Men			Women			Children<15			Men			Women			Children<15		
5.1. Sowing/ Transplanting			V1a			V1b			V1c			V1d			V1e			V1f
5.2. Harvesting			V2a			V2b			V2c			V2d			V2e			V2f
5.3. Other agricultural work (lean seasons)			V3a			V3b			V3c			V3d			V3e			V3f

What is the normal average wage rate per day  
for casual non-agricultural laborers in....  
(In Rupees)

Not Applicable=999

	Men			Women			Children<15		
5.4. Domestic Service?			V4a			V4b			V4c
5.5. Unskilled labour?			V5a			V5b			V5c
5.6. Skilled construction labour such as carpenters / masons etc.?			V6a			V6b			V6c

I.24: How far is the nearest town (in kilometres)?

I.25: How far is the district headquarters (in kilometres)?

I.16: Does the village have electricity?

Yes, all the time=1, Some of the time=2, No electricity=3

I.17: Is the village accessible by road?

Pucca road=1, kutcha road=2, footpath only=3

I.18: How far in kilometres is the nearest pucca road?

\_\_\_ kilometres



## II. MGNREGA AND ICRG INTERVENTION

II.1: When was MNGREGA first implemented in the village?

II.2: How many active job card holders are there in the village?

II.3 How many household actively seeking MNREGA work in the last 4 years?

2016-17:      2015-16:      2014-15:      2013-14:

II.4: What is the daily wage rate for MNREGA work?

II.5: Is NREGA payment received on time on average or delayed?

On time=1, Delayed=2, sometimes on time, sometimes delayed=3

II.6: Number of households completed 100 days in the last 4 years?

2017:      2016:      2015:      2014:

II.7: Total NREGS person days in the last 4 years.

2016-17:      2015-16:      2014-15:      2013-14:

II.8: Total NREGS person days worked by women in last 4 years.

2016-17:      2015-16:      2014-15:      2013-14:

II.9: Total NREGS person days worked by SC/ST in last 4 years.

2016-17:      2015-16:      2014-15:      2013-14:

II.10: Total NREGS person days worked by disabled individuals in last 4 years.

2016-17:      2015-16:      2014-15:      2013-14:

II.11: Total NREGS Expenditures (materials plus labour costs) in the village in last 4 years.

2016-17:      2015-16:      2014-15:      2013-14:

II.12: Total NREGS Expenditures on NRM works (materials plus labour costs) in last 4 years.

2016-17:      2015-16:      2014-15:      2013-14:

II.13: What type of NREGA work has been done in the village in the last 4 years?

### Rank Three Activities

Road Construction = 1, Street Construction=2, Land Development=3, Ponds=4, Canals=5, Plantations=6, Others=7 – specify: \_\_\_\_\_

Rank:

Rank	Activity (use codes above)
1	
2	
3	

II.14: Which projects/works are currently ready to be implemented if workers demand employment?

Specify: \_\_\_\_\_

II.15: What percentage of the MGNERGA works that have been carried out in the village in the last 4 years are on public land?

\_\_\_\_\_ %

**ONLY FOR ICRG VILLAGES:**

II.16 What type of ICRG work has been implemented in the village?

Specify: \_\_\_\_\_

II.17 Is it ongoing or completed?

Ongoing=0, Completed=1

II.18 Which departments/line ministries are involved in the convergence?

Department 1:

Department 2:

Department 3:

II.19 What is the nature of the convergence?

Specify: \_\_\_\_\_

II.20. What specific support will each line department provide to the ICRG work?

Specific \_\_\_\_\_

II.21 What specific support did ICRG staff provide for the project?

Specify \_\_\_\_\_

II.22: What kind of ICRG training (materials covered, duration etc.) has been provided to technical assistants?

Specify: \_\_\_\_\_

II.23: What kind of ICRG awareness programs (materials covered, number of people targeted etc.) have been provided to villagers?

Specify: \_\_\_\_\_

### III. VILLAGE LIVELIHOOD ACTIVITIES AND AGRICULTURAL LAND USE

III.1: How much are the average prices for the following staple crops?

Crop	Rupees/kilos
Rice	
Wheat	
Maize	
Bajra	
Jowar	

III.2: What is the average price of the following grown animals? (in rupees)

Animal	Lowest Price	Highest Price
Cow		
Buffalo		
Poultry		
Goat/Sheep		
Pig		
Fish		

III.3: How far do women have to go to collect firewood?

\_\_\_ kilometres

III.4: How far do women have to go to collect drinking water?

\_\_\_ kilometres

III.5: Average number of hours taken to collect firewood per day

III.6: Average number of hours taken to collect drinking water per day

III.7: Average price of irrigated and unirrigated land (per hectare):

----Irrigated land      \_\_\_ Unirrigated land

III.8: Major Crops grown in the village

Crop Code	Crop Name	Area of Crop Grown (bigha)	Per cent of Sown Area	Season grown (rabi=1, kharif=2, both=3)

III.9: Agricultural Land Use

Percentage of Total Area in Village:

\_\_\_\_ Net Sown Area \_\_\_\_\_ Gross Irrigated Area \_\_\_\_\_ Net Irrigated Area

**END OF QUESTIONNAIRE**