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EXPANDING NON-FARM LIVELIHOOD OPPORTUNITIES THROUGH MAHATMA GANDHI NREGA

An exploration

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Table of Abbreviations

CFP	Cluster Facilitation Programme
DDUGKY	Deen Dayal Upadhyay Gramin Kaushal Yojna
ERADA	Enhancing Rural Resilience through Appropriate Development Actions
GOI	Government of India
GO	Government Organisation
ILO	International Labour Organisation
MGNREGS	Mahatma Gandhi National Employment Guarantee Scheme
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
NSSO	National Sample Survey Organisation
NRMC	NR Management Consultants India Private Limited
NRLM	National Rural Livelihood Mission
NGO	Non-Government Organisation
PLFS	Periodic Labour Force Survey
PMKVY	Pradhan Mantri Kaushal Vikas Yojna
PMMSY	Pradhan Mantri Matsya Sampada Yojana
PMVDY	Pradhan Mantri Van Dhan Vikas Yojna
RNFS	Rural-Non-Farm-Sector
RKVY	Rashtriya Krishi Vikas Yojna
SECC	Socio Economic Caste Census
SVEP	Start Up Village Entrepreneurship Programme
SFURTI	Scheme of Fund for Regeneration of Traditional Industries
SC	Scheduled Caste
ST	Scheduled Tribe

Executive Summary

The Rural-Non-Farm-Sector (RNFS) that includes economic activities like manufacturing, handicrafts, processing, repairs, construction, mining and quarrying, transport, trade, communication, community, and personal services etc. is growing and attracting more labour force.

Non-farm employment can broadly be classified into **Enterprises** (run with a focus on surplus generation and growth, employing labour with certain degree of technical sophistication), **Products or activities** (often seasonal, run solely with the help of unpaid family labour, using primitive technology and catering mostly to the local market and **Wage Workers** (characterised by low earnings and a disintegrated market with respect to labour supply) (Saxena, 2004). The 68th round of National Sample Survey Organisation (NSSO) survey reveals that among informal sector workers, about 75% in rural areas are engaged in smaller enterprises of various forms like owner-managed enterprises (workshops, small and medium enterprises) that include units run by hawkers, shopkeepers, merchants in wholesale trade, and distributors.

The Rural 'Non-Farm' Sector (RNFS) in India comprises of heterogeneous industries with increasing population engaged in construction sector post 1990's. Other prominent industries that employ non-farm workers include trade, manufacturing, transportation, and storage. Lack of access to tools and equipment, low access to institutional finance, low level of literacy, skill gap etc. are critical factors that remain as barriers to self-employment within RNFS. Determinants for diversification of non-farm livelihood at the household level are more diverse, and mostly determined by strategic choices of the households which are either opportunity-driven or distress-driven, but a complex transformation phenomenon. Often, the poor, landless, illiterate, socially vulnerable communities and women do not seem to get a fair share of power, political space, social standing, and economic results with most of them employed in agriculture with limited scope to diversify their economic opportunities. Employment in RNFS is often constrained by various factors at the individual level or systemic level including **lack of education and awareness, infrastructure related constraints, lack of comprehensive policy intervention in sustaining the RNFS, lack of post skill training assessments, exclusion of persons with disabilities from the labour market, underemployment, and regulatory restriction on small sectors.**

'Enhancing Rural Resilience through Appropriate Development Actions (ERADA)' an Indo-German development cooperation project commissioned by the German Federal Ministry for Economic Cooperation and

Development (BMZ). The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, India is implementing the project in partnership with Ministry of Rural Development (MoRD), Government of India (GoI). It supports the Corona *Immediate Programme* of BMZ.

This report is divided into six sections which elaborates the RNFS scenario in India with a focus on Mahatma Gandhi National Rural Employment Guarantee Scheme (*Mahatma Gandhi NREGS*) and covers case studies of various non-farm models demonstrated across ERADA project states namely Bihar, Jharkhand, Madhya Pradesh and Rajasthan. It aims to respond COVID19 induced economic shocks in rural areas by strengthening the livelihoods of vulnerable communities, based on locally available natural resources and development support programmes. The project targets women, youth, Schedule Caste (SC)/ Schedule Tribe (ST), migrants, disadvantaged ethnical groups and other vulnerable communities to reduce their dependency from labour migration and improve their resilience to future economic shocks, subsequent pandemic wave and other crises and envisions a long-term, sustainable strengthening of the local natural resource base, specifically in cooperation with the Public Employment Programme, especially **Mahatma Gandhi NREGS**. The *Mahatma Gandhi NREGS* comes under the legal purview of Mahatma Gandhi National Rural Employment Guarantee Act 2005 that guarantees the 'right to work' for "enhancing livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year, to every household whose adult members volunteer to do unskilled manual work" and build durable assets such as roads, canals, ponds, and wells etc. that can augment income to rural households.

This report maps out the existing potential non-farm livelihoods activities from the current list of 262 works being implemented under *Mahatma Gandhi NREGS*. Currently, *Mahatma Gandhi NREGS* enlisted activities are categorised as NRM and Non-NRM and further sub categorised based on the nature of the activities. As per the scope of this assignment, the mapping of the potential non-farm activities focuses on potential non-farm wage employment, self-employment and enterprise options that can be generated as a secondary or supporting ecosystem to *Mahatma Gandhi NREGS* interventions. In addition, possibilities of integration of activities under other schemes such as Pradhan Mantri Kaushal Vikas Yojna (PMKVY), Deen Dayal Upadhyay Gramin Kaushal Yojna (DDU-GKY), National Rural Livelihood Mission (NRLM), Start Up Village Entrepreneurship Programme (SVEP), Scheme of Fund for Regeneration of Traditional Industries (SFURTI)

and other private sector skill development and entrepreneurship programmes have been reviewed. A mixed method approach has been adopted with greater reliance on the desk review of secondary literature including statistical datasets and reports by government and other credible sources. The secondary reviews are complimented and triangulated with minimum possible validation through stakeholders' consultations facilitated by GIZ Technical Team located in project states. Situational analysis of non-farm sector in four project states are assessed through review of state specific schemes-project statistics and institutional information around trends of access to non-farm livelihood schemes, entitlements and financial inclusion and trends in non-farm employment sector transformation vis-à-vis farm and allied sectors.

Secondary literature suggests a gradual decline of employment in the agriculture sector in India¹ from 1983 - 2018, resulting in a growing proportion of the workforce shifting to non-farm activities and a falling proportion engaging on casual wage-based employment which emphasises the relevance of rural non-farm sector. **The top four industries** contributing to non-farm jobs in India² are **Trade and Hospitality, Construction, Transport and Education and Health**. Post 1990's both rural and urban areas and construction sector has emerged as the largest employing industry for rural workers. (Vajiram, 2019)

On analysing from a **demand side** perspective, the increasing demand of workforce in urban areas has influenced the national and state policies towards skilling and employment. An assessment made by Skill Mission on available skilled human resources in 2017, estimated demand of skilled human resources and the incremental requirement in 2022 in total 24 occupation sectors. The data trend indicates that there has been a sharp decline of human resource requirement in Agriculture sector (minus 13.3%) as against the highest increasing demand in Building Construction & Real Estate Sector (plus 30.6%). It signifies that the rural population engaged in agriculture are shifting to construction sector to work as skilled or casual labour. The sectors such as Retail, Logistics, Transportation & Warehousing, and Beauty and Wellness have a demand for human resources around eight to ten percent and the latter three sectors have greater potential to create rural non-farm jobs and employment. The sectors between four to eight percent incremental demand are Textile & Clothing, Furniture & Furnishing, Tourism & Hospitality, Travel and Handlooms & Handicrafts. Out of these sectors, furniture making, rural tourism and

handlooms & handicraft have potential to create rural non-farm livelihoods.

While assessing the **demand side**, the **pandemic induced trends** are also considered as part of strengthening the adaptability and resilience of targeted interventions towards climate and/or economic shocks. Evidently, during the pandemic in 2019-20, as the Indian economy decelerated, agriculture was resilient and agricultural growth stood at 4.3% in 2019-20, while manufacturing (minus 2.4%) and construction (1%) declined. The *Periodic Labour Force Survey (PLFS)* for 2019-20 suggests an increasing trend in the number of people employed in agriculture. The share of workers employed in the agricultural sector has risen to 45.6% in 2019-20, from 42.5% and 44.1% for the preceding two PLFS years. This has been accompanied by the declining percentages of those engaged in manufacturing, construction and most services, barring trade, hotels & restaurants. According to *Socio-Economic and Caste Census 2011 (Census 2011)*, out of 482 million workers in India, about 194 million are permanent and semi-permanent migrant workers and the pattern of migration is skewed. However, the pandemic triggered massive reverse migration in India resulting in increasing demand for rural wage employment that can be observed from the growing demand for employment under *Mahatma Gandhi NREGS* in the year 2020-21 as compared to other previous years where the trend was decreasing.

On the **supply side**, India has 55 million potential workers in the age group of 15 to 35 years in rural areas (Census 2011). At the same time, *Federation of Indian Chambers of Commerce & Industry (FICCI)* and Ernst & Young Global Limited (EY) study published in 2013 suggested a shortage of over 47 million skilled workers across the globe by 2020. With rural India emerging as the primary location for job creation, it is inevitable that agriculture is the primary driver. This presents a historic opportunity for India to transform its demographic surplus into a demographic dividend. The government of India has introduced many schemes and programmes over the years to diversify the rural population into non-farm activities. However, *Mahatma Gandhi NREGS* being a bottom-up, people centred, demand-driven planning and decision-making process triggered by the Gram Sabhas greater potential to contribute to RNFS employment which has been mapped out in this report.

Based on the analysis, the report proposes a **multi-pronged approach** that would involve skimming the economic and

¹According to the 38th round of NSS and PLFS (2018-19) reports, the agricultural sector's contribution to employment declined from 81 per cent in 1983 to 58 per cent (decline by 23%) in 2018 while there is an increase in rural non-agricultural employment (from 19 per cent to 42 per cent) between 1983 - 2018 (The Hindu Business Line, 2020)

²between the years 2011 and 2015

employment gains from non-farm livelihood through a holistic village ecosystem approach using *Mahatma Gandhi NREGS* as the resource platform. This approach would connect rural non-farm skills & enterprises for better application of *Mahatma Gandhi NREGS* resources in farm & off-farm sector triggering employment of local youth and women in multiple ecosystem services that with help various actors contribute to improve local employment. On categorising the list of works underarray of 262 types of activities offered by *Mahatma Gandhi NREGS* to be selected by its beneficiaries, based on the nature of work, nearly, 50% of works belongs to construction category followed by 21% on repair and maintenance, 20% on plantation. In terms of asset creation, there has been a gradual shift in focus from building common assets to creating individual assets over a period of ten years which has increased contribution to annual household revenue ranging from 22% to 61%. These individual assets brought tangible impacts under *Mahatma Gandhi NREGS* resulting in increased crop coverage, diversification to cash crops (viz. vegetables, oil seeds etc.), fish farming, animal husbandry etc. While these results reflect that individual asset creation strengthens the production system through land development, irrigation, domestic animal shelters, farm pond etc., it has adequate potential to open non-farm economic opportunities across the agriculture & livestock supply and value chain.

Along with systemic shifts around *Mahatma Gandhi NREGS*, work focused on creation of rural infrastructure and individual focused assets, integration of non-farm eco-opportunities and viewing rural geography in a resource-cluster lens would be critical. The interventions around non-farm livelihoods continuum are already existing although the systemic shifts are required to adapt to the actions on the ground aligning to the concerns of scale and sustainability.

This would require from a **market centric approach**, to **scale up and sustain initiatives** around value chain interventions and supply-value chain development that involves non-farm livelihood potential and from a **resource centric approach to sustain and scale up initiatives** and to explore prospective potential non-farm livelihood options that would generate local employment and economic development through enterprise by building skills/reskilling and integration with *Mahatma Gandhi NREGS* ecosystem for expanding local non-farm employment and enterprise supported through public financing through convergence with government schemes and programmes.

23 non-farm occupation sectors

118 potential rural non-farm opportunities

34 livelihood options have direct linkage with *Mahatma Gandhi NREGS*

118 livelihood activities

19 non-farm livelihood options would generate economic opportunity for wage employment

82 self-employment

21 activities are enterprise promotion centric

118 identified non-farm trades

89 activities have potential in local market that is within the village,

15 have potential market within the district

14 are within the state



Infrastructure

95 activities require electricity

13 require internet connectivity

71 storage/ space facility

64 transport facility

17 some kind of basic or semi-automated processing/ value addition infrastructure



Skills

About 86 activities that are listed only require basic level of education

24 activities require intermediate level of education

8 activities require skill based professional education



Finance & Technology

43 non-farm options require financial assistance in form of start-up grant or credit to initiate the business operations

21 activities requires technological interventions that can increase the efficiency and profitability of the activity.

Recommendations for Way Forward through ERADA

Based on our analysis, we propose augmenting income from the existing list of *Mahatma Gandhi NREGS* works that requires an employment focussed approach through upskilling and reskilling based on individual preferences to work as skilled workers primarily on the non-NRM infrastructure development front, construction works include both common and individual work categories. Requirement of individual skilled worker in each skill domain needs to be assessed based on the demand at the GP level during the preparation of annual plan (shelf of projects) for *Mahatma Gandhi NREGS*. In addition, it is critical to ensure that optimum numbers of such individuals are promoted in each skill domain to ensure income sufficiency for the individuals to continue in that trade based on an assessment of local demand of these rural non-farm skills other than *Mahatma Gandhi NREGS* such as employment opportunities from government programmes/schemes or from private sector.

The outputs/ outcomes from NRM and non-NRM works under *Mahatma Gandhi NREGS* generate potential non-farm economic opportunities across the supply chain and value chain of farm and off-farm sector including construction sector. These economic opportunities are self-employment focused based on available resources and skills. Potential supply chain driven self-employment non-farm economic opportunities are supply of construction materials, rural transport services etc. These set of non-farm self-employment are resource focused. Potential farm and off-farm value chain based non-farm economic opportunities include mechanic for repair and maintenance of agricultural equipment, agriculture equipment operators, drivers, para-vet care, land surveyors, barefoot technicians etc. These set of non-farm self-employment are skill focused.

The increased investment under *Mahatma Gandhi NREGS* and its shifting focus from common asset creation to individual asset creation has increased the production potential from farm and off-farm sector in rural areas. Sustenance of such development primarily depends upon the ecosystem that supports across the value chain beyond employment and self-employment. Supporting in setting up enterprises around the farm and off-farm supply chain and value chain would create potential non-farm economic

opportunities that will support the ecosystem and general local employment. Potential enterprises include agriculture input supply, farm & livestock products aggregation and sale, local value addition (cleaning, grading, packaging) etc. Demand side assessment (consumption and market trends) is crucial in setting up ecosystem services and catering to a niche market. Private sector participation, particularly in augmenting finance (credit) and technology, is essential to sustain the non-farm opportunities. The enterprise focused intervention model may be supported through mentorship programmes and skill development by reskilling/upskilling through convergence with DDU-GKY, RSETI, SVEP etc. Specific focus would be on green enterprises that could increase the participation of women and youth as well. Restored skills with clear roles & institutions and a focus on sustainable livelihoods could lead to increased income and reduced migration.

This study has analysed the structure and potential of expanding the *Mahatma Gandhi NREGS* works to generate non-farm livelihood options, however, there is a need to demonstrate it under ERADA particularly the designing and implementing enterprise promotion interventions backed by *Mahatma Gandhi NREGS* assets. Some of the critical areas that could be taken up by ERADA include expanding the scope of Project Unnati by supporting its implementation in ERADA states, inclusion of SVEP and SFURTI under Project Unnati, addressing employment challenges due to pandemic induced return migration and subsequent re-migration and increased demand for the *Mahatma Gandhi NREGS* works. A detailed study for exploring the local employment opportunities and scope of expansion under handicrafts and handlooms may be taken up in potential clusters to explore the possibility of absorption of rural youth and women into the sector and also to look at the feasibility of setting up clusters-based enterprise. E-commerce boom and its trend of expanding reach to rural areas have opened various non-farm employment opportunities including managing logistics, repair & maintenance, etc. Similarly, rural outreach of financial services has been enhanced through various technology backed delivery models that have created huge potential for private sector engagement in creating rural employment generation and enterprise promotion. A detailed scoping study and skill mapping may be taken up under ERADA for improved results.

1. Background

Policymakers in developing nations promote provision of gainful employment to able-bodied individuals in rural regions as the key to reducing poverty and advancing rural development (OECD, 2009). Agriculture alone cannot accommodate rural employment in agrarian economies characterised by persistent population pressure, ever-declining land-human-being ratios, extremely inequitable land distribution structures, and ever-increasing labor-saving agricultural production technology. Although primary sector has played a very significant role for generation of rural employment in the Asia and Pacific regions, its contribution to the overall economy has reduced in the recent past (Asian Productivity Organisation, 2015). In India, farm-based livelihoods account for 54.60% of the workforce⁴ (Census 2011) while the Rural-Non-Farm-Sector⁵ (RNFS) is growing and attracting more labor force (Agriculture Statistics, 2019).

Historically, organised industrial and service sectors were responsible for absorbing excess labour from rural regions, resulting in a shift in employment patterns from agricultural and other primary activities towards secondary and tertiary industries. However, the pattern of economic growth in industrialised western economies is unlikely to be replicated in the case of currently industrialising countries. Employment in the organised industrial sector in emerging countries is not rising at a fast enough rate, partly due to the capital-intensive nature of the technologies deployed and partly due to the slow growth of the industrial sector. As a result, in such economies, the onus of employing all surplus labour in rural regions falls back on the farmer. The potential to hire extra labour force in agriculture, on the other hand, is essentially non-existent. In reality, agriculture is displacing some of the workers it already employs. As a result, it is apparent that the agriculture and organised industrial sectors would be unable to provide the much-needed job opportunities. Under this scenario, the sole policy option for addressing the problem of unemployment and underemployment is to promote non-agricultural employment in rural regions.

Determinants for diversification⁶ of non-farm livelihood at the household level are more diverse, and mostly determined by strategic choices of the household. A household's choice of non-farm livelihood activity is either opportunity-driven or distress-driven, but it is a complex transformation phenomenon (Kilic et al., 2009). With the gradual decline of absolute level of employment in the agriculture sector (from 268.6 million in 2004-05 to 219.3 million in 2015-16), a growing proportion of the workforce is moving to non-farm activities and a falling proportion is engaged on a casual wage. Self-employment in these sectors also improved due to favourable government policies and programmes, which promotes owner managed enterprises. The 68th Round of NSSO survey reveals that among

informal sector workers, about 75% in rural areas are engaged in smaller enterprises of various forms. These are owner-managed enterprises and include units run by hawkers, shopkeepers, merchants in wholesale trade, and distributors like workshops and small and medium enterprises in agricultural, manufacturing or service sector.

Some of the critical factors influencing the choice for non-farm livelihood diversification are location and distance to the town from the households, food insecurity, and agricultural land size (Ghosh et al, 2021) observed that the *Mahatma Gandhi NREGA* has negatively affected rural non-farm livelihood activities. There is an 18% and 39% probability of reducing non-farm business and services respectively compared to the increasing *Mahatma Gandhi NREGA* work opportunities. At the same time, the likelihood of non-farm business choices has increased by 56% due to rainfall and temperature-change-induced disasters (Gosh et.al, 2021). Non-farm employment in rural regions is important because it can absorb surplus labour from agriculture, reducing distress migration. The increasing demand for skilled labour force in non-agriculture sector, particularly in construction, trade, services etc., has potential to generate rural non-farm employment absorb surplus labour force. Moreover, availability of diverse livelihood opportunities in RNFS would propel multisectoral growth and contribute towards holistic development of rural areas. While access to non-farm activities might boost monthly per capita consumption, it also has the potential to exacerbate inequality (ILO 2013).

1.1. Rationale

Project Enhancing Rural Resilience through Appropriate Development Action (ERADA) is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ India in partnership with Ministry of Rural Development (MoRD), Government of India. It is under implementation in selected locations across the Indian states of Bihar, Jharkhand, Madhya Pradesh and Rajasthan. The project aims to strengthen the livelihoods of vulnerable communities, based on locally available natural resources and development support programmes. The project targets women, youth, SC/ST, migrants, disadvantaged ethnical groups and other vulnerable communities to reduce their dependency from labour migration and improve their resilience to future economic shocks, subsequent pandemic wave and other crises.

The project envisions a long-term, sustainable strengthening of the local natural resource base, specifically in cooperation with the public employment programme, especially *Mahatma Gandhi NREGS*. This includes infrastructure (digital and institutional) measures that improve the natural

resource base to be climate resilient as well as agro ecological approaches that optimise resource use with minimal negative externalities, through contextualised execution.

Outputs of Project ERADA:

Output 1: Improving wage work potential of vulnerable households and enhancing the natural resource base

Output 2: Long-term green livelihood development, in convergence with National Rural Livelihoods Mission and other relevant national and state-level programmes

Output 3: Improving convergence and strengthening of multi-stakeholder platforms for providing better access to vulnerable households.

Figure 1 Project ERADA Outputs

The project will strengthen the convergence of different government support programmes for the conservation and sustainable management of the natural resource base and the strengthening of rural resilience in the selected states.

This study report is conducted in collaboration with NR Management Consultants Private Limited to map the existing potential non-farm livelihoods activities from the current list of 262 works being implemented under *Mahatma Gandhi NREGS*, and further identify innovative livelihood opportunities in the non-farm sector. Currently, *Mahatma Gandhi NREGS* enlisted activities are categorised as NRM and Non-NRM and further sub-categorised based on the nature of the activities viz. construction, plantation, agriculture and allied, water and its subcategories. The mapping of the potential non-farm activities will primarily focus on potential non-farm wage employment, self-employment and enterprise option that can be generated as a secondary or supporting ecosystem to *Mahatma Gandhi NREGS* interventions. In addition, this report also reviews the possibilities of integration of activities under other schemes such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Deen Dayal Upadhyay Gramin Koushal Yojana (DDU-GKY), National Rural

Livelihood Mission (NRLM), Start Up Village Entrepreneurship Programme (SVEP), Scheme of Fund for Regeneration of Traditional Industries (SFURTI) and other private sector skill development and entrepreneurship programmes.

The specific objectives of this report are

- To map all the existing livelihood activities from the current list of 262 enlisted activities under *Mahatma Gandhi NREGS*.
- To map other potential activities for creating livelihoods in rural areas, in the field of non-farm livelihood thematic area.
- Livelihood generating activities under other related departments and schemes from the four project states (Bihar, Jharkhand, Madhya Pradesh & Rajasthan).

1.2. Brief overview of Approach & Methodology

A mixed method approach has been adopted with greater reliance on the desk review of secondary literature, including statistical datasets and reports by government and other credible sources. The secondary reviews are complimented and triangulated with minimum possible validation through stakeholders' consultations facilitated by GIZ Technical Team located in each project state. This helped in adding first-hand information and understanding on the potential non-farm sector in these states and specific case studies or innovations that has happened due to government or non-government initiatives. These consultations are done through online video streaming or telephonically or email depending on the preference of the respondents. These consultations added information symmetry across institutional structures and stakeholders.

- a. **Substantive literature review:** Potential non-farm sector data and information availability, accessibility and usability are variable and therefore locating, extracting, and collating right and relevant information is very important. Following methods are adopted for Desk Review.
 - i. Review the relevant policy documents, reports, government orders, guidelines, manuals from government/other websites and in other public domains available on and offline.
 - ii. Extract quantitative data from databases, census, SECC, household surveys, government statistics related to non-farm sector, schemes, programmes to help the relevant analysis.

iii. Consult appropriate and relevant research articles, blogs, newspaper features to bring in update, trends, and insights into the narratives around these dimensions.

b. GIZ Technical Team & Stakeholder’s Consultations:

Interaction with GIZ’s technical team for each state and with other stakeholders such as sector experts, government officials, NGO etc. These reviews complimented and supplemented in validating the secondary information. These interviews were organised in the four focal states.

c. Situational Analysis of non-farm sector in four project states are assessed through review of state specific schemes/project statistics and institutional information around

- i. **Inclusion:** Trends of access to non-farm livelihood schemes, entitlements and financial inclusion.
- ii. **Transformation:** Trends in non-farm employment sector transformation vis-à-vis farm and allied sectors.

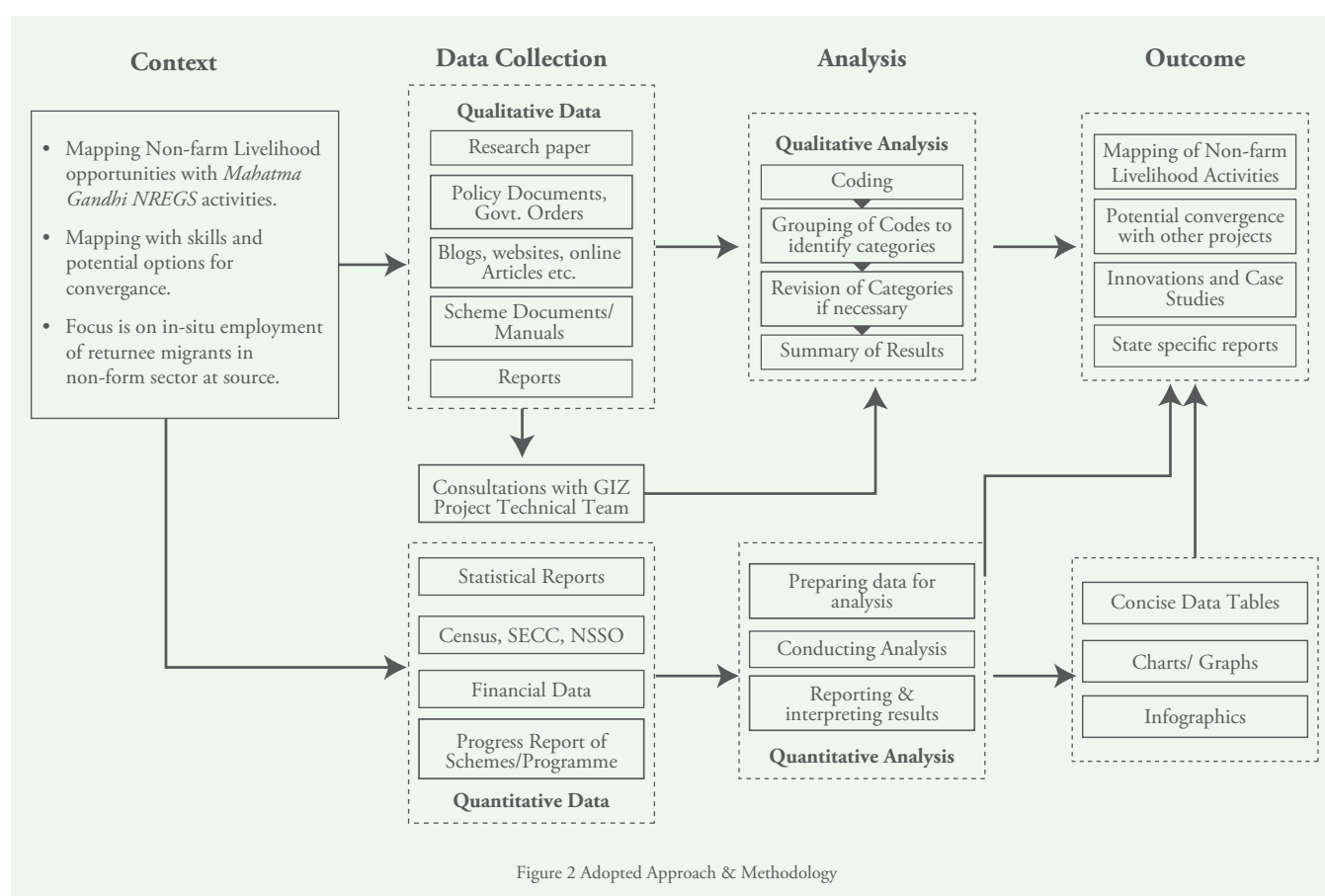


Figure 2 Adopted Approach & Methodology

1.3. Limitation of the Study

The study looks at potential pathways to enhance RNFS within the scope of the ERADA project. All the information used and evidence collected are based on secondary research and qualitative interviews with selected individuals, sector experts, practitioners etc. Within the scope of work, the information produced are from secondary sources including

that of the case studies. The data sources used from the Mahatma Gandhi NREGS and other centrally sponsored scheme MIS (tables 5, 6, 7) were sourced as of 11 February 2022, which are dynamic and being updated regularly. It is also to be mentioned that the present study did not have any baseline and is to be seen as a point-of-time beneficiary assessment

2

Understanding Rural Non-Farm Livelihood Sector in India and its derivatives- National & State Perspectives

India's rural economy is characterised by greater dependency on agriculture, lower transition of workforce to non-farm sector and complex land laws. According to Socio Economic and Caste Census 2011, farm-based livelihoods account for 54.6% of the total workforce in India. The forward and backward linkages of agricultural production techniques led to a series of related economic activities in the villages, widening the scope of non-farm sector in rural India. Greater demand for agricultural inputs like fertilisers and seeds, and in the process, led to growth in non-farm sector (both consumption and production goods sector), and several small-scale industries proliferated in rural areas which has been the main source of supply of non-agricultural goods and services to rural households. With trade liberalisation and Micro, Small and Medium Enterprises (MSME) Act, MSME enterprises were also promoted extensively (Mellor, 1976). Non-farm activities can be divided into "high-labour- productivity activities leading to high-income, and low-labour productivity activities that serve only as residual source of income the latter common among poor and illiterate" (Lanjouw, 1999).

Employment in the agriculture sector in India declined during 1983-2018, resulting in a growing proportion of the work force shifting to non-farm activities and a falling proportion engaging on casual wage-based employment, which emphasises the relevance of rural non-farm sector. The top four industries contributing to non-farm jobs in India are trade and hospitality (15.6%), construction (14.3%), transport (5.7%), and education and health (1.6%). Traditionally, manufacturing has been the most important in the non-farm sector; however, its share has declined in recent period in both rural and urban areas and construction sector has emerged as the largest employing industry for rural workers. Employment is low in mining and utilities which are largely under public domain. Services sector is prominent, though largely confined to the urban areas (Vajiram, 2019).

Development economics literature has identified two main factors that drive diversification into non-farm activities among farm households in developing countries. These factors are broadly classified into "pull factors" and "push factors". Reasons why a farm household can be pulled into the off-farm sector include higher returns to labour and/or capital and the less risky nature of investment in the off-farm sector (Kilic et al., 2009). The push factors that may drive off farm income diversification include: first, the need to increase family income when farm income alone cannot provide sufficient livelihood (Minot et al., 2006); second, the desire to manage agricultural production and market risks in the face of a missing insurance market

(Reardon, 1997; Barrett et al., 2001); and third, the need to earn income to finance farm investment in the absence of a functioning credit market (Reardon, 1997; Ruben and van den Berg, 2001; Kilic et al., 2009; Oseni and Winter, 2009).

RNFS includes several heterogeneous industries wherein employment growth in each of these industries is influenced by a host of separate factors. Determinants for diversification of non-farm livelihood at the household level are different, and mostly determined by strategic choices of the household. A household's choice of non-farm livelihood activity is either opportunity-driven or distress-driven, but it is a complex transformation phenomenon. These can broadly be grouped as development or distress related factors of RNFS growth. In several cases, farm and non-farm activities complement each other. In a study, Hazell and Haggblade (1991) calculated that on an average, an increase in agricultural income by Rs. 100 was associated with an increase in non-farm income by Rs. 64 (Rs. 25 in rural villages and Rs. 39 in rural towns). The residual sector hypothesis for growth of employment in RNFS suggest that wherever labour absorptive capacity of agriculture becomes limited and urban industrial sector is not able to accommodate ever-growing labour force, the RNFS tends to act as a sponge for surplus labour. The growth of RNFS in a region is propelled by either of the above development or distress-related factors.

For assessment and analysing non-farm economic opportunities from *Mahatma Gandhi NREGS*, the **non-farm employment classification** used in this report are broadly categorised into following three categories:

- 1 Enterprises that are run with a focus on surplus generation and growth, employing labour with certain degree of technical sophistication.**
- 2 Products or activities or services (self-employment) which are often seasonal, run solely with the help of unpaid family labour, using primitive technology and catering mostly to the local market.**
- 3 Wage workers characterised by low earnings and a disintegrated market with respect to labour supply (Saxena, 2003)**

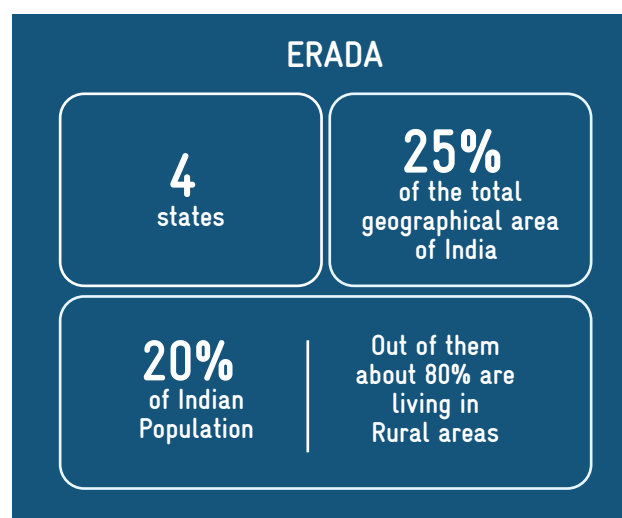
⁷The 38th round of NSS and PLFS (2018-19) reports, the agricultural sector's contribution to employment declined from 81 per cent in 1983 to 58 per cent (decline by 23%) in 2018 while there is an increase in rural non-agricultural employment (from 19 per cent to 42 per cent) between 1983 – 2018 (The Hindu Business Line, 2020)

⁸between the years 2011 and 2015

2.1 Who are employed in the non-farm sector?

In rural areas of India, as far as occupational diversification is concerned, it is observed that the poor and the illiterate, who were primarily employed in casual wage employment in agriculture, had lower reservation wages and were likely to show “greatest inclination to become involved in non-farm activities” (Lanjouw and Shariff, 2004). On the other extreme, individuals belonging to upper castes, because of their access to education, preferred not to continue in agriculture, and therefore opted various non-farm activities. Hence, poor and illiterate predominantly engaged in low end non-farm activities, mostly casual in nature, while upper castes (through their access to physical, human, and social capitals) occupied more remunerative non-farm work opportunities. Therefore, ability of the poor to gain access to rural non-farm employment depended on the extent to which they were crowded out by the wealthy (Lanjouw and Shariff, 2004). The maximum increase in proportion of workers moving into non-farm employment happened in case of SC workers in construction sector.

The *Socio-Economic and Caste Census 2011* divides all rural workers into four broad categories i.e., cultivators, agricultural labourers, those employed in household industries and others. Those employed as cultivators and agricultural labourers are considered as constituting farm employment. Those employed in household industries and other workers together are counted as being in the non-farm employment.



The four ERADA states collectively comprises of 25% of the total geographical area of India and is home for about 20% of Indian population, out of them about 80% are living in Rural areas. Bihar is the most populated state across the four states with 89% of its population residing in rural areas, followed by Jharkhand, Rajasthan, and Madhya Pradesh while Rajasthan and Madhya Pradesh are larger in terms of their geographies.

Following table presents the share of non-farm workers in India comparing with the four ERADA states.

Table 1 Share of Non-Farm Workers comparing with four ERADA States

State	Total Geographical Area (Km2)	No of Districts	Total Population (in Millions)	Population residing in Rural areas (in %)	Total Workers (in Million)	Non-Farm Workers (in Million)	% of Non-Farm Workers
Bihar	94,163	38	104.1	88.70	31.35	6.51	20.79
Jharkhand	79,716	24	32	75.95	10.77	2.68	24.92
Madhya Pradesh	308,245	52	72.7	72.37	24.71	2.55	14.36
Rajasthan	342,239	33	68	75.13	24.38	6.29	25.81
India					348.59	96.63	27.72

(Source: Census of India 2011)

This indicates that rural non-farm sector workers in four ERADA states are below the national average. In terms of share of rural non-farm sector, workers of ERADA states are

much lower as compared to Kerala (73.67%) and Punjab (46.46%) which has a substantially higher percentage of rural workers employed in the non-farm sector.

Table 2 Data on Rural Employment in four ERADA States

State	Percentage of population in the working age group 15-59 years by sex and residence (Census 2011)		Labour Force Participation Rate (Rural) (Source: PLFS 2019 -2020)		Literacy Rate (Rural) (Source: Census 2011)		Unemployment Rate (Source: CMIE Feb 2022)
	Male	Female	Male	Female	Male	Female	
Bihar	55.4	56.2	75.4	9.8	71.9	50.82	13.3
Jharkhand	59.6	60.1	83.1	44.8	74.57	49.74	8.9
Madhya Pradesh	61	60.7	85.0	47.0	76.64	53.2	3.2
Rajasthan	60.2	60.3	80.3	47.8	77.49	46.25	18.9

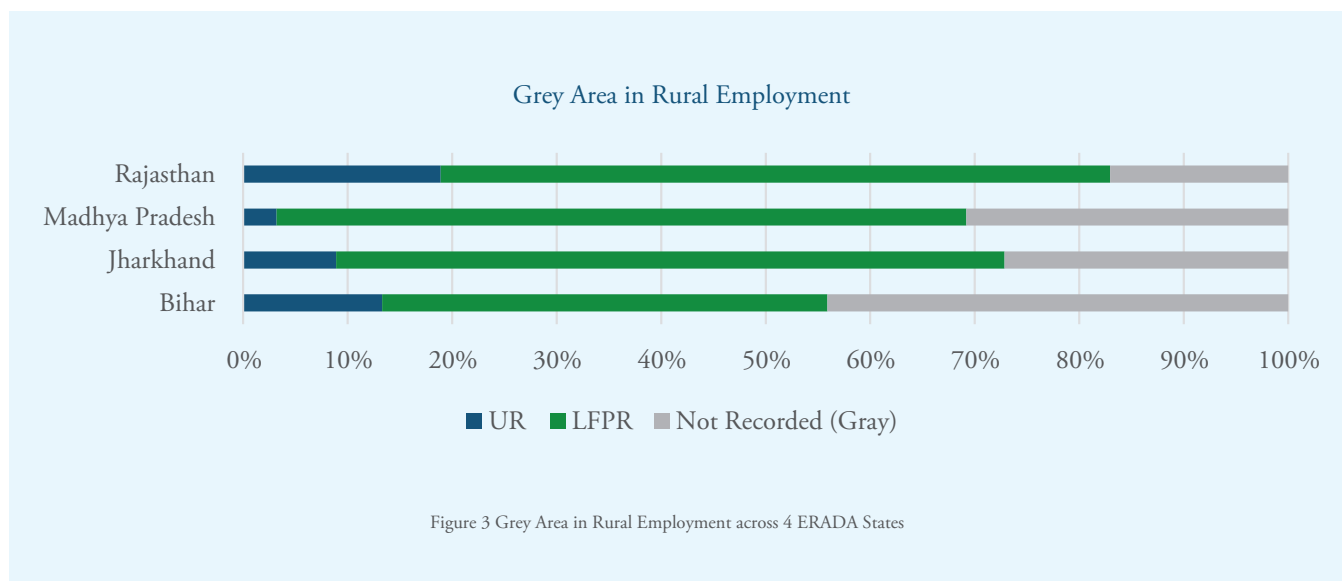
(Source: Census of India 2011)

The Labour Force Participation Rate (LFPR) for males stands above 70% across states as compared to females which are below 50% and specifically for Bihar, it stands at 9.8%, despite having the female literacy rate of 50.82%. In the case of Madhya Pradesh and Rajasthan the LFPR is higher than the national average of 26.4%.

It may be noted that the population available in the working age group is on an average, 59% across all the states, Madhya Pradesh (60.8%) being the highest and Bihar (55.8%) being the lowest.

The unemployment rate is highest in Rajasthan (18.9%), followed by Bihar (13.3%) and Jharkhand (8.9%). Madhya Pradesh has the lowest unemployment rate as 3.2.

The wide margin between LFPR with UR indicating a large segment of population yet not recognised either as employed or unemployed.



2.1.2 Income from Rural Non-Farm Sector

The PLFS 2017-18 data showed that motor vehicle drivers were among the better-paid workers among the self-employed, with median reported earnings of Rs.10,000. The median reported earnings of food processing workers (Rs.2,500), textiles and garments workers (Rs.5,500), and street vendors (Rs.7,000) were lower than that of drivers. It is worth noting that these earnings are self-reported and

hence may suffer from under-reporting. The median reported earnings of own-account workers were Rs.8,000 per month, while that of employers were almost double at Rs.15,000. However, employers constitute a very small proportion of the self-employed. The median monthly earnings for all self-employed workers were Rs.8,000. This is lower than the median earnings of regular workers in the country.

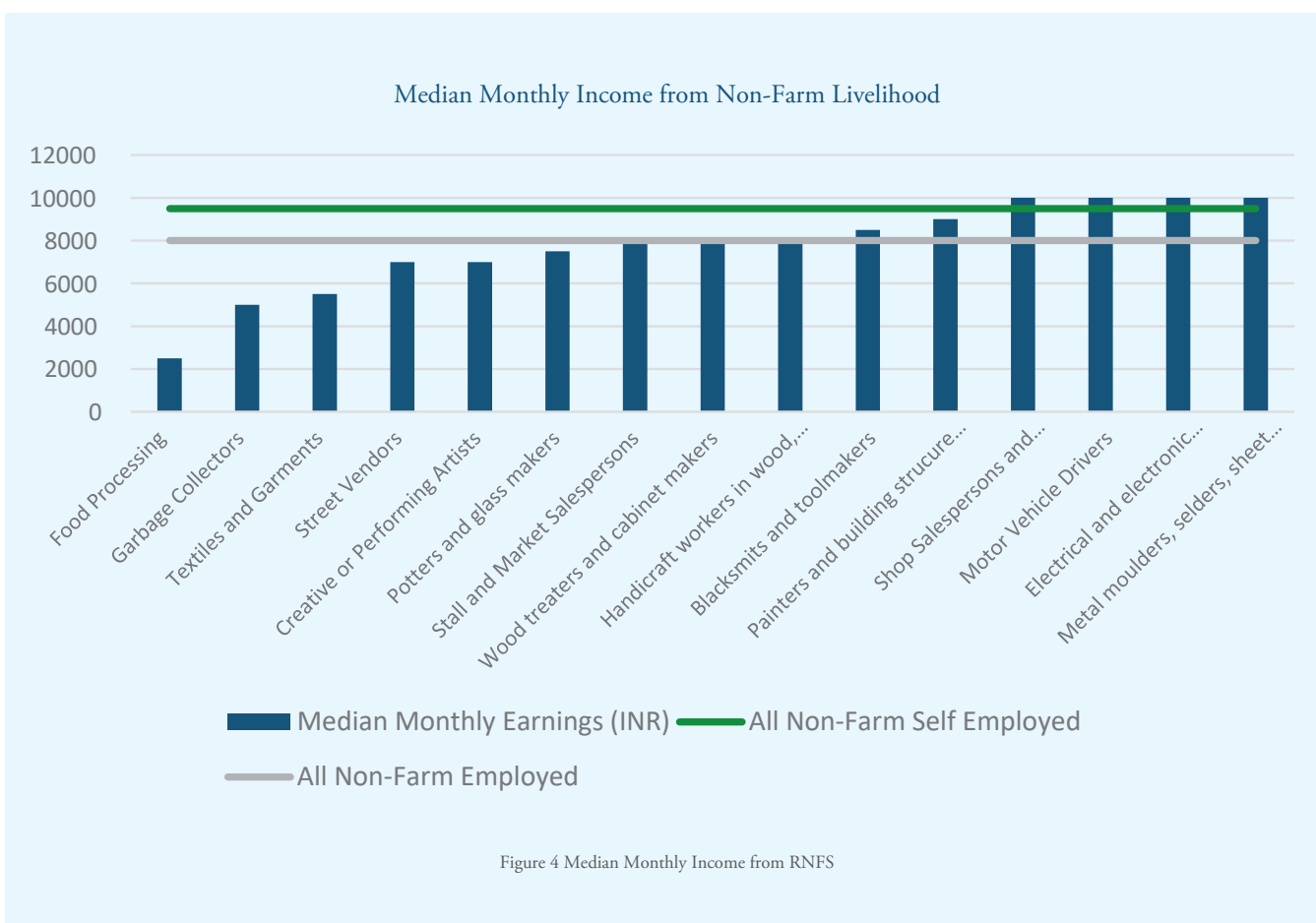


Figure 4 Median Monthly Income from RNFS

In urban regions, self-employment incomes were 1.5 times greater than in rural areas. The gender earnings disparity in self-employment is even more striking: men's median earnings were 2.5 times greater than that of women. Some of India's poorest states recorded the highest percentages of self-employed people in the workforce: Chhattisgarh (66%),

Rajasthan (65%), Uttar Pradesh (64%), and Jharkhand (61%). Over half of Indian employees are self-employed, and the majority of these self-employed people work on a very modest scale without employing others or as unpaid assistance in their families' businesses.

2.2 Trends in the Rural Non-Farm Sector

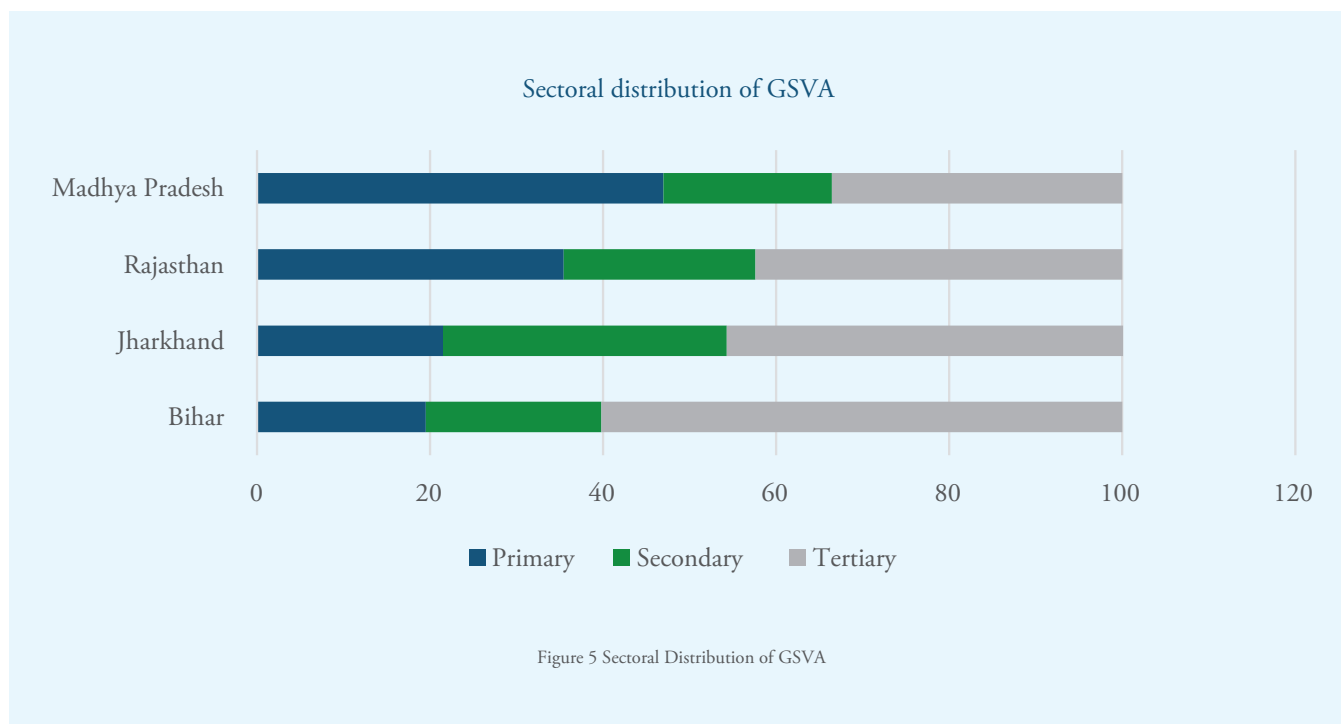
There has been a steep fall in share of agriculture in rural workforce after the 1990s, which emphasises the relevance of the rural non-farm sector. Traditionally, manufacturing has been the most important in the non-farm sector; however, its share has declined in recent period in both rural and urban areas. Construction is now the largest employing industry for rural workers with its employment share increasing since the 1990s. Among non-agriculture sectors, services sector is prominent, though largely confined to the urban areas. Employment is low in mining and utilities which are largely under public domain and government often attempts to downsize it.

During the pandemic in 2019-20, as the Indian economy decelerated, agriculture was resilient and agricultural growth stood at 4.3% in 2019-20, while manufacturing (minus 2.4%) and construction (1%) declined. The recently released Periodic Labour Force Survey (PLFS) for 2019-20 suggests an increasing trend in the number of people employed in agriculture. With rural India emerging as the primary location for job creation, it is inevitable that agriculture is the primary driver. The share of workers employed in the agricultural sector has risen to 45.6% in 2019-20, from 42.5% and 44.1% for the preceding two PLFS years. This has been accompanied by the declining percentages of those engaged in manufacturing, construction and most services, barring trade, hotels & restaurants. The Indian government's commitment towards rural development through introducing mechanisation in agriculture is likely to boost the agricultural machinery market in India. Also, government subsidies and low import duties on agricultural equipment have made heavy machinery affordable to farmers, thus increasing sales volumes. Large scale migration from rural to urban areas has led to a shortage of wage-based labour in the agriculture. Therefore, to fulfil the rising demand for agricultural products by the growing Indian population, farmers are forced to use automatic machinery that ensure high productivity, in less time, with limited human effort.

According to PLFS 2019-2020, Worker Population Ratio (WPR) in the population of 15 years & above is 50.9% in 2019-20, up from 46.8% in 2017-18, with females seeing a higher increase than males. Driven more by rural females (up from 23.7% in 2017-18 to 32.2% in 2019-20) than urban (18.2% to 21.3%). For males too, the increase is more in rural regions (rural 72% to 74.4% vs. urban 69.3% to 69.9%). Highest WPR (59.5%) in the 'literate & up to primary' category, and lowest in 'secondary & above' (46%). Male WPR is highest in 'literate & up to primary' pulled by rural (86.5% vs 81.9%) and female WPR is highest for 'not literate' also pulled up by rural (39.4% vs. 25.2%).

Majority (53.5%) of workers are in self-employment with 56.3% of self-employed females and 52.4% males. Self-employment is the highest among rural females (63%) and lowest among urban females (34.6%). 22.9% of the population is regular wage earners or salaried employee with the employment rate being highest among urban females (54.2%) and urban males (47.2%) and low among rural females (9.5%) and rural males (13.8%). Regular wage/salaried employees in non-agriculture sectors without a written job contract are 67.3% in 2019-20, down from 71.1% in 2017-18. Average wage/salary for females is lower than that for males by 18-26% in the four quarters from Jul-Sep 2019 to Apr-Jun 2020. Average gross earnings from self-employment for females are lower than that for males by 50-55% in the four quarters. Highest unemployment rate is among 'secondary & above' and lowest among 'not literate' categories. Female unemployment rate is lower than for males except among secondary & above (14.1% vs. 9% for males). 15% youth unemployment, down from 17.3% in 2018-19 and 17.8% in 2017-18). Urban youth unemployment higher than rural youth (19.9% vs 12.9%)

On analysing the Gross State Value Added (GSVA) data for 2019-21 at 2011-12 basic prices trends across all four ERADA states, primary sector predominantly has the larger share with Madhya Pradesh being the highest with 46.98%, followed by Rajasthan (35.43%). Primary sector contributions in Bihar and Jharkhand are around 20% despite 11% of operational landholders in Bihar, and Jharkhand being a forested state with 30% of its geographical area as forests. Manufacturing and construction remain the predominant subsectors under secondary. While share of construction across four states ranges between eight to ten percent, manufacturing in Jharkhand contributes 22.5% that potentially include mining (under mining and quarrying subsector under primary sector it is reported to be 8.9% in Jharkhand). Part of the secondary and tertiary sectors and its subsectors contribute to rural non-farm livelihoods directly, while under primary sector particularly under livestock & aquaculture subsector, there is a potential for generating rural non-farm livelihoods. Tertiary/services sector seems to have greater contribution than secondary sector across all four states. While the share of trade and repair services is higher in Bihar, financial services and real estate remain similar across the states. However, it is observed that real estate and related services have a larger contribution that eventually employ larger segment of population along with construction. The following chart presents the sector wise GSVA, and subsector wise details are given in Annexure 1.



To develop rural non-farm economy, heavy investments are needed for inclusive, sustainable and diversified rural development along with the right governance system.

According to Census 2011, India has 55 million potential workers in the age group of 15 to 35 years in rural areas while there has been a global shortage of workers expected as of 2020. This presents a historic opportunity for India to transform its demographic surplus into a demographic dividend.

For proper implementation of same, the government of India has introduced many schemes and programme over the years to diversify the rural population into non-farm activities. The central and state specific schemes that have potential to generate and trigger rural non-farm employment opportunities are given in Section 6.5 of the report.

2.3 Migration and RNFS

Migration is a pervasive feature of the Indian economy and constitutes a significant share of the country's GDP.

Out of 482 million workers in India, about 194 million are permanent and semi-permanent migrant workers as per the 2011 Census.

The pattern of India's migration is much skewed. The Economic Survey (2017) estimated that an average of 5–6 million Indians migrated annually between 2001 and 2011, leading to an inter-state migrant population of "about 60 million" and an inter-district migrant population "as high as 80 million" (GoI, 2017). Uttar Pradesh and Bihar constitute the highest out-migrants in India, while most of the migrated people moved to Maharashtra and Delhi (Census, 2011, Jha 2006).

With many reasons, the main reasons for migration are seasonality and low employment, small landholdings, low incomes and indebtedness in villages (Saha et al., 2016).

However, unemployment in urban areas (7.8%) is higher than the unemployment rate in rural areas (5.3%) (Jitendra, 2019). In addition to this, Indian towns and cities continue to be plagued by the prevalence of low-wage, poor quality, informal work.

Table 3 Migration Patterns in four ERADA States

Migration Patterns in ERADA States (Census 2011)								
State	Bihar (Rural)		Jharkhand (Rural)		Rajasthan (Rural)		Madhya Pradesh (Rural)	
Reason for Migration	% Male Wrt total migrants in the state	% Female Wrt total migrants in the state	% Male Wrt total migrants in the state	% Female Wrt total migrants in the state	% Male Wrt total migrants in the state	% Female Wrt total migrants in the state	% Male Wrt total migrants in the state	% Female Wrt total migrants in the state
Work/Employment	1.66	0.55	7.99	1.15	6.47	1.13	9	2
Business	0.11	0.15	0.29	0.13	0.16	0.10	0	0
Education	0.23	0.15	0.62	0.55	0.42	0.21	1	1
Marriage	1.44	78.53	1.90	84.77	0.68	74.35	2	71
Moved after birth	0.41	0.28	0.64	0.43	2.24	1.49	2	2
Moved with household	1.75	1.94	4.79	6.69	4.81	6.32	6	7
Others	3.12	5.55	3.07	4.55	2.52	3.75	4	4
Total Migrants in the state	23,266,838		6,526,970		15,836,322		16,350,897	

On analysing the trends in migration across ERADA states, migration of males for employment/work in rural areas is the highest in Madhya Pradesh (nine percent) followed by eight percent in Jharkhand and six percent in Rajasthan with respect to the total migrants in the state. Only 1.66% of males in Bihar migrate for work/employment. Migration among females is largely due to marriage and patrilineal residence.

2.3.1 Pandemic induced reverse migration

The COVID19 pandemic has triggered a massive reverse migration in India. The data provided by the Ministry of Labour and Employment shows that Uttar Pradesh has the biggest share (26%) of migrant workers who returned to the state, followed by Bihar (12%), West Bengal and Rajasthan (11%), Odisha (7%) and Madhya Pradesh (6%) (The Hindu Business Line, 2021⁹). Due to the nationwide lockdown, migrant labourers, especially in the low-income groups who are highly vulnerable to shocks, found themselves in the void of job loss and tried to return to their

natives by any means (de. Haan, 2020). Forced reverse migration from urban to rural areas would dramatically affect rural India's demographics, culture and economy. According to the Centre for Monitoring Indian Economy, over 122 million people in India lost their jobs across sectors in April 2020, a vast majority of them being small traders and wage-labourers engaged in the non-farm sector. In a study by Azim Premji University's Centre for sustainable employment, 80% of urban workers have lost their jobs, while farmers and self-employees in the non-farm field have seen significant reduction in their incomes (Behera et al, 2021). The pandemic-induced reverse migration caused an increase in demand for rural wage employment that can be observed from the demand for employment under *Mahatma Gandhi NREGS*. There is a sharp rise in demand for wage employment in the year 2020-21 as compared to other previous years where the trend was decreasing. The following chart depicts the trend of job demand under *Mahatma Gandhi NREGS* for previous five years.

⁹<https://www.thehindubusinessline.com/data-stories/data-focus/five-states-account-for-67-migrant-workers-who-returned-home-during-the-lockdown/article33813158.ece>

Trend of Job Demand under *Mahatma Gandhi NREGS*

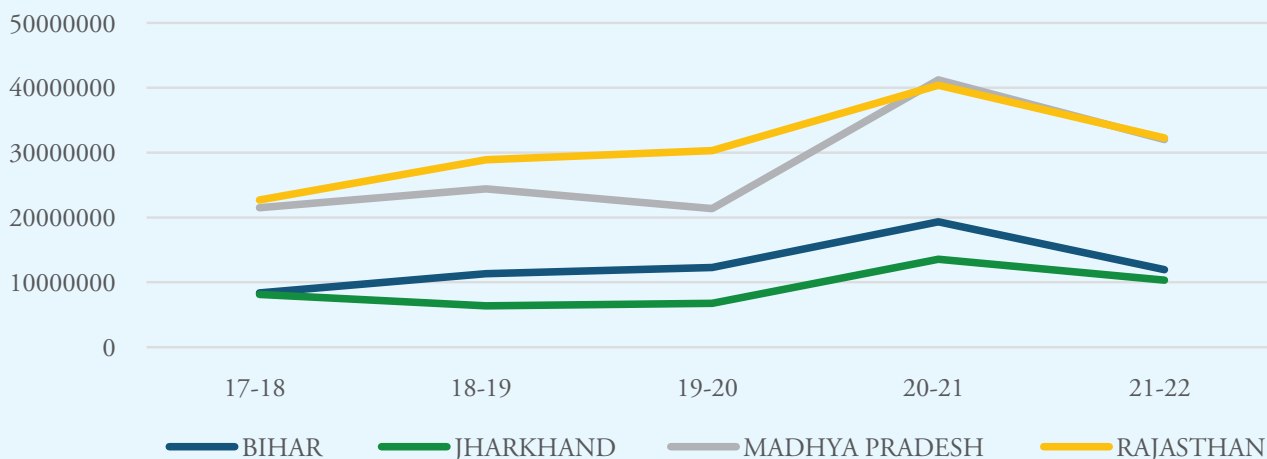


Figure 6 Trend of Job Demand under *Mahatma Gandhi NREGS*

Source: *Mahatma Gandhi NREGS* Web MIS

2.4 Gender and Rural Non-Farm Sector

Women do not seem to get a fair share of power, political space, social standing and economic results. Women account for around 30% of rural workforce; bulk of them are in agriculture. According to PLFS 2019-2020, Female Labour Force Participation rate among population of 15 years and above, is 30%, up from 24.5% in 2018-19 and 23.3% in 2017-18. Increase driven more by rural female (33% in 2019-20 vs 24.6% in 2017-18) than by urban (up from 20.4% to 23.3%). There is a significantly high level (one-third) of disguised unemployment among female workers in the rural sector. Schemes and programmes initiated to address the imbalance mostly have not progressed or have become labelling exercises under which men access the support made available for women. The gap severely affects livelihoods of women. Barring the microfinance sector where microfinance institutions and Self-Help Groups (SHGs) address the needs of women, other sectors do not seem to have focused gender targeting strategies.

The NSSO employment and unemployment survey (2009-10) collected information regarding willingness of females (15 years and above) primarily involved in domestic duties to accept work opportunities at the household premises. For the country as a whole, one-third of females (15 years and above) in rural areas and more than one-fourth in urban areas who were engaged in domestic duties (by usual principal activity) were willing to accept work opportunities at the household premises. In both rural and urban India, there was a strong willingness among females primarily involved in household chores to take up tailoring work within their premises. Apart from macro exercises such as gender budgeting, programmatic and field-level strategies are required to provide a larger space for women in accessing livelihoods and to ensure that they get a fair share of income. Denial of new and meaningful roles to women, wage differentials and workplace hygiene factors have to be closely examined and steps taken to deal with the same. The other major issue is that of inequality. While economic growth is taking place at varying rates over the years, the poor do not get an equitable share of the benefits of growth.

3

Challenges and Opportunities in Rural Non-Farm Sector

3.1. Challenges and Limitations in Rural Non-Farm Sector

The rural non-farm sector is often constrained by various factors that influence employment and income of the rural households. While some of the constraints are generic and could be addressed through operational interventions, some needs a structural policy shift to boost the rural non-farm sector.

3.1.1 Education and Awareness

High levels of illiteracy and skill gap in rural India have hampered the growth of the rural non-farm sector. The quality and quantity of labour available at the household level determined by education, experience, health is necessary to meet the minimum requirements of any production process and hence will play a role in determining income diversification (Carney, Drinkwater, Rusinow, Neeffes, Wanmali, & Singh, 1999; Ellis, 2000, Reardon et al., 2007). As a key source of human capital, education has received a lot of attention as it is the most likely means through which individuals and households can access high return non-farm earning options (Senadjki, Mohd, Bahari, & Hamad, 2017).

Since the past decade, an array of schemes and projects have been launched and implemented by the government to boost the non-farm sector in terms of skill development, enterprise support, financial inclusion, technological upgradation etc. However, the outreach has not been encouraging and the impact of such schemes is limited to few sections of the population due to lack of adequate information and awareness among targeted communities.

3.1.2 Infrastructure

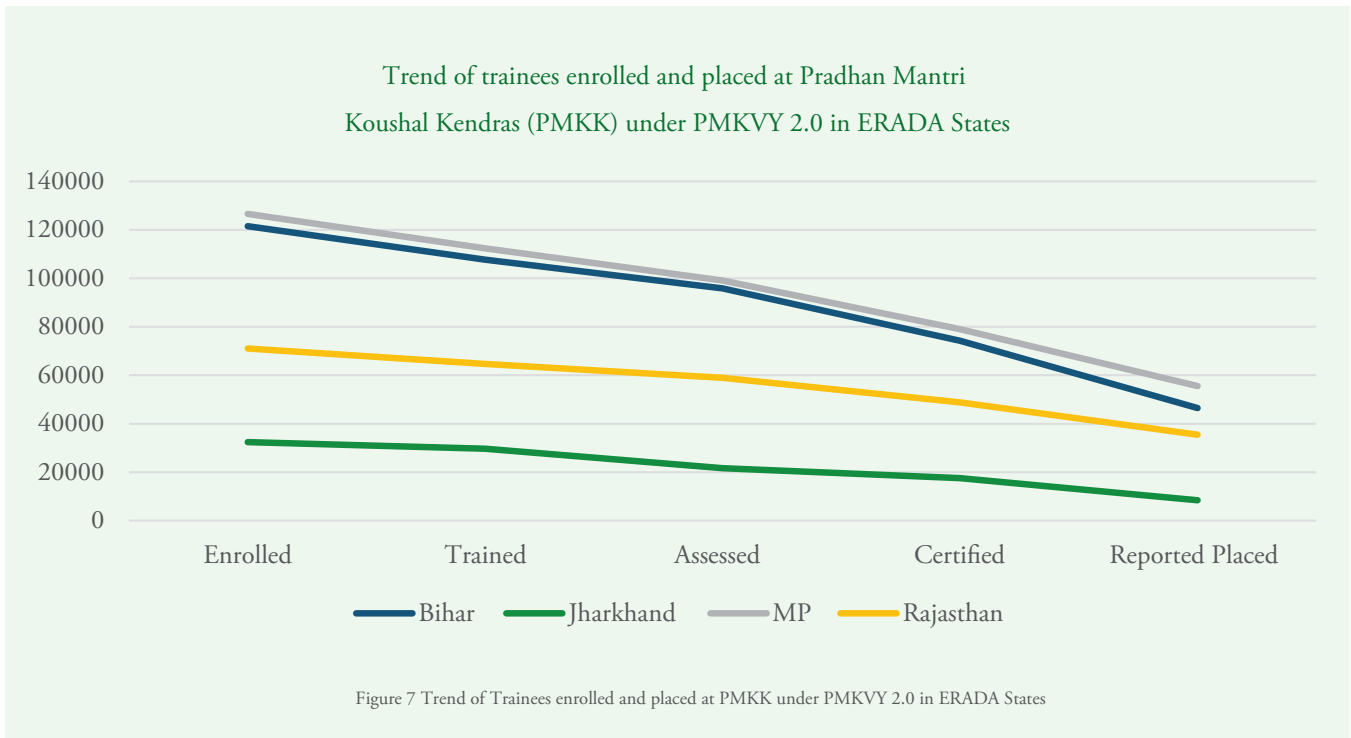
At the meso-level, the most significant bottleneck faced by rural households in taking up non-farm livelihood options is absence of adequate infrastructure (communication, roads, transport). Better access to institutional and physical infrastructures may be expected to lower the cost of acquiring information, transportation and transaction costs, and may enhance the potential returns from and the probability of involvement in non-farm activity (Barrett & Reardon, 2000; Ellis, 2000; Lanjouw & Feder, 2001; Reardon et al., 2007). Previous empirical studies tend to use proximity to towns, access to roads, electricity and water to examine the effect of public infrastructure system on non-farm employment (see Barrett et al., 2001; Ellis, 1998; Reardon et al., 2007).

3.1.3 Lack of comprehensive policy intervention in sustaining the rural non-farm sector

The ideas of the rural non-farm sector often remained confined to khadi and village and later to handloom and handicrafts. This was a freezing of what Kumarappa and Gandhi had proposed of as the basis for self-reliant villages. Therefore, the growth of the rural non-farm sector remained inadequate to absorb the persons wanting to move out of agriculture, particularly the rural youth (Fisher & Mahajan, 1997). Even agro processing moved out of rural areas, for example, in the soybean sector, most of the processing units came up in cities such as Kota, Indore and Dewas and none in rural areas. This was inevitable due to the better availability of input, market linkages and infrastructure in urban areas. These factors enabled setting up larger units in urban areas and the resulting lower costs enabled urban units to outcompete rural units, because of which the rural non-farm sector could not continue, except for a few handloom and handicraft units in established clusters. The part of the rural non-farm sector, which continued to exist, was proximate services such as repairs, retail trade, transport, education and health care.

3.1.4 Lack of Post skill training assessments

India Skills Report 2019 (brought out by Wheebox) finds that compared to 2018, the skill and job environment is turning positive with more entities wanting to increase hiring. As stated in the 2018 report, the state of skilling has not been exciting in terms of its achievements. Over the four-year period, from 2016, 3.30 million persons enrolled under different centrally funded, managed skill development programmes. Of these, 3.10 million have completed training, but only 2.55 million persons actually passed their courses and became eligible for certification. The number of persons placed was 1.37 million. The gap between those who completed training and were placed is large. Roughly one out of five persons enrolling for training does not pass the course, hence, placement is not an easy proposition. About 44% attained placement. A number of issues in selection of courses, training partners, employer acceptance, wage levels and continuity in the jobs have been identified and are being sorted out on an ongoing basis. Some of the courses with low placement rates have been identified and strengthened to include greater skill content and thereby improving job prospects. While all this effort is intense and incrementally made responsive to both supply and demand requirements, the results likely to be achieved might fall severely short of the ambitious targets. A key issue is that of the competence and quality of skill trainers and standards of performance for the trainers.



3.1.5 Exclusion of persons with disabilities from the labour market

According to the Census 2011, there were 26.8 million (2.21%) persons with disabilities in India. As per the National Centre for Promotion of Employment for Disabled People, however, the actual number of people with disabilities is far greater than what has emerged in the Census – the estimates range from 5% to 15% of the population. Though the Persons with disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act was adopted in 1995, the average employment rate of people with disabilities was far lower than proportionate. The International Labour Organisation’s (ILO) 2011 report, ‘Persons with Disability and the India Labour Market: Challenges and Opportunities’, stated that 73.6% of the disabled in India are still outside the labour force. Of these, those with mental disability, disabled women and those in rural areas were the most neglected. The aspirational target for employment of disabled persons should therefore be a worker population ratio comparable to the rest of the population. This means about 12 million disabled persons should get work in the coming decade. This is about 10% of the total incremental livelihoods. That is clearly going to be difficult. It is perhaps more realistic to adopt a target of 6 million livelihoods for the disabled (State of Livelihoods Report 2020).

¹⁰The index was calculated based on data from NSSO 66th round

3.1.6 Underemployment

In 1966, in the Eleventh International Conference of Labour Statisticians (ICLS), the ILO adopted the first international statistical definition of underemployment based on which an employed person is considered visibly underemployed, also known now as time-related underemployed, if he/she is (a) willing to work additional hours (b) available to work additional hours (c) and worked less than a threshold relating to working time (in the reference period). Underemployment can also be invisible. According to Underemployment Index developed by Mukherjee et.al¹⁰, underemployment in India is 0.07% for both rural and urban areas. Across ERADA states, in rural areas, Madhya Pradesh (0.08%) records higher underemployment as opposed to Rajasthan (0.02%) recording the lowest underemployment rates (S. Mukherjee et.al, 2018)

3.1.7 Regulatory restriction on small sectors:

Capital investment limits have discouraged economies of scale, and concessions offered to small industry have created adverse incentives against re-investment. Reservation of products for the small-scale sector has gradually reduced its significance. The decision of the government to put all the reserved items in the open general license category from

April 2005 meant free import of such items at the prevailing tariff rate. With the latter slated to come down over time to around 20% as per the WTO norms, this will effectively signal the end of protection for the small-scale industry.

3.1.8 Barriers to Self-Employment

The majority of India's self-employed are not job creators. Up to 70% of the self-employed are self-account workers, who run their own establishment or enterprise (with or without partners) without hiring any workers, and 26% are unpaid helpers who assist household members in running their enterprise but do not receive any regular wage or salary. Only four percent of the self-employed were employers, meaning they ran their business by hiring others (PLFS 2017-18). In rural context, agriculture employs the bulk of the self-employed (60%). Trade, construction, manufacturing, transportation, and storage employ the majority of non-farm workers. Lack of access to tools and equipment, access to institutional finance, low level of literacy, skill gap etc. are critical factors that remains as barriers to self-employment.

3.2 Exploring Opportunities

3.2.1 Tapping the Strength of JAM Trinity

Jan Dhan, Aadhaar and Mobile (popularly known as JAM Trinity) has been a game changer in paving ways to DBT (Direct Benefit Transfer)– delivering benefits in shape directly to the beneficiary through bank account. JAM has changed the picture of Rural India from unprivileged strata to the privileged and developing segment which is trying to be self-sustainable particularly in agriculture and allied sector. Jan Dhan Yojna (JDY) strongly focused on use of mobile/internet banking especially in the areas where physical branches cannot be established. This will result in low transaction cost, minimum time for processing and provide speedy service to the beneficiary. Aadhaar numbers are also being seeded or linked with Jan Dhan accounts so that the benefits (*Mahatma Gandhi NREGS* payment, subsidies, scholarships, pension etc) can be directly transferred to the beneficiary or the last person. This has resulted in preventing the leakage in the payment system, reduced documentation requirements at service points, and biometric identification of the beneficiary.

Thus, the strength of JAM needs to be capitalised to increase the share of total disbursement of money in the non-farm sectors by various actors including skill providers, business service providers, financial institutions etc. This is in addition to the existing financial institutions like Khadi and Village Industries Commission (KVIC), State Khadi

Boards, Small Industries Development Bank of India (SIDBI) etc., which have helped in the development of agro-industries, domestic marketing channels for rural non-farm production as well as government support in export promotion.

3.2.2 Creation of Green Jobs to address climate change and resolve issues of unemployment

Optimal use of natural resource is the root of climate change adaptation. Livelihood options (mostly marginal) with limited access to natural resources (water and soil) do not always have the technical knowhow to optimise the use. Equitable sharing of resources is another aspect that is critical to ensure that the poorer sections of people have access to better opportunities. Government policies with regards to the use of irrigation water, harnessing of solar and wind power for producing electricity, control of unsustainable practices in agriculture, etc. are yet to reach an evolved stage, that could set the conditions for better use of natural resources. Even in schemes aimed at tapping natural resources such as soil and water conservation, the extension work needed to apply the results of the intervention for best benefit is missing.

There is a need to shift the focus of livelihood promoting schemes/projects from asking “how to find adequate natural resources to carry on existing livelihood activity” to “what are the best livelihood options and applications that can secure wellbeing, given the natural resources that become available”. It has also been experienced in *Mahatma Gandhi NREGS* that significant investment made for natural resources management works including irrigation and land development, but it lacks focus in usage of such assets for livelihood generation. Climate change, and its relationship with livelihoods, has not received the attention adequately. It is time to invest resources to understand the implications of current actions and decide on how to shape the future in a consistent manner with secure livelihoods for the poor and vulnerable.

3.2.3 E – Commerce boom

Covid19 pandemic (the year 2020/21) brought with it an array of newer opportunities & technological advancements that changed the way people shop. From being highly dependent on offline retail and local stores to getting comfortable with the idea of e-Commerce was a game-changer. Business adaptation strategies during lockdowns required online sale or other modes to make the product reach customer's doorstep. Products from cottage industries or SHGs of rural women could be aggregated and sold to urban based clientele through such platforms.

In addition to the business, e-commerce has also generated employment particularly in managing the supply chain, logistics, customer service etc. The faster expanding outreach of e-commerce into rural areas would generate local employment and also provide long term and sustainable non-farm livelihood options to the rural youths.

3.2.4 Strengthening and promoting Convergence Models under Project Unnati

Mahatma Gandhi NREGS setup Project Unnati that aims to upgrade the skill base of *Mahatma Gandhi NREGS* workers through convergence with DDU-GKY, RSETI and KVK. This model primarily aims to provide opportunity to the workers within the age group of 18-45 years who have completed 100 days of wage employment under *Mahatma Gandhi NREGS* and willing to move from current partial employment to full employment to reduce their dependency on *Mahatma Gandhi NREGS*. While this convergence model is offering immense potential in RNFS as the requirement of skillsets are similar for rural non-farm

workers, yet the outreach is very low. There is a need to revamp the model in terms of its targeting approach and inclusion of schemes/ programmes such as Start-up Village Entrepreneurship Programmes (SVEP), SFURTI etc. under Project Unnati focused on RNFS.

3.2.4.1 Status of SVEP in ERADA States

The Start-up Village Entrepreneurship Programmes is a subcomponent of Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) of the Ministry of Rural Development. It aims to support entrepreneurs in rural areas to set up local enterprises by providing support for start-up to one crore village enterprises and provide direct employment to two crore people. SVEP intervenes to address at knowledge, advisory and finance ecosystems to sustain rural enterprises. In its first phase of validating the concept, SVEP is expected to support creation and strengthening of about 1.82 lakh village enterprises in 125 Blocks across 24 States in the targeted four years i.e., 2015-19. This is expected to create employment for about 3.78 lakh persons.

States/UT	Enterprises formed in no. of Blocks	Enterprises formed in the year	Enterprises formed in no. of Blocks	Enterprises formed in the year	Enterprises formed in no. of Blocks	Enterprises formed in the year	Enterprises formed in no. of Blocks	Enterprises formed in the year 2021-22 (Up to June, 2021)
Bihar	12	3,167	12	5,541	12	6,844	12	1,482
Jharkhand	16	3,437	16	2,294	18	5,218	18	188
Madhya Pradesh	14	2,901	14	4,550	14	4,791	14	264
Rajasthan	5	1,140	5	2,436	7	1,733	7	191

(Source: Press Release¹¹)

SVEP intends to include any rural poor who is willing to be entrepreneurial and self-reliant particularly targeting the highly vulnerable beneficiaries under *Mahatma Gandhi NREGS*, marginalised sections, women, SC and ST and rural artisans etc. and being implemented and managed by NRLM through the State Rural Livelihood Missions (SRLM).

SVEP is quite successful¹² in targeting the intended rural cohort by supporting 82% of entrepreneurs who are SC, ST & OBC, 75% of the enterprises were owned and managed by women and about 57% of the total household income is through the enterprises promoted under SVEP. Access to financial services has increased where around 96% of the entrepreneurs have enhanced savings 70% entrepreneurs have loans from Community Enterprise Fund (CEF).

¹¹ <https://rural.nic.in/en/press-release/183-project-proposals-have-been-approved-across-29-statesuts-under-start-village>

¹² Mid-term review of SVEP, 2018-19 by Quality Council of India (QCI).

3.2.4.2 Status of SFURTI in ERADA States

Scheme of Fund for Regeneration of Traditional Industries (SFURTI) under the Ministry of Micro Small and Medium Enterprises (MSME)(Govt. of India) operating since 2005 with the view to promote cluster development aims to organise the traditional industries and artisans into clusters. It supports them to become competitive for their long-term sustainability and attend economy of scale. It also focuses on sustained employment for traditional industry artisans and rural entrepreneurs by enhancing marketability of their products, providing support for new products development, design, improving packaging and improvement of

marketing infrastructure. The project targets artisans, workers, machinery makers, raw material providers, entrepreneurs, institutional and private business development service (BDS) providers, Artisan guilds, cooperatives, consortiums, networks of enterprises, SHGs, enterprise associations etc. In addition, it also supports implementing agencies, field functionaries of government institutions/organisations and policy makers, directly engaged in traditional industries.

States	No of Districts with clusters		No. of Clusters		No. of Artisans		Project Cost (INR Lakh)		Approved Cost (INR Lakh)	
	Approved	Functional	Approved	Functional	Approved	Functional	Approved	Functional	Approved	Functional
Bihar	8	3	10	3	6176	1750	3197.61	771.06	2954.34	724.17
Jharkhand	12	2	13	3	6682	1981	3887.69	566.43	3511.09	553.56
Madhya Pradesh	31	15	39	17	21240	8527	11037.95	4283.09	10048.89	3895.73
Rajasthan	25	3	29	3	15838	1070	8831.63	732.88	7992.47	660.83

(Source: SFURTI, March 2022)

The cluster wise details for each ERADA state are given in Annexure 7. There is a wide gap in approved clusters and functional clusters in the ERADA states. According to the annual report by the Ministry of Textiles (Government of India) (2017-18), handloom sector employs more than 43

lakh weavers and others associated directly and indirectly out of which approximately 77% are women. Thus, handloom and handicrafts are important for women's empowerment in rural areas and can contribute significantly in the exports¹³.

¹³As per the Annual Report by Ministry of Textiles, GOI, Export of handicrafts (excluding gems and jewellery) was worth 3494.0 crore rupees and that of handlooms was worth 2392.23 crore rupees in the (2016 -2017).

4

Mapping of Rural Non-Farm
Livelihood Activities under
Mahatma Gandhi NREGS

4.1 Demand and Supply Side Analysis of Rural Non-Farm Sector in ERADA States

4.1.1 Demand Side Assessment

Non-Farm Sector has always been perceived and triggered towards supply of skilled and semi-skilled workforce from rural to urban locations. The increasing demand of workforce in urban areas has influenced the national and state policies towards skilling and employment. An assessment made by Skill Mission on available skilled human resources in 2017 estimated the demand of skilled human resources and the incremental requirement for 2022 in 24 occupation sectors. The results are presented in Table 4 below. The data trend indicates that there has been a sharp decline of human resource requirement in the

agriculture¹⁴ sector (minus 13.3%) as against the highest increasing demand in the building construction & real estate sector (plus 30.6%). It signifies that the rural population engaged in agriculture are shifting to construction sector to work as skilled or casual labour. The sectors such as Retail, Logistics, Transportation & Warehousing, and Beauty and Wellness have a demand for human resources between 8% to 10%. While the above three sectors are more urban centric and may induce rural to urban migration, the logistics, transportation and warehousing sectors have potential to create rural non-farm jobs and employment. The sectors between four to eight percent incremental demand are textile and clothing, furniture and furnishing, tourism & hospitality, travel and handlooms & handicrafts. Out of these sectors, furniture making, rural tourism and handlooms & handicraft have potential to create rural non-farm livelihood.

Table 4 Breakup of Incremental Human Resource Requirement across 24 Sectors (in Millions)

Sector	Human Requirement	Resource Estimates	Incremental Human Resource Requirement
	2017	2022	(2017-2022)
Building Construction & Real Estate	60.4	91	30.6
Retail	45.3	56	10.7
Logistics, Transportation & Warehousing	23	31.2	8.2
Beauty and Wellness	7.4	15.6	8.2
Textile & Clothing	18.3	25	6.7
Furniture & Furnishing	6.5	12.2	5.7
Tourism, Hospitality & Travel	9.7	14.6	4.9
Handloom & Handicraft	14.1	18.8	4.7
Electronics & IT Hardware	6.2	9.6	3.4
Education & Skill Development	14.8	18.1	3.3
Domestic Help	7.8	11.1	3.3
Gems & Jewellery	6.1	9.4	3.3
Private Security Services	8.9	12	3.1
Food Processing	8.8	11.6	2.8

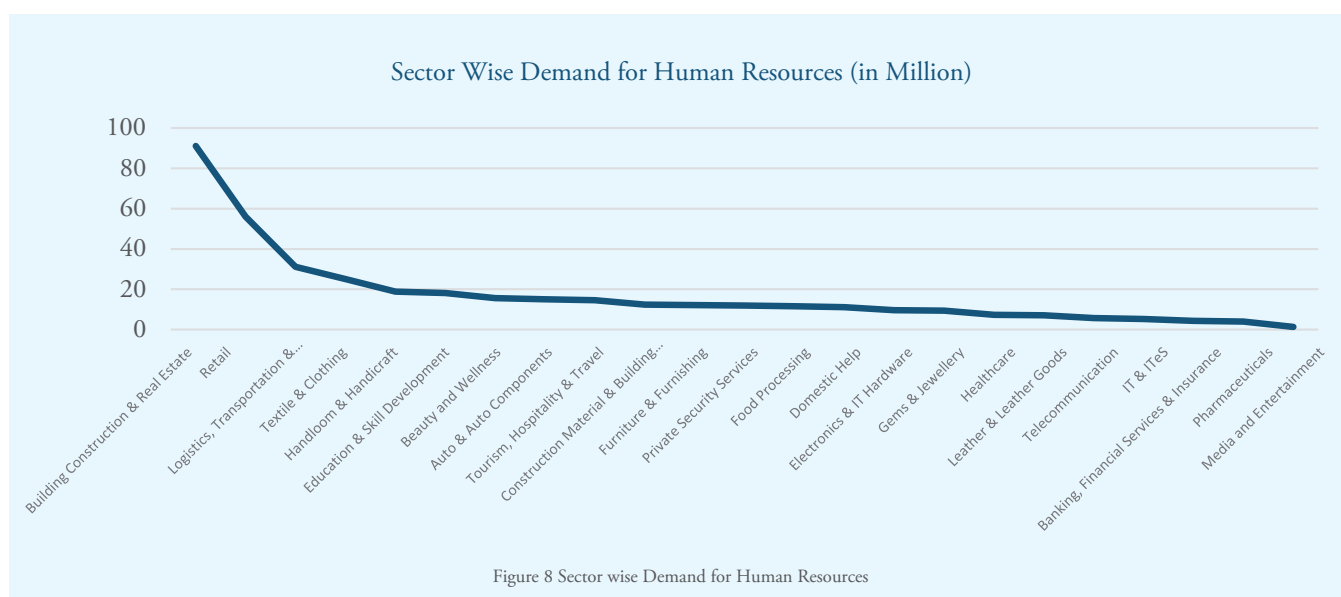
¹⁴In spite of decline in human resources requirement in Agriculture Sector, it employs the maximum number of workforce in India with 215 million people.

Sector	Human Requirement	Resource Estimates	Incremental Human Resource Requirement
	2017	2022	(2017-2022)
Healthcare	4.6	7.4	2.8
Telecommunication	2.9	5.7	2.8
Construction Material & Building Hardware	9.7	12.4	2.7
Leather & Leather Goods	4.4	7.1	2.7
Auto & Auto Components	12.8	15	2.2
IT & ITeS	3.8	5.3	1.5
Pharmaceuticals	2.6	4	1.4
Banking, Financial Services & Insurance	3.2	4.4	1.2
Media and Entertainment	0.7	1.3	0.6
Agriculture	229	215.5	-13.5

(Source: Skill Mission)

Sectors with below four percent incremental demand for human resources are Food Processing, Construction Material & Building Hardware, Auto & Auto Components, Banking, and Financial Services & Insurance, which have potential for creating rural non-farm livelihoods. The Electronics & IT Hardware, Education & Skill Development, Healthcare, IT (Information Technology) & ITeS (Information Technology Enabled Services) sector could generate rural non-farm livelihoods in post Covid19 pandemic context where the use of mobile phones, computers have increased due to online education, e-commerce, and home-based health care services.

While the above analysis looked at the incremental human resources, the estimated human resource requirement for non-farm sectors are highest in Building Construction & Real Estate (91 million) followed by Logistics, Transportation & Warehousing (31.2 million), Handloom & Handicraft (18.8 million), Education & Skill Development (18.1 million), Auto & Auto Components (15 million), Tourism, Hospitality & Travel (14.6 million), Construction Material & Building Hardware (12.4 million) etc.



For the ERADA states, the estimated incremental human resources requirement are 44.52 lakh in Jharkhand, 78.16 lakh in Madhya Pradesh, 42.42 lakh in Rajasthan. The data for the state of Bihar is not reported by Skill India Mission.

4.1.2 Supply Side Assessment

For supply side assessment of skill and human resources requirement, three datasets are used for analysis of rural non-farm livelihood sector. These datasets are LIFE survey & project Unnati data from *Mahatma Gandhi NREGS* and registered workers dataset of e-Shram portal. LIFE Survey data are based on choice of preferred skill/trade, e-Shram portal is a self-declared data by individuals who have registered in the portal under various skill/occupation

categories. The project Unnati under *Mahatma Gandhi NREGS* includes enrollment of workers between 18 to 45 years of age, from the households who completed 100 days of work under *Mahatma Gandhi NREGS*.

The analysis of the datasets from LIFE survey and e-Shram reflects agriculture as occupation/skill sector is the first preference, constituting about 50% of the rural households. Excluding agriculture and factoring rural non-farm livelihood, the preferences are construction, automobile, transportation, electrical, apparel, healthcare, tourism etc. The top fifteen trade/skill/occupation sector surveyed under LIFE Survey and e-Shram is given in the Table 3 and 4 respectively. The complete data set for all the trade/skill/occupation sector are given in Annexure 2.

Table 5 Trade/skill sector based on LIFE Survey

Trade/ Skill Sector as per LIFE Survey	All India	Bihar	Jharkhand	Madhya Pradesh	Rajasthan
Garment Making	4.86	3.09	2.76	1.80	5.90
Automotive Repair	4.27	1.77	6.19	2.39	3.02
Beauty Culture & Hair Dressing	4.24	4.16	3.01	3.12	4.57
Banking & Accounting	4.19	0.88	2.07	1.46	2.08
Electrical	3.81	1.74	3.13	2.07	3.00
Construction	3.74	2.78	2.58	7.58	3.69
Allied Health Care	2.79	1.93	3.39	1.20	1.49
Fashion Design	2.27	0.46	0.83	0.95	1.43
Fabrication	2.26	0.59	0.57	0.57	0.93
Business & Commerce	1.97	0.72	0.89	1.05	0.62
Hospitality	1.90	3.05	0.71	0.71	1.00
Security	1.90	0.48	1.61	0.53	2.54
Medical And Nursing	1.73	1.01	1.52	0.35	0.59
Electronics	1.60	1.47	2.29	1.16	1.56
Food Processing & Preservation	1.50	1.98	0.79	0.97	1.21

Source: LIFE Survey, *Mahatma Gandhi NREGS* Web MIS as on 11 Feb 2022

Table 6 Occupation Sector based on E-Shram Portal

Occupation Sector as per e-Shram Portal	India	Bihar	Jharkhand	Madhya Pradesh	Rajasthan
Domestic and Household Workers	10.83%	14.74%	9.70%	5.92%	4.53%
Construction	9.68%	10.50%	6.76%	10.92%	17.52%
Apparel	6.50%	5.66%	3.12%	6.44%	5.20%
Miscellaneous	4.18%	3.33%	2.97%	4.15%	3.22%
Automobile & Transportation	2.77%	2.26%	2.13%	3.36%	3.16%
Capital Goods & Manufacturing	2.56%	2.64%	3.59%	4.17%	3.24%
Education	1.78%	1.62%	1.51%	1.47%	1.33%
Electronics & HW	1.72%	2.03%	2.09%	2.72%	2.09%
Leather Industry Works	1.59%	1.37%	0.52%	1.63%	1.97%
Tourism & Hospitality	1.38%	1.35%	0.71%	1.08%	1.15%
Healthcare	1.12%	1.34%	1.00%	0.86%	0.87%
Tobacco Industry	0.82%	0.33%	0.89%	0.96%	0.26%
Retail	0.81%	0.59%	0.55%	1.01%	0.97%
Handicrafts & Carpets	0.81%	0.38%	0.30%	0.51%	0.56%

Source: LIFE Survey, *Mahatma Gandhi NREGS* Web MIS as on 11 Feb 2022

The current skilling initiative under project Unnati (*Mahatma Gandhi NREGS*) through convergence with DDU-GKY, RSETI and KVK are targeting to the households who have completed 100 days of work and have workers between the age group of 18-45 years. As per the 2018-19 Project Unnati data, about five percent (National Average is 3.28%) households completed 100 days of work in Rajasthan and in the other three ERADA states, less than one percent of households have completed 100 days of work.

The data reflects a declining trend of the number of beneficiaries who registered, who completed the training and obtained placement. However, the recent data from the Project Unnati may be obtained to analyse the context and bring a better clarity on this convergence model. It may be noted that most of the skill trainings that are designed and delivered under DDU-GKY and RSETI are urban centric and the KVK's focus is on farm and off-farm skills.

Table 7 Data on coverage of workers under various schemes

State	Total Household under Mahatma Gandhi NREGS	No. of HHs completed 100 days in FY 2018-19		ELIGIBLE HHs (having workers of the age group 18-45 years)		No. of SELECTED HHs/workers				No. of REGISTERED workers in Kaushal Panjee App				No. of TRAINED workers				No. of workers got placement				
		Number	%	Number	%	DDU-GKY	RSETI	KVK	Total	DDU-GKY	RSETI	KVK	Total	DDU-GKY	RSETI	KVK	Total	DDU-GKY	RSETI	KVK	Total	
BIHAR	19519000	24129	0.12	15718	65.14	3	466	0	469	3	460	0	463	0	168	0	168	0	0	0	0	0
JHARKHAND	6081000	25212	0.41	18878	74.88	713	1278	0	1991	696	1252	0	1948	11	432	0	443	0	0	0	0	0
MADHYA PRADESH	7672000	68691	0.90	48798	71.04	189	2481	277	2947	189	2150	273	2612	0	108	0	108	0	0	0	0	0
RAJASTHAN	11583000	584279	5.04	391669	67.03	415	994	6	1415	386	926	6	1318	0	178	0	178	0	0	0	0	0
India	157990000	5178569	3.28	3390632	65.47	15973	21586	2918	40477	15889	20827	2903	39619	16	2895	0	2911	0	0	0	0	0

(Source: Project Unnati, Mahatma Gandhi NREGS Web MIS as on 11 Feb 2022)

4.2 Mahatma Gandhi NREGS & its potential to generate Rural Non-Farm Livelihood

Mahatma Gandhi NREGS, under the legal purview of National Rural Employment Guarantee Act 2005, is an Indian labour law and social security measure that aims to guarantee the ‘right to work’. The act was initiated with the objective of “enhancing livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year, to every household whose adult members volunteer to do unskilled manual work” and to create durable assets such as roads, canals, ponds, and wells etc. that can augment income to rural households. It provides a legal guarantee for wage employment by providing allowances and compensation both in cases of failure to provide work on demand and delays in payment of wages for work undertaken.

Mahatma Gandhi NREGS envisages a bottom-up, people centred, demand-driven planning and decision-making process triggered by the Gram Sabha. The decentralised process empowers the Gram Panchayats (GP) to plan the nature and choice of works to be undertaken from the prescribed list of works which evolved gradually over a period one and half decade of implementation. Over the years, *Mahatma Gandhi NREGS* has expanded its focus from employment generations to enhancing resilient rural livelihoods through integrated natural resource management and income generation. Non-farm (at times overlaps with off-farm) work is defined as any remunerative work outside one’s own farm (NSSO). It includes wage labour on other farms, wage labour engaging in non-farm work, or running non-farm enterprises or businesses. As per the above definition, as *Mahatma Gandhi NREGS* major focus is on wage employment, all the listed 262 works under *Mahatma Gandhi NREGS* may qualify for non-farm livelihoods option. However, this chapter analysed other potential non-farm livelihood option beyond wage employment that includes self-employment (skill) and micro enterprises that can emerged from the list of *Mahatma Gandhi NREGS* work.

Mahatma Gandhi NREGS offers an array of 262 types of activities to be selected by its beneficiaries categorised as follows,

Table 8 Mahatma Gandhi NREGS Works Categories

Code	Category	Number of Works	Percentage
A	Public Works Relating to Natural Resources Management	87	33
B	Individual Assets for Vulnerable Sections (Only for Households in Paragraph 5 of Schedule I)	65	25
C	Common Infrastructure for NRLM Compliant Self-Help Groups	8	3
D	Rural Infrastructure	102	39
Grand Total		262	100

Table 9 Mahatma Gandhi NREGS Works-Ownership Categories

Ownership Category	Number of Works	Percentage
Community ¹⁵	183	70
Groups ¹⁶	11	4
Individual ¹⁷	66	25
Institutional (School, Panchayat, etc.) ¹⁸	2	1
Grand Total	262	

The list of works under *Mahatma Gandhi NREGS* are also categorised under three major ownership categories that includes community assets, individual assets, group assets and institutional (school) assets (table 9). About 70% of works are categorised under community ownership and 25% are categorised under individual assets the remaining 5% are under group and institutional ownership.

Mahatma Gandhi NREGS has been instrumental in generating rural employment and creating livelihood assets that augment income to rural poor. The gradual shift in focus from building common assets to creating individual assets (Category II works constituted about 20% of the total in 2012-13, which was increased to 46% in 2016-17 and 73% in 2020-21¹⁹) over a period of ten years has increased contribution to annual household revenue ranging between 22% to 61%. These individual assets brought tangible impacts under *Mahatma Gandhi NREGS* resulting in increased crop coverage, diversification to cash crops (viz. vegetables, oilseeds etc.), fish farming, animal husbandry etc. While these results reflect that individual asset creation

strengthens the production system through land development, irrigation, domestic animal shelters, farm pond etc., it has adequate potential to open non-farm economic opportunities across the agriculture & livestock supply and value chain.

Given the increasing trend of choice of individual works, community assets under *Mahatma Gandhi NREGS* absorb maximum investment as it caters to the larger population and is focused on rural infrastructure creation such as rural roads, buildings, storage, toilets, SHG meeting hall etc. These rural infrastructure development activities generate several non-farm economic opportunities, including employment of skilled workforce in the construction work viz. mason, plumber, iron rod binding, electrician, carpenter, house painter etc. In addition, the repair and maintenance work of these rural infrastructures generates year-round employment for skilled workers. This also applies to individual assets such as PMAY and toilets constructed under *Mahatma Gandhi NREGS*.

¹⁵Assets that are owned and used by community and constructed on community owned land/ common land. For example, water harvesting structure, check dam, irrigation channels etc. that are primarily benefit a mass instead of individual.

¹⁶Assets that are aimed to be used by SHG women for value addition, processing, packaging, conducting meetings, storage etc. of their product. For example, common facility centre, SHG meeting hall etc.

¹⁷Assets are owned and used by individual households and created on individual owned land. For example, goat shade, cow shade, farm pond on individual owned land, compost pits etc.

¹⁸This refers to the construction of school boundary permitted under Mahatma Gandhi NREGS which eventually is a community asset.

¹⁹In terms of number of assets not investment.

Categorising the list of works under *Mahatma Gandhi NREGS* based on the nature of work, close to 50% of works belongs to construction category followed by 21% on repair and maintenance, 20% on plantation²⁰. This trend indicates

that the interventions are focused on creation of rural infrastructure followed by plantation. Table 10 depicts the details of the work categories based on the specific nature of work, action or interventions.

Table 10 *Mahatma Gandhi NREGS* Nature of Works

Work Categories based on Specific Interventions	Number of Work	Percentage
Afforestation	2	0.77
Block Plantation	29	11.15
Construction	130	49.23
Land Development	4	1.54
Drainage	2	0.77
Land Levelling/ shaping	2	0.77
Line Plantation	21	8.08
Canal Lining	5	1.92
Nursery Raising	3	1.15
Reclamation	1	0.38
Renovation	7	2.69
Repair and Maintenance	56	21.54
Grand Total	262	100

Further, these interventions are mapped to understand specific activities or assets created under *Mahatma Gandhi NREGS*. The mapping of the *Mahatma Gandhi NREGS* assets against work categories are given in the table 9. Out of these mapped activities plantation²¹ includes 20% of the works followed by construction of bund, canal under NRM categories. Under construction, both buildings (including individual housing and public buildings) and road constitutes 5.38% each. Assets that would strengthen the livelihood of individuals and groups constitutes creation of Compost Structure (8.46% including vermi compost, Azola and bio manure production), Livestock Shelter (4.62%), Water Harvesting Ponds (2.69%), Nursery (1.15%) etc. which have potential for creation of green jobs and strengthening the non-farm livelihood options.

Activities such as Work-shade for Livelihood, Production of construction materials, and construction of storage structure, Village/ Rural Haat etc. provides options for augmenting non-farm livelihoods. Construction of cattle, goat, sheep and piggery shades intends to promote livestock-based income generation activities with both individuals and groups. This could enable rural youths to take up non-farm activities by taking up roles like livestock

vaccination, deworming, basic treatment of domestic animals at village level. Similarly, production of construction materials particularly making hallow bricks, fly ash bricks are potential non-farm enterprise which would not only streamline local supply system for the construction works but also generate local employment by employing both skilled and unskilled workers. Rural youths could be promoted to setup marketing services such as providing services of quality control (grading, sorting, packaging, weighting etc.) either at village or at rural haat (market) and generate income.

Land development and irrigation centric assets created under *Mahatma Gandhi NREGS* have potential to provide growth to agriculture particularly production of cash crops such as vegetables, oilseeds etc. This brings potential to augment income for land holding farming households. Outcomes of such farm-based activities have the potential to create non-farm livelihood opportunities in agriculture supply chain, value chain and ecosystem services. The integration of *Mahatma Gandhi NREGS* with Pradhan Mantri Krishi Sichai Yojna (PMKSY) for augmenting irrigation potential in rural areas has also generated demand for services like installing micro irrigation systems and its maintenance, demand for diesel water pumps on hire basis, installation of solar operated pumps etc.

¹⁹Includes afforestation, block & line plantation.

²⁰Includes afforestation, block plantation and line plantation.

Table 11 Mahatma Gandhi NREGS-Mapping the Non-farm livelihood potential

Assets/ Work Categories	Afforestation	Block Plantation	Construction	Development	Drainage	Leveling/ shaping	Line Plantation	Lining	Raising	Reclamation	Renovation Maintenance	Repair and	Grand Total
Building			9									5	14
Bund			18									3	21
Canal			5				5				4	5	19
Channel			1								1	1	3
Check Dam			10									4	14
Compost Pit			1										1
Compost structure			11									4	15
Compound wall for government schools			1									1	2
Crematorium			1									1	2
Culvert/cross drainage structures			1									1	2
Cyclone shelter			1									1	2
Embankment			1										1
Fish Drying Yards			2									1	3
Grasslands				2									2
Grey Water/Storm Drain			1									1	2
Gully Plugs			4									2	6
Infrastructure for Azola cultivation			2									1	3
Infrastructure for Liquid Bio manure			3									1	4
Land			2	2	2							7	
Livestock Shelter			8									4	12
Mini Percolation Tank			2									1	3
Nursery												3	3
Open Well			3									1	4

Assets/ Work Categories	Afforestation	Block Plantation	Construction	Development	Drainage	Leveling/ shaping	Line Plantation	Lining	Raising	Reclamation	Renovation Maintenance	Repair and	Grand Total
Play field			1									1	2
Production of building material			1										1
Recharge Pits			2										2
Roads			7									7	14
Sand filter for well recharge			5										5
Soak Pit			2										2
Soakage Channel			1										1
Spur			3									3	6
Stabilization Pond			1									1	2
Storm Water Drain			2									2	4
Storm Water drain for coastal protection			1									1	2
Terrace			4										4
Toilers			3										3
Trench			4										4
Underground Dykes			1										1
Village/Rural Haat			1									1	2
Water Harvesting Ponds			3								2	2	7
Work shed for Livelihood activity			1										1
Trees Plantation	2	29					21						52
Grand Total	2	29	128	4	2	2	21	5	3	1	7	56	260

Based on the nature of *Mahatma Gandhi NREGS* works and its potential to generate non-farm livelihoods, the following broad categorisation of non-farm activities are mapped against 262 *Mahatma Gandhi NREGS* list of works. Table 10 depicts the potential non-farm activities segregated into three domains as per the definition of the non-farm livelihood options i.e. a) wage employment, b) self-employment and c) enterprise. The list of potential non-farm livelihood options against each *Mahatma Gandhi NREGS* work is given in the Annexure 2. The prioritisation of the non-farm livelihood options has been made based on the activity that has potential to link with multiple number of works under *Mahatma Gandhi NREGS*. For example, Construction Skill Pack, under wage employment is linked to 55% of the works under *Mahatma Gandhi NREGS*. While wage employment and self-employment are predominantly skill based non-farm livelihood options, the non-farm enterprise options require both skill and investment.

Mahatma Gandhi NREGS includes several interventions on NRM domain that required basic level of skills for mapping, designing, giving layout and supervising work. Under *Mahatma Gandhi NREGS* this role was expected to be delivered by Bare Foot Engineer (BFT). However, in most cases these BFTs are non-functional or mostly engaged with the Gram Rozgar Sevak (GRS) in filling up muster roll and other documentation. This role is larger where the surveyors can be skilled on land parcel mapping technique using GPS enabled mobile tools. Other than being employed under *Mahatma Gandhi NREGS*, they may also take up other land mapping works in the village viz. mapping of house sites, agricultural land etc.

²³Aggregator can be promoted at the village level particularly unemployed youths who can set up enterprises to support farm and off-farm ecosystem. The aggregator could be an agriculture input supplier, operating custom hiring service for agricultural equipment, trade farm and/ or off-farm produces collectively and selling it, installing micro irrigation system under PMKSY etc.

Table 12 *Mahatma Gandhi NREGS* – Mapping the Non-Farm potential (segregated as self-employment, wage employment or enterprise)

Wage Employment	Potential	Self-Employment (Product/ Service)	Potential	Enterprise	Potential
Construction Skill Pack/a	55.00%	Surveyor	21.15%	Aggregator	21.54%
Nursery Skill Pack/b	25.00%	NTPP Sale	9.62%	Vermi Compost Trade	8.85%
		Fruit Orchard	6.92%	Pump Set Mechanic	3.08%
		Sale of Vermicompost	6.15%	Plumbing Material Seller	1.92%
		Veterinary Service Provider	4.62%	Dry Fish Packaging and Sale	1.15%
		Plumber	3.85%	Sale of Seedlings	1.15%
		Construction Skill Pack	3.46%	Decentralised Godwan	0.77%
		Compost Production	2.69%	Fodder Making	0.77%
		Fish Farming	2.69%	Mechanic	0.77%
		Pump Set Hire	1.54%	Paver Tile Manufacturer	0.77%
		Sale of Silkworm	1.54%	Borewell Machine Digger	0.38%
		Dry Fish Making	1.15%	Dairy	0.38%
		Nursery Skill Pack	1.15%	Food Processing Unit	0.38%
		Road Roller Driver	0.77%	Goat rearing, Breeding	0.38%
		Tile Layer	0.77%	Piggery & Breeding	0.38%
		Value Addition	0.77%	Poultry, Mother Chick Unit	0.38%
		Fodder Making	0.38%	Production of Building Materials	0.38%
		Wire Crate Maker (Gabion Maker)	0.38%		

The identified non-farm activities under enterprise promotion are primarily focused on aggregation, value addition and ecosystem support services. In addition, these potential rural non-farm enterprises could also generate employment for individuals based on the skills and services listed under employment and self-employment category. It may also be observed that most of the non-farm enterprises mapped are potential green jobs and have no or very little effect on environment, while supporting the farm and off-farm sector.

4.3 Unpacking Potential Rural Non-Farm Livelihood Opportunities mapped with *Mahatma Gandhi NREGS* Works and beyond

While the mapped rural non-farm livelihoods have a potential linkage with *Mahatma Gandhi NREGS* works, it is important to unpack it and expand its scope to generate incremental and sustainable income. The incremental human resource demand and skill & enterprise support services provided under different government programmes are urban centric and have little or no push in creating rural skills. However, within the purview of the existing schemes and introduction of schemes such as Revamped Scheme of Fund for Regeneration of Traditional Industries (SFURTI) and Start Up Village Entrepreneurship Programme (SVEP) under DAY-NRLM could trigger the potential of rural non-farm sector by augmenting skill, business support services and finance.

Eliminating overlapping cases, cases that are completely urban centric and mapped cases with *Mahatma Gandhi NREGS* from the list of different non-farm options available under different government schemes/ programmes viz. Skill India Mission, DDU-GKY, e-Shram Portal, RSETI, RKVY etc. 23 non-farm occupation sectors are identified covering about 118 potential rural non-farm opportunities. Out of these 118 identified rural non-farm livelihood options, 34 have direct linkage with *Mahatma Gandhi NREGS*. 19 non-farm livelihood options would generate economic opportunity for wage employment, 82 self-employment and about 21 activities are enterprise promotion centric.

While skilling is a major element in promoting these rural-non-farm enterprises, about 97 activities require skill development of individuals on the specific trade that require moderate to high level of skilling and reskilling. Mapping

these activities to individual capacities, all the 118 options require technical capacity to manage the livelihood while 65 require managerial capacity and 61 require financial capacity to invest in the trade either from own sources or Govt. support or credit. Most of the identified non-farm livelihood options are long-term or regular in nature while about six are seasonal and 96 activities could be taken by individuals while about 22 activities could be group-based activities that can be taken up by women SHGs.

In terms of infrastructure requirements, road connectivity is a major requirement for better mobility of the raw materials, products and services. Out of the 118 rural non-farm activities, 95 activities require electricity, 13 require internet connectivity, 71 storage/ space facility, 64 transport facility and 17 basic or semi-automated processing/value addition infrastructure.

While the level of education is an important element in the successful management of the non-farm enterprises, about 86 activities that are listed required basic level of education (matriculation or above), 24 activities required intermediate level of education (higher secondary or above) and eight activities require skill based professional education viz. web designer, computer networking, mechanic, electronics repair etc.

In terms of support services that can be provisioned for the individuals or groups willing to take up these non-farm livelihood options, capacity building and training (that includes skill, technical and managerial) are highly essential. In addition, 43 non-farm options require financial assistance in form of start-up grant or credit to initiate the business operations and 21 activities requires technological interventions that can increase the efficiency and profitability of the activity.

Market being a critical element in the rural non-farm sector, out of the 118 identified non-farm trades, 89 activities have potential in local market that is within the village, GP or Block, 15 have potential market within the district and 14 are within the state. There are also potential markets outside the state, however, that will depend upon the scale of the business.

The details of the mapping are given in annexure. This combination of mapping layers of different variables could be triangulated to decide the best non-farm livelihood options.

5

Case studies on Successful Initiatives

5.1 Enterprise based Initiatives to enhance rural non-farm livelihoods

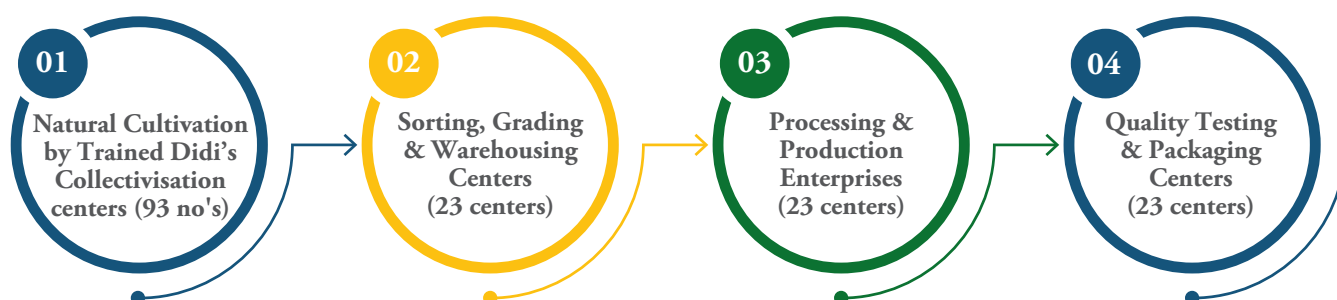
Case Study 1: Palash: Igniting the entrepreneurial spirit of Jharkhand

Objective:

Jharkhand State Livelihood Promotion Society (JSLPS), which comes under the rural development department, launched Palash Brand with the aim to provide rural women entrepreneurs' better market opportunities, with direct access for the sale of their products by connecting lakhs of women members of SHGs to strengthen and sustain their livelihood.

Institutions Involved/roles and responsibilities:

The focus is on end-to-end value chain process of production, collectivisation, processing, packaging, branding, and marketing with concurrent ownership of the rural women entrepreneurs of SHGs and their institutions like Producers' Groups (PGs), Farmer Producer Companies (FPOs), etc. There are all together 5000 PGs which have started Package of Practice (POP) based cultivation and Collectivisation branding of products with the hallmark of the competent government authority affirms the strong representation of the product quality being endorsed. Through this initiative, marts and display counters are also being set-up in several districts so that the reach of the products can be increased.



From September 2020, the sale of edible products under the brand accounted for 37% while sale of non-edible products came upto 63%. At present, around 42 Palash Marts and 31 Display cum Sale counters are operational across the state in different blocks. More than 60 products, ranging from unpolished rice, pulses, ragi atta, mustard oil, soaps to pickles, honey, spices, masks, sanitisers, hand-washes etc., made by the women entrepreneurs of Sakhi Mandals (women federations), are being sold in these marts. In addition, the marts also provide livelihoods to the women operating and managing them and the display counters.

Scale:

Palash is the brand name for products by women associated with the Jharkhand State Livelihood Promotion Society (JSLPS). The autonomous society established by the rural development department works as a nodal agency in the state for effective implementation of livelihood promotional activities. Nearly threemillion poor women are associated with the Society through SHGs. In addition to farm-based activities, rural women are also encouraged to take up entrepreneurship and thereby enhance their social and economic status.

Rationale/Trigger:

Palash has been established as an umbrella brand in Jharkhand for marketing and sales of products made by the rural women of the state with the intention to cover all SHG women members under the fold and link them to a market suited to their business/production. Value chain interventions are often plagued due to the involvement of intermediaries and lack of direct market for the producers to sell their products. The State Mission's initiative to give a brand name to the produce of SHG members is an attempt to do away with such malpractices and provide remunerative prices to the producers.

Implementation Status:

Palash Branding & Marketing initiatives value chain:

During the second wave of COVID19 and lockdown in the state, a mobile application was also introduced under the brand name "Palash Mart Mobile App" which enabled the consumers to order the products made by rural women from their home and have them delivered at their doorstep. Efforts are being made to connect them with various enterprises which will add to their livelihoods, thus, providing them enhanced economic opportunities. Adequate support in the form of training and financial aid is provided through the Sakhi Mandals and the banks.

Impacts:

Within a period of around nine months, 60 products have been launched in the open market through exclusive network of 42 Palash Marts and 31 Palash display centres.

Further, several products such as Soap, Mustard Oil, Jeera Phool Rice, Arhar Pulse, Mask, Millet Flour, Honey etc. have emerged as potential market leader products of the Palash brand in the last six month.

Table 6 Occupation Sector based on E-Shram Portal

Product	Wheat (in Metric Tonnes) (MT)	Maduwa (in MT)	Jeera Phool Rice/ Rice (in MT)	Arhar Daal (in MT)	Mustard (in MT)	Haldi (in MT)	Red Chilli (in MT)	Tamarind (in MT)
Quantity	178.00	111.00	125.00	100.00	110.00	44.00	42.00	45.00

Lessons Learnt:

Local products can go global with strategic interventions and strong institutional support by organising women SHGs into product-based collectives and providing them adequate skilling, facilities, finance and access to market. The state's initiative to establish a brand helps women members to showcase their products and fetch better market and price. However, Palash needs to collaborate with private sector better outreach and sustainability. The farmers supported with NRM based individual assets under *Mahatma Gandhi NREGS* needs to be mobilised to join these producer groups and supported to take up production and value addition activities that can further strengthen the supply chain of Palash. In addition, assets such as storage structures, common facility centres and SHG work shades constructed at the village level may be mapped and tagged with these producer groups for better access to infrastructure and trigger value addition of rural produces. This would enable rural women and youth to benefit from non-farm employment such as storage, transport, value addition, packaging etc.

Case Study 2: Art and Craft: ORUPA Empowering Traditional Artisans of Odisha

Objective:

ORUPA (Odisha Rural and Urban Producers' Association) works towards improving product design, strengthening artist's capacity and providing market linkage for artisans to improve livelihood opportunities for traditional artisans, especially women. While ORUPA supports both the handlooms and handicrafts sector, the focus is more on handicrafts including handicrafts made from handlooms.

Institutions Involved/roles and responsibilities:

ORUPA is an apex body working at the Odisha focused on providing highly customised and comprehensive capacity building services to artisans engaged in producing various utility and decorative products. It supported cluster-based

organisation of artisans in organisational design, skill development and better access to financial services and marketing assistance to artisans. Through their corporate collaborations and retail network, ORUPA has made a significant market presence in India and overseas.

Rationale/ Trigger:

ORUPA was formed in 1990 as an apex body of artisans working in the handicrafts sector in Odisha. The objective was to create a federation of primary producers, i.e. artisans themselves, to enable them to take charge of their developmental and marketing efforts. Currently, ORUPA functions as a decentralised network of non-profits, SHGs and individual artisan members from 30 districts of Odisha. ORUPA's interventions with artisans are divided into two main areas:

- a. **Promotion:** Through promotional activities, ORUPA aims to support the social, economic and technical development of artisans. ORUPA organises artisans into SHGs which are trained through technical and managerial skill development programmes. Additionally, ORUPA ensures that artisan groups have access to finance, raw material, design information and product development inputs.
- b. **Marketing:** ORUPA provides a permanent marketing network for all its members by ensuring that artisans' products are ready for Indian and overseas markets, facilitating relationships with trading houses and marketing products through annual exhibitions as well as the ORUPA store.

Scale:

Over the years, ORUPA has successfully established its footprint in all 30 districts of Odisha and currently works with 30,000 individual artisans. The organisation plans to double this number over the coming years with a special focus on the remote tribal belts of Odisha that have been left untouched by most developmental efforts.

Implementation Status:

At present, ORUPA has 13 non-profit partners across Odisha that assist the organisation in the implementation of its programmes. Non-profits are selected as members of the ORUPA network based on their experience in crafts and impact on artisans, and ORUPA trains partner staff in all its programme guidelines. Thereafter, the non-profit and ORUPA together organise the artisans in SHGs, link them with credit institutions and provide them with capacity building. The marketing network established by ORUPA facilitates the promotion of artisan's products. All activities in a zone, consisting of five to six districts, are managed by a zonal coordinator who is in turn supported by a team from local non-profit members.

The key to ORUPA's enormous scale is the network model adopted by the organisation. ORUPA implements its interventions through established local non-profit partners by leveraging their human resources and infrastructure. Additionally, ORUPA forms artisan groups that are efficiently organised into cluster, district and zonal levels, allowing for effortless replication which is vital to scaling any non-profit intervention model.

ORUPA's full time team of 15 is divided across its two main activities of promotion and marketing. The team is spread across all 30 districts of Odisha and is supported by staff from local non-profit partners. ORUPA's board consists of professionals from the development sector and academia, with a large proportion being artisans themselves, in order to ensure that they have a stake in organisational decision making.

Impacts:

Till date, ORUPA has reached out to 30,000 artisans across Odisha through its interventions. All the master craftsmen that ORUPA has worked with over the years have managed to increase their income around five times, while the smaller artisans have been able to achieve three times increase in their income.

Lessons Learnt:

Investing in the crafts sector today presents a tremendous opportunity to shape the prosperity of those engaged in India's non-farm rural economy. For the seven million engaged in production and the millions more dependent on the sector as a source of livelihood, strengthening the craft ecosystem will result in benefits including stable employment and income generation opportunities, the ability to capture a greater share of a significant global market, and preservation of unique cultural assets. Moreover, crafts are a powerful tool to create catalytic impact on the lives of women, marginalised communities and social outcomes of entire families engaged in the sector.

Non-profits, that have been active in the crafts space since the 1960's, have developed strong models of working closely with artisans, providing critical inputs and taking products to diverse markets. Given the adequate support, they have the potential to further strengthen these models, specialise in improving the artisan end of the value chain and scale impact across the country. This emphasises the need for a multi-stakeholder approach to build the crafts ecosystem. The government has a key role to play in creating a policy and economic environment conducive to the growth of crafts into an industry. The private sector including mainstream retail, high end design houses, financial institutions and social businesses are pivotal to ensure the growth of business models that overcome challenges in the value chain and create markets for craft products.

Case Study 3: Didi Ki Rasoi Yojana: Community Canteens run by women SHG members in Bihar**Objectives:**

Under the Didi Ki Rasoi' programme by Bihar State Livelihood Mission, Jeevika workers are given charge of the hospital's canteen to prepare quality meals for admitted patients there which would provide a consistent means of income to the Didis (members of SHG involved) and generate employment opportunities for many other employees through community canteens run by them. The programme aims at supporting the rural enterprise run by community initiative for improved service delivery in government hospitals while generating an economic return to entrepreneurs.

Institutions Involved/ roles and responsibilities:

The DKR (Didi Ki Rasoi) chain of community-based canteens is efficiently managed by the empowered rural women who are the members of the SHGs of JEEViKA (or Bihar State Rural Livelihoods Mission).

Scale:

Didi Ki Rasoi Yojana project was initially started on an experimental basis in Vaishali district hospital under the concept of community canteens run by women who are part of SHG's. Later the facility was expanded to Gaya, Saharsa, Purnia, Buxar, Sheohar and Sheikhpura districts under Bihar Rural Livelihood Promotion Society (BRLPS).

Implementation Status:

There are around 12 million "Jeevika Didis" associated with more than one million lakh women self-help groups.

Impacts:

Providing quality and hygienic food to patients of district hospitals had been a challenge for government. Buoyed by the success of the DKR canteens run by women SHGs,

popularly known by the name of Jeevika Didis, along with the Bihar Rural Livelihoods Promotion Society (BRLPS) at seven district hospitals of the state, he state currently spends at least Rs 130 per patient per day on food in accordance with rates. Allotted by the state government, this amount is routed to women SHGs through BRLPS, which is a state government initiative. Apart from catering to the in-patients of district hospitals and their attendants, the DKRs have also been making their presence felt in fairs and exhibitions at district, state and national levels through food courts. DKR in Buxar and Vaishali served food to Bihar State Election Commission during General Elections, 2019 and as per official statements, total sales during the General Elections 2019 were worth Rs 18 lakh.

Lessons Learnt:

DKRs display collective leadership and ownership aiming at meaningful changes in the rural community in terms of poverty elimination in Bihar. These women entrepreneurs are charged with commitment to serve the customers (mostly in patients of district hospitals) with hygienic and home-like quality food at fair price. While the market for this model is backed with a strong support of government, there is a need to pilot this activity through private sector financing and validate the profitability and potential employment opportunities for women members. Keeping the potential urban and industrial growth in Bihar, how this model can be replicated to supply working lunch to corporates/offices in urban locations etc. may be explored. The possibility for replicating the Mumbai Dabba Wala distribution model or online food delivery models may be explored for ensuring larger and diversified market for DKR.

Case Study 4: SoUL Project on Solar Study Lamps: Bihar

Objective:

SoUL Project aims to provide seven million rural students with high quality, affordable clean light in the form of these solar lamps. Solar Urja Lamp (SoUL) project is an initiative of IIT Bombay to promote off grid solutions, use of renewable energy and empower rural women and children, solar study lamps initiative was launched in Bihar in 2015.

Institutions Involved/roles and responsibilities:

The initiative is part of a project to assemble and distribute seven million solar lamps along with Energy Efficiency Services Ltd. (EESL) funded by the Ministry of New and Renewable Energy in the five states of Assam, Bihar, Jharkhand, Odisha and Uttar Pradesh, where more than 50% of rural households have no access to electricity.

Scale:

Ministry of New and Renewable Energy has targeted to provide sevenmillion solar study lamps to students from 22,000 villages in 385 blocks spread across 49 districts.

Rationale/Trigger:

According to MNRE, 221 million people are without any electricity in India and 81.2 million students use kerosene for lightning to study. As many as 43% of rural households in India are dependent on kerosene and 189 million students reside in rural areas. Kerosene lamps emit carbon dioxide fumes, resulting in indoor air pollution that affects the health of children and women the most.

Implementation Status:

The solar photovoltaic module manufacturing plant are owned and operated by local women Self Help Group Federations. At the assembly and distribution centre for solar study lamps at Mahuli village in Arrah, Gaya district (Bihar), local women SHGs are assembling solar study lamps and distribute them to underprivileged students who do not have access to electricity. Thus, the centre is not only providing kerosene-free affordable illumination to students, but also empower rural women with the skills to assemble, distribute and repair solar lamps. In Bihar, the target is to provide more than 18.84 lakh underprivileged students with solar study lamps. Around 4.57 lakh such lamps have already been distributed to the students. In addition, the UJALA van from Arrah have plans to travel across Bihar, distributing LED bulbs and spreading awareness about energy efficiency and energy conservation.

Impacts:

As part of this initiative, 16,000 Indian villages with a significantly large number of low-income households are able to access LED bulbs for a special price of Rs 50 under the Unnat Jyoti by Affordable LEDs for All (UJALA) programme. These LED bulbs will equip homes with energy-efficient, cost-effective lighting, and higher lumen output than conventional incandescent bulbs.

According to the study titled “Impact of Solar Off-grid Lighting Solutions on Rural Households in the states of Uttar Pradesh and Bihar” by IFC’s Lighting Asia/ India Programme in partnership with D. Light analysed the impact of solar lanterns on rural households in Uttar Pradesh and Bihar (2016), it was observed that in addition to a reduction of the households’ dependency on kerosene for lighting by 75%, the average time spent by for children to study increased by one hour daily.

Lessons Learnt:

On ground, experiences suggest that in addition to improving children's education, solar study lamps serve multiple uses in rural households as these lamps have replaced kerosene lanterns and the traditional Dhibri lamps. Some villagers are using the portable solar study lamps for outdoor activities like light to irrigate their farmland during dusk and dawn which was difficult to do with kerosene lamps. Moreover, it has created non-farm income opportunities for rural women and enhanced their income from both assembling and sale of solar lamps. However, there is a need ensure the supply chain of inputs, strengthening assembling units operated locally and continue product development to sustain the effort and enterprise of women. It is essential that these SHG women may be trained in assembling mainstream LED and solar lighting products such as streetlights, tube lights, bulbs etc. to cater the mainstream market.

Case Study 5: Solar Charka Mission: Bihar**Objective:**

The objective of the mission was to enable SHG members to work on the solar charkha and establish micro enterprises run by artisans so that their economic and social status could be improved.

Institutions Involved/ roles and responsibilities:

GoI launched the Solar Charkha Mission, under the aegis of Ministry of Micro Small & Medium Enterprises (MSME) for Khadi weaving on solar charkha in Khanwa village of Nawada district in Bihar during June 2018 with an objective to revive Khadi industry.

Scale:

Bhartiya Harit Khadi Gramodyog (BHKGS) under this initiative opened a Training-cum-Production Centre on Solar Charkha at Khanwa village. The centre is dedicated to promotion of Khadi industry and providing employment opportunities to the women residing in nearby areas. NABARD sanctioned an LEDP with a grant support of Rs.6.00 lakh to Bhartiya Micro Credit for capacity building of 150 SHG members.

Implementation Status:

Initial survey of identified village was conducted to select women belonging to BPL families having limited livelihood options, who were sensitised about the Solar Charkha programme and trained at BHKGS's Training-cum-Production Centre. Both backward and forward linkages were provided to the artisan. After successful completion of the training programmes, the trainees were credit linked

with the Madhya Bihar Grameen Bank. Subsidy was also provided to the beneficiaries for purchase of solar charkha. The agency also ensured to provide readymade market to the artisans.

Impacts:

BHKGS has launched their own brand named Greenwear for khadi products. The agency has also collaborated with popular clothing brands like 'W' and 'Aurelia'. Income between a range of Rs.5,000 - 6,000 per member per month has been ensured through this intervention. The initiative provides a boost to the khadi industry as also the income of rural people. Solar Charkha is less labour intensive, and one person can operate more than one charkha at a time which increases the output.

Lessons Learnt:

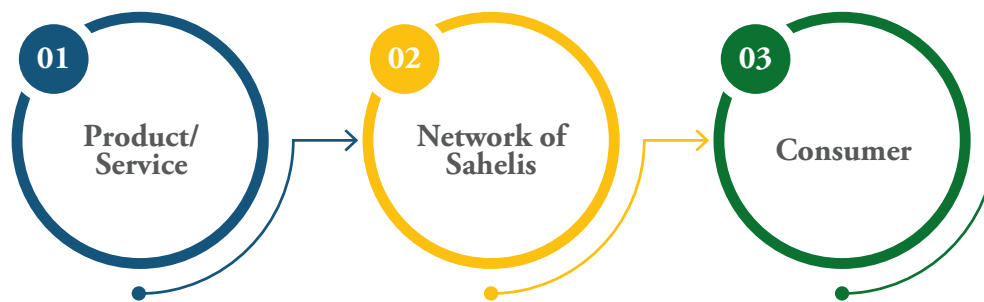
Given the income of the artisans working in the production centre, it can be concluded that a small technological intervention can go a long way in empowerment of hitherto neglected sections of the society.

Case Study 6: Frontier Markets: Digitally and Economically Empowering Rural Women**Objective:**

Frontier Markets is a social commerce platform with a mission to create 'Saral Jeevan' or an 'Easy Life' for rural households by providing them local access to high quality, climate friendly, and gender inclusive products and services, including clean energy services, to last mile villages by investing in rural women entrepreneurs as our connector to rural communities. They are a supply chain company that uses data to understand the needs of rural customer and serves them through a hyper-local supply chain supported by a network of 14 warehouses with a focus on providing good quality product at as competitive a price.

Institutions Involved/roles and responsibilities:

Frontier Markets, headquartered in Jaipur, Rajasthan was founded in 2011 by Ajaita Shah to bridge markets between rural customers and solutions and handles the last-mile delivery with its warehouse infrastructure and mobile camps for after-sales services. Frontier Markets evolved from a high-touch to a high-tech digital platform working rural women influencers across multiple states in India, adding vital services based on market demand. Since its inception in 2011, Frontier Markets has consistently worked to make a strong environmental impact in rural communities. They provide environment-friendly solar products designed and built for rural markets, local trainings and workshops to influence behaviour, and expand access to information.



Scale:

Frontier Markets is technologically enabling rural women to use their social network and social capital in the village to book orders to help 150 million rural consumers join the online market experience through a salesforce of 1 million digitally informed women. With this, women in rural Rajasthan, where large online marketplaces like Amazon and Flipkart do not deliver, are becoming the last-mile link between consumers and sellers for a wide-range of products, including large consumer appliances such as TV, washing machine, fridges, mixies (local term for mixers), baati (Rajasthani dish) making oven and cattle feed.

Implementation Status:

Frontier Markets also collaborates with SHGs and NGOs to digitally up-skill rural women entrepreneurs and create employment opportunities that improve the quality of life for women and their families. Frontier Markets Sahelis consistently earn 4X the income from any other similar programme. Meri Saheli app, has about 10,000 women users. The Meri Saheli app through its women networkers, who are usually from self-help groups, sells curated products for rural areas. Each Saheli, who is smartphone-enabled, serves 50 households and earns through commission on products sold and also through payments by doing surveys in rural areas for large companies.

Impacts:

- Significant rural presence-30 branches across 3,456 villages serving 5,00,000 rural households. Training programmes, curated aspirational products and services, and local entrepreneurship opportunities facilitate and support positive impact in village communities.
- In 2015, Frontier Markets initiates a gender-smart strategy to bring rural women entrepreneurs on-board as Frontier Market representatives in rural villages. In

2018, they launch Meri Saheli mobile app, India's first assisted e-commerce app designed by and for rural women. Currently there is an involvement of 12,000 Saheli networks with INR 12 lakhs of average GMV (Gross Merchandise Volume) per Saheli.

- Frontier Markets provides after-sales service for all the brands like Samsung, Usha, Crompton that it on boards. Each saheli sells about 131 products or services in a year. So far, 7 million products have been sold influencing 3.5 million beneficiaries generating net earnings of INR 11 Billion.

Lessons Learnt:

Gender inclusive businesses are essential to holistically impact rural markets-women are influencers, passionate for change, eager to work, and provide strong insights that are otherwise hard to access-key ingredients in successful, customer-centric companies. Combining technology with local trusted influencers enables, a deeper connect to the rural customer, while driving innovation. By harnessing rich rural data, product companies do not just stop at serving the massive untapped rural consumer base. The insights allow them to firmly integrate into the rural consumer's life through new, curated product lines and refined baskets aimed at improving the quality of life.

Case Study 7: From grain bags to a digitised Grain Bank

Objective:

The Ergos created a Grainbank that enables farmers to convert their grains into tradable digital assets, avail credit against those assets through partner NBFCs and Banks and get better prices for their produce. The Ergos Grainbank platform empowers farmers by providing them with a choice on when, how much quantity and at what price they want to sell their produce, thus maximising their income.

Institutions Involved/roles and responsibilities:

Ergos's on ground operations are backed by a comprehensive tech platform which assists the end-to-end process and operations, starting from farmer on-boarding to final sale. The end-to-end process of capturing farmers' data, booking warehousing space, sale of grains or availing credit happens digitally on the Ergos Live platform. Farmers register on the mobile app/web and book space in the Grain bank for storage. Grains are inspected for quality at the warehouse and Grain bags are deposited into the Grain bank. The information is digitised making the grain bags fungible. Farmers can access their digital inventory and sell a single unit of grains in just one click and can even avail direct credit against their stored grains.

Rationale/ Trigger:

Almost 86% of farmers in India are small and marginal farmers, who lack the resources as well as knowledge to adequately store their produce, leading to post harvest grain loss as well as deterioration of grain quality. This agri-tech start-up has built a unique Grain Bank model that helps farmers achieve higher incomes.

Implementation Status:

Currently, they are operational in Bihar with a goal to serve over twomillion farmers across the country by 2025 and create a sustainable income for them. So far, over 64,000 farmers have registered having achieved a direct farmer transaction of over 204 Crore INR and more than threemillion bags have been digitised.

Impacts:

Uniform grain quality and digitisation of the grains stored makes it fungible and helps aggregate demand & supply. Proper storage eliminates the risk of grain loss arising from improper storage by the farmers. Ergos also facilitates credit and market linkage for the farmers storing their grains with it. Using the credit facility, farmers can avail immediate liquidity; they don't have to sell their produce during the harvest season when the prices are at the lowest. They can use the Ergos platform to sell their produce during off-season fetching themselves better income.

- **Network of Warehouses:** Scientifically managed warehouses at farmgate where farmers can store even a single bag of grains.
- **Credit Availability:** Credit available from partner banks/NBFCs against grains stored with Ergos
- **Market Linkage:** Empowering farmers with a choice to sell a single bag of grain. Ergos aggregates the supply, and offers farmers market linkage to sell their stored grains.

Lessons Learnt:

Addressing post-harvest grain loss and ensuring quality control of grains is a major challenge for small and marginal farmers. Integrated technology driven solutions involving private players could potentially improve the situation of farmers.

6

Recommendations for Way Forward through ERADA

6.1 Potential Economic Opportunity Streams from Non-Farm Sector - Pathways to expand under *Mahatma Gandhi NREGS*

- *Mahatma Gandhi NREGS* has been instrumental in generating rural employment and creating livelihood assets that augment income to rural poor. The gradual shift in focus from building common assets to creating individual assets (Category II works constituted about 20% of the total in 2012-13, which was increased to 46% in 2016-17 and 73% in 2020-21²⁴) over a period of ten years has increased contribution to annual household revenue ranging between 22% to 61%. These individual assets brought tangible impacts under *Mahatma Gandhi NREGS*, resulting in increased crop coverage, diversification to cash crops (viz. vegetables, oilseeds etc.), fish farming, animal husbandry etc. While these results reflect that individual asset creation strengthens the production system through land development, irrigation, domestic animal shelters, farm pond etc., it opened non-farm economic opportunities across the agriculture & livestock supply and value chain.
- Common assets under *Mahatma Gandhi NREGS* absorb maximum investment as it caters to the larger population and is focused on rural infrastructure creation such as rural roads, buildings, storage, toilets, SHG meeting hall etc. These rural infrastructure development activities generate several non-farm economic opportunities including employment of skilled workforce in the construction work viz. mason, plumber, iron rod binding, electrician, carpenter, house painter etc. In addition, the repair and maintenance work of these rural infrastructures generates year-round employment for skilled workers. This also applies to individual assets such as PMAY houses and toilets constructed under *Mahatma Gandhi NREGS*.
- While a range of works under *Mahatma Gandhi NREGS* could potentially generate and enhance non-farm employment and income opportunity in rural areas, it is essential to assess these opportunities around resource and skill requirements, understanding people's preferences on the kinds of activities they want to pursue, and contextualisation of activities based on local economic trends. It involved an inherent risk of accelerating rural to urban migration post skilling however, an appropriate targeting approach would minimise such risk.
- Construction works under *Mahatma Gandhi NREGS* is the prominent labour absorbing activity in rural non-farm sector. It provides opportunities for employment, self-employment, and enterprise. The current skilling support that is provided under project Unnati through the convergence of DDU-GKY, RSETI and KVK are focused on the households who completed 100 days of work and further to the members between the age group of 18-45 years. As per the 2018-19 Project Unnati data about two percent households completed 100 days of work in Rajasthan and all other three states have less than one percent. Further drilling down the data reflects reduced number of beneficiaries is registered and the numbers further lowered in terms of training completion and placement. However, it may be noted that most of the skill trainings that are designed under these three schemes are predominantly urban skills.
- Rural areas being predominantly agrarian economies, recognition of land rights, forest rights (Jharkhand, MP), and pastoral rights (Rajasthan) could benefit communities that depend on NRM based livelihoods as well as value chains around such resources. In addition, skills such as mapping, surveying, landscaping etc. could generate non-farm employment for the youth population.
- Self-employment and enterprises could be encouraged across farm and off-farm value chains and supply chains considering the seasonality of farm-based livelihoods. Similarly, a set non-farm skills and enterprises connected with agriculture and animal husbandry could be supported to reduce urban migration. Such non-farm economic activities allied to agriculture including logistics, trade etc. that could be promoted as local enterprises.
- Promoting transferable skills and combination of related skills through training programmes could increase resilience towards economic shocks. There are growth centre focussed approaches adopted, in peri urban spaces that diminishes rural urban binaries slowly and is more like a continuum with peri urban spaces in between. Such growth centres are needs to be identified and incubated from an enterprise perspective.

Licenced Surveyors in Odisha and Para Legal Workers in Gujarat

In 2012, the Government of Odisha enacted Odisha Special Survey and Settlement Act, 2012 and its rules, which strengthened the legal foundation for use of modern survey technologies, including the engagement of licensed surveyors from outside Government to assist in the survey process. It supplemented the implementation of Digital India Land Records Modernisation Programme (DILRMP), where Odisha ranks as second among all the States and UTs of India as per the NCAER N-LRSI in terms of the extent of digitisation of land records and the quality of these land records. The Board of Revenue announced a three month modular course under Revenue Officers Training Institute (ROTI) to train Diploma Engineers and Science Graduates as License Surveyor who would eventually take mapping jobs assigned to them by Tehsils based on the demand of services such as computerisation of existing land records and online mutation, cadastral map digitisation, spatial verification, and linkage of the cadastral maps with the record of right (RoR). Given the limited number of enrolments as licensed surveyors due to its educational criteria and other preferred career options before them, the demand of their services is high and mostly used by Tehsildars for resurvey work. In addition, in urban locations their services are also accessed by real estate developers and construction contractors for surveying and structural layout work.

Construction and repair & maintenance being a major chunk of *Mahatma Gandhi NREGS* work, such trained youths as surveyors could be employed with basic level of skill building. Unlike Licensed Surveyors promoted in Odisha, informal or semi-formal recognition of such skills would create rural employment and promote demand for such services which are currently quite expensive and time consuming for rural households. Similar examples from Gujarat, where the Working Group for Women and Land Ownership (WGWLO), a network of organisations that work towards improving women's land rights, started building the capacity of its own network and land administration officials to provide appropriate legal and institutional support for improving women farmers' land rights as a mean to empower women farmers. In 2005-06, the WGWLO initiated a process to familiarise its member organisations with the legal and procedural aspects of land governance with the help of the Centre for Social Justice, a legal support organisation. This partnership trained a cadre of women para-legal workers (PLWs) (Fernandez et al., 2016) to help women claim their legal land rights through standard procedures. PLWs are usually individuals from the member NGOs or leaders from community based organisations. Upskilling rural women and youth to support various governmental departments and non-governmental agencies which lack adequate human resources will not only empower communities but would also enhance democratic participation of community members but would also reduce information asymmetry.

Similarly, in Odisha under the IFAD supported project, Government of Odisha launched Comprehensive Programme on Land Rights to Tribals over five years (2012-2017) to formalise rights over land for households possessing government land- for both homestead and agriculture and to settle households on their occupied house and cultivation sites. The Programme involved Bhumi Sanyojaks who provided additional capacity to local revenue officials for accurate enumeration of homesteadlessness and landlessness.

- Potential green jobs are an emerging sector particularly in peri-urban areas and it includes solid waste management-recycling, upcycling, composting units etc. There is also a possibility to explore green jobs for women to promote their presence and engagement in spaces beyond domestic spaces. For example, intervention of skilling women as paralegal workers by WGWLO²⁵ in Gujarat through their Swabhoomi Kendras, community resource persons etc. Similar activities could be integrated through common service centres operating in rural areas.
- Seasonality in agricultural production provides the opportunity to use idle labour or machinery and unused rural infrastructure viz. buildings etc. for non-agricultural activities which may supplement incomes without capital investments and at low opportunity costs.

²⁵Working Group for Women and Land Ownership: <https://www.wgwlo.org/>

6.2 The pathways possible for the expansion of rural non-farm based income

To achieve RNFS growth, rural areas need to develop activities that produce rural exports, along with tradable goods and services that extend beyond rural communities. There could be competitive advantages in sectors where primary non-farm activities are tied to natural resources (agriculture, forestry, mining, etc.), natural resource processing, transportation and waste management (agrifood and mineral processing); and where labour is cost-sensitive (i.e., able to exploit low opportunity costs of seasonal labour) or where the rural population has specialised skills (e.g. arts and crafts). Rural remittances through migration, rural industry and rural tourism also have potential as rural growth engines (Davis, J, 2003). This section covers pathways for the expansion of RNFS based income described as follows.

6.2.1 Augmenting income from existing list of Mahatma Gandhi NREGS works

- a. Employment focussed: Upskilling and reskilling based on individual preferences to work as skilled workers
 - i. Primarily on the non-NRM infrastructure development front, construction works include both common and individual work categories. Some of such non-farm skill-based employment is mason, plumber, carpenter, rod binding, fabrication etc.
 - ii. In addition, under plantation works (both block and avenue plantation) skilled individuals such as gardeners, grafters etc. could be employed in the nurseries developed under *Mahatma Gandhi NREGS*.
- b. Requirement of such individual skilled worker in each skill domain needs to be assessed based on the demand at the GP level during the preparation of annual plan (shelf of projects) for *Mahatma Gandhi NREGS*. In addition, it is also important to ensure that optimum number of such individuals needs to be promoted in each skill domain so that there's income sufficiency for the individuals to continue in that trade.
- c. Assessment of local demand of these rural non-farm skills other than *Mahatma Gandhi NREGS* such as employment opportunities from government programmes/schemes or from private sector.
- d. Augmenting income from *Mahatma Gandhi NREGS* outputs/outcomes
 - i. The outputs/outcomes from both NRM and non-NRM works under *Mahatma Gandhi NREGS* generates potential non-farm economic

opportunities across the supply chain and value chain of farm and off-farm sector including construction sector.

- ii. These economic opportunities are self-employment focused based on available resources and skills.
- Potential supply chain driven self-employment non-farm economic opportunities are supply of construction materials, rural transport services etc. These set of non-farm self-employment are resource focused.
 - Potential farm and off-farm value chain based non-farm economic opportunities include mechanic for repair and maintenance of agricultural equipment, agriculture equipment operators, drivers, para-vet care, land surveyors, barefoot technicians etc. These set of non-farm self-employment are skill focused.
- e. Augmenting income from Ecosystem Services
 - i. The increased investment under *Mahatma Gandhi NREGS* and its shifting focus from common asset creation to individual asset creation has increased the production potential from farm and off-farm sector in rural areas. Sustenance of such development primarily depends upon the ecosystem that supports across the value chain beyond employment and self-employment.
 - ii. Supporting in setting up enterprise around the farm and off-farm supply chain and value chain would create potential non-farm economic opportunities that will support the ecosystem and general local employment.
 - iii. Potential enterprises include agriculture input supply, farm & livestock products aggregation and sale, local value addition (cleaning, grading, packaging) etc.
 - iv. Demand side assessment (consumption and market trends) is crucial in setting up ecosystem services and catering to a niche market.
 - v. Private sector participation particularly in augmenting finance (credit) and technology is essential to sustain the non-farm opportunities. In addition, this will generate local employment.
 - f. The enterprise focused intervention model may be supported through mentorship programmes and skill development by reskilling/upskilling through convergence with DDU-GKY, RSETI, SVEP etc. Specific focus would be on green enterprises that could increase the participation of women and youth as well. Restored skills with clear roles & institutions and a focus on sustainable livelihoods could lead to increased income and reduced migration.

²⁴In terms of number of assets not investment.

6.3 Strategies to expand rural Non-Farm Income

Build Integrated Digital platform to enable the local governance units (GP) for a decentralised planning of *Mahatma Gandhi NREGS* implementation integrating sustainable employment, self-employment and enterprise development opportunities. This will go beyond the *Mahatma Gandhi NREGS* existing scope of employment (originating from the outputs/outcomes generated from *Mahatma Gandhi NREGS* works) expanding non-farm economic opportunities around supply and value chains, developing sustainable products/services from farm and off-farm sector. The platform would integrate resource information, skill information, GI tagging of products/enterprises, traceability connects, informs and empower actors, generate data, shape market & influence policy.

Seed, incubate, nurture & accelerate non-farm based community microenterprises of youth and women around supply chain (production and supply of construction materials, repair & maintenance of agriculture equipment, operating agriculture equipment, tractor driver etc.) and green value chains (viz. agriculture input supply, agriculture and veterinary services, farm, livestock, forest product aggregation, value addition, marketing, trading etc.) to promote sustainable production and responsible consumption.

Policy Engagement & Resource Mobilisation to build enabling environment around non-farm supply chains and value chains as well as to shape the local market around non-farm employment and enterprise. In addition, policy engagement for enabling inclusion of current non-permissible works under *Mahatma Gandhi NREGS*, yet essential for rural employment and livelihood promotion may be taken up. For example, works like boulder pebble and shrub removal silt application, and similar activities are not taken up as standalone activities. However, such activities could be part of tasks in works for converting uncultivable/barren/fallow lands into cultivable lands through one time land development activities. Such pilot²⁶ may be taken up under ERADA to demonstrate the possibilities and push for further expansion of *Mahatma Gandhi NREGS* work.

Generate Critical Evidence around rural non-farm contribution vis-a-vis local farm, and off-farm livelihoods and with reference to local/ global market to change the narrative.

6.4 Possible Approaches to sustain the non-farm initiatives

A multi-pronged approach would involve skimming the economic and employment gains from non-farm livelihood through a holistic village ecosystem approach using *Mahatma Gandhi NREGS* as the resource platform. This approach would connect rural non-farm skills & enterprises for better application of *Mahatma Gandhi NREGS* resources in farm & off-farm sector triggering employment of local youth and women in multiple ecosystem services that with help various actors contribute to improve local employment.

Reaping resilient and enhanced rural non-farm economic opportunities require an integrated approach which is key to systemic change as a cornerstone for sustainable development. Along with systemic shifts around *Mahatma Gandhi NREGS* work focused on creation of rural infrastructure and individual focused assets, integration of non-farm eco-opportunities and viewing rural geography in a resource cluster lens would be critical.

That interventions around non-farm livelihoods continuum are already existing. The systemic shifts are required to adapt to the actions on the ground. Therefore, the aforesaid strategies can be blended by following two approaches, aligning the concerns of scale and sustainability.

- a. **Scale up and sustain initiatives:** this would be a market centric approach and involve identifying and scaling up best practices around value chain interventions and supply value chain development that involves non-farm livelihood potential. This has to be connected with investments and activities around resource base to sustain and boost local employment and enterprise with private sector engagement and through social entrepreneurs.
- b. **Sustain and scale up initiatives:** This approach would adopt a resource centric approach and explore prospective potential non-farm livelihood options that would generate local employment and economic development through enterprise. Accordingly, methods for sustainable management of resources can be designed along with, building skills/reskilling and integration with *Mahatma Gandhi NREGS* ecosystem for expanding local non-farm employment and enterprise. This will primarily be supported through public financing through convergence with government schemes and programmes.

Both the approaches will however focus on fostering non-farm employment and enterprise-based livelihood development locally and bring in additional income to the local communities.

²⁶Pilots are not permitted under MNGREGS and needs to be undertaken separately with the support of development assistance.

6.5 Next Steps

While this study has analysed the structure and potential of expanding the *Mahatma Gandhi NREGS* works to generate non-farm livelihood options, there is a need to demonstrate it under ERADA particularly the designing and implementing enterprise promotion interventions backed by *Mahatma Gandhi NREGS* assets. Some of the critical areas that could be taken up by ERADA are:

- a. Expanding the scope of Project Unnati by supporting its implementation in ERADA states. Revision of criterion for selection of beneficiaries under Project Unnati to make it more exclusive can be reconsidered. In addition, the inclusion of SVEP and SFURTI under Project Unnati may be considered to expand its scope and outreach.
- b. Addressing employment of returnee migrants: Post COVID19 return migration and subsequent re-migration has been stabilised with a shifting trend in migration pattern and increased demand for the *Mahatma Gandhi NREGS* works. In such context, the

project may consider piloting mapping of available fallow land in villages and allocating it to returnee migrants to take up farm and off-farm based livelihood activities backed by *Mahatma Gandhi NREGS* assets to develop those lands.

- c. A detailed study for exploring the local employment opportunity and scope of expansion under handicrafts and handlooms may be taken up in potential clusters to explore the possibility of absorption of rural youth and women into the sector and also to look at the feasibility of setting up clusters-based enterprise.
- d. With e-commerce boom and its trend of expanding reach to rural areas has opened various non-farm employment opportunities including managing logistics, repair & maintenance, etc. Similarly, rural outreach of financial services has enhanced through various technology backed delivery models that have created huge potential for private sector engagement in creating rural employment generation and enterprise promotion. A detailed scoping study and skill mapping may be taken up under ERADA project.

6.6 State Specific Schemes in RNFS

Table 13 State Specific Schemes on Rural Non-Farm Sector

State	Schemes	Skill Development/ Training	Enterprise Support*	Finance/ Credit	Industry Linkage	Others
Bihar	Bihar State Rural Livelihood Mission (JEEVIKA)	Yes	Yes	Yes	Yes	
	Jal Jeevan Hariyali Abhiyan					Yes
	Lohiya Swachh Bihar Abhiyan			Yes		Yes
	Shyama Prasad Mukherji Rurban Mission	Yes			Yes	Yes
	Mukhyamantri Yuva Udyami Yojana			Yes		
Jharkhand	Neelambar Pitambar JAL Sammriddhi Yojana			Yes		Yes
	Veer Sahid Poto Ho Khel Vikas Scheme					Yes
	Jharkhand State Livelihood Promotional Society (JSLPS)			Yes		Yes
	Jharkhand's Opportunities for Harnessing Rural Growth (JOHAR)			Yes		Yes

State	Schemes	Skill Development/ Training	Enterprise Support*	Finance/ Credit	Industry Linkage	Others
Madhya Pradesh	Madhya Pradesh water sector restructuring Programme		Yes		Yes	Yes
	Udyog Mitra Yojana			Yes		Yes
	Mukhya Mantri Kaushalya Yojana (MMKY)	Yes		Yes	Yes	Yes
	Mukhya Mantri Yuva Swarojgar Yojana			Yes		Yes
Rajasthan	Guru Golvalkar Grameen Jan Bhagidari Vikas Yojana (GGJVY)		Yes		Yes	Yes
	Mukhya Mantri Adarsh Gram Panchayat Yojana (MAGPY)		Yes	Yes		Yes
	Gramin Gourav Path Scheme	Yes		Yes	Yes	Yes

*(marketing, product design & development, incubation etc.)

The Centrally sponsored schemes are listed in Annexure 6.

References

- Asian Productivity Organisation. (2015). *Productivity in the Asia-Pacific: Past, Present, and Future*. Tokyo, Japan: Asian Productivity Organisation.
- Barrett, C. & Reardon, T. 2000. Asset, activity and income diversification among African agriculturists: Some practical issues (available at World Bank ARD website).
- Barrett, Christopher & Reardon, Thomas & Webb, Patrick. (2001). Nonfarm Income Diversification and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics and Policy Implications. *Food Policy*. 26. 315-331. 10.1016/S0306-9192(01)00014-8.
- Behera M, Mishra S, Behera AR. The COVID-19-Led Reverse Migration on Labour Supply in Rural Economy: Challenges, Opportunities and Road Ahead in Odisha. *The Indian Economic Journal*. 2021;69(3):392-409. doi:10.1177/00194662211013216
- Bihar Economic Survey Report (2020-21). Finance Department, Government of Bihar.
- Carney, Diana & Drinkwater, Michael & Rusinow, Tamara & Wanmali, Samir & Singh, Naresh & Neefjes, Koos. (1999). *LIVELIHOODS APPROACHES COMPARED A brief comparison of the livelihoods approaches of the UK Department for International Development (DFID), CARE, Oxfam and the United Nations Development Programme (UNDP)*.
- Choudhury, Pranab and Amang, Navin Kumar, *Enhancing Recognition and Return of Women Farmers: WGFWLO's Legal and Institutional Initiatives* (February 14, 2021). Available at SSRN: <https://ssrn.com/abstract=3785433> or <http://dx.doi.org/10.2139/ssrn.3785433>
- Datta, N. (2015). Evaluating impacts of watershed development programme on agricultural productivity, income, and livelihood in bhalki watershed of Bardhaman District, West Bengal. *World Development*, 66, 443-456.
- Davis, J. C., and J. V. Henderson (2003) Evidence on the political economy of the urbanisation process. *Journal of Urban Economics*, 53, 98-125
- de Haan A. Labour Migrants During the Pandemic: A Comparative Perspective(2020). *Indian J Labour Econ*. 2020;63(4):885-900. doi: 10.1007/s41027-020-00283-w. Epub 2020 Oct 19. PMID: 33100735; PMCID: PMC7571525.
- Economic Review (2020-2021), Directorate of Economics & Statistics Rajasthan, Jaipur
- Ellis, F. 1998. *Rural livelihood diversification: Framework and categories*. Chatham, UK, Natural Resources Institute. (unpublished mimeo)
- Ellis, F. (2000). *Rural Livelihoods and Diversity in Developing Countries*. New York, NY: Oxford University Press.
- Enhancing Tribal Land Tenure Security In Odisha: OTELPLandesa Partnership.<https://centerforland.org/project-report-land-policy-reform/>
- Fisher, T., Mahajan, V., & Singha, A. (1997). *The forgotten sector* (pp. 274). London: Intermediate Technology Publications
- Ghosh, Manoranjan & Ghosal, Somnath. (2021). Households' Choices and Their Drivers to Rural Non-Farm Livelihood Diversification in West Bengal, India. *Journal of Asian and African Studies*. 002190962110405. 10.1177/00219096211040592.
- GoI (2011a). Socio Economic and Caste Census (SECC) 2011, The Ministry of Rural Development Retrieved from <https://secc.gov.in/>
- GoI (2011b). Census (2011), Registrar General & Commissioner of Census., Retrieved from https://censusindia.gov.in/2011-prov-results/paper2-vol2/data_files/AP/Chapter_VI.pdf
- GoI (2014), NSSO (2011-12) unit level data, 68th round, Employment Unemployment survey, NSSO Ministry of Statistics and Programme Implementation. New Delhi
- GoI (2016a). The Ministry of Labour & Employment, Labour Bureau (2015-16). Retrieved from http://labourbureaunew.gov.in/UserContent/EUS_5th_1.pdf
- GoI (2016b). National Sample Survey Office (NSSO) 2015 - 2016, National Statistical Commission, New Delhi
- GoI (2018), Annual Report by the Ministry of Textiles (2017-18), Udyog Bhawan, New Delhi
- GoI (2019). Periodic Labour Force Survey (PLFS) 2017-18, Ministry of Statistics and Programme Implementation, National Statistical Office, New Delhi, 2019. Retrieved from http://www.mospi.gov.in/sites/default/files/publication_reports/Annual%20Report%20C%20PLFS%202017-18_31052019.pdf

GoI (2020). Agriculture Statistics At a Glance, 2019, Ministry of Agriculture and Farmers Welfare

Department of Agriculture, Cooperation and Farmers Welfare, Directorate of Economics and Statistics

GoI (2021a). Periodic Labour Force Survey (PLFS) 2019-2020: Quarterly Bulletin, Ministry of Statistics and Programme Implementation, National Statistical Office, New Delhi.

GoI (2021). Ministry of Rural Development, NRLM 75 Inspirational Stories of Atmanirbhar Rural Women. Retrieved from https://rural.nic.in/sites/default/files/NRLM_75_Stories_of_Atmanirbhar_17092021.pdf

Gulati, A, Roy, R, Saini, S. (2021) Revitalising Indian Agriculture and Boosting Farmer Incomes. Retrieved from https://link.springer.com/chapter/10.1007/978-981-15-9335-2_6

Hazell, P.B.R., & Hageblade, S. (1991). Rural growth linkages in India. *Indian Journal of Agricultural Economics*, 46(4), 515-529.

International Labour Organisation (ILO) (2011). 'Persons with Disability and the India Labour Market: Challenges and Opportunities', Report. International Labour Office, Geneva.

International Labour Organisation (ILO) (2013) Opportunities for integrated support for moving out of informality. Chapter 9.1 in *The informal economy and decent work: a policy resource guide, supporting transitions to formality*. International Labour Office, Employment Policy Department, Geneva

Jha, B. (2006). Rural Non-Farm Employment in India: Macro-Trends, Micro evidences and Policy Options. Institute of Economic Growth Working Paper (234), New Delhi. <http://www.iegindia.org/upload/publication/Workpap/wp272.pdf>. Retrieved on 23 April, 2019.

Jadhav, Radheshyam. Data Focus :Five States account for 67% migrant workers who returned home during the lockdown. Article, *The Hindu Business Line*, Feb 2021, Pune.

<https://www.thehindubusinessline.com/data-stories/data-focus/five-states-account-for-67-migrant-workers-who-returned-home-during-the-lockdown/article33813158.ece>

Jharkhand Economic Survey (2020-21). Centre for Fiscal Studies, Planning-cum-Finance Department, Government of Jharkhand.

Kakaria, T (2021), An overview of E-commerce in 2021: Growth, hits, and misses. Retrieved from <https://timesofindia.indiatimes.com/blogs/voices/an-overview-of-e-commerce-in-2021-growth-hits-and-misses/>

Kilic, T., Carletto, C., Miluka, J., and Savastano, S. (2009). Rural nonfarm income and its impact on agriculture: evidence from Albania. *Agricultural Economics*, 40(2), 139- 160.

Lanjouw, P., & Feder, G. (2001). Rural Non-farm Activities and Rural Development: From Experience Towards Strategy (The World Bank Rural Development Strategy Background Paper no. 4). Washington D.C.: World Bank. Retrieved February 28, 2020, from <http://documents.worldbank.org/curated/pt/903001468740446659/Rural-non-farm-activities-and-ruraldevelopment-from-experience-towards-strategy>.

Lanjouw, P and Shariff, A, (2004) Rural Nonfarm Employment in India: Access, Incomes and Poverty Impact, Available at https://www.researchgate.net/publication/241214188_Rural_Nonfarm_Employment_in_India_Access_Incomes_and_Poverty_Impact

Lanjouw, P. and Shariff, A. 1999. Rural poverty and non-farm employment in India: evidence from survey data. Mimeo. Department of Development Economics. Amsterdam: Free University of Amsterdam.

Mellor, John W., *The New Economics of Growth- A Strategy for India and the Developing World*, A Twentieth Century Fund Study, Cornell University Press, 1976.

Minot, N., Epprecht, M., Anh, T. T. T., & Trung, L. Q. (2006). Income Diversification and Poverty in the Northern Uplands of Vietnam (Research Report no.145). Washington DC: International Food Policy Research Institute. Retrieved February 22, 2020, from <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/125250/>.

NRLM 75 Inspirational Stories of Atmanirbhar Rural Women, Ministry of Rural Development and Panchayat Raj, Government of India, Krishi Bhawan, New Delhi

Organisation for Economic Cooperation and Development (OECD), 2009. Promoting Pro-Poor Growth: Employment.

²⁷Extracted as of 11 Feb 2021, 11 am

Oseni, G., and Winters, P. (2009). Rural nonfarm activities and agricultural crop production in Nigeria. *Agricultural Economics*, 40(2), 189-201.

Reardon, (1997); Barrett et al., (2001) Available at researchgate.net/publication/222688399_Nonfarm_Income_Diversification_and_Household_Livelihood_Strategies_in_Rural_Africa_Concepts_Dynamics_and_Policy_Implications

Reardon, T., Berdegue, J., Barrett, C. B., & Stamoulis, K. (2007). Household Income Diversification into Rural Nonfarm Activities. In S. Haggblade, P. B. R. Hazell, & T. Reardon (Eds), *Transforming the Rural Nonfarm Economy: Opportunities and Threats in the Developing World* (pp. 115-140). Baltimore, MD: Johns Hopkins University Press.

Ruben, R., and Berg, M. V. D. (2001). Nonfarm employment and poverty alleviation of rural

farm households in Honduras. *World Development*, 29(3), 549-560.

State of Livelihoods Report (2020). Retrieved from <https://livelihoods-india.org/publications/all-page-soil-report.html>

Saha, P., S.S. Verick, S. Mehrotra, S. Sinha (2016), "Declining Female Employment in India: Insights from Gujarat and Uttar Pradesh", in Sukti Dasgupta and Sher S. Verick, *Transformation of Women at Work in Asia, An Unfinished Development Agenda*, Sage Publications India, New Delhi

Saxena, N.C. (2003). *The Rural Non-Farm Economy in India: Some Policy Issues*.

Senadjki, A., Mohd, S., Bahari, Z., & Hamad, A. F. C. (2017). Assets, Risks and Vulnerability to Poverty Traps: A Study of Northern Region of Malaysia. *Journal of Asian Finance, Economics and Business*, 4(4), 5-15. <http://dx.doi.org/10.13106/jafeb.2017.vol4.no4.5>

Subrata Mukherjee, 2018. "Underemployment in India: Measurement and Analysis," Working Papers id:12681, eSocialSciences. <<https://ideas.repec.org/p/ess/wpaper/id12681.html>>

Vajiram and Ravi (2019). Non-Farm Sector in India, Kurukshetra Summary, July 2019. https://www.vajiramandravi.com/pdf_upload/new/Kurukshetra_Summary_July_2019.pdf

Web Sources²⁷

Bihar Rural Development Society (BRDS). Retrieved from <http://brds.bih.nic.in/>

The Mahatma Gandhi National Rural Employment Guarantee Act, Ministry of Rural Development. Retrieved from <https://nrega.nic.in/Netnrega/stHome.aspx>

<https://www.ceicdata.com/en/india/census-of-india-migration-number-of-migrants-by-states/census-number-of-migrants-madhya-pradesh-female>

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj0YTc-In2AhXOjdgFHVRA-Bm8QFnoECAMQAQ&url=https%3A%2F%2Fwww.nabfoundations.in%2Fpdf%2F2FSHG-creating-livelihoods-changing-lives.pdf&usq=AOvVaw1oztcTbKlW6sQP_38ktXWl

<https://timesofindia.indiatimes.com/business/india-business/power-minister-inaugurates-solar-lamp-distribution-centre-in-bihar/articleshow/63764279.cms>

<https://www.hindustantimes.com/india-news/bihar-govt-plans-didi-ki-rasoi-canteens-in-all-district-hospitals/story-gYawSfVANSi5jVaoCJTYPN.html>

<https://thelogicalindian.com/good-governance/all-items-made-by-jharkhand-women-ready-to-be-sold-online-under-palash-brand-32088>

<https://forest.jharkhand.gov.in/>

<https://www.frontiermkts.com/>

<https://www.thehindubusinessline.com/catalyst/women-in-rural-rajasthan-plug-the-last-mile-gap-between-consumers-and-sellers/article33922733.ece>

<https://www.financialexpress.com/industry/ergos-from-grain-bags-to-a-digitised-grain-bank/1991339/>
<https://ergos.in/>
<https://www.wgwlo.org/>

Read More

Mehrotra. Santhosh (2019), *Informal Employment Trends in the Indian Economy: Persistent informality, but growing positive development*. ILO : Employment Policy Department. Working Paper 254.

www.ilo.org/employment/Whatwedo/Publications/working-papers

Annexures & Appendixes

Appendix A: ERADA State Profiles

Bihar

Bihar is the third largest populous state in India with a population of 104.1 million in 2011 with number of males and females at 54,278,157 and 49,821,295 respectively. Of the total population of Bihar state, around 88.71% (92,341,436 people) live in the rural areas. Average literacy rate in Bihar for rural areas is recorded to be 59.78% with male literacy rate at 69.67 % and female literacy rate at 44.30%. (Census 2011) In rural areas of Bihar, the maximum income accrues to non-agricultural sources; therein, all three components, that is, self-employment (36%), income from salary (37%) and income from labor (27%) are important. Local non-agricultural income appears higher than local agricultural income, indicating the relative importance of the non-farm sector vis-a-vis the farm sector in the economy of rural Bihar. This growth in the non-farm sector in rural areas points towards further decoupling of agriculture from the "rural" (Datta, 2015) In addition, food processing, dairy, sugar, manufacturing, and healthcare are some of the fast-growing industries in the state. Handicrafts is a prominent livelihood option including Madhubani paintings, Manjusha Art, Tikli art, Terracotta, Stonework, Papier-mache, Sujani embroidery, Khatwa applique, Silk Tussar, Cane and bamboo decor items, Sikki craft etc. in some pockets of the state (Details in Annexure 7)

The economic history of India suggests that Bihar has been an uninterrupted source of migrant workers at different stages of economic and social development in India. The workers (skilled, semi-skilled, and unskilled) have migrated to different parts of India to work as labour for both agricultural and industrial growth. The data from Census 2011 suggest that workers from Siwan, Gopalganj, West, Champaran and East Champaran districts in Bihar tend to migrate to the Gulf countries as well. According to Census 2011, in Bihar, 75% of total migration took place due to marriage, compared to 46% at the all-India level. Only 2.9% of total migration took place due to work/employment and business. Of the total number of migrating people due to marriage, 98% were women. 76% of migrants due to work, employment and business, were men. These two patterns indicate that in Bihar, migration due to social norms and customs has been overwhelmingly dominant over economic reasons of migration. Secondly, migration of women has been primarily controlled by social and cultural factors, and the migration of men has been determined by economic factors. As of 2022, under Mahatma Gandhi NREGA, 232.08 Lakh job cards have been issued and 316.82 lakh workers have been enrolled out of which 17.2 lakh are active workers. Number of person days generated in the financial year 2021 – 2022 is 309.33 Lakhs.

Jharkhand

Geographically, forests play an important role in the economic, cultural and social lives and supporting rural livelihoods and food security in Jharkhand. The total recorded forest area of the state is 23,605 km² which is 29.61% of the geographical area of the state. Of the total recorded forest area, Reserved Forests constitute 18.58%, Protected Forests 81.28%, and Unclassed Forests 0.14%. Forest dwelling communities commonly rely on forest based livelihoods including collection and extraction of timber, fuel wood, fodder, and a range of Non-Timber Forest Products (NTFPs) such as fruits, nuts, edible fungi, vegetables, fish, animals and medicinal plants, resins, essences, and a range of barks and fibers such as bamboo, rattans, palms and grasses. Dhokra, Bamboo Work are traditional livelihoods for many rural people.

Of the total population of Jharkhand state, around 75.95% live in rural areas. In rural areas of Jharkhand, average literacy rate is 61.11% and the literacy rate of males and females are at 72.86% and 6.62 % respectively. As per the census of 2011, the proportion of rural population of Jharkhand is 76% out of which 31% are in the age group of 20-39 years whereas, 16.3% are in the age group of 40-59 years. Thus, more than 47% of rural population fall in age group of working individuals. The estimates on internal migration suggest that 43.6% of rural males migrate from rural areas to urban areas in Jharkhand. The proportion of rural to urban migration is 7.9% for females and the overall migration is 12.1%. It is also noticeable that 15.6% migration of rural males is due to employment-related reasons. Industrial Area Development Authorities {Ranchi Industrial Area Development Authority (RIADA), Adityapur Industrial Area Development Authority (AIADA) & Bokaro Industrial Area Development Authority (BIADA)}, State Khadi Board, Jharkhand Industrial Infrastructure Development Corporation (JIIDCO) and JHARCRAFT are making significant contribution towards industrialisation of the State.

Madhya Pradesh

According to the 2011 Census, Madhya Pradesh has a population of 72.7 million and the estimated population for 2018 is 82.3 million, which is 6% of India's population. Of the total population of Madhya Pradesh state, around 72.37% live in the villages of rural areas. About 21% of the population, 15.3 million belongs to scheduled tribes while 16%, or 11.3 million, belong to scheduled caste, according to 2011 Census data. In rural areas of Madhya Pradesh, literacy rate for males and female stood at 74.74 % and 48.49 %. Average literacy rate in Madhya Pradesh for rural areas was 63.94%. Madhya Pradesh had 54.6% of its workforce engaged in agriculture in 2015–16 while the contribution of agriculture to overall GSDP was 40% 2018–19.

The agricultural sector is largely dominated by small and marginal farmers. In 2015–16, 75.5% of small and marginal farmers with a holding size of less than 2 ha accounted for 48% of the total area operated. The average size of landholding declined from 2.28 ha in 1995–96 to 1.78 ha in 2010–11 and further to 1.57 ha in 2015–16. The average monthly income per farm household stood at Rs. 7919 in 2015–16, which is lower than the all—India average of Rs. 8931. But the growth rate of income (3.7%) is the same as that achieved at all—India level (NABARD and NSSO, 2002–03 and 2015–16). Livestock is the second-largest segment after food grains in MP, contributing around 18.8% of the GVOA. The milk segment contributes around 83% of the total value of output from livestock and the meat segment contributes around 5%. Since Madhya Pradesh is landlocked, inland fishery is favourable in the state. MP has around 4.03 lakh ha of reservoirs and tanks, which can be utilised for fishing.

Rajasthan

As per Census 2011, Rajasthan's total population is 6.85 crores with one of the lowest density of population in the country. Of the total population of Rajasthan state, around 75.13% live in the villages of rural areas. In rural regions of Rajasthan state, female sex ratio per 1000 males was 933. Average literacy rate in Rajasthan for rural areas was 61.44% with literacy rate of males and females at 76.16 % and 42.20 % respectively. Rajasthan is the first State in the country to have announced the Rural Non-farm Development Policy for the promotion of the non-farm sector as an alternate strategy for generating additional avenues of employment particularly in the rural areas. Looking to the potential, three sub-sectors - leather, wool & textile and minor-mineral have been taken up for the focused development under the Rural Non-Farm Development Policy, 1995 which has now been expanded to include handloom, khadi and village industry also. Rajasthan produces around 40% of the country's raw wool and this sector supports nearly 30 lakh persons. According to the last survey completed in the year 1995-96 there are 66,000 active weaver families in Rajasthan and about 700 weavers' cooperative societies.

Rajasthan is the biggest producer of woolen Khadi in the country and ranks third in the overall Khadi production.

Under Village Industries, the State's total production is of the order of Rs.270 crores. Through these twin activities, the sector provides regular or subsidiary employment to an estimated 4.25-lac people. The exports of handicrafts from Rajasthan in 2003-2004 stood at Rs 1800 crores as against 1200 crores in the previous year, with a growth rate of 33%. Every district has its distinctive handicrafts and over 7 lac craft persons are employed in this activity. Additional employment is being generated through programmes which impart skills in Stone carving, leith work, semi-precious stone processing, pneumatic tools, terracotta product making and blue pottery craft. The red sandstone cluster in Manpur and Sikandra has become a hub of economic activity and income levels of the artisan groups have increased manifold. Efforts have been initiated to protect rights of the artisans by intellectual property rights.

As per the data available in Census 2011, males primarily migrate from rural to urban areas in search of employment opportunities, while female primarily migrate due to marital reasons in Rajasthan. Census 2011 indicates that in Rajasthan 32 lakh people migrate from rural to urban areas which contribute at 4 per cent of total rural-urban migrants in the country. Data highlights that out of total migrated male population, 49.16% migrated from rural to urban areas in search of better opportunities for work/employment, while out of total migrated female population, 59.11% migrated moved due to marital reasons (Economic Survey Report 2020- 2021). *Mahatma Gandhi NREGS* has been instrumental in providing employment to rural people. During the financial year 2020-21 an expenditure of Rs. 7,240.78 crore has been incurred and 3,432.36 lakh person-days were generated by providing employment to 69.29 lakh households.

Ground Specifications:

The Skill India Mission has focused interventions on left wing extremism districts which includes nine districts in Bihar, 16 in Jharkhand and one in Madhya Pradesh under the scheme "Skill Development in Districts Affected by Left Wing Extremism". The list of districts is given in the following Table 14.

Table 14: Districts Affected by Left Wing Extremism in ERADA States

States	No. of Dist.	Name of the Districts
Bihar	9	Jamui, Gaya, Aurangabad, Rohtas, Jehanabad, Arwal Muzzafarpur, Banka and Nawada
Jharkhand	16	Chatra, West Singhbhum, Palainau, Garhwa, East Singhbhum, Bokaro, Lohardaga, Gumta, Latehar, Hazaribagh Girdib, Khunti, Ranchi, Dumka. Ramgarh and Simdega
Madhya Pradesh	1	Balaghat

Annexure 1: Sectoral Distribution of Gross State Value Added (GSVA) at constant (2011-12) basic prices

State		Bihar	Jharkhand	Rajasthan	Madhya Pradesh
Sector	Subsector	Share in GSVA (2019-20)	Share in GSVA (2019 -20)	Share in GSVA (2020 -21)	Share in GVA (2020 -21)
Primary Sector/ Farm	Agriculture (Crops, Livestock, Forestry and logging, Fishing and Aquaculture)	18.6	12.7	29.45	43.86
	Mining and quarrying	0.9	8.9	5.98	3.11
	Total	19.5	21.5	35.43	46.98
Non - Farm (Secondary and Tertiary)	Manufacturing	8.7	22.5	11.82	8.39
	Electricity, Gas, Water Supply and Other Utility Services (EGWUS)	1.6	1.5	2.18	3.72
	Construction	10	8.8	8.17	7.36
	Secondary	20.3	32.8	22.17	19.47
	Trade & repair services	17.2	12.7	10.39	7.91
	Hotels & Restaurants	1	0.8	0.51	0.43
	Transport, Storage, Communication and Services Related to Broadcasting (TSC&S)	10.2	7.7		4.68
	Railways	1	2.1	0.58	0.71
	Road transport	5.9	3.5		2.38
	Water Transport	neg.	0		0
	Air Transport	0.1	0.1		0.02
	Other Transport			3.03	
	Services incidental to transport	0.6	0.2		0.09
	Storage	neg.	0	0.04	0.04
	Communication and Services Related to Broadcasting (C&SRB)	2.5	1.8	1.66	1.43
	Financial services	3.6	3.2	3.96	3.29
	Real estate, Ownership of Dwelling and Professional Services (REID&PS)	9.4	9.8	9.7	5.35
	Public Administration	5	7.2	3.7	5.89
	Other services	13.8	4.4	8.83	6
	Tertiary		60.2	45.8	42.4
Total GSVA at basic prices		100			

Annexure 2: Mapping of Non-Farm Livelihood Options from List of 262 Mahatma Gandhi NREGS Work

Work	Ownership	Action	Type of Work 1	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Building	Individual	Construction	House (PMAY-G)		Construction Skill Pack	Construction Skill Pack		Construction of PMAY-G House Building for Individuals
Building	Individual	Construction	Houses (State scheme)		Construction Skill Pack	Construction Skill Pack		Construction of State scheme Houses Building for Individuals
Building	Community	Construction	Anganwadi		Construction Skill Pack	Construction Skill Pack		Construction of Anganwadi Building for Community
Building	Community	Construction	Gram Panchayat/ Panchayat Bhavan		Construction Skill Pack	Construction Skill Pack		Construction of Gram Panchayat/ Panchayat Bhavan Building for Community
Building	Community	Construction	Food grain Storage		Construction Skill Pack	Construction Skill Pack	Decentralised Storage	Construction of Food grain Storage Building for Community
Building	Community	Construction	Kitchen shed Skill Pack		Construction Skill Pack	Construction		Construction of Kitchen shed Building for Community
Building	Community	Construction	Bharat Nirman Seva Kendra		Construction Skill Pack	Construction Skill Pack		Construction of Bharat Nirman Seva Kendra Building for Community
Building	Groups	Construction	Agricultural produce storage		Construction Skill Pack	Construction Skill Pack	Decentralised Storage	Construction of Agricultural produce storage Building for Groups
Building	Groups	Construction	SHG/Federation		Construction Skill Pack	Construction Skill Pack	Food Processing Unit	Construction of SHG/Federation Building for Groups
Bund	Individual	Construction	peripheral/farm/field Earthen		Construction Skill Pack	Surveyor		Construction of Earthen peripheral/farm/field Bund for Individuals
Bund	Individual	Construction	peripheral/farm/field Pebble		Construction Skill Pack	Surveyor		Construction of Pebble peripheral/farm/field Bund for Individuals
Bund	Individual	Construction	peripheral/farm/field Stone		Construction Skill Pack	Surveyor		Construction of Stone peripheral/farm/field Bund for Individuals
Bund	Individual	Construction	contour	Earthen	Construction Skill Pack	Surveyor		Construction of Earthen contour Bund for Individuals
Bund	Individual	Construction	contour	Pebble	Construction Skill Pack	Surveyor		Construction of Pebble contour Bund for Individuals
Bund	Individual	Construction	contour	Stone	Construction Skill Pack	Surveyor		Construction of Stone contour Bund for Individuals
Bund	Individual	Construction	graded	Earthen	Construction Skill Pack	Surveyor		Construction of Earthen graded Bund for Individuals

Work	Ownership	Action	Type of Work 1	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Bund	Individual	Construction	graded	Pebble	Construction Skill Pack	Surveyor		Construction of Pebble graded Bund for Individuals
Bund	Individual	Construction	graded	Stone	Construction Skill Pack	Surveyor		Construction of Stone graded Bund for Individuals
Bund	Community	Construction	peripheral/farm/field	Earthen		Surveyor		Construction of Earthen peripheral/farm/field Bund for Community
Bund	Community	Construction	peripheral/farm/field	Pebble		Surveyor		Construction of Pebble peripheral/farm/field Bund for Community
Bund	Community	Construction	peripheral/farm/field	Stone	Construction Skill Pack	Surveyor		Construction of Stone peripheral/farm/field Bund for Community
Bund	Community	Construction	contour	Earthen		Surveyor		Construction of Earthen contour Bund for Community
Bund	Community	Construction	contour	Pebble		Surveyor		Construction of Pebble contour Bund for Community
Bund	Community	Construction	contour	Stone	Construction Skill Pack	Surveyor		Construction of Stone contour Bund for Community
Bund	Community	Construction	graded	Earthen		Surveyor		Construction of Earthen graded Bund for Community
Bund	Community	Construction	graded	Pebble		Surveyor		Construction of Pebble graded Bund for Community
Bund	Community	Construction	graded	Stone	Construction Skill Pack	Surveyor		Construction of Stone graded Bund for Community
Canal	Community	Construction	Feeder		Construction Skill Pack	Surveyor		Construction of Feeder Canal for Community
Canal	Community	Construction	distributary		Construction Skill Pack	Surveyor		Construction of distributary Canal for Community
Canal	Community	Construction	minor		Construction Skill Pack	Surveyor		Construction of minor Canal for Community
Canal	Community	Construction	sub-minor		Construction Skill Pack	Surveyor		Construction of sub-minor Canal for Community
Canal	Community	Construction	water courses		Construction Skill Pack	Surveyor		Construction of water courses for Community
Channel	Community	Construction	Flood/ Diversion		Construction Skill Pack	Surveyor		Construction of Flood/ Diversion Channel for Community
Work shed for Livelihood activity	Groups	Construction			Construction Skill Pack			Construction of work shed for Livelihood activity for Groups
Check Dam	Individual	Construction	Anicut	Brushwood				Construction of Brushwood Check Dam for Individuals

Work	Ownership	Action	Type of Work 1	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Check Dam	Individual	Construction	Anicut	Earthen				Construction of Earthen Anicut Check Dam for Individuals
Check Dam	Individual	Construction	Anicut	Boulder				Construction of Boulder Check Dam for Individuals
Check Dam	Individual	Construction	Anicut	Masonry/CC	Construction Skill Pack			Construction of Masonry/CC Check Dam for Individuals
Check Dam	Individual	Construction	Anicut	Gabion				Construction of Gabion Check Dam for Individuals
Check Dam	Community	Construction	Anicut	Brushwood				Construction of Brushwood Check Dam for Community
Check Dam	Community	Construction	Anicut	Earthen				Construction of Earthen Check Dam for Community
Check Dam	Community	Construction	Anicut	Boulder				Construction of Boulder Check Dam for Community
Check Dam	Community	Construction	Anicut	Masonry/CC	Construction Skill Pack			Construction of Masonry/CC Check Dam for Community
Check Dam	Community	Construction	Anicut	Gabion				Construction of Gabion Check Dam for Community
Compost Pit	Individual	Construction			Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Compost Pit for Individual
Compost structure	Individual	Construction	Vermi		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Vermi Compost structure for Individual
Compost structure	Individual	Construction	NADEP		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of NADEP Compost structure for Individual
Compost structure	Individual	Construction	Berkeley Compost Pit		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Berkeley Compost Pit for Individual
Compost structure	Community	Construction	Vermi		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Vermi Compost structure for Community
Compost structure	Community	Construction	NADEP		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of NADEP Compost structure for Community
Compost structure	Community	Construction	Berkeley Compost Pit		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Berkeley Compost Pit for Community
Compost structure	Community	Construction	Compost Pit		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Compost Pit structure for Community
Compost structure	Groups	Construction	Vermi		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Vermi Compost structure for Groups
Compost structure	Groups	Construction	NADEP		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of NADEP Compost structure for Groups

Work	Ownership	Action	Type of Work 1	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Compost structure	Groups	Construction	Berkeley Compost Pit		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Berkeley Compost Pit for Groups
Compost structure	Groups	Construction	Compost Pit		Construction Skill Pack	Sale of Vermi Compost	Vermi Compost Trade	Construction of Compost Pit for Groups
Crematorium	Community	Construction			Construction Skill Pack			Construction of Crematorium
Culvert/cross drainage structures	Community	Construction			Construction Skill Pack			Construction of Culvert/cross drainage structures for Community
Storm Water drain for coastal protection	Community	Construction	Coastal Protection		Construction Skill Pack			Construction of Storm Water drain for coastal protection for Community
Storm Water Drain	Community	Construction	Intermediate and Link		Construction Skill Pack			Construction of intermediate and Link Storm Water Drain for Community
Storm Water Drain	Community	Construction	Diversion		Construction Skill Pack			Construction of Diversion Storm Water Drain for Community
Grey_Water/Storm Drain	Community	Construction	Open/Covered		Construction Skill Pack			Construction of Open/Covered Greywater/Storm Drain for Community
Open Well	Individual	Construction	Irrigation		Construction Skill Pack	Pump Set Hire	Pump Set Mechanic	Construction of Irrigation Open Well for Individuals
Open Well	Community	Construction	Irrigation		Construction Skill Pack	Pump Set Hire	Pump Set Mechanic	Construction of Irrigation Open Well for Community
Open Well	Groups	Construction	Irrigation		Construction Skill Pack	Pump Set Hire	Pump Set Mechanic	Construction of Irrigation Open Well for Groups
Fish Drying Yards	Individual	Construction			Construction Skill Pack	Dry Fish Making	Dry Fish Packaging and Sale	Construction of Fish Drying Yards for Individual
Fish Drying Yards	Community	Construction			Construction Skill Pack	Dry Fish Making	Dry Fish Packaging and Sale	Construction of Fish Drying Yards for Community
Gully Plugs	Individual	Construction	Earthen		Construction Skill Pack	Surveyor		Construction of Earthen Gully Plugs for Individuals
Gully Plugs	Individual	Construction	Stone boulder		Construction Skill Pack			Construction of Stone boulder Gully Plugs for Individuals
Gully Plugs	Community	Construction	Earthen		Construction Skill Pack	Surveyor		Construction of Earthen Gully Plugs for Community
Gully Plugs	Community	Construction	Stone boulder		Construction Skill Pack	Surveyor		Construction of Stone boulder Gully Plugs for Community
Mini Percolation Tank	Individual	Construction				Surveyor		Construction of Mini Percolation Tank for Individuals
Mini Percolation Tank	Community	Construction				Surveyor		Construction of Mini Percolation Tank for Community

Work	Ownership	Action	Type of Work 1	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Water Harvesting Ponds	Individual	Construction	Farm			Fish Farming	Aggregator	Construction of Farm Ponds for Individuals
Water Harvesting Ponds	Community	Construction	Fisheries			Fish Farming	Aggregator	Construction of Fisheries Ponds for Community
Water Harvesting Ponds	Community	Construction	Community			Fish Farming	Aggregator	Construction of Community Water Harvesting Ponds
Stabilisation Pond	Community	Construction						Construction of Stabilisation Pond for Community
Recharge Pits	Individual	Construction						Construction of Recharge Pits for Individuals
Recharge Pits	Community	Construction						Construction of Recharge Pits for Community
Roads	Community	Construction	Bitumen Top		Construction Skill Pack	Road Roller Driver	Mechanic	Construction of Bitumen Top Roads for Community
Roads	Community	Construction	Gravel Road		Construction Skill Pack			Construction of Gravel Road Roads for Community
Roads	Community	Construction	Inter-locking cement block/tiles		Construction Skill Pack	Tile Layer	Paver Tile Manufacturer	Construction of Inter-locking cement block/tiles Roads for Community
Roads	Community	Construction	WBM		Construction Skill Pack			Construction of WBM Roads for Community
Roads	Community	Construction	Mirri Murrum		Construction Skill Pack			Construction of Mirri Murrum Roads for Community
Roads	Community	Construction	Kharanja (brick/stone)		Construction Skill Pack			Construction of Kharanja (brick/stone) Roads for Community
Roads	Community	Construction	Cement Concrete		Construction Skill Pack			Construction of Cement Concrete Roads for Community
Sand filter for well recharge	Individual	Construction	Borewell		Construction Skill Pack	Plumber	Borewell Machine Digger	Construction of Sand filter for Borewell recharge for Individual
Sand filter for well recharge	Individual	Construction	Open Well		Construction Skill Pack	Plumber	Pump Set Mechanic	Construction of Sand filter for Openwell recharge for Individual
Sand filter for well recharge	Community	Construction	Borewell		Construction Skill Pack	Plumber	Pump Set Mechanic	Construction of Sand filter for borewell recharge for Community
Sand filter for well recharge	Community	Construction	Open Well		Construction Skill Pack	Plumber	Pump Set Mechanic	Construction of Sand filter for openwell recharge for Community
Sand filter for well recharge	Groups	Construction	Open Well		Construction Skill Pack	Plumber	Pump Set Mechanic	Construction of Sand filter for openwell recharge for Groups
Livestock Shelter	Individual	Construction	Cattle		Construction Skill Pack	Veterinary Service Provider	Dairy	Construction of Cattle Shelter for Individuals

Work	Ownership	Action	Type of Work 1	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Livestock Shelter	Individual	Construction	Goat		Construction Skill Pack	Veterinary Service Provider	Goatery	Construction of Goat Shelter for Individuals
Livestock Shelter	Individual	Construction	Piggery		Construction Skill Pack	Veterinary Service Provider	Piggery	Construction of Piggery Shelter for Individuals
Livestock Shelter	Individual	Construction	Poultry		Construction Skill Pack	Veterinary Service Provider	Poultry, Mother Chick Unit	Construction of Poultry Livestock Shelter for Individuals
Livestock Shelter	Community	Construction	Cattle		Construction Skill Pack	Veterinary Service Provider		Construction of Cattle Shelter for Community
Livestock Shelter	Community	Construction	Goat		Construction Skill Pack		Veterinary Service Provider	Construction of Goat Shelter for Community
Livestock Shelter	Community	Construction	Piggery		Construction Skill Pack		Veterinary Service Provider	Construction of Piggery Shelter for Community
Livestock Shelter	Community	Construction	Poultry		Construction Skill Pack		Veterinary Service Provider	Construction of Poultry Shelter for Community
Soakage Channel	Community	Construction			Construction Skill Pack			Construction of Soakage Channel for Community
Soak Pit	Individual	Construction			Construction Skill Pack	Plumber	Plumbing Material Seller	Construction of Soak Pit for Individual
Soak Pit	Community	Construction			Construction Skill Pack	Plumber Seller	Plumbing Material	Construction of Soak Pit for Community
Spur Community	Construction	Wire crate (gabion)				Wire Crate Maker (Gabion Maker)		Construction of Wire crate (gabion) Spur for Community
Spur Community	Construction	Stone						Construction of Stone Spur for Community
Spur Community	Construction	Earthen						Construction of Earthen Spur for Community
Terrace	Individual	Construction	Level Bench Terrace					Construction of Level Bench Terrace for Individual
Terrace	Individual	Construction	Upland Bench Terrace					Construction of Upland Bench Terrace for Individual
Terrace	Community	Construction	Level Bench Terrace					Construction of Level Bench Terrace for Community
Terrace	Community	Construction	Upland Bench Terrace					Construction of Upland Bench Terrace for Community
Toilets	Individual	Construction	Single Unit		Construction Skill Pack	Plumber	Plumbing Material Seller	Construction of Single Unit Toilets for Individual
Toilets	Community	Construction	Multi Unit	Anganwadi	Construction Skill Pack	Plumber	Plumbing Material Seller	Construction of Anganwadi Multi Unit Toilets for Community
Toilets	School	Construction	Multi Unit		Construction Skill Pack	Plumber	Plumbing Material Seller	Construction of Multi Unit Toilets for School

Work	Ownership	Action	Type of Work I	Type of Work 2	Wage Employment	Self-Employment	Enterprise	Description
Trench	individual	Construction	Staggered Trench		Construction Skill Pack	Surveyor		Construction of Staggered Trench for individual
Trench	Community	Construction	Staggered Trench		Construction Skill Pack	Surveyor		Construction of Staggered Trench for Community
Trench	Community	Construction	Continuous Contour Trench		Construction Skill Pack	Surveyor		Construction of Continuous Contour Trench for Community
Trench	Community	Construction	Water Absorption Trench		Construction Skill Pack	Surveyor		Construction of Water Absorption Trench for Community
Infrastructure for Azola cultivation	Individual	Construction			Construction Skill Pack	Compost Production	Vermi Compost Trade	Construction of Infrastructure for Azola cultivation for Individual
Infrastructure for Azola cultivation	Community	Construction			Construction Skill Pack	Compost Production	Vermi Compost Trade	Construction of Infrastructure for Azola cultivation for Community
Infrastructure for Liquid Biomanure	Individual	Construction			Construction Skill Pack Trade	Compost Production	Vermi Compost	Construction of Infrastructure for Liquid Biomanure for Individuals
Infrastructure for Liquid Biomanure	Groups	Construction			Construction Skill Pack	Compost Production	Vermi Compost Trade	Construction of Infrastructure for Liquid Biomanure for Groups
Infrastructure for Liquid Biomanure	Community	Construction			Construction Skill Pack	Compost Production	Vermi Compost Trade	Construction of Infrastructure for Liquid Biomanure for Community
Underground Dykes	Community	Construction			Construction Skill Pack			Construction of Underground Dykes for Community
Embankment	Community	Construction			Construction Skill Pack			Construction of Embankment for community
Village/Rural Haat	Community	Construction			Construction Skill Pack	Value Addition	Aggregator	Construction of Village/Rural Haat for community
Cyclone shelter	Community	Construction			Construction Skill Pack			Construction of Cyclone shelter for Community
Play field	Community	Construction			Construction Skill Pack			Construction of Play field for Community
Compound wall for government schools	Community	Construction			Construction Skill Pack			Construction of Compound wall for government schools for Community
Production of building material	Community	Construction			Construction Skill Pack		Production of Building Materials	Construction of Production of building material for Community

Annexure 3: Mapping of RNFS livelihood options

Potential Non Farm Livelihood Options	Linkage with Mahatma Gandhi NREGS	Wage Employment	Self Employed	Enterprise	Location	Competency Level - Skilled	Competency Level - Semi Skilled	Competency Level - Unskilled	Tech Capacities	Managerial Capacities	Financial Capacity	Tenure	Institutional (Individual/ Group/Both)	Infra - Road	Infra - Electricity	Infra - Connectivity	Infra - Storage	Infra - Transport	Infra - Processing/ Value Addition	Education	Con - CBT	Con - Fin	Con-Tech	Market
Agriculture & Allied	Yes			Yes	Rural	Yes			Yes	Yes	Yes	Long Term	Both	Yes	Yes		Yes	Yes		Intermediate	Yes	Yes	Yes	Local
Agriculture & Allied			Yes		Rural	Yes			Yes	Yes	Yes	Long Term	Individual		Yes					Professional	Yes	Yes		Local
Agriculture & Allied	Yes		Yes		Rural	Yes				Yes		Long Term	Individual	Yes						Basic	Yes			Local
Agriculture & Allied	Yes		Yes		Rural	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes					Intermediate	Yes	Yes		Local
Agriculture & Allied	Yes			Yes	Rural		Yes		Yes			Long Term	Both	Yes					Yes	Basic	Yes			Local
Agriculture & Allied	Yes		Yes	Yes	Rural		Yes		Yes			Long Term	Both	Yes					Yes	Basic	Yes			Local
Agriculture & Allied	Yes		Yes	Yes	Both	Yes			Yes			Long Term	Individual	Yes				Yes		Intermediate	Yes			Local
Apparel			Yes		Both	Yes			Yes	Yes		Long Term	Individual	Yes				Yes		Basic	Yes			Local
Apparel			Yes		Both	Yes			Yes	Yes		Long Term	Individual	Yes				Yes		Basic	Yes			Local
Apparel			Yes		Both	Yes			Yes	Yes		Long Term	Individual	Yes				Yes		Basic	Yes			Local
Apparel			Yes		Both	Yes			Yes	Yes		Long Term	Individual	Yes				Yes		Basic	Yes			Local

Sector	Potential Non Farm Livelihood Options	Linkage with Mahatma Gandhi NREGS	Wage Employment	Self Employed	Enterprise	Location	Competency Level - Skilled	Competency Level - Semi Skilled	Competency Level - Unskilled	Tech Capacities	Managerial Capacities	Financial Capacity	Tenure	Institutional (Individual/ Group/Both)	Infra - Road	Infra - Electricity	Infra - Connectivity	Infra - Storage	Infra - Transport	Infra - Processing/ Value Addition	Education	Con - CBT	Con - Fin	Con-Tech	Market
Culinary Services	Bakeries/ Restaurants/ Fast Food Center/Food trucks		Yes	Yes		Both	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes		Yes	Yes	Yes	Basic	Yes	Yes		Local
Culinary Services	Dhaba/Tea Stall/ Bakery		Yes	Yes		Both	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes		Yes	Yes	Yes	Basic	Yes	Yes		Local
Culinary Services	Vegetable/ Fruit/Fruit Juice/Fruit Chat Shop		Yes	Yes		Both				Yes	Yes	Yes	Long Term	Both	Yes	Yes		Yes	Yes	Yes	Basic	Yes	Yes		Local
Culinary Services	Raw Meat Shop	Yes	Yes			Both	Yes			Yes	Yes	Yes	Long Term	Both	Yes	Yes		Yes	Yes	Yes	Basic	Yes	Yes		Local
Educators	Teaching/Coaching Institutes			Yes		Both	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes					Professional	Yes			Local
Educators	Tuition teachers		Yes			Both	Yes			Yes			Long Term	Individual	Yes	Yes					Professional	Yes			Local
Electronics & Electricals	Computer/ TV/Printer/ Mobile Repairing		Yes	Yes		Both	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes		Yes	Yes		Professional	Yes	Yes		Local
Electronics & Electricals	Electrician (AC Repair)		Yes			Both	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes					Professional	Yes			Within Dist
Electronics & Electricals	Home appliances repair- Kitchen gadgets : mixers, blenders, refrigerators, washing machines		Yes	Yes		Both	Yes			Yes	Yes	Yes	Long Term	Individual	Yes	Yes		Yes			Intermediate	Yes			Local
Electronics & Electricals	Gas Stove/ Sewing Machine Repairing		Yes			Both	Yes			Yes			Long Term	Individual	Yes			Yes			Intermediate	Yes			Local

Market	Local		Local	Local	Local	Local	Local	Local	Local	Local	Local	Local
Con-Tech												
Con- Fin											Yes	
Con - CBT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education	Intermediate	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Intermediate
Infra - Processing/ Value Addition												
Infra - Transport												Yes
Infra - Storage		Yes							Yes	Yes		Yes
Infra - Connectivity												
Infra - Electricity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Infra - Road	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Institutional (Individual/ Group/Both)	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual
Tenure	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term
Financial Capacity										Yes		
Managerial Capacities										Yes		
Tech Capacities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Competency Level - Unskilled												
Competency Level - Semi Skilled												
Competency Level - Skilled	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Location	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both
Enterprise												Yes
Self Employed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Wage Employment												
Linkage with Mahatma Gandhi NREGS						Yes						
Potential Non Farm Livelihood Options	RO Filter Technology/ Installation/ Repairing/ Servicing	Battery Repairing	Electrician (Electrical Goods and Home Fittings)	Inverter/ Generator Mechanic	Pumpset installation/ Repairing	Electrician (Automobiles)	Cable/DTH Operator	Electric Motor Rewinding/ Repairing	Mobile Recharge/ Repair/ Accessories Shop	Production/Assembly of Small Electrical Appliances		
Sector	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals	Electronics & Electricals		Electronics & Electricals

Market	Local	Local	Local	Local	Local	Local	Local	Local	Local	Within Dist	Within State	Local	Within State	Local	Within Dist
Con-Tech	Yes	Yes													
Con- Fin	Yes	Yes		Yes								Yes			
Con - CBT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education	Basic	Basic		Basic		Basic		Basic		Basic		Basic		Basic	Intermediate
Infra - Processing/ Value Addition	Yes	Yes		Yes		Yes		Yes		Yes					
Infra - Transport	Yes	Yes		Yes		Yes		Yes		Yes				Yes	
Infra - Storage	Yes	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Infra - Connectivity															
Infra - Electricity	Yes	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Infra - Road	Yes	Yes		Yes		Yes		Yes		Yes		Yes		Yes	Yes
Institutional (Individual/ Group/Both)	Both	Both		Both		Both		Individual		Individual		Both		Individual	Individual
Tenure	Long Term	Seasonal		Seasonal		Long Term		Long Term		Long Term		Long Term		Long Term	Long Term
Financial Capacity	Yes	Yes		Yes		Yes		Yes							
Managerial Capacities	Yes	Yes		Yes		Yes		Yes							
Tech Capacities	Yes	Yes		Yes		Yes		Yes		Yes		Yes		Yes	Yes
Competency Level - Unskilled															
Competency Level - Semi Skilled															
Competency Level - Skilled	Yes	Yes		Yes		Yes		Yes		Yes		Yes		Yes	Yes
Location	Both	Both		Both		Both		Both		Both		Both		Both	Both
Enterprise	Yes	Yes		Yes		Yes						Yes			
Self Employed						Yes		Yes		Yes				Yes	
Wage Employment															Yes
Linkage with Mahatma Gandhi NREGS	Yes	Yes						Yes		Yes		Yes			Yes
Potential Non Farm Livelihood Options	Milk Processing	NTFP aggregation and value addition	Pickles/ Jam/ Squashes/Jellies/Papad/ Badi Making	Mushroom production & processing	Furniture Making	Canning of Furniture	Gardener/ Nursery Raising	Lawn/grass cutting	Net House/ poly house making	Artificial Jewellery Making	Home decors /artifacts	Pottery	Laboratory Technician		
Sector	Food Processing	Food Processing	Food Processing	Food Processing	Furniture	Furniture	Gardening	Gardening	Gardening	Handicrafts	Handicrafts	Handicrafts	Healthcare		

Market	Within State	Within State	Within State	Within State	Within State	Local	Within State	Within State	Local	Local	Local	Local	Local
Con-Tech									Yes	Yes	Yes	Yes	Yes
Con- Fin						Yes			Yes	Yes	Yes	Yes	Yes
Con - CBT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education	Intermediate	Basic	Professional	Basic	Basic	Basic	Basic	Professional	Professional	Intermediate	Intermediate	Intermediate	Intermediate
Infra - Processing/ Value Addition													
Infra - Transport						Yes							
Infra - Storage						Yes			Yes	Yes	Yes	Yes	Yes
Infra - Connectivity									Yes	Yes	Yes	Yes	Yes
Infra - Electricity						Yes			Yes	Yes	Yes	Yes	Yes
Infra - Road	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Institutional (Individual/ Group/Both)	Individual	Individual	Individual	Individual	Individual	Both	Individual	Individual	Individual	Individual	Individual	Individual	Individual
Tenure	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term
Financial Capacity							Yes	Yes	Yes	Yes	Yes	Yes	Yes
Managerial Capacities							Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tech Capacities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Competency Level - Unskilled													
Competency Level - Semi Skilled		Yes		Yes	Yes	Yes							
Competency Level - Skilled	Yes		Yes				Yes		Yes	Yes	Yes	Yes	Yes
Location	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both
Enterprise						Yes							
Self Employed				Yes	Yes				Yes	Yes	Yes	Yes	Yes
Wage Employment	Yes	Yes	Yes					Yes					Yes
Linkage with Mahatma Gandhi NREGS													Yes
Potential Non Farm Livelihood Options	Nursing	Women/ Child Health Care Services	Paramedical Staff	Old Age Domestic Help/Home nurses	Baby Sitting/ Caretakers	Manufacturing cloth masks	Hospitality/ Tour Operating	Web Designing	Computer Networking/ Internet Cafes/CSC	Data Entry Operator cum Typist	Online Filling of Forms/ Applications	Veterinary Services (including AI, Vaccination, basic treatment, insurance etc.)	
Sector	Healthcare	Healthcare	Healthcare	Healthcare	Healthcare	Healthcare	Travel	ITeS	ITeS	ITeS	ITeS	Livestock	

Market	Local	Local	Local	Within Dist	Within State	Local	Local	Local	Local	Local	Local	Local	Local	Local	Local	Local	Local	Local	Local
Con-Tech																			
Con- Fin																Yes	Yes	Yes	Yes
Con - CBT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic
Infra - Processing/ Value Addition		Yes																	
Infra - Transport	Yes	Yes			Yes	Yes													Yes
Infra - Storage	Yes	Yes			Yes	Yes									Yes	Yes	Yes	Yes	Yes
Infra - Connectivity																			
Infra - Electricity	Yes	Yes			Yes	Yes											Yes	Yes	Yes
Infra - Road	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Institutional (Individual/ Group/Both)	Individual	Both	Both	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual
Tenure	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term
Financial Capacity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Managerial Capacities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tech Capacities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Competency Level - Unskilled																			
Competency Level - Semi Skilled	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Competency Level - Skilled							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Location	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both
Enterprise																			
Self Employed	Yes	Yes	Yes				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wage Employment					Yes	Yes												Yes	
Linkage with Mahatma Gandhi NREGS	Yes	Yes																	
Potential Non Farm Livelihood Options	Butchers	Poultry/Goatry/Piggery breeding/fattening	Beekeeping	Door to door delivery services	Packers and movers	Lathe Machine Operator/Turners	JCB Machine/Heavy Earthmoving Equipment Operator	Small Vehicle Driver (Auto Rickshaw/ Small Truck/ Taxi etc.)	Heavy Vehicle Driver (Bus/ Truck) Drivers	Beauty Parlour	Hair Dressing	Printing Technology (Invitation Card/Visiting Cards)							
Sector	Livestock	Livestock	Livestock	Logistics & Transportation	Logistics & Transportation	Logistics & Transportation	Logistics & Transportation	Logistics & Transportation	Logistics & Transportation	Personal Care	Personal Care	Printing							

Market	Within Dist	Local	Within Dist	Local	Local	Within Dist	Within State	Within State	Local	Local	Within Dist	Within State	Within State	
Con-Tech														
Con- Fin	Yes				Yes									
Con - CBT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Education	Basic	Basic	Basic	Basic	Basic	Basic	Intermediate	Basic	Basic	Basic	Basic	Basic	Basic	
Infra - Processing/ Value Addition										Yes			Yes	
Infra - Transport	Yes	Yes	Yes	Yes	Yes	Yes				Yes			Yes	
Infra - Storage	Yes	Yes	Yes	Yes	Yes	Yes				Yes			Yes	
Infra - Connectivity														
Infra - Electricity	Yes	Yes	Yes	Yes	Yes	Yes				Yes			Yes	
Infra - Road	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Institutional (Individual/ Group/Both)	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Individual	Both	Both	Individual	Both	
Tenure	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	Long Term	
Financial Capacity	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes			Yes	
Managerial Capacities	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes			Yes	
Tech Capacities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	
Competency Level - Unskilled														
Competency Level - Semi Skilled					Yes	Yes				Yes			Yes	
Competency Level - Skilled	Yes	Yes	Yes	Yes			Yes	Yes	Yes				Yes	
Location	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both	
Enterprise			Yes	Yes	Yes					Yes			Yes	
Self Employed	Yes	Yes				Yes		Yes	Yes					
Wage Employment							Yes					Yes		
Linkage with Mahatma Gandhi NREGS					Yes					Yes				
Potential Non Farm Livelihood Options	Advertising/ Flex Board Making	Book Binding/Card Board Boxes Making	Fabrication/ installation/ operation of solar energy	Sanitary Marr for Supply of Sanitation related products	Medicine/ Grocery Shop	Electronics & Electricals	CCTV Operators	Tour guide	Travel agents	Wet Waste Management (Composting)/ Compost Selling	Door to door waste collection	Scrap dealers	Production of Plastic Pellets from Single-use plastics	Manufacturing of Cloth bags
Sector	Printing	Printing	Renewable Energy	Retail	Retail	Electronics & Electricals	Travel	Travel	Waste Management	Waste Management	Waste Management	Waste Management	Waste Management	Waste Management

Annexure 4: Trade/Skill preferred by Mahatma Gandhi NREGS workers under LIFE Survey

Trade/Skill	India Ch 1 HH	Bihar Ch 1 HH	Jharkhand Ch 1 HH	Madhya Pradesh Ch1 HH	Rajasthan Ch 1 HH
GGarment Making Related	4.86	3.09	2.76	1.80	5.90
Automotive Repair Related	4.27	1.77	6.19	2.39	3.02
Beauty Culture & Hair Dressing Related	4.24	4.16	3.01	3.12	4.57
Banking & Accounting Related	4.19	0.88	2.07	1.46	2.08
Electrical Related	3.81	1.74	3.13	2.07	3.00
Construction Related	3.74	2.78	2.58	7.58	3.69
Allied Health Care Related	2.79	1.93	3.39	1.20	1.49
Fashion Design Related	2.27	0.46	0.83	0.95	1.43
Fabrication Related	2.26	0.59	0.57	0.57	0.93
Business & Commerce Related	1.97	0.72	0.89	1.05	0.62
Hospitality Related	1.90	3.05	0.71	0.71	1.00
Security Related	1.90	0.48	1.61	0.53	2.54
Medical And Nursing Related	1.73	1.01	1.52	0.35	0.59
Electronics Related	1.60	1.47	2.29	1.16	1.56
Food Processing & Preservation Related	1.50	1.98	0.79	0.97	1.21
Textile And Cotton Spinning Related	0.88	0.32	1.10	0.15	1.82
Information And Communication Technology Related	0.87	0.29	0.35	0.49	0.50
Paint Related	0.76	1.13	0.69	0.28	0.79
Retail Related	0.60	0.10	0.05	0.37	0.34
Travel And Tourism Related	0.58	0.13	0.15	0.20	0.42
Construction Equipment Related	0.58	0.25	0.26	1.33	0.59
Production And Manufacturing Related	0.55	0.11	0.19	0.08	0.17
Gem And Jewellery Related	0.52	0.74	0.28	0.49	0.58
Fast Moving Consumer Goods (Fmcg) Related	0.41	0.71	0.11	0.21	0.26

Trade/ Skill	India Ch 1 HH	Bihar Ch 1 HH	Jharkhand Ch 1 HH	Madhya Pradesh Ch1 HH	Rajasthan Ch 1 HH
Soft Skills Related	0.38	0.53	0.56	0.08	0.19
Industrial Electrical Related	0.33	0.08	0.35	0.23	0.17
Courier & Logistics Related	0.30	0.17	0.13	0.28	0.43
Plastic Processing Related	0.29	0.34	0.43	0.15	0.26
Telecom Related	0.29	0.13	1.02	0.12	0.18
Refrigeration And Air Conditioning Related	0.27	0.02	0.06	0.04	0.14
Printing Related	0.24	0.21	0.13	0.05	0.13
Leather & Sports Goods Related	0.24	0.17	0.34	0.10	0.26
Jute Diversified Products Sector Related	0.19	0.04	0.49	0.09	0.11
Material Management Related	0.17	0.11	0.05	0.09	0.18
Media Related	0.16	0.02	0.11	0.08	0.10
Marine Engineering Related	0.16	0.00	0.22	0.03	0.05
Insurance Related	0.15	0.02	0.06	0.16	0.14
Spa & Wellness Related	0.06	0.00	0.16	0.01	0.09
Renewable Energy Related	0.05	0.08	0.03	0.01	0.02
Process Instrumentation Related	0.04	0.00	0.03	0.01	0.02

Annexure 5: Occupation prioritised based on workers preference under e-Shram Portal

Occupation Sector Rajasthan	India	Bihar	Jharkhand	Madhya Pradesh	
Agriculture	50.42%	49.54%	62.28%	50.92%	49.97%
Domestic and Household Workers	10.83%	14.74%	9.70%	5.92%	4.53%
Construction	9.68%	10.50%	6.76%	10.92%	17.52%
Apparel	6.50%	5.66%	3.12%	6.44%	5.20%
Miscellaneous	4.18%	3.33%	2.97%	4.15%	3.22%
Automobile & Transportation	2.77%	2.26%	2.13%	3.36%	3.16%
Capital Goods & Manufacturing	2.56%	2.64%	3.59%	4.17%	3.24%
Education	1.78%	1.62%	1.51%	1.47%	1.33%
Electronics & HW	1.72%	2.03%	2.09%	2.72%	2.09%
Leather Industry Works	1.59%	1.37%	0.52%	1.63%	1.97%
Tourism & Hospitality	1.38%	1.35%	0.71%	1.08%	1.15%
Healthcare	1.12%	1.34%	1.00%	0.86%	0.87%
Tobacco Industry	0.82%	0.33%	0.89%	0.96%	0.26%
Retail	0.81%	0.59%	0.55%	1.01%	0.97%
Handicrafts & Carpets	0.81%	0.38%	0.30%	0.51%	0.56%
Beauty & Wellness	0.69%	0.58%	0.41%	0.90%	0.77%
Office Administration & Facility Management	0.66%	0.44%	0.35%	0.71%	0.64%
Food Industry	0.36%	0.27%	0.20%	0.47%	0.46%
Professionals	0.28%	0.23%	0.27%	0.36%	0.26%
Gem & Jewellery	0.19%	0.17%	0.08%	0.21%	0.24%
Printing	0.17%	0.13%	0.10%	0.35%	0.28%
Mining	0.16%	0.14%	0.18%	0.25%	0.71%
Private Security	0.14%	0.09%	0.08%	0.20%	0.15%
Service	0.09%	0.07%	0.03%	0.09%	0.10%
Textile & Handloom	0.07%	0.04%	0.02%	0.04%	0.07%
Wood & Carpentry	0.07%	0.07%	0.03%	0.09%	0.10%
Others	0.04%	0.03%	0.07%	0.06%	0.03%
Musical Instruments	0.03%	0.03%	0.01%	0.04%	0.05%
Organised Retail	0.03%	0.02%	0.02%	0.06%	0.04%
Glass & Ceramics	0.02%	0.01%	0.01%	0.02%	0.02%
BFSI	0.01%	0.01%	0.01%	0.02%	0.02%

Annexure 6: Central Sponsored Schemes with potential non-farm livelihood linkage

Scheme	Sub Scheme	Pattern of Assistance
National Agricultural Development Programme	Introduction of new seed varieties, methods of cultivation, new equipment for demonstration in selected areas.	100% Central Government Grant. RKVY-RAFTAAR funds would be provided to the States as 60:40 grants between Centre and States
National Mission on Agricultural Extension and Technology (NMAET)	Establishment of large-scale seed processing and storage units	Financial Support provided to States establishing Seed Processing-cum-storage go down Units each of 500 MT. Capacity at Gram Panchayat level
PM-Kusum	Grid connected renewable energy power plan for farmers	Component-A: For Setting up of 10,000 MW of Decentralised Grid. The power generated will be purchased by local DISCOM at pre-fixed tariff. Renewable Energy Power Plants on barren land. Under this component, renewable energy based power plants (REPP) of capacity 500 kW to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/Farmer Producer Organisations (FPO)/Water User associations (WUA) on barren/fallow land. These power plants can also be installed on cultivable land on stilts where crops can also be grown below the solar panels. The renewable energy power project will be installed within five km radius of the substations to avoid high cost of sub-transmission lines and to reduce transmission
Capital Investment Subsidy Scheme For Commercial Production Units For Organic/Biological Inputs	Subsidy for setting up production unit for Organic/Biological Inputs	NABARD would release 50% advance subsidy to the participating bank for keeping the same in subsidy reserve fund account of the concerned borrower, The remaining 50% would be disbursed to the participating banks by NABARD or to Cooperative society by NCDC after conduct of an inspection by the Joint Inspection Committee
Mission for Integrated Development of Horticulture (MIDH)	A) Production of Planting Material i) Hi-tech Nursery (2 ha) ii) Small Nursery (0.5 ha)	40% of cost as credit-linked back-ended subsidy will be provided
Sub-Mission on Agricultural Mechanisation (SMAM)	Subsidy for purchase of farm equipments	This scheme is for promotion of farm machineries. There are subsidies as well as loan facilities for establishing CHC by individual entrepreneur as well as SHG
Pradhan Mantri Fasal Bima Yojana (PMFBY)	Seasonal Insurance for medium to large farmers	Premium of 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops. In case of annual commercial and horticultural crops, the premium to be paid by farmers is 5%. Balance premium will be paid by the Government.
Atmanirbar Bharat Abhiyan	Promotion and scaling up of advanced beekeeping practices	It is a separate Mission carved out of National Horticulture Mission and started in 2020-21 with allocation of about Rs. 500 cr.

Scheme	Sub Scheme	Pattern of Assistance
Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)	Incentive for setting up Food Processing Units	Applicant for the Scheme shall be (i) Proprietary Firm or Partnership Firm or Limited Liability Partnership (LLP) or a Company registered in India (ii) Co-operatives; and (iii) SME and making an application for seeking approval for coverage under the Scheme. Applicant may also include company applying on its own behalf and its subsidiary/ies provided the applicant company holds more than 50% of the stock of its subsidiary/ies and that none of such subsidiary company/ies is included in any other applicant company under the scheme
E Naam	Establishment of EMarket or ENAM in selected States	e-NAM software will be provided to States/UTs free of cost. Department will give grant as one-time fixed cost to the States/UTs up to Rs. 30,00 lakh per market, based on their DPR for purchase of hardware, internet connection, assaying equipment and related infrastructure to make the market ready for integration with e-NAM platform. State Government/UT/their agencies would bear balance fund requirement, if any, for making arrangement for electronic trading in proposed markets
Mission for Integrated Development of Horticulture (MIDH)	<p>a) Pack house/On farm Collection & Storage unit</p> <p>b) Integrated pack house with facilities for grading, sorting etc.</p> <p>c) Cold Storage Units</p> <p>d) Integrated Post Harvest Management Ripening Chamber, Reefer Van, Retail Outlet, Pre-Cooling Unit etc.</p>	<p>50% of cost will be provided</p> <p>35% in general areas, 50% in Hilly and scheduled areas as credit linked back-ended subsidy will be provided</p> <p>35% of project cost (50% in NE, Hilly and Scheduled areas) for capacity above 5000MT, as credit linked back ended subsidy will be provided</p> <p>35% of project cost in general areas and 50% of cost in NE, Hilly and Scheduled areas will be provided</p>
Dhaanya Lakshmi Scheme	Development of village level storage facility	The storage houses will be run by the SHG (Self Help Group). Importance under the scheme will be given to the Women SHGs. Under the scheme, the group will get loan from NABARD to store food grains. This will help farmers to increase their holding capacities.
National Mission for Sustainable Agriculture	Pipe/pre cast distribution system	Pipe/precast distribution system
Dairy Entrepreneurship Development Scheme	Input Purchase	Entrepreneur contribution (Margin) for loans beyond 1.6 lakh - 10% of the outlay (Minimum) Back ended capital subsidy -25% of the project cost for General category and 33.33% for SC/ST farmers Effective Bank Loan - Balance portion

Scheme	Sub Scheme	Pattern of Assistance
Livestock Health and Disease Control (LH & DC)	Strengthening and establishment of veterinary services in rural areas	Establishment and Strengthening of existing Veterinary Hospitals and Dispensaries will benefit families involved in animal husbandry. Several schemes for livestock health are run under the scheme, programme focus will depend of the local context.
National Livestock Mission (NLM)	Ensuring suitable ecosystem for improved income from livestock cultivation	The major outcome is to reduce the gap in demand and availability of feed and fodder, conservation and improvement of indigenous breeds, higher productivity and production in a sustainable and environment friendly manner, enhanced livelihood opportunities, especially in rainfed areas and for landless, small and marginal farmers, increased awareness, improved risk coverage and better availability of quality animal products to consumers overall socio-economic upliftment of livestock rearers.
Livestock Health and Disease Control (LH & DC)	Establishment of Piggery Units	Livestock development - 100% central assistance Pig Development in North-Eastern Region Strengthening of Farms - 90% Central Assistance; 10% State Share Maximum ceiling per unit - Rs.50.00 lakh Pig Development in North-Eastern Region - Propagation of Reproductive Technologies - 90% Central Assistance; 10% State Share
Pradhan Mantri Matsya Sampada Yojana	Development of fish ponds, advanced fishing gears and adoption of advanced methods	100% Central government funding
Fisheries and Aquaculture Infrastructure Development Fund (FIDF)	Development of fish farms, purchase of modern fishing gear, input sourcing and processing	The project shall be eligible for loan up to 80% of the estimated/actual project cost. Beneficiaries are required to contribute at least 20% of the project cost as margin money.
Blue Revolution	Development of fish farms, purchase of modern fishing gear, input sourcing and processing	<ol style="list-style-type: none"> 50% of the project/unit cost for general States, leaving the rest to State agencies/organisations, corporations, federations, boards, Fishers cooperatives, private entrepreneurs, individual beneficiaries. 80% of the project/unit cost for NorthEastern/Hilly States leaving the rest to State agencies/Organisations, Cooperatives, individual beneficiaries etc. 100% for projects directly implemented by the Government of India through its institutes/organisations and Union Territories
Revamped Scheme of Fund for Regeneration of Traditional Industries (SFURTI)	Subsidy for Industrial Unit Establishment by multiple agencies	Soft Interventions: A maximum ceiling of Rs. 25.00 lakhs (100% scheme funding) Hard Interventions: As per project requirement (75% scheme funding) Eligibility - NGOs, institutions of the Central and State Governments and semi-Government institutions, field

Scheme	Sub Scheme	Pattern of Assistance
		functionaries of State and Central Govt., Panchayati Raj institutions (PRIs), Private sector by forming cluster specific SPVs, Corporates and CSR foundations
“Seekho aur Kamao (Learn & Earn)”	Youth skilling and self-employment promotion	The scheme aims at upgrading the skills of minority youth in various modern/traditional skills depending upon their qualification, present economic trends and market potential, which can earn them suitable employment or make them suitably skilled to go for self-employment. The scheme is implemented through selected expert Project Implementing Agencies (PIAs). The scheme ensures placements of minimum 75% trainees, out of which at least 50% placement is in organised sector. On approval of the project funds will be released in 3 instalments 1st tranche - 30% 2nd tranche - 50% 3rd tranche - 20%
DDUGKY	Skilling with support under DDUGKY for support towards training costs, stipends, placement	Eligibility: Rural Youth: 15 - 35 Yrs SC/ST/Women/PVTG/PWD: upto 45 Yrs DDU-GKY provides funding support for placement linked skilling projects that address the market demand with funding support ranging from Rs. 25,696 to over Rs. 1 lakh per person, depending on the duration of the project and whether the project is residential or non-residential. DDU-GKY funds projects with training duration from 576 hours (3 months) to 2304 hours (12 months). Funding components include support for training costs, boarding and lodging (residential programmes), transportation costs, postplacement support costs, career progression and retention support costs.
Roshini	Skilling support targeting women candidates	Under this initiative skill development courses shall be a mandatory residential course with 40% coverage to women candidates, in extremist affected districts.
Sahakar Mitra	Employment in cooperatives for skilled youth	Intern will be offered Rs. 45,000 from NCDC
Institutional support for Deve. and marketing of Produce	Product enhancement and market linkage for better incomes	100% Grant in aid for activities are market intervention, R&D, skill upgradation - provides support to tribals in agri and forest produce in production, product development, institution support etc.
MFP through MSP	Purchase of Minor Forest Produce through SHGs	The implementing agency shall pay commission to the SHGs at the rate not exceeding 7.5% of the value of MFP procured through them to be charged. Ministry has provided a list of 50 products

Scheme	Sub Scheme	Pattern of Assistance
Van Dhan	Establishment of Van Dhan Kendra	At unit level, aggregation of produce would be done by SHGs having about 30 members each forming Van Dhan Vikas 'Samuh'. The SHGs would also undertake primary value addition of the MFPs using equipment such as small cutting and sieving tools, decorticator, dryer, packaging tool etc based on MFPs available in the area. The establishment of "Van Dhan Vikas Kendra" is for providing skill upgradation and capacity building training and setting up of primary processing and value addition facility.
Pradhan Mantri Kaushal Vikas Yojana (PMKVY)	Subsidised training and certification cost	The training cost for the candidates will be directly transferred to TPs,.Assessment fee shall be given to the SSCs in accordance with the Common Norms
Yuva Sahakar	Placement of trained youth in cooperatives	Category 1 -Fund disbursement ratio between Center and state is 80:20 in any type of cooperative society in the North Eastern Region. Category. 2: Fund disbursement ratio between Center and state is 70:30 in case of any type of cooperative society which is not covered 37 under Category-A for all types of activities.
Agriclinic and Agribusiness Centres Scheme	Subsidised training and certification cost	60% of the total eligible training fund shall be released to the Public NTIS on receipt of Screening Committee report, applications and application fee. Remaining 40% or the eligible expenditure, whichever is less, shall be released on completion of training programme after receipt of expenditure statement.
Jal Jeevan Mission		Water supply to rural habitations

Annexure 7: Clusters under SFURTI

a. Approved Clusters under SFURTI

Bihar							
Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Hand Knotted Carpet Cluster			Council for Handicrafts Development Corporations (COHANDS)	Aurangabad	725	359.5	330.38
Jute & Banana Natural Fiber Cluster	Handicraft	Jute based products	Council for Handicrafts Development Corporations (COHANDS)	Purnia	1000	489.9	448.41

Bihar							
Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Katarmala Beekeeping Cluster			KVIC	Vaishali	330	204.36	188.14
Khudani Agro Producer Cluster	Food Processing	Jam, Jelly, Juice, Pickle, Chips, Makhana, Sauce	IIEG	Muzaffarpur	501	523.42	482.66
Lac Cluster Muzaffarpur Bihar			Council for Handicrafts Development Corporations (COHANDS)	Muzaffarpur	829	386.88	355.22
Makhana Processing and Value Addition Cluster			PPDC-Agra	Madhubani	878	330	303
Mushroom And Baby Corn Processing And Value Addition Cluster			PPDC-Agra	Gaya	799	398.5	364.65
Nalanda Embroidery Cluster			KVIC	Nalanda	364	223.89	206.12
Rohtas Pottery Cluster	Handicraft	Pottery-Glazed/ Ceramic/Terracotta	KVIC	Rohtas	150	133.27	127.87
The Traditional Painting Cluster	Handicraft (Painting)	Painting	KVIC	Madhubani	600	147.89	147.89
Jharkhand							
Bamboo Craft Cluster			Council for Handicrafts Development Corporations (COHANDS)	West Singhbhum	1048	413.65	379.52
Annatdev Woodcraft Producer Company Limited			NIMSME	Bokaro	150	259.43	238.84
Bamboo Crafts Cluster			NIMSME	Ranchi	698	429.35	393.76
Basantrai Badge and Embroidery Producer Company Limited	Defence Related Badges, All Type Jury Products	All Types Embroidery Related Works	NIMSME	Godda	207	236.25	217.5
Bishnugarh Brass & Bronze Cluster			KVIC	Hazaribagh	832	460.45	421.9
Bundu Lac Farming & Processing Cluster			NIMSME	Ranchi	500	578.7	480
Gold & Silver Jewellery Cluster			NIMSME	Ramgarh	500	365.94	310.54
Gumla Honey & Food Processing Major Cluster	Food Processing	Honey& Other food items	KVIC	Gumla	800	254.24	254.24

Jharkhand							
Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Honey Processing Cluster	Food Processing	Honey	NIMSME	Lohardaga	250	187.75	146.45
Kariyatpur Brass Manufacturing Private Limited			NIMSME	Hazaribagh	266	262.3	241.58
Koderma Agarbatti Mini Cluster	Agarbatti	Agarbatti	KVIC	Koderma	250	127.44	127.44
Lac and other Processing Cluster	NTFP	Lac, Chironji, Tamarind	IMEDF	Gumla	500	162.19	149.32
Santhal Pragana Khadi Cluster	Handicraft	Silk	KVIC	Deoghar	681	150	150
Madhya Pradesh							
Balaghat Agro Cluster			IIEG	Balaghat	501	170.43	156.74
Balaghat Incense Products Cluster			Foundation for MSME Cluster(FMC)	Balaghat	484	265.13	244.08
Bamboo and Pottery Mini Cluster	Handicraft	Bamboo	KVIC	Hoshangabad	474	181.09	149.44
Bamboo Based Indigenous Toys Cluster			Indo-German Tool Room, Indore	Balaghat	760	330.4	303.36
Bamboo Cluster	Bamboo Products, Utility Items, Home Decor Products, Furnitures, Bamboo sticks & chiks	Lamp sheds, pen/pencil holders, bottle, tea-cups, serving tray, jewelry, accessories,sofa set, center table, magazine shelf, shoe racks, show pieces, couch, bed, stool, utility items, decor products, incense sticks, bamboo curtains (chik)	Foundation for MSME Cluster (FMC)	Betul	817	311.06	286.4
Bamboo craft and Bamboo Toys Cluster			Indo-German Tool Room, Indore	Ratlam	701	378.59	347.7
Bamboo Craft Cluster			Council for Handicrafts Development Corporation (COHANDS)	Harda	401	243.04	223.75
Bamboo Craft Cluster Chhindwara	Handicraft	Bamboo craft	Council for Handicrafts Development Corporations (COHANDS)	Chhindwara	891	373.75	343.31
Bamboo Craft Cluster Khandwa	Handicraft	Bamboo	Council for Handicrafts Development Corporations (COHANDS)	Khandwa	441	236.8	218.01

Madhya Pradesh

Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Bamboo Value addition and Zero-waste Agarbatti Cluster			Indo-German Tool Room, Indore	Seoni	1006	474.25	433.32
Batik and Block Printing Cluster	Handicraft	Batik & Block Printing	Council for Handicrafts Development Corporations (COHANDS)	Ujjain	414	252.35	232.32
Burhanpur Bamboo Cluster			Council for Handicrafts Development Corporations (COHANDS)	Burhanpur	500	258.07	237.59
Carpet Cluster Hatwa			Council for Handicrafts Development Corporations (COHANDS)	Sidhi	520	256.2	235.86
Chanderi Cluster			Council for Handicrafts Development Corporations (COHANDS)	Ashoknagar	362	247.11	227.49
Chitrakoot Herbal Product Cluster	Herbal Product	Herbal Product	KVIC	Satna	500	306.55	245.24
Embroidered Fashion Clothing and Accessories Cluster			Foundation for MSME Cluster (FMC)	Katni	407	266.51	245.36
Embroidery and Carpet Making Cluster			Indo-German Tool Room, Indore	Hoshangabad	230	164.75	150.74
Embroidery and Zari Zardozi Cluster	Handicraft	Zari-Zardozi, Embroidery	Council for Handicrafts Development Corporations (COHANDS)	Jabalpur	844	342.46	314.92
Embroidery Zardozi and Stitching Cluster			Council for Handicrafts Development Corporations (COHANDS)	Bhopal	850	342.48	314.93
Handlooms and Handicrafts Cluster	Textile	Craft and Utility Items	Council for Handicrafts Development Corporations (COHANDS)	Dhar	324	243.36	223.94
Incense Stick and Capmhor Cluster			Council for Handicrafts Development Corporations (COHANDS)	Ujjain	423	266.01	244.91
Jobat Natural Dye Cluster	Natural Dye	Natural Dye	KVIC	Alirajpur	300	124.31	112.65
Jute Craft Cluster			Foundation for MSME Cluster (FMC)	Khandwa	411	263.62	242.72
Kasaravad Art Cluster	Handloom	Saree, Dupatta, Fabric, Home Decor	Foundation for MSME Cluster (FMC)	Khargone	407	266.86	245.68
Lac Processing and Value Addition Cluster			Indo-German Tool Room, Indore	Balaghat	250	206	175

Madhya Pradesh

Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Lantana and Bamboo Cluster	Handicraft	Bamboo & Lantana	Council for Handicrafts Development Corporations (COHANDS)	Dindori	410	229.38	211.18
Magtha Weaving Cluster	Textile	Saree, fabric, bedsheet etc.	Council for Handicrafts Development Corporations (COHANDS)	Chhindwara	915	389.84	357.91
Moringa Value Chain and Vermicomposting Cluster			Indo-German Tool Room, Indore	Vidisha	341	186.9	161.9
Narsinghpur Jaggery Cluster			Foundation for MSME Cluster (FMC)	Narsinghpur	815	574.65	500
Silk Handicraft Handloom Cluster			Council for Handicrafts Development Corporations (COHANDS)	Hoshangabad	403	267.03	245.84
Soft Toys and Sportswear Cluster			Foundation for MSME Cluster (FMC)	Shajapur	755	414.85	380.6
Soft Toys Cluster			Indo-German Tool Room, Indore	Barwani	1005	383.83	352.04
Stiching Embroidery Cluster	Zardozi Embroidery Based Products	Bridal Lehenga, sarees, sherwani (Zari), Bridal Purse, Cushion Covers, Ladies Kurties, Photo Frame, Sling Purse etc.	Foundation for MSME Cluster (FMC)	Vidisha	410	254.08	233.92
Stitching and Surface Ornamentation Women's Cluster			Indo-German Tool Room, Indore	Bhopal	230	237.6	217.39
Terracotta Cluster	Handicraft	terracotta craft	Council for Handicrafts Development Corporations (COHANDS)	Dewas	223	213.89	196.91
Terracotta Cluster, Patouhapura, Sahahpur, Betul	Handicraft	Pottery-Glazed/ Ceramic/Terracotta	KVIC	Betul	509	148.55	148.55
Traditional Indian Bamboo and Wood Based Toys Cluster			Indo-German Tool Room, Indore	Mandla	776	396.5	363.35
Wood based Traditional Indian Toys and Associated Fabric Based Accessories Cluster			Indo-German Tool Room, Indore	Sehore	812	325.7	299.23
Zari Zardosi, Silai Kadhaai Cluster	Apparel, Home furnishing, Home Décor	kurta set, shirt pant, Lehnga Kurta, Uniform, Curtains, Cushion Cover	Foundation for MSME Cluster(FMC)	Raisen	418	243.97	224.61

Rajasthan

Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Anmol Beekeeping Cluster			KVIC	Hanumangarh	250	249.23	229.15
Bamboo based Cluster			KVIC	Banswara	331	201.29	185.32
Barmer Handicraft Cluster			KVIC	Barmer	890	322.62	296.91
Baytu Stone Carving Cluster			KVIC	Barmer	290	255.5	235
BeeKeeping Cluster Kota			PPDC-Agra	Kota	701	469.21	429.62
Bharatpur Bee Keeping Cluster	Honey,Beewax, Pollen, Bee venom	Beewax product	Foundation for MSME Cluster(FMC)	Bharatpur	670	475.24	435.12
Deep Hast Ship Wooden Toys Cluster			KVIC	Udaipur	250	162.99	150.01
Garlic Processing and Value Addition Cluster			PPDC-Agra	Jhalawar	710	398	363.7
Guar gum and Isabgol processing cluster			PPDC-Agra	Nagaur	744	427	390
Haldighati Flower Processing Cluster			Foundation for MSME Cluster(FMC)	Rajsamand	403	265.12	243.92
Hand Embroidery and Applique Cluster			Council for Handicrafts Development Corporations (COHANDS)	Jodhpur	937	423.43	353.43
Hand Embroidery and Craft Cluster			PPDC-Agra	Jaisalmer	726	264.6	243.6
Kishangarh Marble and Granite Cluster			KVIC	Ajmer	281	218.43	201.1
Kolsiya Tie & Dye Cluster			KVIC	Jhunjhunu	349	299.36	275.6
Leather Craft Cluster			PPDC-Agra	Baran	337	271.24	249.27
Leather Craft Cluster Sikar			Council for Handicrafts Development Corporations (COHANDS)	Sikar	325	270.42	248.96
Metal Craft Cluste			PPDC-Agra	Jodhpur	657	333	305.1
Mighty Agro Cluster on Edible Oil			KVIC	Ganganagar	265	256.93	236.48
Millet Processing and Value Addition Cluster			PPDC-Agra	Ajmer	800	355	325

Rajasthan							
Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
Namda Wool Art & Handicraft Cluster			Indo-German Tool Room, Indore	Tonk	756	418.29	376.46
Pulse Processing Cluster			PPDC-Agra	Banswara	685	340	311.9
Sanchor Leather Cluster	Leather	Juti, Chhupal, Sandal, Shoes and leather accessories	KVIC	Jaipur	200	125.14	115.21
Sikandra Stone Carving Cluster	Handicraft	Stone Carving	KVIC	Dausa	200	132.5	110.5
Stone Carving Cluster			PPDC-Agra	Karauli	825	383.4	351.51
Tijara Fruit and Vegetable Cluster			IMEDF	Alwar	640	260.73	233.2
Traditional Indian Fabric Based Toys Cluster			Indo-German Tool Room, Indore	Ganganagar	819	317.4	291.66
Urmul Natural Dyeing Cluster	Handloom	Natural Dye	IMEDF	Bikaner	650	308.12	229.25
Wood Carving Cluster			Council for Handicrafts Development Corporations (COHANDS)	Udaipur	258	195.8	180.26
Wood Craft Cluster	Handicraft	Home Décor, furniture, gift articles, toys, etc	Council for Handicrafts Development Corporations (COHANDS)	Jodhpur	889	431.64	395.23

b. Approved Clusters under SFURTI

Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
BIHAR							
Rohtas Pottery Cluster	Handicraft	Pottery-Glazed/ Ceramic/Terracotta	KVIC	Rohtas	150	133.27	127.87
The Traditional Painting Cluster	Handicraft (Painting)	Painting	KVIC	Madhubani	600	147.89	147.89
Jute & Banana Natural Fiber Cluster	Handicraft	Jute based products	COHANDS	Purnia	1000	489.9	448.41

Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
JHARKHAND							
Gumla Honey & Food Processing Major Cluster	Food Processing	Honey & Other food items	KVIC	Gumla	800	254.24	254.24
Lac and other NTFP Processing Cluster	NTFP	Lac, Chironji, Tamarind	IMEDF	Gumla	500	162.19	149.32
Santhal Pragana Khadi Cluster	Handicraft	Silk	KVIC	Deoghar	681	150	150
Madhya Pradesh							
Bamboo and Pottery Mini Cluster	Handicraft	Bamboo	KVIC	Hoshangabad	474	181.09	149.44
Bamboo Cluster	Bamboo Products, Utility Items, Home Decor Products, Furnitures, Bamboo sticks & chiks	Lamp sheds, pen/pencil holders, bottle, tea-cups, serving tray, jewelry, accessories,sofa set, center table, magazine shelf, shoe racks, show pieces, couch, bed, stool, utility items, decor products, incense sticks, bamboo curtains (chik)	FMC	Betul	817	311.06	286.4
Bamboo Craft Cluster Chhindwara	Handicraft	Bamboo craft	COHANDS	Chhindwara	891	373.75	343.31
Bamboo Craft Cluster Khandwa	Handicraft	Bamboo	COHANDS	Khandwa	441	236.8	218.01
Batik and Block Printing Cluster	Handicraft	Batik & Block Printing	COHANDS	Ujjain	414	252.35	232.32
Chitrakoot Herbal Product Cluster	Herbal Product	Herbal Product	KVIC	Satna	500	306.55	245.24
Embroidery and Carpet Making Cluster			IGTR, Indore	Hoshangabad	230	164.75	150.74
Embroidery and Zari Zardozi Cluster	Handicraft	Zari-Zardozi, Embroidery	COHANDS	Jabalpur	844	342.46	314.92
Handlooms and Handicrafts Cluster	Textile	Craft and Utility Items	COHANDS	Dhar	324	243.36	223.94
Jobat Natural Dye Cluster	Natural Dye	Natural Dye	KVIC	Alirajpur	300	124.31	112.65
Kasaravad Art Cluster	Handloom	Saree, Dupatta, Fabric, Home Decor	FMC	Khargone	407	266.86	245.68
Lantana and Bamboo Cluster	Handicraft	Bamboo & Lantana	COHANDS	Dindori	410	229.38	211.18

Cluster Name	Product Category	Product Sub Category	Agency Name	District Name	No. Of Artisans	Total Project Cost (Rs. in Lakh)	Approval Cost (Rs. in Lakh)
JHARKHAND							
Magtha Weaving Cluster	Textile	Saree, fabric, bedsheet etc.	COHANDS	Chhindwara	915	389.84	357.91
Stiching Embroidery Cluster	Zardozi Embroidery Based Products	Bridal Lehenga, sarees, sherwani (Zari), Bridal Purse, Cushion Covers, Ladies Kurties, Photo Frame, Sling Purse So On.	FMC	Vidisha	410	254.08	233.92
Terracotta Cluster	Handicraft	terracotta craft	COHANDS	Dewas	223	213.89	196.91
Terracotta Cluster, Patouhapura, Sahapur, Betul	Handicraft	Pottery-Glazed/ Ceramic/Terracotta	KVIC	Betul	509	148.55	148.55
Zari Zardosi, Silaai Kadhaai Cluster	Apparel, Home furnishing, Home DÃ©cor	Kurta set, shirt pant, Lehnga Kurta, Uniform, Curtains, Cushion Cover	FMC	Raisen	418	243.97	224.61
RAJASTHAN							
Sanchor Leather Cluster	Leather	Juti, Chhapal, Sandal, Shoes and leather accessories	KVIC	Jaipur	200	125.14	115.21
Sikandra Stone Carving Cluster	Handicraft	Stone Carving	KVIC	Dausa	200	132.5	110.5
Bharatpur Bee Keeping Cluster	Honey, Beewax, Pollen, Bee venom	Beewax product	FMC	Bharatpur	670	475.24	435.12

Notes

A series of horizontal dashed lines for writing notes.

