Chapter 12
Can Employment Guarantee Scheme (EGS) Ensure Inclusive and Resilient Growth in Rainfed Areas: Convergence Lessons Learned and Way Forward

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12.1 Introduction

MGNREGS emphasises on drought proofing, soil conservation, land productivity and water security as the principle areas for taking up works under the sub-head of natural resources development. Creation of 'durable assets' is a central tenet of investment decisions in the scheme; it protects MGNREGS investments from being used as 'labour subsidies' in production which can potentially influence crop choices and production relations.

Converging MGNREGS with other regular programmes of government to contribute to agriculture growth has been a major policy concern recently. Several efforts were made across the country and by the Department of Rural Development (DoRD) to evolve convergence guidelines (Ministry of Rural Development 2009-10). The expanded list of permissible activities defined in the revised guidelines of the scheme also emanates from this concern.[1]

This paper presents a case to make MGNREGS more effective in strengthening agriculture, livestock and fisheries in rainfed areas. It builds on the field experiences

[1]GO No. 11017/17/2008-NREGA (UN) (Part-II) approved works as per the revised Schedule I (Para 4 (1) 1. (ii)) of the MGNREGA and GO No. 11017/17/2008-NREGA (UN) (Part-II) Comprehensive treatment of watersheds—Works based on watershed management under MGNREGA as per the revised schedule I, MGNREGA.

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of WASSAN and Revitalising Rainfed Agriculture Network in engaging with MGNREGS and agriculture in rainfed areas across several states.[2]

A brief overview of impacts of the programme across the country is first attempted. This is followed by an analysis of the convergence efforts by DoRD and some state governments as can be observed from the Government Orders/ Department Circulars. Gaps in the convergence framework are brought out based on the field experiences. Against this backdrop, a framework is presented to use MGNREGS investments for strengthening rainfed agriculture systems. The discourse, as explained later, is around having more interpretative flexibility in defining 'durable assets' and taking a broader perspective on what constitutes 'natural resources development'. In this effort, it appears that the primacy of MGNREGS is better reflected as a means of securing employment guarantee, and not to subsume it under asset creation, enhancing efficiencies, or any other social or economic objective.

12.2 MGNREGS and Its Impacts on Agriculture

Much of the impacts of MGNREGS were mainly through improvements in land development, water harvesting and bringing more land into productive use. This is expected as around 51% of the overall investments in MGNREGS were on soil and water conservation and related works (Table 12.1).

A comprehensive review of studies on the impressive impacts of MGNREGS was presented in 'MGNREGA Sameeksha' (Shah 2012).The review presents the multifarious impacts of MGNREGS across the country. Impacts are observed on aspects of increased area under irrigation, land brought into cultivation, changes in crop pattern, increased productivity of crops. Based on a multidisciplinary rapid survey of the works taken up in Chitradurga district of Karnataka, Tiwari et al. (2011) conclude on the multiple gains of the investments on providing environmental services and reduced vulnerability to climate change.

The varied impacts of MGNREGS mostly emanate from the derivatives of works related to soil and water conservation, land development, silt application and plantation. As the 'MGNREGA Sameeksha' observes, 'literature on the impact of MGNREGA on agricultural productivity is neither uniform nor conclusive'. There will also be problems of attributing impacts to the works alone. The impact of MGNREGS on wage markets, farm labour scarcity and related impact on agriculture is much contested. The present paper stays away from this debate and focuses on the Scheme's direct relation with agriculture development.

[2]Rainfed areas are considered as those with less than 40% irrigation. Revitalising Rainfed Agriculture Network (www.rainfedindia.org) is a national network engaged in evolving relevant policy framework for the development of rainfed areas.

Table 12.1 Category-wise expenditure of MGNREGS in financial year 2013–14 and 2015–16

Category of work	Expenditure in FY 2013–14 (in %)	Expenditure in FY 2014–15 (in %)	Expenditure in FY 20015–16 (in %)
Rural connectivity	35.13	32.61	26.97
Water conservation and water harvesting	13.64	13.83	14.32
Renovation of traditional water bodies	12.09	12.23	14.01
Category IV work	7.83	10.75	11.89
Land development	8.93	8.63	9.9
Drought proofing	5.95	5.33	6.72
Micro irrigation works	5.26	4.77	6.41
Flood control and protection	5.09	4.07	4.16
Other works	1.9	1.69	1.95
Rural sanitation	2.46	3.21	1.25
Fisheries	0.14	0.23	0.22
Rural drinking water	0.08	0.10	0.1
Total	100	100	100

Source MGNREGS Reports
http://164.100.129.6/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP and http://164.100.129.6/GRAPH/graphnewxml.aspx?source=national

12.3 Practices on Convergence

MGNREGA clearly mandates convergence of investments. MGNREGA with its inter-sectoral approach opens up opportunities for convergence with different programmes. A broader view on convergence is taken in the 'MGNREGA Sameekhsa', 'The aim of convergence is to optimise public investments made under existing schemes through suggested ways of linking and steering them towards a common/shared recipient end, both physical (area, infrastructure, natural resource) and human (person, group, agency)'. 'Area' and 'Agency' are the two bases for convergence in this approach.

The following three types of convergence mechanisms are generally observed in practice:

1. Agency-based convergence: Budgets are made available to an Agency for implementation of works in its mandate; an example is MGNREGS budgets given to Forest Department to take up conservation works in forest areas.
2. Geography-based convergence: converging investment in a given Panchayat or location by different agencies.
3. Plan-based convergence: A convergence window is opened up during the planning process.

These are not mutually exclusive categories. Plan-based convergence may involve the same agency or a different one in its implementation.

In practice, much of the discussion related to convergence is around sharing labour costs from MGNREGS. One of the circulars on convergence with IWMP typifies this view; 'It must be ensured that the material-intensive shall be taken up under IWMP and all the other labour-oriented works shall be done only under MGNREGS' (Government of India 2008). Such convergence does not change the scope of the intervention but only expands the scale of operation of physical asset creation, mostly related to soil and water conservation.

While appreciable impacts are seen in natural resources related asset creation, as different studies point out, it is argued that this approach does not harness the real potential of MGNREGS in strengthening rainfed agriculture. In all these efforts at convergence, the scope of MGNREGS is limited to soil and water conservation, land development and plantation.

In the subsequent sections, first, the unique features of the programme are identified, elaborate on the requirements of rainfed agriculture and explore the scope of MGNREGS to make a larger impact on rainfed agriculture.

12.3.1 Unique Features of MGNREGS

Several features of MGNREGS make it more attractive as a driver of growth in production and livelihoods in rainfed areas:

1. Universality of its presence and larger coverage of rainfed geography
2. Demand-based investments
3. Focus on labour
4. location-specific works with Gram Sabha/Panchayat vested with the authority of deciding on the works
5. Social audit
6. Human resource base with skills established on ground to implement the programme.

There is no other programme in the rural landscape at present that has such versatility in spread, budget allocation, human resources base and amenable for decentralised decision-making and above all, a wider outreach to rainfed areas. These unique features of MGNREGS potentially make it possible to develop decentralised, participatory, location-specific and labour-oriented support systems for rainfed agriculture. This is in contrast with the present external input centred agriculture extension system driven by subsidised inputs and highly centralised programmes with 'limited' outreach holds greater promise in making an impact on rainfed agriculture.

Low budget allocations for facilitation support, mandate of compliance with employment generation demands, administrative over load and lack of robust back-end technical support, however, limit the scope of MGNREGS making a larger impact on agriculture on its own.

12.4 Distressed Rained Agriculture

Rainfed agriculture is facing multiple problems. Climate uncertainties and variability are increasing. Farmers' disinterest in rainfed agriculture is resulting in the neglect of private investments and lack of attention in aspects like maintaining soil productivity, crop systems and their management. These factors compound the risks and low profitability of rainfed agriculture.

Rainfed systems survive on the amount of rain harvested and retained in the soil profile. Soil organic matter plays a critical role in the process. Organic matter in soils is maintained in the soil systems through a process of integration of livestock, recycling of crop and animal residues and a mix of crop systems. Diversity in production systems, multiple livelihood options and flow of services and inputs across agriculture and livestock systems are traditional risk management strategies followed in rainfed areas.

These integrated systems are breaking down as farmers are increasingly relying on chemical fertilisers and other external inputs. Bare soils with poor organic matter increase climate vulnerability of rainfed agriculture systems manifold. Increase in real wages, problems of labour availability, family labour in particular, are altering farmers' choices towards more external input dependent, unsustainable and risky practices. Groundwater depletion is at an alarming rate making much of the private, high cost of investments in dysfunctional bore well. Farmers' distress spreading across rainfed areas in the country is a symptom of a deeper malaise of rainfed agriculture.

12.4.1 Revitalising Rainfed Agriculture

Several consultations in the Revitalising Rainfed Agriculture Network over the last 8 years brought out the need for critical policy corrections that impinge on the productivity and farmers' income in rainfed agriculture.

The most relevant for the current discussion are the following:

1. A move towards provision of irrigation to fill in soil moisture deficits arising out of increasing drought spells in extensive rainfed areas as a concept of irrigation.
2. Increasing public support to improve soils, particularly on promotion of farmers' practices to improve soil organic matter.
3. Revival of the millet crop systems at scale into the household consumption, state nutrition programmes and in farming.
4. Establishing a seed system that can provide seeds of diverse, locally adapted crops and varieties in time and at affordable prices managed by communities.
5. A transition to agro-ecology—crop systems and agronomic practices that improve local agro-ecology, such as system of rice intensification, NPM—managing pests without using chemical pesticides, LEISA—low external input sustainable agriculture, etc.

6. Mechanisation for agriculture labour, to improve their productivity and skills.
7. Focus on strengthening pastoral and agriculture-integrated extensive livestock systems (that are grazing/foraging based).
8. Bringing numerous seasonal and perennial water bodies into quality fish production.

The RRA Network suggests a landscape approach for strengthening the rainfed production systems integrally. The 12th Plan document and the NRM and Rainfed Farming Sub-Group recommendations also reiterate these propositions.[3] Watershed programmes constitute a sound system-based approach aimed at addressing problems of natural resource management. Various programmes aimed at improving crop productivity and the present support systems, however, are not in sync with sustainable natural resource management with resource degradation problems continuing unabated. Resource conservation and sustainable use, and management for enhanced productivity need to be seen in unison. The Working Group makes a strong case for integration of productivity enhancement with NRM as the core strategy of rainfed areas development. Given the inherent diversity of natural resources in rainfed areas, the health and dynamic inter-relations of the natural resource base (land, water and biomass) are direct determinants of the productivity and incomes from economic activities using these resources.

Apart from physical investments in the above process, the transition to a more secure, productive and remunerative rainfed agriculture requires a wider engagement with farmers, tenants and agriculture labour on effecting a transition to agro-ecology-centred approaches that reduce costs and enhance productivity.

12.4.2 Agriculture Extension and Rainfed Agriculture

Designed for delivering 'Green Revolution', the current agriculture extension system is modelled on a 'transfer of technology' paradigm. The Green Revolution technology is mostly embedded in external physical inputs—new seeds, fertilisers and pesticides. Extension involves promotion of these external inputs through subsidies and disseminating the research station evolved 'package of practices' tailored mostly to usage of these external inputs. Highly centralised and compartmentalised in their knowledge, these extension systems are fast losing their relevance in the context of rainfed systems where the problems are complex and highly location specific.

Some of the key challenges in the re-design of appropriate agriculture extension for revitalising rainfed agriculture (see Table 12.2).

Unlike in irrigated agriculture, productivity of rainfed agriculture systems is integrated with natural resources management. For example, productivity of sheep

[3] http://planningcommission.gov.in/aboutus/committee/wrkgrp12/agri/wg_NRM_Farming.pdf page 1.

Table 12.2 Agriculture extension for revitalising rainfed agriculture

Sl. No.	Present focus	Needed shift in focus
1	Few crops – Major cereals and pulses and commercial crops Few animals – Intensive dairy Few water bodies – Fisheries in large, perennial water bodies	Multiple crops – Millets, minor pulses and oil seeds, trees All animals – Draft animals, small ruminants, backyard poultry, pigs, etc. All water bodies – Seasonal and perennial; private and commons
2	Input-centric extension (technology is embedded into external inputs)	Knowledge- and skill-centric extension as much of the technology is around management, i.e. soils, crop systems, pests, weeds, etc.
3	Subsidy (for inputs) led	Facilitation/knowledge-centric and skill-based transition of labour
4	Isolated, i.e. mostly focus is within crop inputs	Integrated with natural resources, i.e. much of the actions in increasing productivity lie in natural resources base and how it is managed within the crop systems. For, e.g. soil organic matter is important to hold moisture in the soil; and it comes from crop residues and better soil conservation and tillage practices

and goats in extensive system is a function of fodder base in the grazing tracts and effective public (livestock) healthcare service delivery systems. The movement of animals, in turn, fertilises the commons and even the private lands. Investments in these areas are in the nature of 'public goods'; the benefits of such investments are difficult to contain within the private farm boundaries. Farmers' would be reluctant to invest on these for the same reason.

How to restore the agro-ecology and environmental flow across integrated crop-livestock-commons systems? What constitutes the role of farmer and what is the role of state? And therefore, what is the scope of public investments in the revival of agro-ecology? These questions still remain. The mainstream agriculture, livestock and fisheries programmes are couched in a different paradigm that is not much relevant for rainfed areas. Even for subsidised fertilisers applied, for example, needs moisture and organic matter in the soil to be more productive to give higher yields.

The need is for developing an appropriate public investment programme that can effectively enable farmers to shift towards sustainable agro-ecological approach to farming. Can MGNREGS play any effective role in this process without compromising its own objectives?

As several evaluation studies suggest, MGNREGS investment on soil and water conservation infrastructure itself has substantial impacts. As findings of the Chitradurga study (Tiwary 2011) illustrates, MGNREGS has provided multiple environmental services and reduced vulnerability, apart from providing employment and income to rural communities. The environmental services include

groundwater recharge, water percolation and increased water storage in tanks, increased soil fertility, reclamation of degraded lands and carbon sequestration. These services contributed to and had positive implications for, increased crop and livestock production. The scheme activities also contributed to reduce vulnerability of agricultural production to uncertain and low rainfall. The implications measured in this study are only for about 1–3 years of implementation of the scheme; a much longer period of observations are needed to understand the full extent of environmental services and the potential for vulnerability reduction given the gestation period in ecological, hydrological and soil processes. Such efforts also contribute to meeting challenges of climate change. However, the scope of MGNREGS can be much larger given its unique strengths mentioned earlier.

12.5 Boundary Conditions for Expanding the Scope of MGNREGS

At the outset, it is important to lay down some boundary conditions for expanding the scope of MGNREGS so that its constitutional mandate is not compromised and that it would not inadvertently influence the existing production relations or labour markets. Four such principles can be thought of:

1. MGNREGS investment should crowd-in private investments and should not compete with or substitute for private investments.
2. Works should not get subsumed into agriculture as regular labour subsidies without adding '*asset value*' to natural resources—as it will have substantial impact on production relations. Having a finite period for specific 'MGNREGS —projects' will help in avoiding creation of perpetual dependency.
3. Scheme investments must result in improving productivity of the natural resources and drought proofing. The scope of asset creation can be new assets, renovation of old assets or making the existing assets functional or improving the quality of assets/natural resources.
4. Must potentially result in more wage employment generation or higher aggregate wage incomes in the production system to enhance employment opportunities.

12.5.1 Expanding the Scope of MGNREGS for Rainfed Agriculture

Within the above boundary conditions, to explore ways in which MGNREGS investments can be effective in addressing sustainability and growth of rainfed agriculture we first, outline these and provide the argument subsequently.

1. *Enabling Sustainable Agriculture Transitions*: Support in agriculture labour to attain new skill sets to aid in sustainable agro-ecological transitions
2. *Extend centralised services to make sustainable agriculture practices viable* at farm level, i.e. agriculture practices that improve the quality of natural resources
3. *Incubation of labour intensive local enterprises* that can potentially replace external industrial inputs with local labour intensive inputs in agriculture to aid in more employment intensive agriculture growth
4. *Creation of* '*public good-services*' (beyond manual earth/labour work) that help in reducing private costs for farmers

These propositions are further illustrated in the following section.

12.5.2 Enabling to Sustainable Agriculture Transitions

Subsidised external inputs played a key role in transitions like Green Revolution. Unlike these input-embedded technologies, agro-ecological transitions are often labour and management intensive requiring labour with new skills. Who will bear the costs of labour getting trained and available in the market with new set of skills? This falls on the initial innovators or on the extension programmes. System of Rice Intensification (SRI) is a classic case.

Transition to SRI requires availability of labour pool that can transplant early seedlings in square-grid and labour who can weed with a mechanical weeder as against the conventional manual weeding. Experience suggests that mere farmers' awareness or interest is not sufficient for transiting to the new systems; availability of labour with these new skills in the market is a crucial determinant of the spread of SRI. These are typical public goods and farmers will have higher transaction costs in training labour in SRI skills and giving them adequate opportunity to practice and shift to new skills. Once the skill-transformation takes place, studies suggest that there will be savings for farmers on input costs and gain through increased productivity (Adusumilli and Bhagya 2011; Ranganathan et al. 2013). This can potentially increase wages for labour with the new skills creating a win-win situation.

Improvement on sets of skill of agricultural labour is not any part of Agriculture Department's mandate, of either centre or state government agencies. Agriculture Department, with the present structure across states, do not have the ability to operationalize such a programme on skill improvement of un-skill labour in rural India. SRI promotion in programmes like National Food Security Mission (NFSM) gets limited to demonstrations and distribution of implements to farmers. MGNREGS is well placed to work with labour in acquiring the new skills as it has the apparatus to manage such work. A detailed operational process for enabling such transition to SRI is developed by WASSAN for National Consortium on SRI (NCS 2012).

12.5.3 Provision of 'Public Good' Services

Availability of certain key-services will help in reducing input costs for farmers. To illustrate, a transition to non-pesticide management of insect pests (NPM) approach requires regular pest surveillance. Identifying and marking the threshold levels of pest incidence at an early stage helps farmers to take much cheaper and easier preventive measures at right time-saving in high costs of pesticide sprays later on. Getting farmers' regularly visit fields for pest monitoring is one of the biggest challenges in the promotion of NPM. Local pest surveillance is also a 'public good'. If collectively done, it saves large private expenditure. One way to support NPM transition is to establish such pest surveillance mechanism at Gram Panchayat/ habitation level.

Livestock disease surveillance, local weather monitoring and dissemination of weather forecasts and agro-advisories are also of the same nature in terms of work-types and nature of execution. Providing such services under MGNREGS should only be transitory, i.e. for a defined period; once the services are used and systems operational, additional investments may be made to use MGNREGS institutional systems for continued support for such functions.

12.5.4 'Agro-Ecological Restoration' as Durable Asset Creation

Soil and water conservation works are taken up largely under MGNREGS and even in the watershed development programmes. Production in the rainfed systems largely depends on the amount of rainfall harvested (with in the few rainy days) and retained in the soil profile; soil profile is the largest store house for rainfall. Encrustation of the surface, poor permeability and lack of organic matter constrain soils in rainfed areas from harvesting and retaining rainfall. If properly done, the incremental rainfall harvested in soil profile may far exceed the rainfall harvested through water harvesting.

The works taken up in MGNREGS are limited to soil conservation (prevention of runoff) and of late, construction of composting structures like NADEP after the revised guidelines. Both these interventions are inadequate for substantially increasing soil organic matter. A composting structure (a pit or a brick-enclosure) built under MGNREGS is inadequate for motivating rainfed farmers to practice composting or adding organic matter to soils. The operations involved in transporting biomass, filling-in the pits, watering, overturning, harvesting and transporting of the compost requires considerable attention and labour. For lack of such labour available, farmers' find it easier to shift to chemical fertilisers to meet the crop-nutrition requirements. But, use efficiency of fertilisers, water harvesting and retention in soil profile depends on organic matter in the soil.

Organic farming usually considers a period of 3 years to recuperate soil health and the local agro-ecology to offset productivity losses in transition.

In similar lines, MGNREGS can provide common pool-services in few of the components required for compost making at homesteads and farms such as digging, planting of biomass trees, watering, overturning or harvesting. This will reduce the total labour costs for individual farmers to make addition of organic matter viable for farmers. This part support to composting must be seen as a way of improving soil health and restoring soil biology adding substantially to the asset value of the land and does similar function as water harvesting.

Even 10% of the annual fertiliser subsidies invested on this, may result in substantial benefits in (a) improving fertiliser use efficiency, (b) improving soil health and reducing fertiliser use, and (c) move towards low external input agriculture (d) improved soil moisture to sustain short drought spells. Moreover, if farmers shift to local compost making it creates demand for wage employment.

Either this can be made part of MGNREGS or an allocation from Agriculture Department can be made (to the equivalent of 10% of fertiliser subsidies) separately, to be implemented by MGNREGS machinery.

Unfortunately, the perception of 'durable assets' in MGNREGS at present is limited to physically measurable constructions (digging, filling of earth and brick and mortar). If comprehensive measures are taken up in addition to soil conservation, the same soil with improvement in its quality in say, a block of 10 ha of rainfed agriculture can potentially reduce the costs to the farmer, provide better resilience to climate variability, improve productivity and may even reduce the subsidy burden by substituting local material for subsidised inputs. Soil is after all, a public good (irrespective of the private property regimes) that the present generation has to protect and improve for future generations. When the markets fail to generate required surplus for farmers to be able to invest on soils, the responsibility falls on the state to invest and protect this national asset.

The same analogy can be extended to other qualitative aspects of public goods that can potentially provide environmental services. Insect ecology if restored, for example, can improve the predator complex to reduce pesticide costs of individual farmer. Agro-ecological restoration needs to be considered as a 'durable asset', even if it does not involve brick, mortar or earth work.

12.5.5 Incubation of Labour Intensive Enterprises in Sustainable Agriculture Transitions

With the fast spread of NPM and organic agriculture, the scope for local inputs to substitute for external chemical inputs which are often subsidised has increased; such demand is also universal across the rainfed areas. Conversion of this potential demand into local enterprises needs considerable skilling, innovations and effective demand generation; MGNREGS can be an effective platform in incubating such

local labour intensive enterprises. Provision of labour subsidy for such enterprises for a defined incubation period can be an effective instrument for their promotion.

These enterprises are the key to ecological restoration, reducing the costs of production, reducing the chemical load in products and can potentially generate employment. One such option is also to promote 'labour guilds' equipped with knowledge, material and required implements/machinery to take up service contracts in agriculture. This will address the twin problems of employment generation at higher wage rates and addressing the issue of farm labour scarcity for key operations. The experiments like the one in Kerala on 'food security army'[4] merit such consideration; this involves a shift from daily wage labour to 'labour-service guilds' taking contract of operations; MGNREGS is well equipped to promote such guilds.

12.5.6 Enabling Services for Natural Resources Management

Natural resources related assets will have short lifespan if they are not managed. Management of commons, land degradation, groundwater, management of water bodies, protection of biomass and such other principle requisites for community led agro-ecological regeneration often get crippled by lack of participation due to high transaction costs for individuals. Traditional systems of water management also collapsed in several places as state did not take over such management functions. The '*neerati*' or water distributor system in tank irrigation system is dysfunctional in several cases for lack of willingness of farmers' to pay for the services of *neerati.* The collective grasing systems, especially in kharif season, that are prevalent across India are slowly collapsing.

MGNREGS can effectively play a role in restoring these community-based natural resources management systems and even modernise the services. Viability gap-provisioning for the people involved in these systems help in revival of the traditional systems or in the formation of new natural resources management systems.

[4]http://www.indiawaterportal.org/news/keralas-paddy-war-food-security-army-swings-actiontransplanting-rice-300-acres-land-five-days.

12.6 Operationalisation of 'Expanded Scope of MGNREGS'

In all the above, MGNREGS with its unique positioning across the country and institutional capacity to work with rural labour can play a substantive role. However, the non-negotiable boundary conditions (mentioned earlier) for expanding the scope of MGNREGS must be complied with. The instrumentalities of expanding the scope could be the following.

12.6.1 Finite Time Period

MGNREGS must only support transitions with a defined time period, which substantially involves labour and their skills.

(a) **Not to Compete or Substitute Farmers' Investments**: Support only the additionally or the viability gaps on which farmers' are not forthcoming with investments or effort.
(b) **Have a technical programme**: It is important to recognise that MGNREGS is not a technical establishment. Unless there is a technical programme associated with the 'work', the assets created will not sustain nor get integrated with the production. Water body created without a programme on establishing support services and knowledge transfer on fisheries, for example, is most unlikely to result in increased fish production. To be effective, MGNREGS works must be embedded in a technical programme. Such technical programme must have technical capacities in planning and execution and have complementary investments to fulfil the programme requirements.
(c) **Community Resource Persons**: An approach that is widely accepted across several programmes is building capacities in the community and experienced farmer-led extension. The requirement for low-end technical services on a wide scale can be met effectively with this approach. This can be a potential 'Skill-Indian Agriculture Mission' spearheaded through MGNREGS platform.
(d) **Using MGNREGS as a Platform**: Though MGNREGS investments in labour are much coveted for convergence, a much greater strength lies in its ability to reach out to labour and labour payment systems that are well established in several states. For initiatives like skilling labour, incubation of enterprises, etc. special allocations may be made within MGNREGS within defined 'programme areas' which can be integrated with the programmes of agriculture, animal husbandry or other departments. Such provisions also enable the services to flow smoothly even when the demand for employment is low.

12.7 Summary

In summary, MGNREGS is uniquely positioned to make a substantial contribution to drive sustainability, resilience and growth in rainfed agriculture, livestock and fish production systems. Its strength lies in its universal presence, focus on labour, well laid out systems of payments, social audit and intensive coverage of rainfed geography. All that is needed is providing interpretative flexibility on the concept of 'creation of durable assets' in natural resources development and drought proofing.

Expanding the scope of 'durable assets' to include environmental services, quality of natural resources that can potentially crowd-in private investments in employment-intensive production will enable the Scheme to build a larger support system for rainfed agriculture. Such expanded scope of MGNREGS may include (a) enabling sustainable agriculture transition, provision of critical public goods; (b) provision of labour intensive services that are 'public goods' in nature; (c) seeing agro-ecological restoration as a 'durable asset'; (d) incubation of labour intensive enterprises that aid sustainable agriculture transitions; and (e) enabling services for natural resources 'management' (as against merely considering their development). The paper also lays out some boundary conditions for not compromising the constitutional mandate of MGNREGA. Such expansion of scope of the Scheme without compromising its own objectives can potentially have a multiplier effect of its investments in achieving resilience and growth of rainfed agriculture.

References

Adusumilli Ravindra, and Laxmi Bhagya. 2011. Potential of the system of rice intensification for systemic improvement in rice production and water use: The case of Andhra Pradesh, India. *Paddy Water Environ* 9: 89–97.http://link.springer.com/article/10.1007/s10333-010-0230-6#/page-1.

Government of India, 2008. GO No. 11017/17/2008-NREGA (UN) (Part-II) approved works as per the revised Schedule I (Para 4 (1) 1. (ii)) of the MGNREGA and GO No. 11017/17/2008-NREGA (UN) (Part-II) Comprehensive treatment of watersheds—Works based on watershed management under MGNREGA as per the revised schedule I, MGNREGA.

Ministry of Rural Development (MoRD), 'Guidelines for Convergence: Leveraging NREGA for Sustainable Development through Inter-sectoral Convergence', Ministry of Rural Development, 2009–10.

NCS. 2012. Enhancing Employment and Sustaining Production: Framework for Integration of SRI with MGNREGS. (http://www.wassan.org/sri/documents/SRI_MGNREGS_2012.pdf).

Ranganathan, C.R., K. Palanisami, K.R. Karunakaran, and Upali Amarasinghe. 2013. Doing different things or doing things differently. *Economic and Political Weekly* XLVIII(8).

Shah, Mihir. 2012. MGNREGA Sameeksha An Anthology of Research Studies on the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 2006–2012. Ministry of Rural Development, Government of India.

Tiwari Rakesh, H.I Somashekhar, V.R. Ramakrishna Parama, Indu K. Murthy, M.S. Mohan Kumar, B.K. Mohan Kumar, Harshad Parate, Murari Varma, Sumedha Malaviya, Ananya S. Rao, Asmita Sengupta, Ruth Kattumuri, and N.H. Ravindranath. 2011. MGNREGA for environmental service enhancement and vulnerability reduction: Rapid appraisal in Chitradurga District, Karnataka. *Economic and Political Weekly* 66 (20): 9.