MGNREGA Job
Sustainability and
Poverty in Sikkim

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MGNREGA JOB SUSTAINABILITY AND POVERTY IN SIKKIM

Marchang Reimeingam*

Abstract

MGNREGA rural developmental works undertaken since February 2006 in Sikkim have achieved a sustainable characteristic by adopting an environment friendly approach. A range of works on water, soil and land conservation have been taken up besides others on rural connectivity. However, employment sustainability under MGNREGA remains uncertain due to the nature of the scheme, which guarantees just 100 days of wage employment in a financial year to every rural household whose adult member volunteers for unskilled manual work. The scheme is not structured to provide full employment. Employment under the scheme has declined despite the increase in expenditure, which goes more towards material costs than labour. The scheme strengthens the economic well-being of rural households by supplementing their income with an assured minimum wage, resulting in poverty reduction. In rural Sikkim work participation level has increased mainly because of the marginal workers attracted to the scheme. It is envisaged to make MGNREGA a decent rural wage employment scheme by providing full-time jobs to sustain employment.

I. Introduction

The National Rural Employment Guarantee Act (NREGA) enacted in August 2005 and later renamed as Mahatma Gandhi NREGA (MGNREGA) in October 2009 is a rural development scheme. It aims to enhance the livelihood security of the rural poor by guaranteeing at least 100 days of wage¹ employment in a financial year to every rural household (HH) whose adult member volunteers for unskilled manual work. It aims at rural poverty alleviation. The "choice of works suggested in the Act addresses causes of chronic poverty like drought, deforestation and soil erosion, so that the process of employment generation is maintained on a sustainable basis" (Panda, Dutta and Prusty 2009: 2). The terms sustainable or sustainability merely imply the ability to continue to do something indefinitely (Marlow, Beale and Burn 2010). Sustainability is an "ability or capacity of something to be maintained or to sustain itself" (www.landlearnnsw.org.au 2014). However, the most widely acknowledged concept of sustainability or sustainable development entails development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations 1987: 15). Brown (2005: 36) opined that "sustainability can bring about a substantial improvement in productivity quality and cost". Mark (2006) emphasised that the "core concept of sustainability applies equally to employment policies and procedures. Incorporating sustainability into employment practices supports the cultural shift toward responsibly managing economic, environmental and social impacts". MGNREGA activities, which are non-profit governmental programmes, can be designed to promote social and economic goals as well as sustainable employment. According to Bourn (2007), sustainable employment means that an individual remains in work either by continuing in one job or by moving to other jobs. It also means work that provides opportunities to advance and earn more. Sustainable employment can alleviate poverty.

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MGNREGA is implemented as a Centrally Sponsored Scheme on a cost-sharing basis between the Centre and the States, as determined by the Act.² In Sikkim³, it was launched and implemented only in the North district on 2nd February 2006. It was later introduced in the South and East districts from 1st April 2007 and in the West district from 1st April 2008. Since then Sikkim is fully covered under the scheme. As it is demand driven, the scheme is successfully progressing as a catalyst of rural development in general and poverty reduction in particular by strengthening household incomes. The study is based on secondary data, such as those available from Ministry of Rural Development (MRD), National Sample Survey Organisation (NSSO), Registrar General of India (RGI) and Planning Commission, covering the period from the implementation of the scheme till recently in Sikkim. It also studies the profiles of MGNREGA beneficiaries using the unit level data of 68th Round of NSSO (2011-2012). Its objectives are to examine work and employment under MGNREGA and their sustainability, and also the linkages between MGNREGA employment and poverty. Section II gives a brief literature review pertaining to MGNREGA's working, employment, sustainability and poverty. Subsequent sections deal with the work and sustainability of MGNREGA, workers and sustainable employment, and MGNREGA as a poverty reduction programme in rural areas. Lastly, a few concluding remarks are made.

II. Literature Review

In India, people predominantly live in rural areas. Therefore, the rural economy continues to be the major source of employment and livelihood for the majority of the people. Employment has linkage with poverty especially in rural areas. Smith and Sender (1990: 1334) contended that "...there would be a systematic relationship between poverty and participation in wage labour, so that persons offering themselves as wage workers would be from the poorest household...." Sundaram (2007) explicitly showed how changes in employment affected poverty in India. Fuller employment of human resources is considered the most important and the best strategy for poverty reduction or its elimination (Sundaram and Krishnamurty 1978). Poverty is closely related to employment and occupational characteristics (Sen 1996). Employment should be guaranteed in agricultural as well as non-agricultural sectors for rural people in order to combat poverty. Bhalla and Hazell (2003) examined the possible strategies for increasing employment and significantly reducing poverty in rural as well as urban areas in India. Sinha (1981) asserts that there is a relationship between poverty and unemployment or underemployment. However, the relationship between unemployment and poverty is not clear-cut in India. For example, people in backward regions and underprivileged groups like Scheduled Castes (SC) and Scheduled Tribes (ST) are poor, despite some of them having very little underemployment. Dandekar (1986) says poverty is institutional in India, especially referring to SCs and STs. SCs and STs are not only poor but they also suffer from various social and economic impediments that need to be removed. The Constitution of India safeguards them by providing for reservation in employment. Nevertheless, institutional barriers have to be removed to correct the course of economic development in India. Similarly, protective measures and safeguards should be established for the rural people in general and rural females in particular in order to achieve inclusive growth and development.

It is crucial to liberate women from the bondage of traditional household activities and arrange for alternative employment opportunities such as MGNREGA work. Dreze and Sen (2002) remark that

women lack the freedom to do other things that goes with a high frequency of pregnancies and births. Family planning and education can enhance the status, well-being and voice of women. Socio-economic transformation and liberation of women will lead to greater involvement by them in socio-economic work (Emadi 1992).

MGNREGA had its beginnings when Maharashtra government formulated the Maharashtra Employment Guarantee Scheme (1972-73) and Maharashtra Employment Guarantee Act (1977) to provide wage employment to those who demanded employment. Its success story led to the enactment of MGNREGA, a wage employment programme, in 2005 to reinforce the commitment to livelihood security by providing 100 days of guaranteed wage employment in rural areas. It is implemented by the state governments with Central assistance. The scheme is mostly modelled on the Maharashtra Employment Guarantee Act (Hirway 2004).

It is targeted at those employed as casual manual labour. Its basic objective is to provide work for rural households. It acts as a source of wage income for landless labour and marginal farmers during the lean agricultural season. It also creates assets that raise land productivity. Mehrotra (2008) opined that the allocations for the scheme could well take an inverted-U trend i.e. the allocations to the scheme rises initially and then falls over time. The region/state's demand for work under the scheme depends on the nature of labour surplus or its deficit.

MRD (2012-13) highlights that MGNREGA provides a supplementary source of income, and raises the monthly per capita consumption expenditure of rural households, besides being a self-targeting, assets creation, employment and environmentally sustainable programme. Its participation rate among the SCs and STs exceeds their share in the total population. It reduces traditional gender wage discrimination, vulnerability of production system to climate variability and distress migration. It has a positive impact on the socio-economic status of women.

The works under MGNREGA mostly relate to water, soil and land (IRMA 2010; Tiwari *et al* 2011; www.nrega.nic.in (2014a). It gives priority to activities related to water conservation, water harvesting, ground water recharge, drought-proofing, flood protection, land development, afforestation and road connectivity. Most of these remain the main natural resources for agriculture and forest production. As mentioned in www.nrega.nic.in (2014a), the MGNREGA focuses on eco-restoration and sustainable livelihoods over time. It will increase land productivity and help the workers in moving from wage employment to sustainable employment. Almost 80 percent of MGNREGA works in India relate to soil and water conservation. MGNREGA works emphasise raising land productivity, recharging ground water and increasing water availability as part of conservation and other environment-related activities. Tiwari *et al* (2011: 41) say that the goal of NREGA activities has to be "conserving natural resources and enhancing environmental services^[5] to sustain food and livestock production, increasing the supply of fresh water for drinking, and increasing grass and forest product production". MGNREGA activities can facilitate and promote sustainability through functioning environmental services.

In Sikkim, MGNREGA was launched and implemented only in the North district in 2006. In the following year, it was started in the South and East districts. Later in 2008, it was implemented in all the four districts of the state. The wages, however, were not paid in time because of frequent delays in disbursement through bank or post office accounts or other means. Dheeraja, Siva and Rao (2010)

found that in Sikkim, all workers have opened accounts in banks or post offices; however, about half of them do not receive timely wages through their accounts. Despite such lacunae, Sikkim has received seven national awards in a row for exemplary work done under MGNREGA over the last four years.⁶ Through the scheme, poverty level is reduced by raising household incomes. Panda, Dutta and Prusty (2009) found that in Sikkim the scheme has the potential to promote sustainable development through worker participation. MGNREGA works have been linked up with the three elements of sustainable development, namely economic, social and environmental sustainability. Economic sustainability is reached through development of market places, tourist centres, and land productivity enhancement schemes. Social sustainability is made possible through worker participation and creation of social capital. Similarly, environmental sustainability is attained through orange plant cultivation and land terracing.

III. MGNREGA Works and Sustainability

In Sikkim the works under MGNREGA, following the country's pattern, mostly relate to water conservation, soil development and land conservation. Since the implementation of the programme, MGNREGA works in the state have corroborated the goals⁷ of the scheme. Works include water conservation and water harvesting like digging of new tanks/ponds, percolation tanks, small check dams etc; drought proofing such as afforestation and tree plantation and other activities; micro irrigation works like minor irrigation canals and other activities; provision of irrigation facility to land owned by Scheduled Castes and Scheduled Tribes, beneficiaries of land reforms and beneficiaries of Indira Awas Yojana etc; renovation of traditional water bodies such as de-silting of tanks/ponds, de-silting of old canals, de-silting of traditional open well etc; land development like plantation, land levelling and other activities; flood control and protection including drainage in water logged areas, construction & repair of embankment; rural connectivity; and any other activity as approved by MRD. Table 1 presents the distribution of completed works under the scheme in Sikkim. These works all have environmental sustainability as a goal, which simultaneously translates to economic development and sustainability.⁸

Table 1: Share (%) of Completed Work under MGNREGA, Sikkim.

Work	March 2007	March 2010	March 2012	January 2014
Water conservation and water harvesting	6.8	14.4	7.6	5.2
Drought proofing		52.5	12.8	6.8
Micro irrigation	21.4	4.2	2.6	6.1
Provision of irrigation facility to land development				
Renovation of traditional water bodies	1.0	0.4	0.3	
Land development	1.0	8.7	64.2	66.5
Flood control	53.4	6.8	5.3	4.2
Rural connectivity	16.5	13.1	7.1	11.2
Any other activity approved by MRD			0.1	
Total (Number)	103	1372	1666	427

Note: -- not available.

Source: Author's calculation based on data up to 2012 from http://mgnregasikkim.org and 2014 from http://nrega.nic.in (15.01.2014).

In the beginning, till March 2007, most of the completed works were flood control measures, accounting for slightly over 53 percent, followed by micro irrigation, rural connectivity, water conservation and water harvesting. Later in 2010 drought proofing work became the major concern of the scheme. In 2012, the scheme was devoted mostly to land development with plantation, land leveling and other land development activities getting a share of 64 percent. Even now land development continues to be the main activity, accounting for over 66 percent of the total number of 427 works completed under the scheme in Sikkim. Most of the ongoing (including suspended) works also relate to land development and rural connectivity. Over the years, there has been a shift in the nature of activities from predominantly flood control, micro irrigation and rural connectivity to drought proofing and land development, which indicates that there has been a remarkable creation of assets for further development. These activities are notably sustainable works; for example, they not only retain but also improve agricultural productivity and soil conservation. These improvements are made possible through prioritised developmental activities and securing of livelihood opportunities, and through proper coordination between the state and the centre as well as implementers and beneficiaries. All the above mentioned works are relevant for long-term livelihood security, strengthening of source of income and well-being of the people living in and around the work site. For example, the improvement in rural road connectivity under the scheme enhances transportation efficiency and market accessibility for the marketable surplus products of rural areas. Such developmental works are made possible with the participation of labourers, who also earn wages in return, and which also improves their economic opportunities and thus reduces their poverty level. Nevertheless, the sustainability of employment under the scheme continues to remain uncertain.

IV. MGNREGA Workers, Sustainable Employment and Poverty

Table 2 gives details of employment generated by a public work taken up under MGNREGA in Sikkim. The work was initially implemented only in the North district of the state in 2006/07. By the end of financial year 2006/07 as many as 4,498 households were issued job cards, of which 96 percent were STs and the rest SCs and others. In the beginning of the financial year in 2007, the scheme was introduced in two more districts (South and East) resulting in a significant increase in the number of job cards issuance to households which touched a figure of 30,907. Eventually, there was a drastic change in the share of job card holders among the various social groups. In 2007/08, 39 percent of the households having job cards belonged to the STs, seven percent to the SCs while the major share of 54 percent went to the other social groups. The cumulative number of households which were issued job cards increased to 87,051 in 2013/14. Meanwhile, the census of India recorded 129,006 households in Sikkim. This means that the share of households which were issued job cards is about 67 percent in 2013/14 (using the 2011 census household figure). From 2007/08 onwards the distribution of households which had received a job card among the various social groups remains similar. For instance, in Sikkim, in 2013/14, about 37 percent of the cards were issued to the STs, five percent to the SCs and the rest 58 percent to the other social groups. Compare this with the population distribution recorded in the 2011 census, which showed 33.8 percent belonged to the STs, 4.6 percent

to the SCs and the remaining 61.6 percent to the Others group. This shows that in Sikkim, job cards were distributed almost in proportion to the share of population of various social groups.

Table 2: Employment Generated under MGNREGA, Sikkim.

Items	Social Group	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14
	SCs	1.3	7.0	6.5	6.6	6.4	5.1	5.1	5.1
Share (%) of cumulative No. of	STs	96.2	38.7	37.3	41.1	41.1	36.7	36.6	36.6
HH issued job cards (JC) in total	Others	2.5	54.3	56.3	52.3	52.5	58.3	58.3	58.3
	Total (No.)	4498	30907	77112	70050	73575	79196	81914	87051
Cumulative No. of Hidemanded employments		4179	21773	52554	54156	56401	55765	55596	59052
DE%JC		92.9	70.5	68.2	77.3	76.7	70.4	67.9	67.8
Cumulative No. of Hi- employment (PE)	H provided	4107	19787	52006	54156	56401	54464	54536	50613
PE%DE		98.3	90.9	99.0	100.0	100.0	97.7	98.1	85.7
PE%JC	PE%JC		64.0	67.4	77.3	76.7	68.8	66.6	58.1
	SCs	0.8	7.1	5.7	9.7	12.0	4.6	4.5	4.3
Share (%) of	STs	97.9	42.6	44.1	42.6	39.9	35.9	37.5	36.7
cumulative person- days generated	Others	1.2	50.4	50.2	47.8	48.1	59.5	58.0	59.0
(PDG) in total	Women	25.1	36.7	37.6	51.2	46.7	44.7	44.6	46.0
	Total (lakh)	2.4	8.6	26.3	43.3	48.1	32.8	33.2	20.3
Cumulative No. of Hi completed 100 days	H which	222	2006	2863	12633	25695	8731	9233	1106
HH which completed 100 days % to HH provided job		5.4	10.1	5.5	23.3	45.6	16.0	16.9	2.2
PDG%PE (Average number of days worked per HH)		59	43	51	80	85	60	61	40
No. of HH which are beneficiaries of land reform/IAY		5	91	1052	235	307	92	89	109
No. of disabled benefindividuals	ficiary	0	1	45	164	5	91	79	80

Notes: Figure of 2013-14 is up to December 2013. NA – not available. Figures of 2006/07 include only North district, 2007/08 covers North, South and East districts; however, afterwards all four districts including West district are included in Sikkim.

Sources: Author's calculation based on data up to 2007/08 from http://mgnregasikkim.org/ and 2008/09 onwards from NREGA Implementation Status Report of Sikkim (22.01.2014>http://nrega.nic.in/).

Table 3: Share (%) of MGNREG Work Classified by Social Groups, Sikkim/India, 2009/10

State/ Country	HH Social having Groups job		HH who got work					Sought but did not get	Did not seek	AII	Average No. of days
	-	card	<20	20-50	50-100	>100	AII	work	work		worked*
	ST	55.2	6.9	7.9	37.4	0.0	52.2	0.8	47.0	100.0	66
	SC	30.9	5.4	2.1	23.4	0.0	30.9	2.0	67.1	100.0	53
Sikkim	OBC	48.3	6.1	14.8	26.0	0.0	46.9	2.9	50.2	100.0	54
	Others	2.3	2.3	0.0	0.0	0.0	2.3	0.0	97.7	100.0	15
	All	45.8	6.0	10.3	27.7	0.0	44.1	1.9	54.0	100.0	59
	ST	54.1	14.3	12.9	12.3	0.3	39.8	19.7	36.3	100.0	42
	SC	45.0	14.8	10.7	7.1	0.3	32.9	22.2	42.9	100.0	35
India	OBC	30.6	7.5	6.7	6.6	0.2	20.9	18.3	58.3	100.0	42
	Others	24.0	8.9	4.1	2.0	0.1	15.1	18.1	63.8	100.0	27
	All	34.7	10.2	7.6	6.2	0.2	24.2	19.3	53.8	100.0	37

Notes: *Average No. of days worked in MGNREG by households who got MGNREG works.

Source: NSSO (Report No.543).

Table 3 presents the distribution of MGNREGA workers classified by different social groups in Sikkim according to NSSO. In 2009/10, about 46 percent of the rural households had job cards in Sikkim, against 35 percent in India. Strikingly, more than half of the entire ST households both in the state and in India are job card holders. A very small proportion of about two percent of the entire households sought work but did not get it in Sikkim, against 19 percent in India, indicating smooth and fast delivery of employment resulting in low unemployment rates.

In Sikkim the share of households that demanded MGNREGA employment from among those with job cards has substantially declined from 93 percent in 2006/07 to close to 68 percent at present, as presented in Table 2, indicating that many of those who applied for a job are neither desperate for employment because they may have other means of livelihood, e.g. family support, nor interested in taking up manual work. This means that a significant share of them just got job cards issued without real need and that they are not keen to work. However, interestingly, over 98 percent of households were provided with employment among those who demanded employment in the initial year of launch of the scheme. Later, in 2009/10 and the next year, all households who demanded employment got it. In the subsequent periods, some of them did not get employment even if they demanded it. For example, at present only 86 percent of those who demand a job get it. The situation worsens when the share of households offered employment from among the total number of households issued with job cards is observed. At present only 58 percent of those who hold a job card get employment, a figure much lower than the earlier periods. NSSO also recorded that some households did not get work even if

they had a job card in Sikkim, but this kind of situation was worse at the national level (see Table 3). Of the 45.8 percent rural households which had job cards, 44.1 percent got a job in Sikkim. That means close to two percent of the rural households with the card did not get a job. However, the proportion of those who did not get any work among job card holders was larger at the national level (about 10 percentage points). It indicates that the state is not fulfilling its responsibility of providing MGNREGA jobs, a situation that makes this kind of employment unsustainable. This may also mean that some job cards are issued without verifying the eligibility criteria of the beneficiaries in order to enlarge the state's budget for the scheme. It also shows that some job card holders do not want to work in manual activities while some others get employment with higher wages as compared to MGNREGA, and that the government is unable to identify and provide adequate avenues for MGNREGA work. It indicates that MGNREGA activities are not uniformly distributed or available throughout the year exacerbating the employment situation.

In the meantime, the 68th (2011-12) NSSO (unit level) data result⁹ shows that rural households accounted for 76.5 percent of the 135,264 households of Sikkim. As much as 63 percent of the rural households have MGNREGA job cards. Those with a job card are mostly self-employed agricultural households (79.1 percent) followed by regular wage or salary income households (10.7 percent), self-employed in non-agriculture (7.4 percent), casual labour in non-agriculture (2.7 percent), others (0.1 percent) and casual labour in agriculture with a negligible share (0.03 percent). As much as 53.3 percent of the households with a job card belong to OBC, 40.2 percent to ST and 6.5 percent to SC. In terms of religion, 59.9 percent of the households with the MGNREGA job card follow Hinduism, 37.8 percent Buddhism and two percent Christianity. A negligible share of 0.1 percent was from Sikh households.

Among the job card holders as much as 51 percent were males and the rest 49 percent females. Among them as much as 84 percent got MGNREGA work; however, 7.6 percent of them sought work but did not get it and about eight percent did not seek work. This implies that most of the job card holders benefited from the scheme. Among those who got MGNREGA work, about 52 percent were males and 48 percent females. The majority of job card holders were literate. Among those who got MGNREGA work, as much as 78.1 percent were literate and the rest 21.9 percent illiterate. They were mostly currently married persons (80.1 percent), followed by never married persons (13.6 percent), widowed (4.6 percent) and divorced persons (1.7 percent).

The overall expenditure under the scheme in the state, as shown in Table 4, has significantly improved over the years. The per capita expenditure on labour has almost consistently increased despite a systematic decline in the share of labour expenditure. The systematic increase of expenditure on materials and its decrease on labour could partially explain the decline of MGNREGA employment.

Table 4: Financial Progress under MGNREGA, Sikkim.

Financial	Central Total			Expenditure on (Rs. in lakhs)			Per capita	Per capita central
Financial Year	release (Rs. in lakhs)	available fund (Rs. in lakhs)	Labour	Material	Labour + Material	provided job (Nos.)	expenditure on labour (Rs.)#	release fund (Rs.) [@]
2006-07	452	457	211 (80.5)	51 (19.5)	262	4107	5138	10993
2007-08	565	1432	808 (69.9)	348 (30.1)	1156	19787	4083	2854
2008-09	4097	4811	2415 (59.2)	1661 (40.8)	4076	52006	4644	7878
2009-10	8857	10256	4129 (68.6)	1892 (31.4)	6021	54156	7624	16355
2010-11	4449	8348	4813 (61.0)	3080 (39.0)	7893	56401	8534	7887
2011-12*	10080	10309	2844 (66.7)	1423 (33.3)	4267	54464	5222	18507
2012-13**	5327	6086	4604 (63.3)	2673 (36.7)	7277	54536	8442	9768
2013-14	10684		5831 (60.3)	3838 (39.7)	9669	50613	11521	21110

Notes: Figures in parentheses are in percent; # Expenditure on labour divided by number of households (HH) having a job card; [@] Central fund divided by number of households (HH) having a job card; *as per MIS (Provisional); and ** as per MIS (reported till 12/02/2013). -- not available.

Source: Author's calculation based on data from http://nrega.nic.in

The MGNREGA wage rate has been revised upward from time to time in accordance with the change in inflationary rate of the Consumer Price Index for Agricultural Labour for all the states and Union Territories. The revised wage rate and Index Number of wages in Sikkim, a measure of the magnitude of economic change over time, is presented in Table 5. For Sikkim, the wage rate increased by about 59 percent in 2013 from the base period (2005/06). The wage rates for males are always higher than those for females for regular wage or salaried employment or for any type of casual work including public work under MGNREGA at the all-India level. Remarkably, in Sikkim there is no wage differential between genders under the scheme although there is for other activities. For example, Rs.100 was paid for MGNREGA workers (15-59 years of age) as wages per day for both males and females in 2009/10 (Table 6). The non-discriminatory wage between genders encourages females to actively participate in the work.

Table 5: Minimum Wage Rate for MGNREGA Workers (Rs./Day) and Index Number of Wage, Sikkim.

Year	Minimum wage rate	Index Number (2005/06=100)
2005/06	85	100.0
01-Jan-09	100	117.6
01-Jan-11	118	138.8
01-Apr-12	124	145.9
01-Apr-13	135	158.8

Sources: Author's calculation based on data from The Gazette of India (2013) and http://nrega.nic.in/.

Table 6: Average Wage/Salary Earnings (Rs.) Per Day Received by Different Employees (15-59 Years), Sikkim/India.

			Regular	Casual Workers				
State/ Country	Year	Gender wage/salaried employees*		Public work other than MGNREGA (41)	Public work MGNREGA (42)	Other than public work (51)		
0000/40	2009/10	Male	366.0	107.8	100.0	125.3		
Cildina	2009/10	Female	313.2	99.1	100.0	84.2		
Sikkim	2004/05	Male	203.4	89.3		89.2		
		Female	207.3	89.3		74.2		
	2000/10	Male	249.2	98.3	90.9	101.5		
La alla	2009/10	2009/10	Female	155.9	86.1	87.2	68.9	
India	2004/05	Male	144.9	65.3		55.0		
		Female	85.5	49.2		34.9		

Notes: *Activity status 31 (worked as regular salaried/ wage employee), 71 (had regular salaried/wage employment but did not work due to sickness) and 72 (had regular salaried/wage employment but did not work due to other reasons). -- not available.

Source: NSSO (Report No. 515 and 537).

Sikkim has not experienced full 100 days of guaranteed employment under the scheme for each rural household which wanted to engage in manual work. This was because the average number of days worked per household, i.e. the ratio of number of person-days generated and households provided with employment, was below 100 days. On average, 85 days of employment, the highest in the history of MGNREGA in Sikkim, was delivered to each household employed under the scheme in 2010/11. It has gradually declined to 40 days at present. NSSO also gives a similar figure of 59 days per worker in a year during 2009/10 (Table 3). This is possibly due to the government's inability to generate adequate rural unskilled manual work. It also indicates that MGNREGA works as a subsidiary or secondary economic activity; for example, rural agriculturists engage in MGNREGA work during the lean agricultural season. Dheeraja, Siva and Rao (2010), who studied MGNREGA in Sikkim, found the reasons for labourers not working for the full 100 days as follows: own farming activities, household responsibilities in nursing children and aged, health problems, low wages and strenuous work, distance to the worksite etc.

Nevertheless, the scheme is transparent in reaching the beneficiaries, such as households covered under land reform or IAY and even the disabled ones, as shown in Table 2. However, there was no situation of excess wage employment generation because all the job card holders who demanded employment do not get jobs as seen in Table 2; in other words, there is a shortage of MGNREGA employment supply suggesting that full employment remains unsustainable.

An associated issue is unemployment allowances. According to MGNREGA, the state government has to pay unemployment allowance if it cannot provide wage employment within 15 days of job application under the NREGS. According to the MRD (https://nrega.nic.in/ 2014b), unemployment allowances for the financial year 2013-14 as on 31st January 2014 in Sikkim show that the state is liable to pay allowances for 57,927 days with a total payable amount of Rs.38.16 lakhs. This works out to only Rs.65.87 per day, which is lower than the minimum wage rate prevailing in the state. However, ironically nothing has been paid to anybody as unemployment allowance, and no reason has been specified for its non-payment. It could partially be because applicants do not fulfill the conditions laid down in the NREG Act 2005. For instance, they may not have been eligible for reasons such as these: the period for which employment is sought has come to an end; households may have completed 100 days of work; workers may not have been willing to work or they may not have reported for duty within 15 days of being notified to report for work or may have been continuously absent from work.

Employment generation in terms of person-days has substantially increased from 2.43 lakhs in North district in 2006/07 to 8.6 lakhs in the following year when it covered two more districts to 26.33 lakhs when all the districts of the state in 2008/09 were covered. This further increased substantially to 48.14 lakhs in 2010/11. However, later, it declined to 20.29 lakhs in 2013/14 (Table 2). The distribution of person-days generated is similar to the distribution of households issued job cards, as discussed earlier. In 2013/14, slightly over four percent of employment generated were made available for the SCs, and about 37 percent of the person-days were performed by the STs; the largest share of 59 percent went to the Others category. Employment opportunities delivery is somewhat in accordance with the size of social groups in the total population. It indicates that some sort of social justice and transparency prevails in the state. The detailed data examination gives the impression that the socially disadvantaged groups, especially STs, are benefitting to a greater extent as their share of person-days generated or the share of households issued a job card were more than their share of population.

In Sikkim, women participation in the scheme has shown a significant improvement since the launch of the scheme (Table 2). The rate of women participation shows a gradual increase from 25 percent in 2006/07 when the scheme was launched only in one district of the state to 37 percent when three districts were covered in the following year and to 38 percent in 2008/09 when the entire state was covered under the scheme. In the following year slightly more than half of the scheme's persondays were provided to women recording the highest women's participation in the history of MGNREGA work. This counteracts problems of disguised unemployment and underemployment besides general unemployment stemming from poverty by providing wage earnings. In the subsequent years, the rate of women's participation has declined while male participation has increased. At present, about 46 percent of MGNREGA employment is taken up by women. The prevailing rate of women participation is substantial as there is no wage rate differential between genders. During 2009/10, workers participating

in the scheme were mostly women (IRMA 2010). Most importantly, Dheeraja, Siva and Rao (2010: 39) found that in Sikkim "women are the main workers in MGNREGS and participation of men moderate". Further, there was no instance of gender or caste/tribe discrimination either in the allotment of work or payment of wages or at work site, indicating that the implementation of the scheme was hassle-free. Moreover, the environment for work participation is conducive for all types of communities irrespective of gender or caste/tribe in the state. The scheme is implemented well due to good panchayat raj institutions prevailing in the state (Panda, Dutta and Prusty 2009). However, MGNREGA employment sustainability is linked to the scheme's capacity for generating and maintaining the specified 100 days of employment to rural households in future.

The combined changes in the nature of work, the extent of employment and the change in the wage rates of MGNREGA are expected to reduce the level of poverty. The wages received by the workers raise their purchasing power and changes the poverty scenario for the better. The level of poverty in Sikkim, following the national pattern, has substantially declined in recent years in rural areas (Table 7). Poverty in Sikkim is relatively much lower than in India. It is about ten percent in Sikkim against 26 percent for the country in 2011/12. With the implementation of MGNREGA work, large numbers of rural people are getting relief from poverty as the number of rural poor has declined sharply and systematically. For example, in Sikkim, those below poverty line has declined from 1.5 lakh in 2004/05, a period before the launch of the scheme, to half a lakh in 2011/12 when the scheme was in full operation. Studies by Dheeraja, Siva and Rao (2010) have established that MGNREGA has reduced poverty particularly among the poorest of the poor. And, Institute of Rural Management Anand (2010) found that the scheme is attractive not only to the rural poor but also to those households above the poverty level. The scheme enhances economic security in general and food security in particular.

Table 7: Share (%) of Population below Poverty Line in Rural Areas, Sikkim/India.

State/Country	te/Country Year		% of Persons	Poverty Line (Rs.)	
	2004/05	1.5	31.8	531.5	
Sikkim	2009/10	0.7	15.5	728.9	
	2011/12	0.5	9.9	930.0	
India	2004/05	3258.1	42.0	446.7	
	2009/10	2782.1	33.8	672.8	
	2011/12	2166.6	25.7	816.0	

Note: ^Tendulkar method on mixed reference period.

Source: Planning Commission, Gol.

Table 8: Worker Population Ratio (%) in Rural Areas, Sikkim/India.

Year		Sikkim		India			
	Male	Female	Person	Male	Female	Person	
2001*	57.7	40.6	49.7	52.1	30.8	41.7	
2004/05^	55.4	31.8	44.3	54.6	32.7	43.9	
2009/10^	55.6	30.9	44.2	54.7	26.1	40.8	
2011*	61.0	44.6	53.3	53.0	30.0	41.8	

Note: * Worker/population x 100; workers include both main and marginal workers (for detailed definitions please refer to census of India). ^NSSO estimates of usual status (principal and subsidiary status).

Source: Author's calculation based on RGI (2001 and 2011) and NSSO (Report No. 516 and 543).

Table 9: Share (%) of Main and Marginal Workers in Rural Areas, Sikkim/India.

State/	Voor	Main			Marginal			
Country	Year	Male	Female	Person	Male	Female	Person	
Sikkim	2001	87.9	66.7	79.8	12.1	33.3	20.2	
	2011	80.3	57.2	71.2	19.7	42.8	28.8	
India	2001	85.0	54.1	73.9	15.0	45.9	26.1	
	2011	78.5	55.6	70.5	21.5	44.4	29.5	

Source: Author's calculation based on RGI (2001 and 2011: B1 Tables).

The decline in poverty, which is partially attributed to the scheme, and if not overstated, has concurrently led to an increase in the extent of economic participation. This participation could take place in two ways: first, by workers engaging in economic activity for more days in a year; and second, by more new entrants joining the workforce. The first trend will result in subsidiary/ marginal workers becoming principal/main workers thereby reducing underemployment. The second one will raise the size of workforce. Moreover, despite the non-comparability of data between NSSO and census due to conceptual and definitional differences, the worker population ratio which measures the rate of economic participation for Sikkim is given in Table 8. In rural areas, census data has shown an improvement in the economic participation rate in Sikkim, against the country's almost unchanged participation rate, during 2001 to 2011. The improvement is slightly more prominent for females in Sikkim. It has increased by about four percentage points for females against three for males during the same period. However, NSSO data does not show any significant change in rural areas of Sikkim during 2004/05 to 2009/10. Census data, surprisingly, shows that workers are increasingly engaged as marginal workers rather than main workers¹² (Table 9). MGNREGA employment does not necessarily deliver employment to those who have usual work but rather targets new entrants in the workforce or those who have severe underemployment problems. It could be argued that this situation arises due to the limited number of 100 days guaranteed for employment under MGNREGA. Hypothetically, hundred days of employment do not sufficiently enlarge the rate and extent of economic participation. But it was expected to increase the economically active period of workers, i.e. by engaging them in work for longer periods in a year, thereby strengthening and improving annual household income which in turn

reduces the level of poverty and provides self-reliance especially to the underprivileged social groups in rural areas.

Conclusions

MGNREGA for the rural unskilled and disadvantaged people is leading to sustainable work; however, sustainable employment remains elusive. Its activities mainly relate to water, soil and land conservation. The scheme acts as a social security mechanism for the rural underprivileged poor especially SCs, STs and women. There is no gender or social discrimination in the allotment of work or payment of wages or at work sites in the state. But Sikkim was unable to provide full 100 days of employment as quaranteed under the scheme to each rural household which demanded a job. The scheme provides recurring employment for the rural poor by developing income generating assets. It aims to provide sustainable rural employment opportunities and attempts to alleviate poverty among the rural poor and safeguard their economic security. Employment under the scheme has declined despite the increase in expenditure that increasingly apportions more for material costs than labour. This calls for raising fund allocation for labour to improve and deliver the guaranteed employment under the scheme. MGNREGAguaranteed hundred days of unskilled employment implies offering work just to supplement rural incomes. This means that it cannot provide adequate or full employment. MGNREGA employment is a subsidiary or secondary economic activity that falls short of sustainable employment generation. Sustainable MGNREGA employment needs to emphasise rural work which conserves the environment and can also provide employment in future. The government should take on the responsibility of allocating more funds and supporting work that is sustainable; and rural people should actively participate in executing such sustainable work. The scheme needs a broader convergence with other schemes relating to rural livelihood and sustainability. There is a need to boost sustainable employment linked to economic growth with equity to solve the problem of poverty. It is crucial to make MGNREGA a decent rural wage employment scheme by providing full-time work. Upgrading the skill of unskilled labour to semi-skill level through on-job training for greater future earning potential should be emphasised to make MGNREGA employment generation a sustainable one. Without adequate days of employment in a year, providing minimum wages is insufficient to ensure proper livelihood.

End Notes

- Wage refers to the minimum wage fixed by the State Government under section 3 of the Minimum Wages Act, 1948 for agricultural labourers (The Gazette of India 2005).
- As per the MRD (2008), the financing and funding pattern of the NREGS is to be shared by the Centre and the state. The Central Government will bear the entire cost of wages for unskilled manual workers, 75 percent of the material costs, 75 percent of wages for skilled and semi-skilled workers, and administrative expenses as may be determined by the Centre and the Central Employment Guarantee Council. The state government will pay unemployment allowance if it cannot provide wage employment within 15 days of job application under NREGS, provide 25 percent of the material costs, 25 percent of wages for skilled and semi-skilled workers, and the administrative expenses of the State Employment Guarantee Council.
- The state has four districts, namely East, West, North and South.
- ⁴ This implies that employment generated under the scheme would not sustain in the long run. Thus there is a need to converge the scheme with other rural development schemes.

- Environmental services include recharging groundwater, increasing rain water percolation, conserving water, increasing the area irrigated, reducing soil erosion, increasing soil fertility, conserving biodiversity, reclaiming degraded crop and grazing lands, enhancing the supply of leaf manure, fuel wood and non-wood forest produce, and carbon sequestration" (Tiwari et al 2011:41).
- The seven national awards received in a row by Sikkim for exemplary work done under MGNREGA, the National Flagship Programme, are as follows (i) best performing gram panchayats: Chuba Phong Gram Panchayat for transforming a village reeling under perennial drought for construction of 120 household level water storage tanks of 10000 litres capacity each, (ii) best performing district MGNREGA team North District for excellence in district administration in the effective implementation of MGNREGA, (iii) best performing NGO: Voluntary Health Association of Sikkim received the Rozgar Jagrookta Puraskar (Employment Awareness Award) for promoting effective implementation of MGNREGA in Sikkim in 2011 (http://zeenews.india.com 2011); (iv) Deepak Tamang, Panchayat President, Martam Nazitam Gram Panchayat, Martam Block, East District for his outstanding contribution in 2012 (http://isikkim.com 2012); (v) The Hee Gyathang Gram Panchayat, Dzongu Block, North District for excellence in implementation of the programme in 2013 (http://voiceofsikkim.com 2013); and (vi) The Lamten Tingmo Gram Panchayat, Wok Block, South District for excellence in implementation of the programme and (vii) Rural Management and Development Department (Sikkim) received the recognition for excellence in convergence initiatives in 2014 (http://isikkim.com/ 2014).
- See detailed goals of the scheme at MGNREGA 2005, Operational Guidelines 2013, Ministry of Rural Development, Department of Rural Development, GoI, Delhi, p.3.
- Environmental scientists believe sustainability as "primarily about documenting and protecting eco-system health" (Vucetich and Michael 2010:539), and others consider it as "primarily about more efficiently meeting human needs" (*ibid* 2010:539).
- ⁹ Author's calculation based on NSSO (2011-12) 68th Round unit level data.
- ¹⁰ As per the MGNREGA 2005, unemployment allowance rate shall not be less than one-fourth of the wage rate for the first 30 days during the financial year and not less than one-half of the wage rates for the remaining period of the financial year (The Gazette of India 2005).
- ¹¹ See details at The Gazette of India (2005), pp.3-5.
- Definition of work did not change in 2011 census over 2001. Census 2001 defined work "as participation in any economically productive activity with or without compensation, wages or profit. Such participation may be physical and/or mental in nature. Work involves not only actual work but also includes effective supervision and direction of work. It even includes part time help or unpaid work on farm, family enterprise or in any other economic activity. All persons engaged in 'work' as defined above are workers. Persons who are engaged in cultivation or milk production even solely for domestic consumption are also treated as workers." RGI (2001).

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