Transforming Rural Farm Livelihoods:
The NRLM Journey
The agriculture sector is the largest employer in India, providing direct employment to more than 50% of the nation’s workforce. Small and marginal farmers with landholdings of less than 2 hectares comprise 86% of all agricultural labour, reflecting high land fragmentation and low economies of scale. Amongst this sub-section, only 41% have access to formal credit from public and private sector banks. Mainstream extension and agriculture support services are not customized for these farmer segments, limiting their capacity to access improved production inputs and technology. Only 12% of all farm produce is sold to cooperatives and other organized procurement channels, leaving a vast majority of smallholders reliant on complex, unpredictable and often exploitative intermediary-driven markets.

The situation is even more complicated for women farmers who constitute nearly 43% of India’s agricultural labour force. The Economic Survey of 2017-18 points to the increasing feminization of Indian agriculture, especially in low-income states with a high incidence of rural to urban migration. As a result, women farmers feature more prominently in roles of cultivators, entrepreneurs and laborers. These women face the uphill task of accessing credit - on account of limited land ownership - and are inadequately served by existing extension systems. Women farmers constitute only 28% of all those trained by the Krishi Vigyan Kendras (KVKS), the primary institutions aimed at disseminating new farm technology and production methods.

The DAY-NRLM farm livelihoods strategy evolved against this background to leverage the program’s social infrastructure of 68 million households mobilized into exclusively women based SHGs and higher federations, in order to deliver intensive and targeted capacity building of small-farmers and streamline access to credit for farm needs. The program adopts a phased approach to building household capacity, focused on first strengthening and stabilizing existing livelihoods, followed by diversification into other livelihood sectors and activities.

As of March 2020, 6.3 million small-farmers have benefitted from the provision of various technical and livelihoods advisory services related to productivity enhancement and improved natural resource management practices.

Key sub-sectors under the DAY-NRLM farm livelihoods portfolio include agriculture, livestock and non-timber Forest Produce (NTFP), supported through a combination of programs including the Mahila Kisan Sashaktikaran Pariyojna (MKSP), National Rural Livelihoods Project (NRLP) and Sustainable Livelihoods and Adaptation to Climate Change (SLACC). The farm livelihoods strategy under DAY-NRLM has evolved over the years from its initial focus on enhancing productivity through improved inputs and production methods, to a suite of interventions that address multiple entry points in the agriculture value chain.

---

1 Agriculture Census 2015-16
2 Public Sector Advances Annual Return (2015-16)
3 ICAR
4 The programs support productivity enhancement, extension service delivery and value chain development for improved market access as priority areas of interventions, while supporting livelihoods diversification through enterprise opportunities within the value chain.
DAY-NRLM is a large-scale livelihoods support program that engages with 34 States and Union Territories across India through a robust three-tiered capacity building architecture to ensure high quality training and technical assistance support.

At the Village level, a community-based extension system comprising more than 50,000 local Community Resource Persons (CRPs) – a majority of them women – support small-farmers as frontline extension workers to provide training, field demonstrations and technical assistance in various aspects of commodity value chains. Depending upon the sector they support, they are termed Krishi Sakhis (agriculture), Pashu Sakhis (animal husbandry) and Van Mitras (NTFPs). These CRPs plug a crucial gap in field extension support and enable the economic mobilization of farmers into commodity focused Producer Groups (PGs). CRPs are often equipped with modern technology - including hand held projectors and mobile applications - to support video-based extension training and enable content creation featuring best practices among local farmers.

At the State level, all State Rural Livelihoods Missions (SRLMs) are supported by a pool of State Resource Persons (SRPs) comprising senior members of the state livelihood team, staff from MKSP, NGO partners and individual consultants engaged by the SRLMs. SRPs are domain experts, formally trained and certified to implement contextually relevant farm livelihood interventions through high quality technical assistance. As of March 2020, 608 SRPs (309 in sustainable agriculture; 299 in livestock) have been identified, trained and certified.

At the National level, 90 National Resource Persons (NRPs) empanelled and trained in the intricacies of DAY-NRLM, lend technical support to the states. These NRPs have technical expertise and implementation experience in agro-ecological practices, livestock, value addition of NTFP and market-based value chains. They are available on call to SRLMs through the National Institute of Rural Development (NIRD) to plan livelihoods interventions, training and capacity building, development of protocols and identification and documentation of good practices.

The Ministry of Rural Development (MoRD) has also set up a dedicated agriculture value chain (AVC) support cell, to provide technical support services and strengthen the planning and implementation capacities of SRLMs. This cell is being developed into a Centre of Excellence to promote producer-owned and market-centric value chain enterprise. It is envisioned as a self-sustaining entity at the national level and will continue to provide high quality technical assistance to various grassroots implementing organizations.

A high-level advisory committee comprising of eminent sector experts from public, private and civil society organizations supports the National and State Missions of DAY-NRLM.
Theory of Change: How multiple intervention pathways benefit farmers

The ecosystem of Community Based Organizations (CBOs) created under DAY-NRLM unifies the various intervention pathways. The inclusive mobilization protocols of DAY-NRLM ensure that the majority of women small-farmers within a village are SHG members and have easy access to support services. SHGs simplify the delivery of services at the grassroots level and play a vital role in streamlining access to credit for seasonal farm needs and expansion through land leasing. Higher order federations like the VOs and CLFs leverage additional resources from government programs, while managing community level resources like agriculture implements, tool banks and specialized common assets.

Programmatic streams under DAY-NRLM: Complementary intervention pathways

The farm livelihoods framework created under DAY-NRLM leveraged the ecosystem of community institutions to enable small-farmers to better plan, produce and market for higher price realization, nutritional security and ecological resilience. The combination of intervention pathways adopted within the ambit of the program include (a) Universal Farm Livelihoods Interventions through State Action Plans, (b) Mahila Kisan Sashaktikaran Pariyojana - MKSP and (c) Agriculture Value Chains Development through market linked interventions.

Universal Farm Livelihoods Interventions through SRLM Annual Action Plan

A universal set of farm-based interventions is promoted across all blocks to enable social mobilization and financial inclusion. Annual action plans submitted by states promote interventions in sustainable agriculture, non-timber forest produce (NTFP) collection and livestock rearing in these intensive blocks, which are implemented by the CRPs. These plans focus variably on enhancing productivity, food and nutrition security and improving net income through Non-Chemical Pest Management (NPM) for a diversified poly-crop model. NTFP based interventions are supported in tribal areas to promote scientific harvesting, post-harvesting practices, value addition and market linkages. In the livestock sector the focus is on reducing morbidity and mortality of livestock by providing doorstep extension services to SHG member households.

Improved access to credit, inputs and extension support services enable small farmers to achieve higher and more resilient production and boost profitability. PGs support primary aggregation, grading and sorting of farm produce at the village level and enable better returns through transparent price discovery systems. The FPOs support the sale of farm produce and/or value-added products in larger markets and to institutional buyers. This allows farmer owned FPOs to gain a larger share of the price dispersion between wholesale markets and farm-gate, resulting in a higher per unit price realization. These organizations are supported in professional agri-business management by technical assistance partner agencies at the state and national level to build linkages with institutional buyers.

Mahila Kisan Sashaktikaran Pariyojana (MKSP)

MKSP was launched in 2010-11 under the framework of DAY-NRLM to specifically support intensive skill development for women farmers. The scheme was initially implemented through renowned NGOs as Project Implementing Agencies (PIAs) and later SRLMs were encouraged to integrate these into DAY-NRLM’s farm interventions. With a total outlay of INR 1174 crores (USD 170 million), the scheme has supported training and skill development of over 3.6 million Mahila Kishans (woman farmers). Since its inception, MKSP has supported 81 location specific projects in the domain of community managed sustainable agriculture, NTFP and livestock.

<table>
<thead>
<tr>
<th>Key Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
</tr>
<tr>
<td>Blocks entered with value chain interventions</td>
</tr>
</tbody>
</table>
Originally focused on productivity enhancement, MKSP has evolved over the years to include market linkage support for women farmers through the development of producers’ enterprises. The program has supported economic mobilization of women farmers into more than 86,000 commodity-specific Producer Groups and 118 Farmer Producer Organizations.

**Market Based Agriculture Value Chain Development: NRLP and MKSP**

Expanding its focus from production centric farmer capacity building, DAY-NRLM has rolled out several interventions focused on strengthening agriculture value chains by building small-farmer capacity to better engage with rural market systems. The World Bank supported National Rural Livelihoods Project (NRLP) and MKSP’s Value Chain interventions have contributed significantly to promote producers’ collectives, viz. producers’ groups (PGs) and producers’ enterprises (PEs) that enable small and marginal women farmers to access markets for their produce at a competitive price.

**NRLP aims to intensively implement the program in select blocks of key DAY-NRLM states, and develop institutional capacity and community resources for subsequent scaling up. Dedicated funding windows have been established to support higher order value chain interventions across a range of commodities.**

As of March 2019, NRLM has supported value chain development proposals covering 254,000 SHG members. The interventions are focused on value addition and market linkages through Producer Enterprises in vegetables, dairy, fishery and goatery, floriculture, mango and ginger, cashew, hill broom, tamarind, amla, bael, salai gum and other NTFP products. A specialized community cadre called Udyog Mitra has been developed to support entrepreneurship opportunities in agribusiness along the value chains.

**New generation initiatives: Building resilient value chains**

**Promotion of dairy value chains in partnerships with NDS**

NRLM is setting up large scale Dairy Producer Companies with the support of The National Dairy Development Services (NDS). These companies are being set up in regions with low penetration of organized milk marketing channels, supporting improved price realization for dairy farmers through competitive, inclusive and sustainable business organizations. NRLM has initiated six dairy projects thus far, with a combined target coverage of more than 2200 villages, over 114,000 households and a total annual turnover of INR 654 crore (USD 950 million). As of 2018, the project had incorporated 3 companies covering 8363 producers (66% SHG members) from 258 villages with an average milk collection of around 10,000 litres per day. In addition to supporting dairy farmers through quality based fair pricing, these companies focus on backward integration services such as the supply of cattle feed, mineral mixtures, breed improvement and artificial insemination services.
Development of organic clusters

Organic farming is viewed as the next frontier in NRLM’s farm intervention basket and cluster development, with a thrust towards organic certification and market channel development to enable higher price realization for small and marginal women farmers. As part of the cluster-based approach, organic production, post-harvest management, certification, value addition and collective marketing of organic products produced by SHG members. Thus far, 548 clusters across 14 states have been supported under the program, by locally mobilized women’s livelihood groups, registered on the central Participatory Guarantee System (PGS) portal.

The PGS program enables small and marginal farmers to obtain organic certification through a hassle free, decentralized certification system and is aimed at building domestic demand for high quality, organic produce. For farmer groups with sufficient capacity, the program envisions facilitation support for export grade certification as well.

Sustainable livelihoods and adaptation to climate change (SLACC)

The MoRD has supported a four-year project of the World Bank entitled “Sustainable Livelihoods and Adaptation to Climate Change (SLACC)” via the Special Climate Change Fund (SCCF) of the Global Environment Facility (GEF). This pilot project aims to improve the adaptive capacity of the rural poor to climate variability and change affecting farm-based livelihoods, through community-based interventions. A wide range of complementary interventions have been implemented to support climate resilience including climate resilient varietal replacement, resource conservation techniques like Direct Seeded Rice and Zero Tillage, as well as ecological services like community managed soil testing labs and automated weather stations.

SLACC has been implemented across 793 villages in Bihar and Madhya Pradesh, helping more than 8000 farmers to adopt climate resilient agriculture practices by mainstreaming technically rigorous approaches through community institutions. Local communities and entrepreneurs are managing community infrastructure investments in soil health testing centres, tool banks and automated weather stations, under this initiative. A 20-member team of state, district officers, extension and rural service providers have been trained to support this effort, while a Climate Change Adaptation Planning Toolkit has been developed and rolled out.

Convergence with government programs

DAY-NRLM’s institutional platforms facilitate the convergent delivery of several government programs aimed at small-farmers or low-income households. This symbiotic arrangement enables better targeting while bringing in additional resources that bolster the programs own interventions. All SRLMs are encouraged to develop institutional partnerships with other programs within the rural development sector as well as agriculture and allied sector departments. Some of the best examples include (a) convergence with Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) to develop productive infrastructure in support of Agri-Value Chains being promoted under DAY-NRLM, (b) convergence with the Agriculture Department to develop community managed tool banks and Custom Hiring Centers that support mechanization services otherwise out of small-farmer reach and (c) convergence with the Horticulture Department to promote community managed Poly Houses and Shed Nets for round-the-year cultivation of exotic vegetables, serving as a training-cum-revenue center for local farmer groups.

Improving nutrition on the SHG platform

1. NRLM has introduced agri-nutri gardens as a nutrition focused intervention supporting the availability of nutritive food crops and enhanced food safety for all SHG households including those who do not have access to large plots. The initiative supports household level training of women members in maintaining small size gardens in any available space.
Recognizing the importance of small livestock for small and landless farmers, structured interventions in poultry, small ruminants and cattle have been integrated with agriculture initiatives. The focus is on breed improvement through artificial insemination services, reducing morbidity and mortality through regular vaccination, improved feeding and fair price support by introducing digital weighing scale as points of sale. At the village level, 16097 Pashu Sakhis are working as frontline extension workers, providing fee based livestock support services to SHG member households.

The community managed Custom Hiring Centres/tool banks are being established to provide timely access to farm equipment for women SHG members. Upto March 2020, 11,426 Custom Hiring Centres/tool bank were established across 21 States. In Uttar Pradesh, Bihar and Jharkhand, Custom Hiring Centres are being established via a convergence program with the Ministry of Agriculture.

NRLM has partnered with various stakeholders (sector support organizations in diverse livelihood sub-sectors) to improve the implementation of livelihood interventions. These organizations are in a position to support SRLMs in project formulation, implementation support and training and capacity building of SRLM staff, CRP and the community. Some such initiatives are mentioned below.

### Implementation: Partnerships & DAY-NRLM support organizations

DAY-NRLM has partnered with various sector support organizations in diverse livelihood sub-sectors to ensure high quality technical assistance in the implementation of these initiatives. These organizations support SRLMs in project formulation, implementation support, training and capacity building of SRLM staff, CRP and the community. The focus of these partnerships is to enable effective knowledge transfer to project functionaries and community professionals, strengthening the sustainability of these initiatives.

### Key Lessons and the Way Forward

**Integration with the DAY-NRLM ecosystem**

DAY-NRLM’s farm and livestock interventions have capitalized on a readily available institutional base of rural households. The phased approach to introducing livelihood support ensured that these community institutions attained the desired social cohesion and credit access capacity before undertaking higher order initiatives. The exclusive women-based platform meant that the project was able to tap into a hitherto largely overlooked segment of women small-farmers.

**Moving from productivity to profitability**

NRLM’s basket of interventions have evolved from a largely production focused set of initiatives to a set of complementary intervention pathways that provide support at all levels of value chains including pre-production planning, credit and inputs, farm extension, post-harvest management, market linkage and value addition. The program’s massive scale allows it to undertake rapid pilots in diverse contexts before scale-up. The initial focus on productivity enhancement interventions has enabled states to develop sufficient internal capacity at program and community level to sustainably manage these interventions. Therefore, the next
generation of interventions are primed to focus on strengthening market capacity of small-farmers.

Effective and sustainable peer-to-peer learning systems

The robust community-based extension system developed under DAY-NRLM has proven to be an effective and sustainable peer-to-peer learning mechanism. The focus on identifying and training women members as CRPs has ensured that capacity building support reaches small women farmers. The use of digital extension systems harnessing local best practices has enhanced the credibility of training content. Most states are moving towards fee-based models for extension services, paving way for long-term sustainability. Many states have also successfully experimented with developing the CRPs as agri-service entrepreneurs supporting the availability of quality inputs and facilitating aggregation for parent FPOs. The peer-to-peer learning approach extends to SRLMS as well with the national unit of DAY-NRLM supporting cross learning amongst states.

Technical assistance (TA) to internal capacity development

NRLM has placed a strong emphasis on roping in high quality technical assistance and expertise in supporting state missions. All TA partnerships are focused on building long term internal capacity to scale up and deepen initiatives initially supported through external TA. Many state missions have successfully scaled up value chain initiatives on their own after building initial capacity through TA partners. At the national level, the proposed Agri Value Chain cell is envisaged as a self-sustaining entity following a similar principle.

FPOs as inclusive agri-business intermediaries

Farmer Producer collectives under NRLM have successfully demonstrated the potential of collectivization to access cheaper inputs, improve bargaining power and gain access to diversified markets. It has been observed that small-farmer owned FPOs have been able to garner better price per unit by capturing the price dispersion between farm gate and wholesale prices while also catalyzing a corrective effect in local market practices - with existing intermediaries adopting fairer market practices to compete with new institutions.

Building sustainable and pro-poor agribusinesses

NRLM is supporting long-term capacity building and nurturing large-scale Farmer Producer Organizations. The experience so far clearly suggests a strong need for professional human resources and business processes for these organizations and these have been integrated as key principles in the program’s policy for FPOs. Long-term access to finance for business operations of FPOs is being integrated with the DAY-NRLM ecosystem, enabling the program to leverage its longstanding experience and credibility with banking sector to sustainably support these new business organizations.

Transformative approaches building on lessons

Building on lessons from implementation of the MKSP and NRLP, DAY-NRLM is now implementing the National Rural Economic Transformation Project (NRETP), with the support of the World Bank to enable higher order interventions in areas of farm, livestock and enterprise development. NRETP is supporting the promotion of large scale Producer Enterprises through dedicated TA partners coupled with investments in village level mobilization of Producer Groups.

NRETP will also intensively support enterprise development initiatives within the agriculture value chains through the provision of training, start-up capital and on-going handholding support.

ABOUT THE DISCUSSION NOTE SERIES

This note is part of the South Asia Agriculture and Rural Growth Discussion Note Series, that seeks to disseminate operational learnings and implementation experiences from World Bank financed rural, agriculture and food systems programs in South Asia.

Author(s): Anjani Kumar Singh, Alreena Renita Pinto, Paramveer Singh, Alok De

Series editors: Alreena Renita Pinto, Deepti Kakkar

Publication design & Illustrations: Satwik Gade

We are grateful for the generous support from the Ministry of Rural Development, The Bill & Melinda Gates Foundation, The Department for International Development, and various State Rural Development departments.

Disclaimer: The findings, interpretations, and conclusions expressed in this note are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent.