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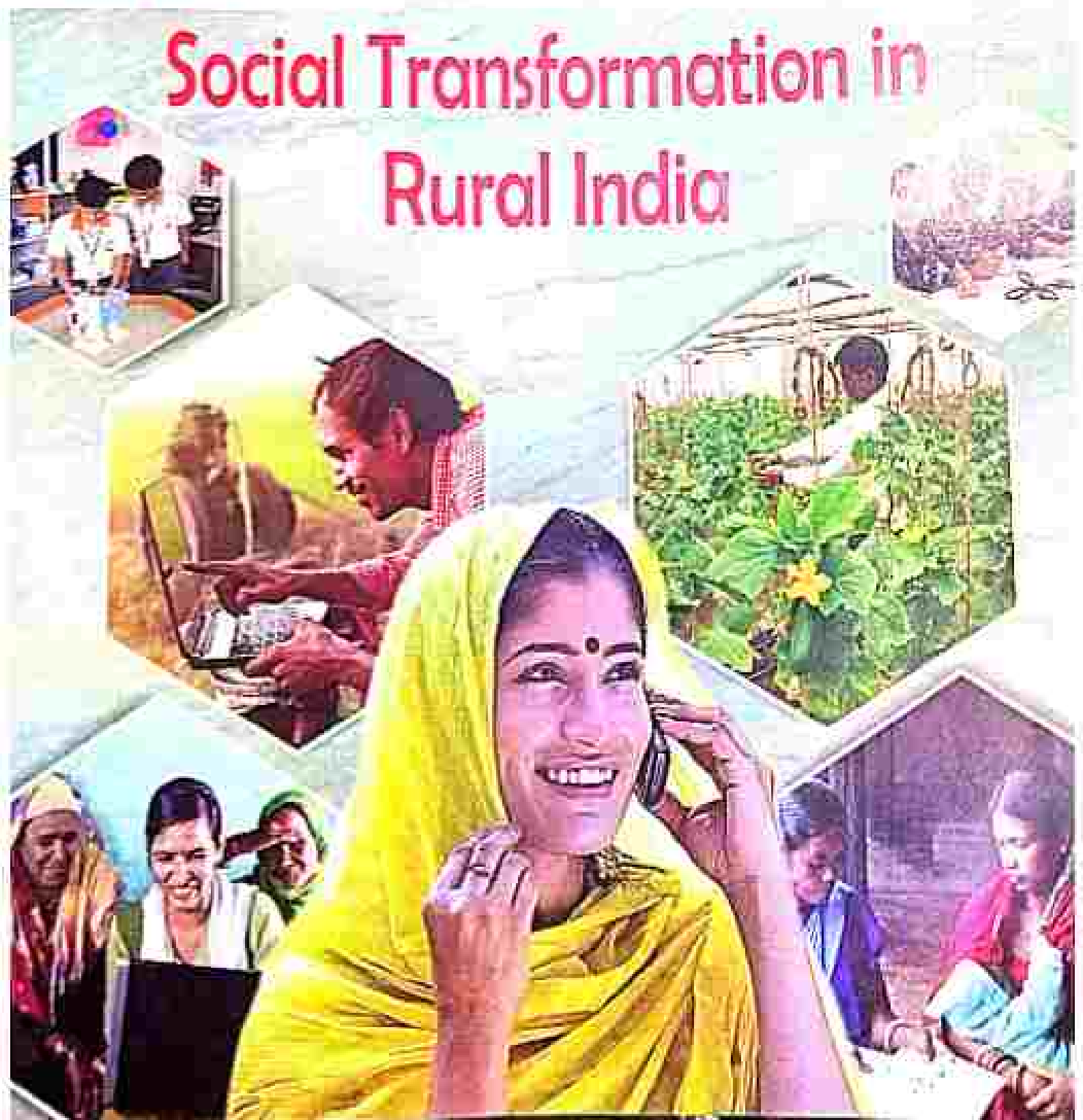
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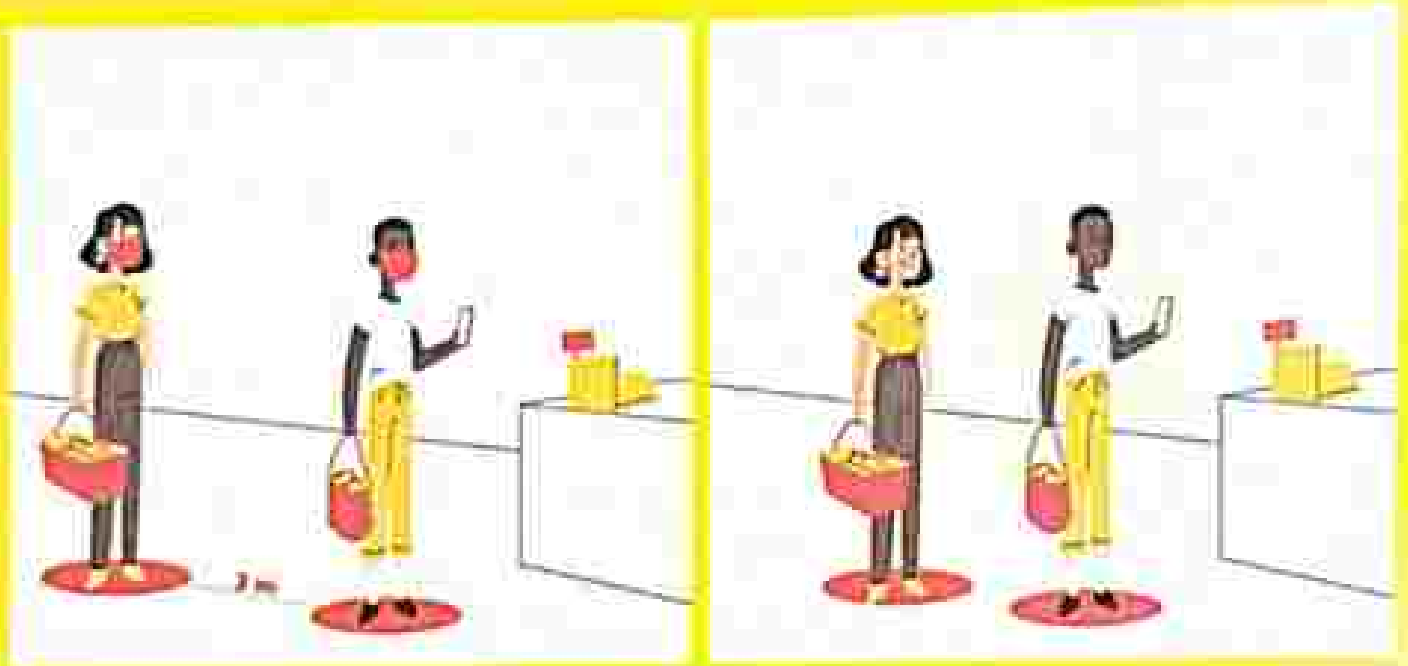
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Special Issue

Social Transformation in Rural India



WHO ARE YOU?



Careful

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Social Transformation in different areas of rural parts of the country is one of the high-priority areas in India due to its strong relevance in national economy; active role in pursuance of sustainable development goals; and critical importance in improving quality of life of rural communities.

Rural Transformation encompasses a whole gamut of social and economic reforms along with inclusive and sustainable development, energy security and affordable access to basic minimum needs for all. To implement the vision at ground level, Ministry of Rural Development is spearheading a bunch of programmes and schemes that address issues of concern such as livelihood opportunities, employment generation, skilling of rural youth, development of infrastructure, improvement in public services etc. Consistent efforts have improved the social and economic indicators of rural population over the years.

Women labour force participation is a driver of development, and their participation rates point to the potential for a country to grow more rapidly. The article titled as *Womenpreneurss driving transformation* tells the readers that entrepreneurship remains critical to harness the economic potential of women and stimulating women entrepreneurship can also go a long way in bridging gender gaps and empowering women.

Ayushman Bharat has transformed the health system in an effective manner. The Abhyaan must become a game-changer in terms of transforming the health sector for the rural masses in the coming years. The Government of India has made a stellar move by bringing the private sector on board for providing affordable healthcare. By leveraging the insurance-based model, it intends to make private healthcare accessible to all.

As India is on its way to develop 100 Smart cities, the article on *Smart Villages* focuses on availability of broadband connectivity to bring new opportunities to India's villages so they can be better connected with the country's digital infrastructure.

In this issue, we have carried an article on *Fit India Movement*. The article will help the readers to understand the overall benefits especially on the health of the movement.

Education is a very crucial component towards transforming lives of rural masses as it is fundamental to development and growth. The Government has brought out holistic educational programmes such as DIKSHA and SWANAM that enhance educational opportunities for children through digital learning tools and content.

We hope that our readers will be able to get desired information out of these informative articles. Happy reading.

Stay Home-Stay Safe!

Major Drivers of Rural Transformation

Dr. Jagdeep Saxena

Rural transformation encompasses a whole gamut of social and economic reforms along with inclusive and sustainable development, energy security and affordable access to basic minimum needs for all. To implement the vision at ground level, Ministry of Rural Development is spearheading a bunch of programmes and schemes that address issues of concern, such as livelihood opportunities, employment generation, skilling of rural youth, development of infrastructure, improvement in public services etc.

'The progress of the country lies in the development of its rural villages, the rural economy, and rural skills.'

— Mahatma Gandhi

Rural transformation is one of the high-priority areas in India due to its strong relevance in national economy; active role in pursuance of Sustainable Development Goals; and critical importance in improving quality of life of rural communities. Over 65 percent Indians inhabiting rural areas face more challenges in life and livelihood as compared to their urban counterparts. Hence, Government of India launched a comprehensive programme of rural transformation with a vision to transform lives and livelihoods through proactive socio-economic inclusion, integration and empowerment of rural people. Rural transformation encompasses a whole gamut of social and economic reforms along with inclusive and sustainable development, energy security and affordable access to basic minimum needs for all. To implement the vision at ground level, Ministry of Rural Development is spearheading a bunch of programmes and schemes that address issues of concern, such as livelihood opportunities, employment generation, skilling of rural youth, development of infrastructure, improvement in public services etc. Consistent efforts have improved the social and economic indicators of rural population over the years. Indicators on education, health, nutrition and provision of basic services (electricity, water, sanitation, roads, etc.) have all registered significant improvements though they still lag behind urban areas. In

the context of making India a self-reliant nation, rural areas are poised to play a pivotal role due to their significant contribution (25-30 percent) in national GDP. The pathway towards India's target to become a five trillion dollar economy by 2024-25 also passes through rural areas. In a proactive move, Government has revitalised and repositioned rural transformation into a centre-stage with multi-pronged and inclusive approach, building synergies with stakeholders and provision of adequate finances.

Livelihood Security: Pathways and Progress

Since independence, poverty alleviation has always been the primary endeavour of the Government with emphasis on its role as harbinger of socio-economic transformation in rural population. Conventionally, poverty or state of deprivation was defined in terms of income poverty, that is, number or proportion of people



living below the poverty line. But, as per current international norms, human poverty is more than income poverty. It is now regarded as deprivation of non-income dimensions of public necessities like health and education opportunities that enhance human capabilities to lead a tolerable life. Hence, Government made a paradigm shift in its approach for tackling rural poverty by implementing innovative schemes and programs that address poverty in a holistic manner. Consequently, India made significant progress in reducing multi-dimensional poverty. Oxford Poverty and Human Development Initiative in its report stated, 'India has made momentous progress in reducing multi-dimensional poverty. The incidence of multi-dimensional poverty was almost halved between 2005-06 and 2015-16, climbing down to 27.5 percent.' In the current perspective, a new set of activities have been identified (listed below) to achieve goal of rural transformation.

- Addressing basic needs and enhancing provision of and access to services as a precursor to improve livelihoods.
- Increasing employment opportunities through labour-intensive approaches including green jobs and development of rural infrastructure.
- Supporting development and use of safe and environment friendly technologies and practices for housing and infrastructure development in rural areas.
- Women empowerment through access to credit and new technologies along with gender specific capacity building and skill development.
- Strengthening road connectivity for accessing essential public service benefits.
- Promoting convergence and developing synergies between various stakeholder departments, agencies, co-operatives and institutions for better impacts and economic returns.
- Supporting training and capacity building of rural communities to effectively implement development programmes.
- Promoting green energy programs to provide energy security for livelihood and household needs.

Among various schemes of livelihood security, MGNREGA (Mahatma Gandhi National

Rural Employment Guarantee Act) is a flagship programme driving rural transformation at ground level. Covering all rural districts of the country, MGNREGA assures at least 100 days of guaranteed wage employment in a financial year to every rural household. Since its launch in 2006, the scheme has undergone a paradigm shift in its approach during recent years bringing a significant change in lives of millions of rural families.

The most tangible effects have been seen under social inclusion, gender parity, social security and equitable growth. The Act mandates 50 percent of the allocation for agriculture and allied activities through development of land, water and tree resources. Individual beneficiaries have created productive assets such as dugwells, farm ponds, sheds for animal husbandry, vermi-composting and NADEP pits. All these assets are contributing to national goal of doubling farmers' income by 2022. Recently, works have been re-oriented to channelise investments and natural resource management with greater focus on water conservation. The Government of India has allocated Rs. 73,000 crore (2021-22) for the scheme, which is an increase of Rs. 11,500 crore as compared to Budget Estimate for the previous financial year (2020-21). The allocation was specifically enhanced to meet the significantly higher demand of works due to reverse migration of workers in rural areas during current pandemic. Vigorous efforts have resulted in employment of 6.31 crore persons and generation of more than 130.9 crore person-days (as on 23rd July, 2021). Additionally, more than 25 lakh assets have been created in the current financial year (2021-22) so far. In the last five years or so, MGNREGA has significantly improved lives of millions of rural people especially in poorer states like Bihar, Jharkhand, Madhya Pradesh, Chattisgarh, Odisha and Uttar Pradesh.

In view of their central role in village economy, social and economic empowerment of rural women has been taken up to drive rural transformation at ground level. Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) was launched primarily to organise rural women in self-managed institutions and build their skills and capacities to enable them to access finance and livelihood services. The members of institutions (Self-Help Groups

of Women and their federations) are provided with training and hand-holding to set-up strong and sustainable institutions. As a unique strategy, Community Resource Persons are identified and trained from among experienced members to further take up capacity building activities in new institutions. As on 31st March, 2019, more than 2.31 lakh community members have been trained and deployed to provide support to the community institutions in a variety of related activities. The Mission is being implemented in 5, 246 blocks in 622 districts across all 29 states and five Union Territories. Cumulatively, 5.92 crore women have been mobilised into more than 52 lakh SHGs. Further, the SHGs have been federated into 2.95 lakh village level federations and more than 27,150 cluster level federations. Since 2014, the Self-Help Groups have cumulatively leveraged Rs. 2.24 lakh crores from banking system that has enabled the members to invest in their economic activities and acquire productive assets. DAY-NRLM promotes both farm livelihood and non-farm livelihoods mainly in newly emerged promising areas, such as organic farming, value chains, processing, custom hiring centres etc. in agriculture domain and transport services, apparel manufacturing, catering units etc. in non-farm sector. In a sub-scheme, Start-up Village Entrepreneurship Programme (SVEP), 108 Detailed Project Reports have been approved for supporting 1.76 lakh small businesses. Sub-scheme is under implementation in over 150 blocks, 135 districts and 23 states. Small businesses run by women SHGs have been able to access opportunities for government procurements. As on August, 2020, around one lakh rural enterprises were getting support, of which 75 percent of the enterprises were owned and managed by women. A mid-term review (September, 2019) of SVEP by Quality Council of India showed that average monthly revenue of enterprises was Rs. 39,000-Rs. 47,800 in case of manufacturing; Rs. 41,700 in case of services, and Rs. 36,600 in case of trading. Success stories of such enterprises can be seen across the country with major impact on rural livelihoods.

Rural Entrepreneurship: Initiatives and Impact

In recent times, vigorous efforts are underway to develop and promote entrepreneurship in rural areas primarily to engage rural youth for tackling

issues such as poverty, unemployment and rural-urban migration. In this context, creation of Rural Self-Employment Training Institutes (RSETIs) at district level proved a watershed moment. It's a tripartite programme engaging Sponsor Banks, Ministry of Rural Development (MoRD) and State Government with mandated financial and infrastructure support for opening the RSETI. Institutes, in their respective lead districts, provide training to rural youth (age group 18-45 years) to take up self-employment/entrepreneurial ventures. Short-term trainings are provided in 64 approved courses with a long-term hand-holding to budding entrepreneurs. Currently, the programme is being implemented in 28 States and 7 Union Territories with 585 functioning RSETIs sponsored by 23 leading banks. A total of 37.81 lakh candidates have been trained so far and 25.63 lakh candidates have been settled for self-employment. Such enterprises, in turn, have become a potential source of employment generation in rural areas for boys and girls alike.

A unique and special ASPIRE Scheme, that is, 'A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship' is driving rural transformation by supporting small enterprises in the agriculture industry. Launched in 2015 with a central corpus of Rs. 200 crore, the scheme aims to set up a network of technology and incubation centres to expedite the wave of entrepreneurship in rural India. Skill up gradation, hand-holding, mentoring, incubation and credit support are major verticals along which support is provided to eligible entrepreneurs. The Union Budget (2019) proposed that 80 livelihood business incubators and 20 technology business incubators will be set up in 2019-20 with the aim to develop and train 75,000 skilled entrepreneurs in agri-rural industries. Being pro-agriculture in nature, value addition of agriculture and forestry products, recycling of agricultural pre/post harvest wastages, and development of innovative business models for agri-marketing are some of the priority areas for business enterprises.

Traditional industries and rural artisans have been one of the major stakeholders in village economy and rural livelihoods since long. But, this potential sector could not keep pace with modern trends and lost its sheen. Therefore, Government

of India launched a special initiative called 'Scheme of Fund for Regeneration of Traditional Industries' (SFURTI) to support and organise rural artisans into clusters to make them competitive and increase their income. Regular (500 artisans) and major clusters (more than 500 artisans) are supported financially for setting up modern infrastructure, procurement of new machineries, creation of raw material banks, improving design, packaging and marketing, and skill and capacity development through training and exposure visits. A total of 171 clusters engaging nearly 2.18 lakh rural artisans have been approved for a funding of Rs. 358 crore. These clusters are spread over 248 districts covering sectors such as handicrafts, coir, bamboo, honey, khadi, food processing and others. Interventions under the scheme are successfully reviving traditional village industries with socio-economic uplift of artisans.

A unique skilling programme, Deendayal Upadhyaya Gramin Koushlya Yojana (DDU-GKY), is developing 'job-ready' rural youth to provide services in upcoming rural enterprises. Besides providing high quality skill training opportunities to the rural poor, the scheme also supports trained candidates to secure a better future. The training to the candidates is free of cost with free boarding and lodging facilities. Once candidate is trained and placed in job, the scheme tries to ensure that the family has come out of the abject poverty. So far (till July, 2021), DDU-GKY has trained 10.94 lakh rural youth with placement of over 7.07 lakh in various enterprises. Currently, the programme is under implementation in 27 states and three Union Territories.

Basic Services: Improving Quality of Life

Shyama Prasad Mukherji Rural Mission (SPMRM) has made strategic endeavours to improve the overall quality of life by ensuring minimum quality service delivery in rural clusters. The mission is being implemented with the vision 'Aatma Gaun ki, Suvidha Shaher ki' (soul of the village, facilities of the city), and to realise it identified clusters of villages are being developed in holistic, integrated and time-bound manner. Government is striving to provide all the basic amenities, infrastructure as well as economic development opportunities in clusters. Under the mission, clusters are being provided with urban

facilities such as roads, piped water supply, waste management, smart classrooms, agro-processing and value addition etc. Out of 300 clusters, 296 clusters across 29 states and 6 Union Territories have been identified for development.

Pradhan Mantri Gram Sadak Yojana (PMGSY) is one of the key driver of transformation in rural areas due to its wide ranging societal impacts. Launched with the over-all objective to provide all-weather road connectivity to all eligible unconnected rural habitations, it is one of the most successful programme now running in third phase with a cumulative total of over six lakh kilometre road length constructed till April, 2019. In its recently launched third phase, it is proposed to consolidate 1.25,000 kms road length in the states. This would facilitate easy and faster movement to and from gramian agriculture markets, higher secondary schools and hospitals. According to a World Bank Report (2019), PMGSY has triggered a robust increase in employment rate in rural areas connected by roads. Similarly, a positive impact was seen on schooling, better remuneration for agricultural produce, growth of non-farm sector, easy access to medical facilities and saving of time for other productive works. Along with roads, Pradhan Mantri Awas Yojana-Gramin (PMAY-G) assures 'Housing for All' by 2022. Under the scheme, eligible beneficiaries are being provided financial assistance (Rs. 1.20 lakh in plains and Rs. 1.30 lakh in hilly states) with a target of construction of 2.95 crore pucca houses in rural areas.

Accessibility and affordability are two major impediments in delivery of health services in rural and remote areas. But, with recent initiatives taken under National Rural Health Mission (a sub-mission of National Health Mission), the scenario has transformed into an accessible, affordable and quality healthcare system for all. A host of services related to maternal and child health, universal immunisation and treatment for major diseases are provided free to all those who access public health facilities. Mobile Medical Units and Telemedicine facilities are also being used to improve healthcare access in rural areas. A total of five lakh Ayushman Bharat-Health and Wellness centres (HWCs) are being set up especially in villages and remote areas by upgrading sub-centres and Primary Health Centres closer to

the homes of people. Over 77,000 HWCs have become functional so far and are providing a wide range of healthcare services to rural people in free. The programme aims to create 1.5 lakh HWCs across the country by December, 2022, for provision of primary healthcare. Besides, a host of Government sponsored schemes and programmes are underway to improve healthcare system in rural and remote areas. Such programmes, in addition to health services, also have employment generation potential specific to rural areas.

Education is regarded as a catalyst of rural transformation as it brings socio-economic change in families and society as a whole. However, there

is a discernible gap between the rural and urban education system for which rural children face many difficulties. To improve the situation, an Integrated Scheme for School Education, called 'Samagra Shiksha' was launched with focus on improvement in school infrastructure and quality of education across the country including rural areas. Under the scheme, support is provided for a wide range of activities and interventions such as school infrastructure, school grant to develop conducive learning environment, creation of sports facilities, ICT, digital initiatives, leadership development programme etc. Under erstwhile 'Sarva Shiksha Abhiyan' (till 2017-18) and 'Samagra

Rural Entrepreneurship: Women Show the Way

In recent times, rural India is witnessing a unique transformation in women, especially in the disadvantaged and poor groups. Brimming with confidence, women are running successful enterprises by organizing themselves into cooperative institutions/enterprises. DAY-NRLM, a flagship scheme of Government of India, provides technical support, training, handholding and financial assistance during initial phase. Following case studies illustrate the point.

- Prabhavathi tried her hands at small businesses of agricultural implements but failed due to strong competition, lack of experience and financial crunch. With DAY-NRLM support, she then started a brick unit, Prabhha Cement Bricks, after receiving a sanction of Rs. 7.40 lakh. She also got a credit support of Rs. 11 lakh from the bank. Her brick unit in Anantpur district of Andhra Pradesh has recently clocked a turnover of Rs. 32 lakh. The enterprise gives employment to eight persons and its current profit is in the range of Rs. 11,000 to Rs. 12,000 per annum. She is planning to introduce cement rings in addition to cement bricks.
- Rina used to work as a computer operator at a low wage, but after her maternity subsided, she started an enterprise Vinnu Meggam designing, tailoring and brick works in Prakazam district of Andhra Pradesh. DAY-NRLM supported Rina by facilitating technical training from the National Institute of Fashion Technology (NIFT) and marketing of products through exhibitions and fairs. In addition to local markets and metro cities, her products have now earned a place in overseas markets also. She was also provided with a start-up loan of Rs. 7 lakh. Her business now has a turnover of more than Rs. 20 lakh while she trained 150 women in the Meggam works, the enterprises also employs 20 women.
- Gaidamma, a housewife in Anantapur zone, Andhra Pradesh, transformed herself into a business woman by setting up a food producer company with the support of DAY-NRLM. With a start-up loan of Rs. 20 lakh, the annual turnover is now over Rs. 5 lakh with more than 20 employees. Company specializes in production of a variety of sweets that are sold through local shops and distributors. DAY-NRLM supported the enterprise cluster in developing market linkages and fostering tie-ups with corporate clients.
- Sunaina, an ordinary honey producer from Buzurgapur, Bihar, increased production capacity from 40 to 120 bee boxes with the support of capital subsidy of Rs. 40,000 only. This intervention almost tripled her turnover to Rs. 2.5 lakh. The success proved a big motivation to other women to join her, and it ultimately led to formation of economic cluster worth Rs. 50 lakh with 271 women entrepreneurs. DAY-NRLM supported the economic cluster by providing technical and commercial training for enhancing production and quality of honey. It resulted in the reduction of input cost and an increase in income due to better qualitative pricing.
- Bhagradhi, along with six other women in Palakkad districts of Kerala started a small enterprise named 'Sama Food'. With an expansion plan, they could get microloans and credits from banks amounting to Rs. 6.50 lakh. The unit started production of food supplements for children, adolescents and pregnant women with assured supply to Anganwadis and other government organisations. With the financial and technical support from DAY-NRLM, the enterprise soon developed into cluster with an annual turnover of Rs. one crore.

Green energy or renewable energy (solar, wind, biogas, biomass, small hydro power etc.) is driving socio-economic transformation in rural, remote and difficult areas. Various renewable energy sources are providing clean and affordable power for lighting, cooking, irrigation etc. Of late, solar energy has also become a source of additional income for farmers. Recently launched PM KUSUM scheme is one of the largest initiative of the world to provide clean energy to more than 3.5 million farmers through solar energy set-up. Scheme is assisting farmers to substitute their diesel and grid connected irrigation pumps. Farmers are technically and financially assisted to raise solar power plants of upto 2 MW capacity on their barren lands or under some suitable crop fields. Sale of surplus power to DISCOMS provides regular and stable additional income to farmers.

Biogas technology is by far the most trusted, popular and effective renewable source of energy for rural areas. Biogas plants generally use cattle dung or other organic wastes to produce biogas that is mainly used as a clean fuel for cooking or lighting in rural homes. Currently, nearly 51 lakh biogas plants are serving rural homes to mitigate drudgery of women with many other social benefits. Biogas plants also produce organically rich 'slurry' that is used as biofertilizer in fields.

Government is providing Central Financial Assistance for deployment of solar street lights, solar study lamps and solar power packs to meet out the electricity and lighting needs of local communities or individuals in rural areas. During 2020-21, over three lakh solar study lamps were distributed to school going children in North Eastern States and left wing Extremism affected districts. About one lakh solar street lights were also installed in North Eastern and Hill states and Union Territories. Various Research and Development institutions have designed and licensed solar dryers for quality drying of agricultural produce and marine fish. Besides being affordable, solar dryers add money benefits over conventional open-air drying of commodities. Many rural entrepreneurs and SHGs are using renewable sources of energy to meet their daily power requirements.

Shiksha' (effective from 2018-19), a transformation has occurred in creation of modern infrastructure in schools, especially in rural areas. Besides school building and class rooms, essential and desired facilities were created such as separate boys and girls' toilets, drinking water facility, toilets for children with special needs, special facilities for 'Divyang' children etc. Various other facilitating and supporting schemes are also acting as catalyst to improve schooling in rural area. Recently launched National Education Policy (2020) has vision and provisions for increasing accessibility of quality education in rural areas. Emphasis on teaching and learning in regional languages and placing sports in main curriculum will go a long way in transforming education in rural and remote areas.

Easy access to clean drinking water has always been a dream for rural households. 'Jal Jeevan Mission' is striving hard to make this dream a ground reality by vigorously pursuing its goal of providing clean tap water to every household in the country by 2024. Recently, the mission achieved a milestone of providing tap water supply to every household in one lakh villages across the country, in a short period of 23 months. Despite COVID-19 pandemic and lockdown disruptions, the Mission provided 4.49 crore tap water connections and

has also elevated 50,000 Gram Panchayats to 'Har Ghar Jal' status. Currently, tap water supply has reached to 7.72 crore (40.77 percent) households. Cumulatively, 71 districts, 824 blocks, 50,309 Gram Panchayats and 1,00,275 villages have achieved the target of 'Har Ghar Jal'. Assured water supply in homes is saving women and young girls from the old drudgery of bringing drinking water from long distances with positive impact on health, education and socio-economic conditions.

To achieve sustained and sustainable rural transformation, Government is endeavouring to make socio-economic development in rural areas inclusive and holistic. Various schemes and programmes are designed to break the vicious cycle of poverty in rural India. Use of IT and digital technologies have made the transformation process fast, transparent and a two-way module to address grievances. In addition, the rural citizens are now empowered through public information systems about their various rights and entitlements. Rural transformation is ensuring rural India a life with dignity, respect and 'ease of living'.

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Womenpreneurs Driving Transformation

Amitabh Kant, Numan Agarwal and Anmol Sehgal

Women labour force participation is a driver of development, and their participation rates point to the potential for a country to grow more rapidly. It is closely linked with financial independence, resilience and ability to drive others, as well as to make an individual mark in the social environment. Entrepreneurship remains critical to harness the economic potential of women. Stimulating women entrepreneurship can also go a long way in bridging gender gaps and empowering women.

The population of India is over 135 crores, and over 67 percent of this population is between the productive ages of 15-64 years. Celebrating this demographic dividend, India has over 43 crore women population between the age of 15-64. Despite this, India's growth story has not leveraged the involvement of women in the workforce. Currently, India stands near the bottom of the ladder in encompassing the women participation in the labour force as per 2019 estimates considering the huge population (Figure-1). Looking at the absolute number of 10,05,08,600 women (Figure-2) in workforce as against 43 crores of working age population, approx. 33.24 crore women are untapped from engagement in workforce.

The economic outcomes of India have shown a steady rise over the last decade, along with a parallel surge in start-ups and new businesses, but the ambitious and aspiring women entrepreneurs struggle with less favourable conditions, pronounced cultural biases and a lack of business resources such as funding, infrastructure, training, and development. This not only affects their confidence but also holds back other women who would gain strength and support seeing these outshine and prosper. A society in which women are unable to realise their full potential loses out on the significant potential for innovation, economic growth, and job creation.

Entrepreneurship remains critical to harness the economic potential of women and thus, achieving the sustainable development goals.



(SDGs) by 2030. The global commitment for realising the sustainable development goals (SDGs) by 2030 focuses on poverty, tackling inequality and injustice, and has set distinct targets for ensuring economic empowerment and the well-being of women. Central to inclusive and sustainable development, there is an urgent need to harness the economic potential of women and for the same entrepreneurship remains critical.

In the coming decade, India will have the largest working-age population in the world with over 1 billion people. This demographic dividend, when pooled with an increasingly educated population, has the potential to change India's economic and social development trajectory. However, the private and government sector alone will not be sufficient in generating the required jobs. Hence, entrepreneurship opportunities for women has a vital role in boosting the economy through job creation but also deliver transformational social and personal outcomes for women.

McKinsey's Gender Parity Report 2018 noted that if India is able to address gender inequality – we could add about \$770 Billion to the GDP which will be equivalent to 18 percent more than the usual. Achieving this visionary but realistic goal requires understanding the status and barriers faced by aspiring women entrepreneurs across the landscape in India. Along with this, it is important to bring to the notice of aspiring innovators, various recent

government initiatives and efforts to bring women on board in the labour force market. This article withholds this approach to analyse the scenario of women entrepreneurship and also brings out important inspiring case studies of women who are stepping out in the industry to fulfil their aspirations and goals.

Participation of Women in Indian Economy

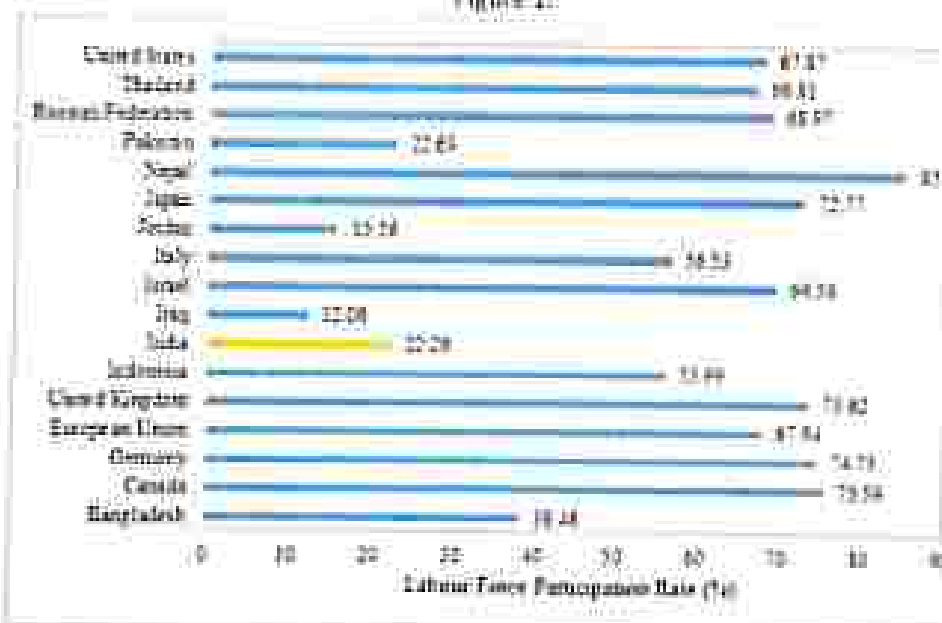
Women labour force participation is a driver of development, and their participation rates point to the potential for a country to grow more rapidly. The interlinkages between women labour force participation and social/economic development is much more directly proportional than described.

Figure 3 explains the trend of female labour force participation since 1990 after an interval of every 5 years. It is easily deductible that the participation has been incessantly falling from 31.79 percent in 2005 to 20.79 percent in 2019 whereas the world average for women participation rate in the labour market stood at a whopping 48.5 percent in 2018. One interpretation of a steady rate between 1990 and 2005 is that women who might have been forced to take the worst-paid, low-quality jobs because of poverty have withdrawn from those jobs as their overall household incomes may have risen because of male labour force participation.

Longer term trends have suggested that female

labour force participation rates in India have been puzzling. Female participation rates declined from 34.1 percent in 1999-00 to 27.2 percent in 2011-12. Along with this, there have been considerable variations between urban and rural areas. The participation rate of rural women decreased from 25.5 percent in 2009-10 to 25.3 percent in 2011-12, while the rate increased for urban women from 14.6 percent to 19.5 percent over the same period. India's rapid urbanisation

Figure 1:



Source: International Labour Organization, 2019-2021 database

is yet to encourage more women to join the labour force. Rural jobs have been decreasing and rural women have not been able to make the transition to working in urban areas. India ranks 120 among 131 countries in female labour force participation rates and rates of gender-based violence remain unsatisfactorily high.

It is difficult to imagine an inclusive and sustainable future when half of the population is not fully participating in the economy. The feature that distinguishes India from the world experiencing a dip is that all of them, excluding Turkey, started off with high levels of female labour force participation averaging around 58 percent.

The societal obligations for the women are a major reason for the setback in the participation rate in the labour force. The cultural norms that place the primary responsibility of routine domestic tasks, keeps the aspirations and strengths of women at bay. According to 2014 OWID data, India's female-to-male ratio of time devoted to unpaid care work stands at 5.83, which is the third highest in the world. On lines of these data in 2017-18, 62.1 percent of the women in the age group 15-59 were involved in domestic duty participation.

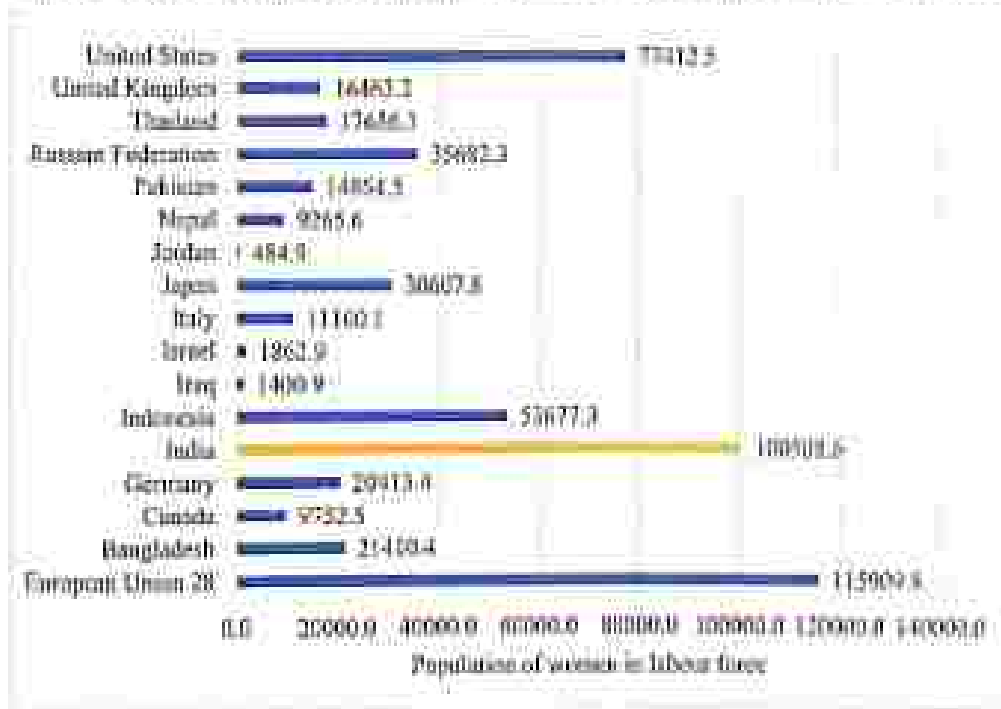
For developing countries like India, women's workforce participation is closely linked with financial independence, confidence and ability to

drive others as well to make an individual mark in the social environment. Entrepreneurship, self-employment and small and micro business significantly contribute to such job creations for aspiring women in the job market. Evidence shows that women led enterprises have a tendency to hire more women and hence female entrepreneurship creates a multiplier effect in generating employment in the wider community. Apart from advancing the economic empowerment of women, entrepreneurship enhances the social status of women through the ownership of assets and the freedom of decision making. Women's participation in the entrepreneurial landscape has multiple benefits, including the latitude that it provides with respect to earning their own livelihoods and gaining financial independence.

The Indian government has invested substantial resources to spur entrepreneurship through programs such as the Prime Minister's Employment Generation Programme (PMESG), Entrepreneurship Skill Development Programme (ESDP) and Startup India. Several state governments, CSR entities, and civil society organisations are also undertaking their own initiatives. Yet, the participation of women entrepreneurs in this ecosystem remains minimal. According to the latest available estimates, of the 58.2 million micro, small, and medium enterprises operating

in the country, only 14 percent or 8.05 million are owned by women. This is backed by evidence as well. India was ranked 52 out of 57 countries when it came to women entrepreneurs' ability to capitalise on opportunities offered by their local environments by the MasterCard Index in 2015. Stimulating women entrepreneurship can go a long way in bridging gender gaps and empowering women.

Figure 2: Labour force population, female (15+ age, figures in thousands) for year 2015



Source: International Labour Organization estimates

Challenges Faced by Aspiring Women Entrepreneurs

The role of women entrepreneurs in economic development is inevitable. Now-a-days women enter not only in selected professions but in professions like trade, industry and engineering. Women are also willing to take up business and contribute to the nation's growth. Their role is also being recognised and steps are being taken to promote women entrepreneurship.

In the last decade, there have also been focused institutional efforts such as Mahila e-Haat and Stand-up India to make women an active part of the entrepreneurial ecosystem of India by enabling access to funds, markets and mentors. However, deeply entrenched socio-cultural expectations act as systemic barriers leading to less-than-ideal participation from women entrepreneurs.

Access to Credit: Additionally, the risks associated with entrepreneurial ventures play a part in holding back aspiring women entrepreneurs who often have to tackle biased perceptions while seeking credit. Getting a loan from a financial institution requires adequate collateral and the gendered differences in asset ownership and the lack of sufficient savings, often disqualify women from receiving credit.

Domestic Responsibilities: For instance, in most Indian families, women are still operating within the framework of pre-assigned gender roles shouldering the sole responsibility for domestic chores and care giving for dependents. OECD reports that the average Indian woman spends nearly six hours on unpaid work each day with men contributing less than a single hour (52 minutes). With the management of the domestic realm falling on women alone, the time and energy required to run a functioning enterprise is not always feasible, making women sceptical and hesitant to enter the space.

Gender Biases: The undercurrent of gender biases

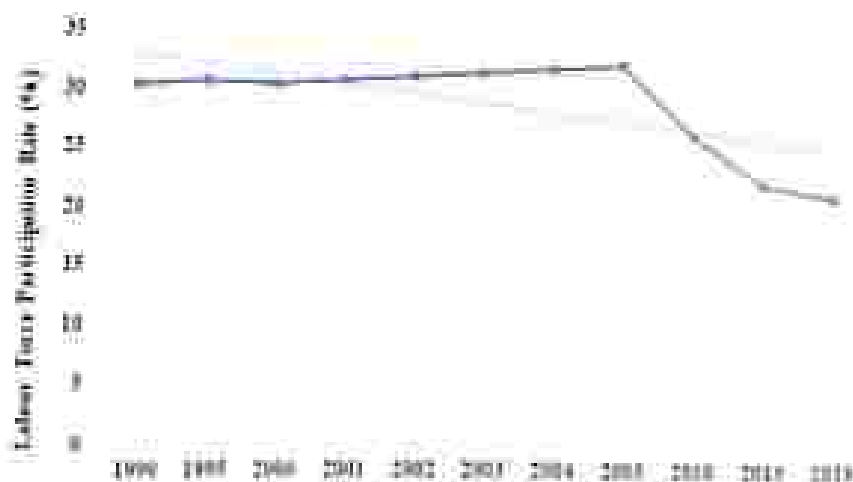
is starkest in the investment space for women owned enterprises. Women entrepreneurs are often hesitant to approach investors. If and when women do make investment pitches, investors have been found to prefer pitches presented by men as compared to those by women, despite having identical content.

Information Asymmetry: Another key challenge is the information asymmetry that implies the lack of access to different resources and support available to women entrepreneurs. Limited exposure to the world of business makes women with entrepreneurial ambitions undermine themselves and question their ability to succeed in the space. This under confidence is only heightened by the lack of formal training and consequent inadequate skill sets.

Lack of Role Models: Added to this, is the dearth of role models, limiting the confidence of aspiring women entrepreneurs, making success seem like an unbreakable glass ceiling. Visibility of successful role models in the public domain helps combat stereotypes and trigger change, and this lacuna can be felt in the Indian ecosystem with the inhibited development of an "entrepreneurial" spirit among young women.

Recognition of some of these systemic roadblocks has led to the Indian government launching several initiatives to encourage and support women entrepreneurs across the country. Some of these include the Startup India vertical dedicated to women entrepreneurship, National Skill Development Program's 'Enabling Women

Figure 1: Labour Force Participation Rate, Women (Percentage of population ages 15+) in India



Source: International Labour Organization, (DOI:10.1896/2012.01)

Entrepreneurs' skilling initiative and the special provision of 3 percent public procurement for MSMEs owned by women. However, slow implementation of these efforts and limited inter-departmental communication, results in many potential beneficiaries remaining unaware of these interventions.

Resolving ecosystem challenges in a holistic manner posits the need for a central hub that can address the challenges faced by women by aggregating knowledge and resources across the entrepreneurial landscape. However, the Indian ecosystem lacked such an entity/venue of support that could disperse relevant and accurate information along with rolling out programs catered to the specific needs of women entrepreneurs.

Role of NITI Aayog to tackle the Gender Bias in Entrepreneurship

Women entrepreneurs must be molded properly with entrepreneurial traits and skills to meet the changes in trends, challenge global markets and also be competent enough to sustain and strive for excellence in the entrepreneurial arena.

Based on the assessments and analysis of the data from the surveys and feedback from the Women Entrepreneurship Ecosystem, key areas of support were identified. These have been developed into six parallel work streams. These streams are curated in a manner so that the larger objectives, namely facilitate collaboration in the ecosystem, address the information asymmetry, facilitate capacity building programs and create role models for the larger ecosystem, offering services to users across its six work streams:

- 1. Community and Networking:** To build a robust network of women entrepreneurs to enable an ecosystem of support, learning, collaboration and mentorship by enabling key partnerships, WEP helps entrepreneurs realize their aspirations, scale-up innovation and chalk-out sustainable, long-term strategies for their enterprises.
- 2. Compliance and Tax Assistance:** Leveraging knowledge partners for resources around taxation, audit, business licensing and regulations.
- 3. Entrepreneur Skilling and Mentorship:** Imparting essential entrepreneurial and management skills to stimulate innovation and sustainability.
- 4. Funding and Financial Assistance:** Providing information on sources of funding, financial management for launch and expansion of enterprises.
- 5. Incubation and Acceleration:** Connecting women to incubation and acceleration programs for speeding up the growth of startups and early stage companies.
- 6. Marketing Assistance:** Providing guidance to help women-led businesses improve their online and offline market presence.

Atal Innovation Mission (AIM) is one such program initiated by NITI Aayog in the direction of supporting budding and existing entrepreneurs in their innovation expeditions. AIM is creating vibrant incubators through programs like Atal Incubation Centres (AICs) in Tier 1 cities and Atal Community Innovation Centres (ACIC) in Tier 2/3 cities along with aspirational districts across all States and UTs in India. The incubation centres not only helps the startups in scaling their ideas but provides them holistic growth and understanding. AIM provides support to these AICs and ACICs in creating world-class incubation facilities across the country with the physical infrastructure ranging from capital equipment and operating facilities to their incubatee start-ups coupled with the availability of sectoral experts for mentoring. Most of the AICs and ACICs established are sector-specific in areas such as manufacturing, transport, energy, health, education, agriculture, water, sanitation, Internet of Things, Cyber Security, etc. and promote unprecedented technological innovation in these sectors. Many of these startups supported are proudly run by women across states and UTs in India. One of the success story of AIC incubated women-led startups is described below:

K-Nomics Techno Solutions Pvt Limited: K-nomics Techno Solutions Private Limited is a Non-govt company, incorporated on 30 Dec, 2013 in Bengaluru. The startup has been incubated at Amrita Technology Business Incubator. Ms. Kalavani Chittaranjan is the Managing Director

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along with Ms. Sasmita Bebortha. Both have enormous experience in business management and project execution. They conceptualised 'MINTBOOK', an innovative way to bring learning resources to students with easiest access through a personalised digital library for learning. The company was recognised as an innovative solution by Indo-USSTF and presented in TIE Silicon Valley, California, USA in 2014. Mintbook was part of Walmart COHORT 3.0, Edupreneur LO top 3, Amrita Incubation and Pitchfest Winner in 2019. Mintbook was also recognised as Startup of the Year (Technology) by the Ministry of Electronics and Information Technology & NASSCOM, New Delhi in 2019.

AIM also runs a challenge-based program called Atal New India Challenge (ANIC). ANIC is an initiative aimed at supporting innovators to create products/solutions based on advanced technologies in areas of national importance and social relevance through a grant-based mechanism. The predetermined vision of ANIC is to help deep technology driven products find markets and buyers from the context of commercialisation. Applicants showing capability, intent, and promise to be able to productise technologies have been awarded grants of upto INR 1 crore, strictly on a milestone basis. A few success stories of women entrepreneurs carved out through ANIC initiative have been elaborated below:

Bioprime Agriolutions Pvt Limited: This is a startup based at Pune, headed by Dr. Renaka Karndikar builds resilience in crops against climate change, insects and pests using targeted Physiology modulating biomolecules. They have a unique solution for the same in terms of Smart Nanomolecules Induced Physiological Response (SNIPR). SNIPR is a unique approach to target and modulate these processes at specific points. Their technology venture has been supported by Venture center, Birac, Department of Biotechnology, NITI Aayog, PUSA IARI, IICM Govt of Telangana. They have also been conferred by various grants and recognitions at other platforms such as ICCI, CISCO, DPIIT.

Proximal Solsens Technologies Pvt. Limited: A startup led by Ms. Rajal Patkar co-created by professors at IIT Bombay is a Maharashtra based

enterprise. They work on creating solutions for improving crop yield through IoT enabled soil monitoring systems. The startup has indigenously developed SMART system based on micro/nano sensors for early detection of diseases in plants via AI and ML. The products use IoT (Internet of Things) technology to send data to the cloud as well as a phone application, which is then used by the farmers. Also, as part of funding given by AIM, NITI Aayog, they are revamping the hardware, adding additional sensors and adding decision support systems for various crops to add value to farmers. They have also received support from WIN Foundation, BIRAC, IIT Bombay.

Pristech Technologies Pvt Limited: Ms. Shampa Chaudhary and her team through her startup based in Bengaluru, have ventured on to create faster, safer and greener transit networks on Quantum Computations and displayed the same for ANIC competition. For the same they partner with cities, enterprises and operators to drive urban and transportation policies and make people move on a multi-modal transit network. Currently, they have piloted in 3 cities (Surat, Kolkata and Pune) and on boarding 4+ cities (Varanasi, Varodara, Bhopal and Bhujaneswar). They have engaged in MoU with MoHUA & several cities and strategic partnership with Cisco, I&T, BEL Ford etc to scale rapidly.

The upcoming women enterprises in the social sector is not only a confident step towards building a sustainable ecosystem dealing with problems in agriculture, education etc. but also a boost for the budding women entrepreneurs to learn and come forward with their ideas.

Conclusion and Way forward

It can be said that today we are in a better position wherein women participation in the field of entrepreneurship is increasing at a considerable rate. At this juncture, effective steps are needed to provide entrepreneurial awareness, orientation and skill development programs to women. The role of women entrepreneurs in economic development is also being recognised and steps are being taken to promote women entrepreneurship. From these suggestions it is quite viable that for development and promotion in the same field, there is a need for a multi-dimensional approach from different

stakeholders, namely government, financial institutions, NGOs, academic/non-academic institutions, existing women entrepreneurs as well as enterprises run by men for a flexible-integrated and coordinated specific approach.

The principal factor in developing entrepreneurship among women is not in terms of infrastructure or financial assistance or identifying an enterprise but it is a question of clearing the ground for their movement into entrepreneurship. For ages together they have been confined to a secondary role and confined to the homes and one has to make them self-reliant, self-respecting enterprising people.

Though there are several factors contributing to the emergence of women as entrepreneurs, the sustained and coordinated effort from all dimensions would pave the way for the women moving into entrepreneurial activity thus contributing to the social and economic development of the members of the family and thereby gaining equality and equal importance for themselves.

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Rashtriya Ekta Diwas

Vishnu Sharma

In 2014, Government of India decided to observe the birth anniversary of Sardar Vallabhbhai Patel, the first Home Minister of Independent India, as the "Rashtriya Ekta Diwas" (National Unity Day) on 31st October every year. The day is observed to highlight the efforts made by Sardar Patel for uniting country.

Sardar Patel was born on 31st October 1875. He was a very successful barrister who then joined the Indian National Movement for freedom from the British colonialism under Mahatma Gandhi. Shri Patel grew up to become one of its tallest leaders. He played key leadership roles in organising peasants' movements in Kheda, Barsoad and Bardoli in Gujarat and promoting the Quit India Movement against the British Raj.

Inaugurating the first National Unity Day at Vijay Chowk in Delhi in 2014, from where he flagged off Run for Unity, Prime Minister Shri Narendra Modi had said that the country's culture and legacy is Unity in Diversity and the citizens of India ought to rise above caste, creed, community and language and stand for the unity of the country.

Even since then, the National Unity Day is celebrated every year by organising variety of events involving people from all walks of life. Along with this, various programmes are organised by the Government of India to mark the occasion such as run for unity, pledge taking ceremony march past by the Indian police. The Run for Unity is held in all the major cities, district towns and various places in the rural areas. Youths from the schools, colleges, universities, educational institutes, National Cadet Corps, National Service Scheme and other organizations take part in the programme.

In 2018, Prime Minister Shri Modi inaugurated the statue of Sardar Vallabhbhai Patel, named the Statue of Unity, in Gujarat. It is located on the Narmada River in the Kevadia colony. The statue is the world's tallest statue, approximately 597 feet in height.

Every year the government introduces a theme to mark the occasion. The theme for National Unity Day 2016 was "Integration of India". In 2019, the Unity Day was celebrated with the theme: "To bring the nation together, united in times of strife and rising extremism". In 2020, the theme was, "Unity in diversity is better than unity in similarities".

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Role of Micro Finance and Micro Credit in Transforming Rural India

Dr. G. R. Chintala

Microfinance is emerging as a fast growing sector in India. It has transformed lives by mainstreaming rural women and making them partners in the nation building process. A multi-pronged strategy is now required for harnessing our demographic dividend, unleashing entrepreneurial spirit and increasing technological penetration backed by financial literacy in rural areas.

Give a man a fish, he'll eat for a day. Give a woman micro credit, she, her husband, her children and her extended family will eat for a lifetime.

— Paul David Hewson

Microfinance refers to the provision of financial services like loans, insurance, savings etc. to low-income groups like women, farmers, pensioners, etc. who are often left uncovered by the formal financial sector. Microcredit is a subset of microfinance and refers to small credit facilities extended for short term, many times at low interest rates to the needy people whose earning capacity is limited by the fact that they are unable to offer collateral, are often unemployed or have unsound credit history. The loan enables people, especially rural women to earn a livelihood, start their business and ultimately achieve financial independence thus reducing their dependence on loan sharks. Thus, microfinance plays a significant role in a country's economy by providing poor people the ability to fulfil their basic needs, manage their finances effectively and take advantage of economic opportunities while managing potential risks.

Microfinance in India

The term 'Microfinancing' in the modern times has its roots in the 1970s when the Nobel Laureate Muhammad Yunus founded the Grameen Bank of Bangladesh. Closer home, the search for delivering financial services to the rural poor in a sustainable manner led to two distinct approaches for extending microfinance in India, the bank led approach called Self Help Group – Bank Linkage Programme (SHG-BLP) and the Micro Finance Institution led approach.



The programme of linking Self Help Groups (SHGs) to banks was started on a pilot basis by NABARD in 1991-92 and since then it is being propagated, promoted and financed by the latter. The Self Help Group movement is a revolutionary initiative which connects group members, many of whom never had a bank account earlier, to formal financial services in a sustainable and scalable manner. Members are generally from economically homogeneous groups and come together through the process of self-selection. SHGs have well-defined rules and bye-laws, hold regular meetings, maintain records and keep savings and credit discipline. They are self-managed institutions characterised by participatory and collective decision making.

What began as a humble approach of improving the outreach of the banking system and deepening rural credit base, over the years, transcended into a holistic programme for building financial, social, economic and, of late, technological capital in rural India. The

program has reduced dependence of the rural poor on informal service providers such as moneylenders, pawnbrokers and so on, who charge usurious interest rates including some physical collateral and often resort to naming and shaming on delay of payments. Membership of SHGs has enabled economic empowerment of women through control of resources, political empowerment through participation in decision-making and social empowerment through better social standing obtained from better economic status. Thus, the SHGs have become the most powerful conduits for incubating and empowering women to move from subsistence to sustainability. The SHG-BLP has its outreach to 13.87 crore families, providing social, economic and financial empowerment to the rural poor, especially women. As on 31 March 2021, out of the 112.23 lakh SHGs under the SHG-BLP, 51.50 percent were credit linked to banks. Further, as against the total loans outstanding of Rs. 1,03,289.71 crore under SHG-BLP for all banks, the NPAs are at 4.73 percent.

Since 1999, Government of India (GoI) has been supporting promotion of the SHGs by way of special budgetary provision through 'Swarnajayanti Gram Swaroger Yojana' (SGSY) which was implemented with group mode of financing for covering all BPL families. Subsequently, in 2015, it was restructured as National Rural Livelihood Mission (NRLM) to work towards achieving universal financial inclusion of all the poor households which are organised into SHGs. NRLM was renamed as DAY-NRLM (Deendayal Antyodaya Yojana - National Rural Livelihoods Mission) w.e.f. 29 March 2016. The DAY-NRLM has supported nearly 70 lakh SHGs, with a cumulative outreach to nearly 7.5 crore families.

The success of SHG-BLP has also attracted the attention of State Governments who, through departmental initiatives, undertook major programmes of SHG promotion. Notable among the State Government initiatives were Andhra Pradesh's Podupu Lakshmi and Indra Kranti Patham programme, Jeevika Project of Bihar, Mahalir Thittam in Tamil Nadu, Kudumbashree in Kerala and TRIPTI/ Mission Shakti projects in Odisha.

Coming to the Micro Finance Institutions led approach which emerged in India in the late

1980s, in response to the gap in availability of banking service for the unserved and underserved rural population, these institutions follow a variety of credit methodologies. Many of them were inspired by the Grameen Bank in Bangladesh and the innovations taking place in Latin America. Voluntary agencies and Non-Governmental Organisations (NGOs) undertook financial intermediation as a part of larger social good. Many NGOs have also helped SHGs to organise themselves into Federations and these federations were performing non-financial functions like capacity building activities, promotion of SHGs, facilitating training of SHGs as well as undertaking internal audit. In the initial years of setting up of MFIs in their NGO-MFI form, NABARD assisted them with grant support and Revolving Fund Assistance (RFA). Later, NABARD helped a number of MFIs with quasi-equity and subordinated debt instruments from Micro Finance Development and Equity Fund (MFDEF). Compared to 2019-20 (141 lenders), there were 208 MFI lenders during 2020-21 which included 87 NBFC-MFIs, 58 NBFCs, 39 Non-profit MFIs, 17 Banks and 8 SFBs. The total industry loan outstanding as on 31 March 2021 is estimated at Rs. 2,47,839 crore with 1,028 lakh active borrowers. The microfinance customers, however, are facing challenges in terms of adverse impact on their businesses, loss of jobs, reverse migration to villages and lack of new opportunities due to COVID-19 which in turn has impacted the microcredit lending business and recoveries as well. To cater to the growing needs of the clients, the MFI sector aims to further deepen its outreach for providing sustainable financial services to the poor and vulnerable families pan India.

Initiatives of NABARD for the Microfinance Sector

The SHG-BLP which emerged as a powerful force facilitating women empowerment, financial service delivery and poverty alleviation has been strengthened by the various interventions initiated by NABARD.

NABARD provides grant support to partner agencies like NGOs, Federations of SHGs, CBs, RRBs, NGO-MFIs, CCBs, PACS, Farmers' Clubs, Individual Rural Volunteers (IRVs), etc. for promotion, nurturing and credit linkage of SHGs with the banks. Catalysed by the grant support and the committed efforts of Self Help promoting institutions, a spectacular 112.23 lakh SHGs were savings linked to banks as on 31st March 2021. Cumulatively the grant support sanctioned is



to the tune of Rs. 42635.85 lakh, out of which Rs. 17123.45 lakh has been released as on 31 March 2021. Funding for the SHGs/Agencies was done from the 'Financial Inclusion Fund' to support initiatives that are focused on mentoring, handholding and evuating financial literacy.

Another initiative is the Scheme for promotion of Women SHGs, which is a targeted scheme implemented by NABARD in association with the Govt. of India, for promotion and financing of Women Self Help Groups in 150 identified backward and Left Wing Extremism (LWE) affected districts of the country. Besides achieving a commendable target of savings linkage of 2.11 lakh WSHGs and credit linkage of 1.28 lakh WSHGs, support has also been extended for newly introduced activities like Gram-Dukan, funding of impact assessment studies, films, exposure visits, publications, exhibitions, melas, promotion of tie-ups for marketing, etc.

Further, under its JLG promotion support initiative, NABARD extends grant support for formation and nurturing of JLGs to Banks and other JLG promoting institutions. For strengthening JLG financing, NABARD also extends (a) financial support for awareness creation and capacity building to all stakeholders of the programme and (b) Refinance support to those banks which finance JLGs. The cumulative number of JLGs promoted as on 31 March 2021 is 131.83 lakhs, depicting a net growth of 45 percent over 2015-20. With a view to give a fillip to the Government of India's programme of doubling of farmers' income by 2022, in consultation with NABARD, share of financing to the SF/MF/tenant farmers has been developed as one of the benchmarks for monitoring the flow of credit to this segment by RBI. In terms of non-financial support intervention, NABARD has been organising training programmes and exposure visits to successful JLGs.

NABARD, while promoting NAFFINS, its subsidiary exclusively for microcredit, had envisaged that the latter shall evolve into a Model Microfinance Institution to set standards of governance among the MFIs, operate with exemplary levels of transparency and operate at reasonable/moderate rates of interest. In this endeavour, a pilot project has been sanctioned to NABFINS as JLGPI for promotion and self-financing/direct credit linkage of JLGs in 5 states.

In addition to this, NABARD tries to supplement its microfinance initiatives with SHG based livelihood interventions recognising their

importance in holistic financial inclusion and poverty alleviation. Thus in order to stimulate micro entrepreneurship movement in rural India, Micro Entrepreneurship Development Program (MEDP) was launched in 2006 to provide grant assistance for skill upgradation through training in both farm and non-farm activities. Cumulatively 5.22 lakh SHG members have received training through 18,434 MEDPs with total grant support of Rs. 3509.59 lakh as on 31 March, 2021. Further, NABARD also operationalised MEDPs on NABSKILL portal in July 2019 to bring in speed and efficiency and ease of application processing.

Building on the success of MEDP, Livelihood and Entrepreneurship Development Programme (LEDP) was launched in 2015 which envisaged conduct of livelihood promotion in both farm and off-farm activities under project mode in clusters around contiguous villages, with a provision for intensive training for skill building, refresher training, backward-forward linkages, handholding and escort support for credit linkage. The focus was also on value chain support and promotion and working closely to offer end-to-end solutions to the SHG members. As on 31 March 2021, 136098 SHG members have been supported through 1284 LEDPs with grant sanction of Rs. 6332.82 lakhs from NABARD. A recent example of innovation under LEDP through NABFOUNDATION is the pan India project 'My Pad My Right' where the SHG members are trained in basic hygiene, running machines and marketing as a complete livelihood-based activity. This project aims to ensure access to affordable menstrual pads to rural women along with increased awareness in the community and adoption of sustainable menstrual waste management practices.

Further, NABARD provides support for training and capacity building to microfinance clients like bankers, NGOs, government officials, SHGs, SHG Federations and trainers. Cumulatively, 42.17 lakh participants under FIF and 3.70 lakh participants under WSHG have been imparted training till 31st March, 2021, thus supporting the creation of a strong, highly skilled and experienced team for implementation of the microfinance programmes.

In line with Government of India's "Digital India" mission, EShakti, a pilot project for digitisation of SHGs was launched by NABARD in the year 2015 in two districts Ramgarh (Jharkhand) and Dhule (Maharashtra). It aims at digitisation of data of all SHGs for enhancing

the ease of doing business. The project captures information on the existing SHGs as well as all financial transactions taking place within the group and with banks on a real-time basis. The database thus generated, provides reliable and up to date information on SHGs and its members to banks and other stakeholders, enabling them to take credit decisions. As on 31 March 2021, project EShakti is being implemented in 781 districts in the country and covers 12.33 lakh SHGs. Digitisation addresses issues like quality of bank keeping, multiple membership of SHG members, uneven credit history and provides online grading report of any SHG based on its financial and non-financial records.

Another initiative in deepening microfinance is the Centre for Research on Financial Inclusion and microfinance (CRFIM), which was set up in BIRD in 2008 and takes up research activities in the field of Microfinance and financial inclusion with an aim to facilitate policy initiatives and continuous improvement in design and delivery system in the said space.

NABARD has been extending 95 percent refinance to banks towards their lending to SHGs, ILGs, Rythu Mitra Groups and MFIs to supplement their resources and boost their bank credit availability. As on 31 March, 2021, cumulative disbursement of refinance by NABARD for SHG lending stood at Rs. 90,821.81 crore. Further NABARD supports MFI by way of Long Term Refinance since FY 2014-15. NABARD also implements the Interest Subvention Scheme for Women SHGs under the DAY-NRLM for Regional Rural Banks (RRBs) and Cooperative Banks in Category I districts. Further, as a part of collaboration between NABARD and DAY-NRLM, regional offices of NABARD are coordinating with the concerned SRLM to achieve the goal of training of all rural bank managers. State level sensitisation programmes on SHG-ILP for senior bank executives have also been organised in coordination with SRLMs with the overall objective of increasing credit linkages. Many SRLMs have also been roped in as implementing agencies for EShakti in several states.

During the COVID-19 pandemic, NABARD has taken up some special initiatives to support SHG members both in terms of health advisory and promotion of livelihood support activities. These include usage of EShakti portal for sending health advisory SMS to 40 lakh SHG members, helping SHGs in making face masks/hand sanitizers/PPE kits, distributing essential items/ grocery

kits/vegetable hamper, setting up of grain bank, running awareness drive, etc. Further, keeping in view the labourers' reverse migration to rural areas, allocations under MEDPs, LEOPs and Capacity Building were also increased substantially to provide adequate skill set for employment in rural areas. For FY 2020-21, in comparison to the previous year, the number of MEDPs were tripled and LEOPs doubled to augment skills of rural folk for enhanced employment.

Challenges and the Way Ahead

With the success of NABARD supported SHG bank linkage programme, progress made by DAY-NRLM in forming and supporting SHGs and with the role of MFIs, the country now has a cumulative outreach of over 138 million poor families under the SHG programme. The next logical step is to consolidate this gain in terms of social capital and initiate actions to develop a self-reliant sector contributing to the country's economic growth in the coming years. However, in order to achieve this, it is pertinent to understand and address the major challenges that the sector is facing.

The credit absorption capacity of SHGs and the availability of per member credit remains quite low, posing challenges in their graduating towards enterprise or substantial income generating activities. Further, the pandemic also had ramifications for livelihood based skill trainings of SHGs. Due to the lockdown and restrictions on public gatherings, the capacity building programmes for SHGs were adversely impacted. It has also been noted that along with backward linkages such as imparting skill, arranging for proper forward linkages, specifically market linkages for sale of products and adequate handholding and continuous guidance is paramount for graduating from a SHG to a successful enterprise.

There are also regional imbalances in the growth of the microfinance sector with Southern States having 36 percent share in total bank linkages while Northern and NE regions lagging behind with only 3.4 percent and 5.6 percent bank linkages respectively. Thus special focus needs to be lent to nurturing SHG-ILP in the regions lagging behind. The pandemic has not only underlined the need for assessing the level of resilience in SHG-ILP and preparedness to adapt in the wake of black swan events but also highlighted the importance of adopting technology based solutions for furthering the agenda of microfinance. These aspects will have to be pursued further. Besides

with multiple institutional players such as SFIs, NRLM, SIDBI, MUDRA and others operating in the microfinance field, the programme architecture must be revisited for better alignment of objectives and forging strategic partnerships.

To conclude, there is a need for increasing the average loan per group in SHG-BLP so as to enable them to graduate and become micro entrepreneurs deploying more capital, using better technology and operate sans seasonal fluctuations. Creation of a directory of SHG products which documents the skillset of the groups would further facilitate marketability of the SHG products. Special emphasis through focused capacity building should be given to underserved states/districts in Central, Eastern and North-Eastern Regions, as underlined in the latest priority sector guidelines by RBI. Linking at the big picture, financial literacy through the use of technology and financial inclusion through the use of JAM Trinity (i.e. Jan Dhan, Aadar and

Mobile) can be a game changer in microfinance penetration. In this light, adoption of EShakti portal by banks by way of linkage with their CBS and partnering with Fintech agencies, has the potential of manifold increasing of credit outreach and easy availability of digital banking to SHGs. Various institutions like NABARD, SIDBI, MUDRA etc. work closely and align initiatives to the DAY-NRLM. This could be enhanced by more financial institutions proactively and effectively using the large SHG customer base to reach out to the poor and vulnerable sections. Only with collaborative efforts by all the players, the unserved and under served in rural and remote regions can be efficiently and effectively served.

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एक भारत श्रेष्ठ भारत

Ek Bharat Shreshtha Bharat

Prime Minister Shri Narendra Modi announced the "Ek Bharat Shreshtha Bharat programme" on 31st October 2015 on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel. The programme aims to enhance interaction and promote mutual understanding between people of different states/UTs through the concept of state/UT pairing. The states carry out activities to promote a sustained and structured cultural connect in the areas of language learning, culture, traditions and music, tourism and cuisine, sports and sharing of best practices.

It is to be noticed that India is a unique nation and its fabric has been woven by diverse linguistic, cultural and religious threads that are held together into a composite national identity which consists of its various cultural and shared history of our freedom struggle against the British colonialism. The spirit of mutual understanding amidst a shared history has enabled a special unity in diversity, which stands out as a tall flame of nationhood that needs to be nourished and cherished into the future.

All States and UTs are covered under the programme. The States and UTs are paired at national level. The State/UT level pairings are utilised for state level activities. District level pairings are independent of the State level pairings. The activity is very useful to link various states and districts in annual programmes that further connect people through exchanges in areas of culture, tourism, language, education trade etc.

Broadly, the objectives of the initiative are: to celebrate the Unity in Diversity of our nation and to maintain and strengthen the fabric of traditionally existing emotional bonds between the people of our country, to promote the spirit of national integration through a deep and structured engagement between all Indian states and union territories through a year-long planned engagement between states, to showcase the rich heritage and culture, customs and traditions of either state for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity, to establish long-term engagements, and to create an environment which promotes learning between states by sharing best practices and experience.

(The author is Delhi based senior journalist. Views expressed are personal)

Ayushman Bharat-Transforming Health

Manjula Wadhwa

Ayushman Bharat will become a game-changer for the masses in the coming years. It will improve India's ranks in human development indicators. With the robust architecture and prompt rollout of the PM-JAY, universal healthcare is likely to become an affordable dream for all.

Development of the health sector from primary up to the tertiary sector in an economy triggers a series of socio-economic developmental milestones - disease burden reduces, health outcomes improve, out-of-pocket health expenditure comes down, poverty rates decline. As a matter of fact, the investment in healthcare initiates a domino effect in the development of an economy. Good health and adequate nutrition are the best indicators of the overall well-being of population and human resources development, which also form an important component of human capability. Despite the passage of 74 years of independence, rural India lags behind urban India in several indicators; Infant Mortality Rate, Percentage of Anaemic Population, Various Health Indicators and Access to Basic Services. The 71st round of National Sample Survey Organisation reveals that staggering 85.9 percent of the rural Indian households do not have access to any health care insurance or assurance. Studies reveal that between 2004 and 2014, the average medical expenditure per hospitalisation for urban and rural patients has risen steeply by 176 percent and 160 percent respectively. Thus, the lack of financial health protection, especially for the poor and vulnerable sections of rural India, creates a burden of health expenditure for them.

Meanwhile, rising private healthcare costs have made their services virtually unaffordable for the common man. In the light of these challenges, the Government of India has made a stellar move by bringing the private sector on board for providing affordable healthcare. By leveraging the insurance-based model, it intends to make private healthcare accessible to all. In no way does it leave healthcare for the masses to be monopolised by the unaffordable private health sector. Rather, it



has strategically ensured universal access to the multi-speciality health infrastructure and facilities through the empanelment of private hospitals under the scheme. The Central government with primary objective of "Sabka Saath Sabka Vikas", launched Ayushman Bharat in 2018 as recommended by the National Health Policy 2017, to achieve the vision of universal health coverage. This initiative has been designed to meet Sustainable Development Goals (SDGs) and its underlining commitment, is to "leave no one behind." The launch of PM-Jan Aarogya Yojana is India's ticket to entering the league of universal healthcare (UHC) providing nations like UK, Thailand, Brazil and Sri Lanka. It is an attempt to move from sectoral and segmented approach of health service delivery to a comprehensive need-based health care service. This scheme aims to undertake path breaking interventions to holistically address the healthcare system (covering prevention, promotion and ambulatory care) at the primary, secondary and tertiary level. In 2015-2016, the overall health expenditure in India was just 3.8 percent of the total gross domestic product (GDP), and the government's contribution to it was nearly 1.18 percent of GDP. For

this colossal programme, the government has so far allocated 100 billion rupees (almost US\$1.5 billion) for 2018–2019, 2019–2020 and 2020–21. This means that a beneficiary will be allowed to take cashless benefits from any public or empanelled private hospital across the country. State health authorities will lead the implementation of the AB-PM-JAY, and they are free to continue to provide existing programs alongside the national program or integrate them with the new scheme. States will also be able to choose their own operating model to either use the expenditure to pay a private insurance provider to cover services or provide services directly (as elected by Chandigarh and Andhra Pradesh, for example), or a mix of the two (as in Gujarat and Tamil Nadu). A pilot of the program, involving only public hospitals initially, was launched in August 2018 across 110 districts in 14 states and union territories, with a large number of private hospitals having since been empanelled under the programme.

Ayushman Bharat adopts a continuum of care approach, comprising of two inter-related components:

1. **Establishment of Health and Wellness Centres** - The first component, pertains to creation of 1,50,000 Health and Wellness Centres which will bring health care closer to the homes of the people. These centres will provide Comprehensive Primary Health Care (CPHC), covering both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services. Here, the emphasis of health promotion and prevention is designed to bring focus on keeping people healthy by engaging and empowering individuals and communities to choose healthy behaviours and make changes that reduce the risk of developing chronic diseases and morbidities.
2. **Pradhan Mantri Jan Arogya Yojana** - This is another significant step towards achievement of Universal Health Coverage and Sustainable Development Goal 3 (SDG3). PM-JAY is the largest health insurance scheme in the world which aims at providing a health cover of Rs. 5 lakh per family per year for secondary and tertiary care hospitalisation to over 10.74 crore poor and vulnerable families (approximately 50 crore beneficiaries) that form the bottom 40 percent of Indian population. The 10 crore

families comprise 8 crore in rural areas and 2.33 crore in urban areas. The households included are based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011). Earlier known as the National Health Protection Scheme (NHPS) before being rechristened, it subsumed the then existing Rashtriya Swasthya Bima Yojana (RSBY) which had been launched in 2008. The coverage mentioned under PM-JAY, therefore, also includes families that were covered in RSBY but are not present in the SECC 2011 database. PM-JAY is fully funded by the Government and cost of implementation is shared between the Central and State Governments. For eight states of the North East and the Himalayan states, the sharing is 90:10, for other states, it is 60:40. For union territories with a legislature and for those without a legislature, the sharing patterns are 80:40 and 100:0 respectively.

Now, let us deliberate over the key benefits of the programme.

One of the biggest advantages of the program is higher sum insured. Most of the schemes like the Rashtriya Swasthya Bima Yojana (RSBY) or the various other state sponsored schemes provided coverage between Rs. 30,000- 3 lakh. Whereas Ayushman Bharat provides Rs. 5-lakh coverage on a family floater basis at no cost to the insured citizen. Secondly, there is no cap on the number of family members who are covered, this was earlier subject to a maximum of 5 family members. Also, there is no discrimination on the basis of gender, caste, creed or physical ability of the person which aims to make this scheme totally inclusive. Pre-existing diseases are covered from the day of enrolment which is a huge advantage for insured citizens. Ayushman Bharat is an entitled-based scheme for the socio-economic bottom layer of the rural society. Hence, the premium is shared by the Central and State Governments at no cost to the insured beneficiary. Further, as a secondary and tertiary care cover, this program covers all aspects of in-patient treatment including pre/post hospitalisation, medical consultation, diagnostics, medicine and supplies, accommodation etc. Out-patient treatment coverage is, however, not covered under this plan. A wide network of 23,000 hospitals, both public and private, empanelled under this scheme makes healthcare accessible to

people even in the remotest parts of the country. Coverage for COVID-19 treatments is also now part of the Ayushman Bharat scheme. The pan-India coverage of the program makes it convenient for migrant labourers and people involved in trades that require constant movement, to avail healthcare anywhere in India. Because of more than 1400 treatments covered under it, it ensures that patients can get treated for a large number of diseases which have unique treatment procedures. There is also a possibility of choice between the old and the cutting edge method. It allows the beneficiaries to avail free services from either public or an empanelled private hospital. All pre-existing diseases are also covered, and the hospitals are not allowed to charge any fees. The coverage includes 3 days of pre-hospitalisation and 35 days of post-hospitalisation expenses also.

As we all know, the grass of every pasture is not all green. Governance and Stewardship of the Program is a big challenge. Factually, the progress towards UHC must be seen in light of the severe challenges facing the Indian system. The extent and distribution of health facilities for secondary and tertiary care level in public as well private sectors are highly uneven. According to a recent study, the number of private hospitals in health insurance network in Bihar has 253, whereas in contrast, Maharashtra has >3000 private hospitals in the network. Bihar and Maharashtra contribute to 10.4 percent and 8 percent of total beneficiaries of PMAY, respectively. More importantly, around 65 percent of the private hospitals in the country have strengths of 11-50 total beds, which can significantly limit their ability to function as a tertiary care center. The country is beset with deficiencies in the resources available to fund healthcare, the skilled workforce and infrastructure available to provide care, and oversight of healthcare provision. Private providers have become the dominant provider of care in India, and thus UHC is unlikely to be achieved without engagement with this sector. The profit motive that drives the behaviour of these providers, however, has led to concerns that services may be encouraged to sometimes act against the public interest. Regulation and oversight of these providers in our country is often poor. The private providers more frequently deviate from evidence-based practice, have poorer patient outcomes,

and are more likely to provide unnecessary testing and treatment and the data that do exist from India have mirrored these findings. At the same time, public providers in India have been shown to face significant governance challenges as well, with services shown to be rife with absenteeism, of poor quality, and nonexistent in many areas of care. Corruption at all levels of the system from doctor training to investment decisions remains a major issue.

Another much-lauded feature of PMAY is the portability of benefits across states. However, due to the uneven distribution of health facilities across states, this feature of the scheme can significantly complicate the future development of health-care infrastructure and health systems. The relatively better treatment facilities available in better-performing states of the country are likely to attract more patients from states with inadequate facilities. This may result in two possible scenarios. In the first scenario, the health facilities in better-performing states may not be able to cope up with increased load of patients, and quality of services get compromised. In the second scenario, if the health system in the better-performing states is able to cope up with increased service demand, then it will lead to the transfer of funds spent on the scheme from poor-performing states to the better-performing states. In the long run, the health infrastructure in the better-performing states will get further boost utilising resources from the poor-performing states, thus widening the inequity between states. In both the cases, the poor-performing states will end up having limited capacity for infrastructure development and overall health system strengthening.

Engaging with the private sector in near-complete absence of regulation and "laissez faire" health-care market is another significant challenge. The Clinical Establishment Act, 2010 with the mandate to register and regulate health facilities has failed miserably in regulating the private sector in ten states and Union Territories, where it was implemented. Other states have diverse form of regulatory policies with variable outcomes. The absence of standard treatment guidelines (STGs) and protocol and evidence of empirical practices can be one more important bottleneck. In the absence of robust regulation and STGs, the cost of care and

overall budget for the scheme may rise steeply in due course of time.

The amount allocated to PMJAY in two subsequent annual budgets (2018-2019 and 2019-2020) is also proportionately much lower to cover the targeted 40 percent of the population of the country. Around Rs. 3200 crore was allocated for the scheme in the 1st year and Rs. 6400 crore in the subsequent year. Even if only 5 percent of the beneficiary families claim 20 percent of the insurance amount (i.e. Rs.5 lakh) which they are entitled to, the estimated expenses would be Rs. 50,000 crore per annum, without accounting for the running cost of the scheme.

In effect, the Policy interventions to lead India towards UHC need to factor in the above difficulties and make tangible inroads into overcoming them. Normally, the institutional inefficiencies common in health systems, are often difficult to change once embedded because change often creates winners and losers. The size and scope of the announced program, however, presents something of an opportunity to overcome some of this fragmentation and set India onto an optimal path to UHC if it is able to constructively work to overcome these challenges. Fundamental to doing so, will be ensuring appropriate governance and quality of the healthcare provided especially to the rural population. As new services are provided and coverage increased, successful implementation requires a parallel concerted push towards quality assurance, appropriate governance, and appropriate referral pathways in both public and private healthcare providers. Given the importance of private providers in India, there is a need to strengthen the stewardship function of the government to monitor the provision of care from these providers. This could occur in a number of ways, such as through the development of robust referral pathways for patients, quality audit of providers, incentives to improve the efficiency and quality of care, strategic purchasing and a general strengthening of the capacity of the public sector to effectively contract with and regulate the private sector.

Apparently, it seems that PMJAY can potentially reduce the incidence of catastrophic health expenditure for the downtrodden households although its impact on reducing the Out of pocket expenses (OOPE) seems to be very limited owing

to the fact that currently 60 percent of OOPE is incurred on outpatient care, which is not included in the scheme. PMJAY can probably be helpful for chronically ill patients from lower socio-economic strata requiring frequent hospitalisation or expensive procedures such as dialysis. It can also incentivise the existing secondary and tertiary care public health facilities by infusing more insurance claim money. In the long run, of course, this scheme has the potential to enable the growth of the private sector in second and third tier cities, thus giving the rural Indian more choices.

Conclusion

As on 17th August 2021, around 26.50 crore beneficiaries have been identified and issued Ayushman e-cards. Since launch of the scheme till date, over 2 crore hospital admissions estimated to be worth more than Rs 25,000 crore have been authorised across the country. On an average, approximately 7% beneficiaries are verified per minute and atleast 20 pre-authorisations take place per minute under the scheme. The results definitely testify effectiveness of this scheme. For a scheme of the nature of Ayushman Bharat, the responsibilities of the government further expand to include putting in place complex regulatory framework for the private sector, establishing ombudsman to protect the rights of the people vis-à-vis the health insurance providers and the preparedness of the system to deal with challenges as they arise. Thus, whilst these weaknesses pose a threat to the ability of proposed reforms to meet their ambitious objectives, by providing the impetus for systemic reform, AB-PMJAY presents the nation with a chance to tackle long-term and embedded shortcomings in governance, quality control, and stewardship.

To deduce, AB-PMJAY has a very critical role to play in the social transformation of the rural masses especially, during COVID-19 times. All efforts must be stepped up to ensure that all essential and non-essential hospitalisation care is provided both through public and private empanelled hospitals under AB-PMJAY in convergence with primary care provision through the public health infrastructure.

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Smart Villages: Towards Information Superhighway

Balendu Sharma Dadhich

Availability of broadband connectivity is surely bringing new opportunities to India's villages as they will be better connected with the country's digital infrastructure. The government believes the proliferation of broadband in rural areas will bridge the rural-urban divide of digital access and accelerate the achievement of Digital India. The penetration and proliferation of broadband is also expected to increase direct and indirect employment and income generation. After the smart cities, the smart villages are going to be a big step forward in our quest to make India digital.

We are on our way to develop 100 smart cities in India which are going to become a showcase of India's growth, future vision, technological strength and a vigour to build a new India. While the smart cities are often discussed in the media and on national and global platforms, there is something that we usually miss to take cognisance of. Thanks to some important initiatives taken by the Central and State Governments, the rural India is no stranger to the process of digital transformation taking place in the country. Already, we can see

a host of 'smart villages' emerging in the country showing the way for a technologically empowered and sustainable future.

Recently, Gujarat became the first state in India having truly smart villages using LiFi based optical wireless communication system. Akrund and Navaragar villages in Dhansura Tehsil of the Aravali district are getting safe and faster internet connectivity over existing electric power lines. LiFi is a mobile wireless technology that uses light rather than radio frequencies to transmit data. The technology is considered as the next generation



of wireless Internet which has great potential for seamless integration into the 5G core. With a reliable Internet connectivity in place, various government offices in the two villages have started to leverage government infrastructure of online services.

This is a small example of how rural India is employing diverse and innovative ways to establish a connection with the information superhighway. After all, connectivity is a pre-requisite for growth in the digital age. In the changing dynamics, it will be crucial to ensure that every citizen of this country gets access to good education, livelihood and health; and communities prosper. Even today, many people have to travel large distances to access government services and banking, filling out forms, and getting access to legal documents. With an ever-increasing footprint of rural connectivity, these may be a thing of past in a few years. A World Economic Forum report had recently linked internet access to improved economic outcomes including development, education and jobs.

Changed realities in the post pandemic era have further underscored the need for a reliable and faster connectivity across the country including the villages which bear the brunt of the digital divide. Given the size of the country and its phenomenal diversities, the goal to connect every single village with Internet is not an easy one. However, we continue to make good progress on this front. The developments in villages such as Akroth and Navanagar provide a glimpse to the impending change.

Mori village in East Godavari district of Andhra Pradesh presents another example of digital transformation. The village is actually known as the Super Smart Village due to its excellent use of smart connectivity. All households (about 1200) in the village enjoy Wi-Fi connectivity and almost all transactions in the village are cashless. Broadband Internet flows in the village at a speed of 15 Mbps which is good enough for even advanced digital activities like video calls and telemedicine. The village is connected with fiber grid. Each household has access to cable TV; use of e-banking, AP Purse, Rupay cards and SBI Buddy is extremely common for financial transactions; and each grocery shop

has e-pos Machines. Welcome to an iconic smart village of India!

Connectivity at the Grassroots

In his Independence Day address in 2020, the Prime Minister, Shri Narendra Modi had expressed his government's commitment to provide broadband connectivity to all villages within a period of 1000 days. Recently, the government had said that out of 2,50,000 gram panchayats in India, 1,56,000 have already been connected with broadband. Additionally, on June 30th last, the Union cabinet approved a plan to extend BharatNet, the government's rural broadband connectivity program, to 3,60,000 villages in 16 states. The cabinet approved the extension of BharatNet to inhabited villages in rest of the states and UTs as well. To ensure timely implementation and wider coverage of the plan, the government has also revised its strategy to implement the program. This will now be implemented through Public Private Partnership (PPP) mode. The states coming under this programme are Rajasthan, Himachal Pradesh, Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, Kerala, Karnataka, West Bengal, Assam, Meghalaya, Manipur, Mizoram, Tripura, Nagaland and Arunachal Pradesh.

Availability of broadband connectivity is surely bringing new opportunities to India's villages as they will be better connected with the country's digital infrastructure. The government believes the proliferation of broadband in rural areas will bridge the rural-urban divide of digital access and accelerate the achievement of Digital India. The penetration and proliferation of broadband is also expected to increase direct and indirect employment and income generation.

Right from the beginning of his first tenure as the Prime Minister, Shri Narendra Modi has been committed to all-round development of India's villages which includes an easy access to Internet. On Jayprakash Narayan's birth anniversary in 2014, he had unveiled a blueprint for Saansad Adarsh Gram Yojana (SAGY) which originally had a provision for the members of parliament from both houses to identify, adopt and develop three villages (one in the first phase and two more in the second phase) from their constituency as model villages. Rajya Sabha MPs can select a village in any district of the state

from where they have been elected. In 2019, the government added five more villages to the target, to be implemented in the third phase by 2024.

Under the plan, the members of parliament are expected to utilise their MPLAD funds for development of these villages. Another focus of the scheme is to improve implementation of already existing government schemes for rural development and connectivity, such as MNREGA, Midday Meal Scheme, Aadhaar Enrolment and Backward Regions Grants Fund. The plan also expects setting up of smart schools with IT-enabled classrooms and e-libraries and improvement in panchayat infrastructure.

Initiatives by State Governments

Even some state governments have come forward with their own plans to extend the footprint of broadband connectivity in their states. The Uttar Pradesh government has prepared an action plan to convert all rural areas into 'smart villages' with an objective to ensure that the benefits of the welfare schemes are provided to the last person of the society. Chief Minister of Uttar Pradesh, Shri Yogi Adityanath has announced that the state's gram panchayats will be made digital. The government spelled out the vision behind the program which is centered on three key areas: digital infrastructure as a utility to every citizen, governance and services on demand, and digital empowerment of citizens. This essentially means that every citizen in the state is going to have his digital identity, mobile phone, bank account, and safe and secure cyberspace. They will be provided government services in real-time on online and mobile platforms, making financial transactions electronic and cashless. Finally, all documents and certificates will be made available on the cloud.

An innovative dimension of these smart villages is the Digital Village Scheme in which they are provided facilities like mini bank, mini-ATM, hotel booking, and mobile and DTH recharge. E-pathshalas are being set up where farmers will be taught about various agricultural and cultivational techniques over digital platforms which is expected to add value to their knowledge and skills. The farmers will also get all information

regarding the weather conditions on a regular basis and in real-time.

Maharashtra government is also focusing on development of smart villages and has launched an ambitious project called State of Maharashtra Agribusiness and Rural Transformation (SMART) covering 10,000 villages. Under the scheme, launched under the tenure of the last government, MoUs were signed between big corporates and farmers producer groups including Reliance Retail, Amazon, Walmart, Mahindra Agro, PepsiCo, Tata Hall's, Big Basket, Patanjali, Tata Chemical, Happy Roots, Mera Kisan, Way Cool etc. The scheme is being assisted by the World Bank. The scheme targets villages with socio-economic backwardness. Under a separate plan, the state government is also offering cash prizes to top villages at taluka and district levels under a scheme that seeks to transform rural Maharashtra through development initiatives. Villages performing well in use of information technology, cleanliness, health, education, environment and renewable energy sources will be rewarded by the state government.

Other Stakeholders

These are only glimpses of how the rural India is making progress in terms of all-round empowerment and development by making use of digital connectivity and infrastructure. Apart from the governments, relevant efforts have also been made by some corporate houses, international organisations and the non-profits. Microsoft's AirJaldi initiative is a worthwhile mention as the company has partnered with service providers like Airtel to connect a large number of people in the rural and semi-urban area with Internet. AirJaldi has so far installed 30,000 square kilometers of wireless coverage, reaching 1,500 villages, including the Churni village in Maharashtra which is using faster Internet connectivity for its Common Service Center (CSC).

India's concept of a smart village is not complete without the mention of Common Service Centers (CSCs). These centers have been set up by the Ministry of Electronics & IT under the Companies Act, 1956, aimed at providing a centralised collaborative framework for delivery of services to citizens. Based on the assessment of the CSE scheme, the Government launched the

CSE 2.0 scheme in 2015 to expand the outreach of CSCs to all Gram Panchayats across the country. Under CSC 2.0 scheme, at least one CSC will be set up in each of the 2.5 Lakh gram panchayats. Basic objectives of the scheme are to provide access to information to all remote and rural citizens of India; to provide access to quality education and skill development to Indian citizens (majority rural population); ensuring efficient delivery of public services that are mainly G2C (Government to Citizen) and B2C (Business to Citizen); making cost efficient and quality healthcare services available to citizens; and to promote rural empowerment, collective action for the empowerment of society and to enable community participation.

The CSC scheme is not only a mission mode project of the Union Government's Digital India programme but also its strategic cornerstone. It is helping the government as well as the villagers to take optimum advantage of digital technologies and infrastructure. Recently, a remote village called Khodaganj in Madhwa district of Bihar was in news as an excellent example of how CSCs can be used to ensure well-being of the people apart from providing online services. CSCs work with Village Level Entrepreneurs (VLEs) and the 25-year-old VLE Prabhakar Kaur in Khodaganj has helped hundreds of patients by providing telemedicine services through his CSC. He says: "Primary care through his centre is helping in the COVID-19 response in many ways, including by making a diagnosis, identifying COVID-19 and differentiating them from other patients and helping people in dealing with psychological issues. On one hand, this helping the citizens to access immediate healthcare and consultancy while on the other hand this is helping reduce unnecessary burden on the country's healthcare system."

FAO Recognition

The Food and Agriculture Organization of the United Nations (FAO) runs its "1000 Digital Village Initiative" under which many countries including India are being covered. FAO has already praised India for its progress in rural digitalisation by saying: "FAO Members like China, India, Japan, and Republic of Korea are quite advanced in their own digitalisation processes. Together with a multitude of partners in government, private

sector and institutional innovators, resource and multilateral partners – farmers, fishers and all those who help feed a hungry world – we can upscale digitalisation and make every village, township or rural community digitally connected, dynamic and prosperous." FAO's endorsement of India's progress is important as the organisation's efforts and assessments are not just focused on planning and implementation of digitalisation plans but it attaches equal importance to their feasibility, inclusiveness and sustainability.

Due credit also needs to be given to efforts made by individuals towards making their own villages smart and digital. For instance, IRS officer Mr. Satyupal Singh Meena and his team have played a pivotal role in transforming the Dhanora village in Dhaulpur district of Rajasthan which, apart from an improved physical infrastructure, enjoys the facility of digital connectivity as well. As a result, Dhanora has a coaching institute for competitive examinations, and a school equipped with e-learning facility and computers. A dedicated skill development center and rural development training center are also being set up in the village. To address the need for funds, Mr. Meena explored the mode of crowd sourcing which worked well. This underlines the fact that people's participation and involvement in planning, implementation and maintenance of such projects could pave way to better results on the ground and could lend a helping hand to governments' efforts in this direction.

As mentioned above, providing universal broadband connectivity is not an easy goal in a country which is so large and so diverse; however, we have appropriate plans, missions, initiatives and programs in place to make that happen. We are moving towards that direction at a good pace and inspiring success stories are emerging from various parts of the country already. Even smartphones are contributing to taking connectivity to the last mile and are proving to be a great enabler in a common rural citizen's quest for e-empowerment. After the smart cities, the smart villages are going to be a big step forward in our quest to make India digital.

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Dr Santosh Jain Pansi and Akanksha Jain

Good health is central to happiness and well-being of the individual, and contributes significantly to productivity, prosperity and economic growth of the individual, families and the nation as a whole. Fit India movement was launched on 29th August to make fitness an integral part of our daily lives. The mission of the movement is to bring about behavioural changes and move towards a more physically active lifestyle. It is aimed at spreading awareness on fitness and various physical activities that promote fitness through various computer and smartphone indigenous apps.

Fitness is a cumulative outcome of appropriate nutrition, good health as well as physical, social, psychological and spiritual wellbeing. A nation can attain fitness only when all its people are fit and fine and follow healthy lifestyle practices. However, the importance of fit and healthy lifestyle is often being ignored or taken for granted, especially among the poor whose major focus is on their livelihoods. As per World Health Organisation, 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. Enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without the distinction of race, religion and political belief, economic or social conditions. The WHO's current goal is to achieve 'Health for All' at least by 2030. Occurrence of COVID-19 pandemic has been rather unfortunate. It has exacerbated the scenario of under-nutrition (underweight/stunting/wasting), micro-nutrient malnutrition and the ever increasing burden of various non-communicable diseases (NCDs; particularly diabetes); but inadvertently, it has drawn our focus towards appropriate nutrition, good health, immunity and fitness too.

Although adequate quantity/quality of food is one of the human rights, as per Global Hunger Index Report (2020), nearly 811 million in the world are going hungry while more than 2 billion suffer from malnutrition; and many succumb to hunger (Figure-2 highlights the trends in some nutrition related indicators for India). Acute hunger - the most extreme form of hunger, arises frequently during disasters like droughts, famines, El Nino and war; and adversely affects people already suffering from chronic hunger (~ 8 percent of the hungry people). Chronic hunger/long-term under-nourishment is globally most widespread and affects the people not having sufficient resources

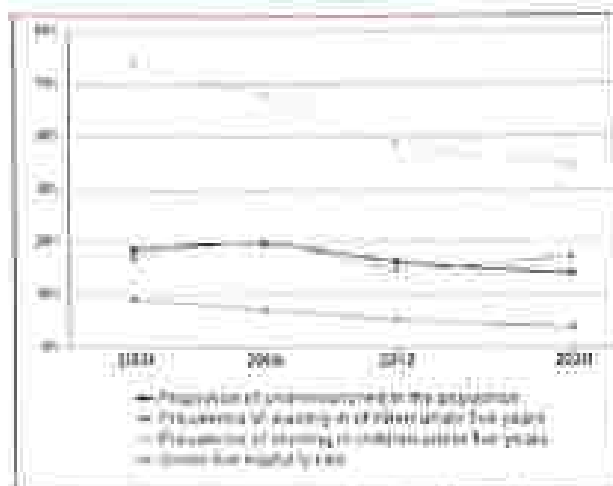


Figure 2: India - Trends in some nutrition related indicators (2000-2020)

for good nutrition, clean water or health care. Hidden hunger, on the other hand, is the deficiency of several important micronutrients (such as iron, iodine, zinc or vitamin A) which in the long run causes several serious diseases/disorders and hampers overall development of the nation. In 2020, with a Global Hunger Index score of 27.2, India ranked 94th among the 107 countries which is a matter of grave concern.

Children's nutrition deserves special attention because nutritional deficiencies place them at high risk of physical/mental impairments and mortality. Even in children dying from infectious diseases, the underlying cause is a weakened immune system due to dietary deficiencies. Malnutrition in any form - be it under-nutrition, micro-nutrient malnutrition or over-nutrition, presents a significant threat to human health. Hence, there is a dire need to develop and adopt innovative strategies for preventing/treating multiple forms of malnutrition.

Appropriate Nutrition is critical for proper growth, development and good health. It helps in

building stronger immune system, better cognition, improving infant, child and maternal health, safer pregnancy/childbirth, lowering the risk of non-communicable diseases (such as diabetes and cardiovascular disease) and bestowing longevity. Well-nourished individuals are likely to be more productive who can gradually break the vicious cycle of poverty and hunger.

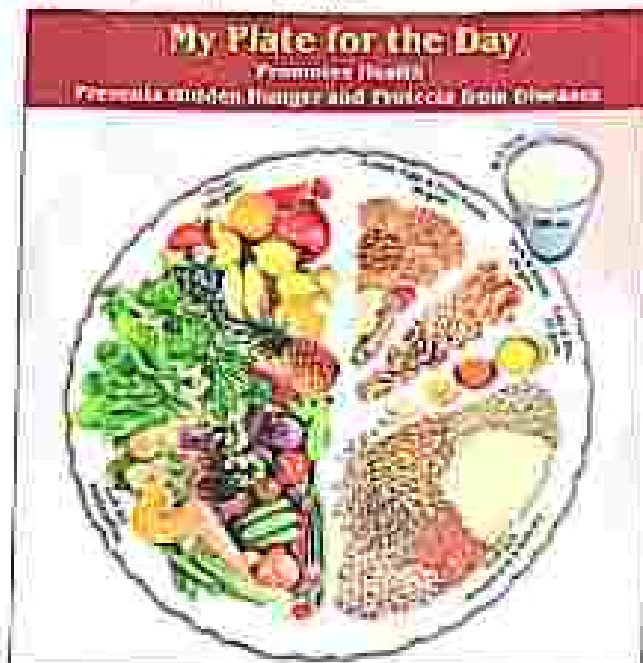


Figure 2: A typical balanced diet for a Day (ICMR-National Institute of Nutrition)

Nutrition and health, in fact, are inseparable sides of the same coin. An individual's health largely depends on nutrition; and nutrition on his/her food intake. A balanced diet comprises variety of foods in adequate amounts and proportions to meet the individual's daily needs of all essential nutrients such as proteins, carbohydrates, fats,



Figure 3: Functional Classification of the Foods

vitamins, minerals, dietary fibre, phytochemicals, antioxidants and water etc. National Institute of Nutrition-ICMR recommends sourcing of macro-nutrients from all the food groups and micro nutrients from all the food groups every day to achieve a balanced diet that would meet energy requirements (~2000 kcal) of an Indian (Figure-2). Such diets not only provide a safety margin or nutrient reserves for emergency situations but also help to promote/maintain positive health – a perfect blend of physical, social, emotional and mental health. Functional classification of the foods is given in Figure 3.

Diets rich in complex carbohydrates are healthier than the low-fibre diets primarily based on refined and processed foods. Dietary fibre - the complex carbohydrates, are resistant to digestion/absorption in the small intestine but they undergo complete or partial fermentation in the large bowel. These include celluloses, hemicelluloses, lignins, pectins, gums, mucilages, arabinoxylan, inulin, β -glucan and resistant starches. Dietary fibre rich diets confer numerous health benefits such as providing protection against certain gastro-intestinal tract diseases (constipation, haemorrhoids, gastro-esophageal reflux disease (GERD), duodenal ulcers, diverticulitis), obesity, diabetes, hyper-tension, cardiovascular diseases, stroke and colon cancer. Phytochemicals are a variety of biologically active non-nutrients (flavonoids and polyphenols) occurring in plant foods that confer numerous health benefits beyond basic nutrition. These are present in all the commonly consumed vegetables, fruits, pulses/legumes and grains. Diets containing substantial amounts of antioxidants (present in fruits/vegetables) prevent or delay various types of cell damage and thus, provide protection to the body. Some of the nutrient antioxidants include vitamin C, vitamin E, selenium, and carotenoids (such as beta-carotene, lycopene, lutein and zeaxanthin). An array of antioxidants and phytochemicals present in fruits, vegetables, herbs and spices efficiently modulate oxidative and inflammatory stresses to prevent many of the diet-related diseases/disorders.

National Nutrition Policy and the National Plan of Action in Nutrition stressed on tackling the nutrition related problem through direct nutrition interventions (for vulnerable groups) as well as through various development policy

instruments for improved access/conditions for better nutrition. Since 2017, the National Nutrition Month (1st-30th September) is being celebrated every year all over the country. It focuses on creating awareness regarding the importance of good nutrition for health which has far reaching implications on development, productivity, economic growth and ultimately national development. Earlier, since 1982 onwards, the National Nutrition Week (1st-7th September) was celebrated every year with almost similar objectives; and in view of its grand success, the government expanded its duration-cum-preview.

POSHAN Abhiyaan/National Nutrition Mission—the overarching scheme for holistic nourishment, is our Government's flagship programme for improving nutritional outcomes for children, pregnant women and lactating mothers. Launched on the International Women's Day-2018, it aims to draw the nation's attention towards the burning problem of malnutrition in a mission-mode. Likewise, there are a number of programmes addressing nutrition related issues at various levels to improve nutritional status of our people at large. Among many such initiatives, Children's Nutrition Park is a unique move to provide the children high quality entertainment coupled with vital knowledge on nutrition and healthy eating habits; one of its main feature being the 'Nutri-Train' (covering 500 meters long track). Ample stress is laid on the importance of fresh vegetables/fruits, milk and milk products, nuts/oilseeds and water in our diet as well as on the home cooked food. The importance of physical activity (sports/out-door activities) and yoga in our daily life is also highlighted. Such awareness generation actions can be of great help in bringing about the necessary behavioural changes among our masses, especially the children.

Good health is central to happiness and well-being of the mankind; and contributes significantly to productivity, prosperity and economic growth of the individuals, families and the nation as a whole. Our National Health Policy envisages to attain the highest possible level of health and wellbeing for all (at all ages), through preventive/promotive health care policies and universal access to quality health care services without

any financial hardships. It proposes to achieve its goal by enhancing access, improving quality and lowering the cost of healthcare delivery. The modern system of medicine focuses on the body and its various biological systems, organs, tissues, cells, molecules including the genes primarily with the aim of treatment. However, the traditional systems of medicine treat the human being as a whole, taking care of his/her physical, mental and spiritual health. In this case, focus is laid on 'sthalasharira' (gross body), 'sukshmatharita' (subtle body) and 'karansharira' (casual body) for establishing harmony at all levels of human being's existence.

Integrative health emphasises on multimodal interventions [2] in a coordinated manner which may include conventional medicine, lifestyle changes, physical rehabilitation, psychotherapy and complementary health approaches in various combinations; the emphasis being on treating the whole body rather than any one organ system. It also aims at a well-coordinated patient care by the various care providers/institutions. Ayurveda - the science of life, is not only a system of medicine but a way of life for complete positive health and spiritual attainments. Homeopathic remedies are commonly used by the masses for viral diseases, allergic conditions, skin disorders, behavioural problems and several chronic diseases; stand-alone



treatment for various women/children's diseases, hormonal disorders, infertility, pain and palliative care; and as an adjunct/adjuvant in Cancer, COPD, Diabetes and its complications. Strength lies in its role in promotive health as well as effectiveness in certain clinical conditions having fewer treatment options in other systems of medicine. Naturopathy-an art/science of healthy living is a drug less system which advocates removing the cause of disease by expelling the unwanted/unused matters (toxins) from the body. Such treatments include: Mud-bath/Spinal-bath/Spinal-spray-bath/Steam-bath/Sauna-bath/Sun-bath, Mud-pack/Wet-sheet-pack/Chest-pack/Abdomen-pack, Physio-therapy, Magnet-therapy, Acupuncture, Acupressure, Reflexology etc. Unani Medicine - the science dealing with various states of the body in health/not-in-health, provides promotive, preventive, curative and rehabilitative healthcare. Its unique features are the use of exhilarants, organ-specific tonics, immune modulatory/temperament-specific drugs, purgatives and the correctives for adverse effects, and the cosmeceutics, nutraceuticals, aromatics and other corresponding therapies. SIKHA-globally one of the earliest traditional systems of medicine, treats not only the body but also the mind and soul. It claims to revitalize/rejuvenate the disease causing dysfunctional organ/s. It treats the person as a whole concentrating on his/her physical, psychological, social and spiritual well-being. Similarly, Yoga - the art and science of healthy living, aims at self-realisation for overcoming all kind of sufferings for attaining the 'state of liberation'; its holistic approach is well established. Its role in health promotion and disease prevention, esp. in the management of lifestyle related disorders, is well established. Among the world's oldest sciences of Indian origin, yoga is extremely helpful in maintaining one's physical/mental health and spiritual evolution. Yoga and meditation play an important role in preventing/reducing the risk of NCDs and associated complications; therefore, it is important to inculcate yoga practice among children at an early age. The International Yoga Day (21st June)-an important initiative by the Indian government, has put it at the global map; more than 180 countries across the world have been practicing yoga since last many years.

The present COVID-19 challenge has brought back the focus on traditional systems of medicines.

The Ministry of AYUSH has done extremely good service to the society at large in the prevention, control, treatment and management of this pandemic which has turned every one's attention towards our body's immune system/desence mechanism against various diseases caused by the bacteria, viruses or other micro-organisms. The traditional systems of medicine not only address the curative but also the prophylactic/promotive aspects; and thus, emphasise on ensuring positive health rather than focusing only on the treatment.

Mental health-an integral component of health and a state of well-being when an individual realises his/her own abilities, productivity, can cope with the normal stresses of life and make contributions towards his/her community. Unhealthy lifestyle, physical ill-health, stressful work conditions, gender discrimination, rapid social change, social exclusion and human rights violations are some of the leading contributors to poor mental health. Excessive stress poses numerous adverse health effects; therefore, for overall well-being, appropriate stress management is essential. For reducing the risk of NCDs, an effective coping strategy emphasises on preventing the avoidable/keeping the unavoidable stress at a minimum. Meditation-a type of mind body linked complementary medicine, produces a deep state of relaxation and tranquilises the mind. It brings about significant reduction in pain, fatigue and sleeplessness; and improves general health of the people suffering from chronic pain syndrome. Spiritual health ideally encompasses the overall lifestyle of a person including the way one thinks, talks, eats, dresses, and behaves in public/private life.

The four pillars of healthy lifestyle are-*Ahara* (what, how and how much one eats), *Vihara* (the way one engages himself/herself in relaxation, entertainment and leisure time activities), *Vichaar* (one's mental make-up, emotional control, attitude and outlook towards life) and *Vyavhaar* (how one actually behaves in public/private life).

Health, nutrition and education are strongly linked. While healthy individuals are more likely to have better education outcomes, right education can improve nutrition/health status of the

individual as well as that of the household. The recently released National Education Policy-2020 proposes to bring about a paradigm shift in our education system. To achieve optimal learning, it recognises the need for proper nourishment and good health; therefore, it has proposed various health-related interventions. Nutrition, health, hygiene/sanitation, physical education, sports, fitness and well-being are some of the key subjects and skills needed to be learnt/acquired by all-through proper teaching-learning and training, regular health check-ups, universal immunisation and growth monitoring/health monitoring will be carried out at the schools. For addressing mental/emotional health issues of the children, in addition to the social workers/counsellors, community shall also be involved. In addition to mid-day meals, it proposes the provision of healthy breakfast for school children.

Physical inactivity or sedentary lifestyle is a risk factor for numerous NCDs/chronic conditions. Among adults, physical activity confers multi-fold health benefits. It lowers the risk of all-cause mortality including the cardiovascular mortality, as well as lowers the incidence of hypertension, type-2 diabetes and site-specific cancers. It reduces adiposity and has a profound positive impact on mental health (by minimising anxiety and depression), cognition and sleep. For achieving substantial health benefits, it is recommended that - on a weekly basis, adults should undertake at least 150-300 minutes of moderate-intensity physical activity or at least 75-150 minutes of vigorous intensity physical activity or an equivalent combination of moderate- and vigorous-intensity activity. For additional health benefits, they should also perform certain muscle strengthening activities (moderate/vigorous intensity) involving all major muscle groups.

Regular weight monitoring can help to gauge weight gain/weight loss as well as in assessing the extent of overweight/obesity or chronic energy deficiency. It also helps in computing BMI - a better marker of fitness.

In 2019, on the National Sports Day (birth anniversary of Major Dhyan Chand), the Prime Minister launched the Fit India Movement and commented that a healthy individual, a healthy family and a healthy society are the essentials for achieving this; and urged the people to make

fitness a part of their lifestyle. He commented that technology has impeached on our physical activity; and with time, fitness has been relegated a lower priority. 'Fit India Movement' is an effort to bring about small lifestyle changes which can help to prevent many of the lifestyle diseases as well as improve professional efficiency through mental and physical fitness. Sports is directly linked to fitness -an essential pillar for a healthy and prosperous life.



Under this people's movement, numerous initiatives/activities and focused campaigns have been undertaken to promote fitness in an easy/fun-filled way along with an emphasis on indigenous/rural/tribal games or sports. Efforts are also being made to ensure that the concept of fitness reaches every school/college/university/panchayat/village; and that a platform is created for our citizens to share their experiences. It motivates people to inculcate at least 30-60 minutes of physical activity in their daily routine and also spread the PM's message - 'Fitness ki dose, Aadha Ghanta Roz'. Fit India Mobile App has also been launched which indicates the fitness score by tracking the steps, sleep and the calories consumed. Khelo India- a national programme for developing sports has been introduced to revive the sports culture at grass-roots level and establish India as a great sporting nation. In this direction, the Prime Minister has given a call to all our Olympians to visit 75 schools each by the Independence Day in 2023, enthuse sportsmanship in school children and spread awareness regarding adverse effects of malnutrition.

To commemorate the 75th Independence Day -Azadi Ka Amrit Mahotsav, a nationwide Fit India Freedom Run 2.0 (Physical/Virtual) Run has been



Body Mass Index (BMI) = Weight (kg) ÷ Height (m)²

BMI Cut-offs (given by WHO/forAsian/South Asian populations)	
Underweight	BMI < 18.5 kg/m ²
- Severely Underweight	BMI < 16.5 kg/m ²
Normal weight	BMI ≥ 18.5 to 24.9 kg/m ²
Overweight	BMI ≥ 25 to 29.9 kg/m ²
Obesity	BMI ≥ 30 kg/m ²
- Obesity class I	BMI 30 to 34.9 kg/m ²
- Obesity class II	BMI 35 to 39.9 kg/m ²
- Obesity class III (severe/extreme/massive obesity)	BMI ≥ 40 kg/m ²

Since Asian/South Asian populations are at a greater risk of NCDs even at lower BMI levels, for them, the cut-offs are:
*Overweight - BMI between 25 and 29.9 kg/m²
**Obesity - BMI greater than 25 kg/m²

launched (from 13th August - 2nd October 2021) for promoting fitness as well as to help people get rid of their excess weight/obesity, laziness, stress, anxiety and many other related diseases/disorders. It can be 'run anywhere, at any time' on a route of one's choice at his/her suitable time and pace.

'Running is the human body's rawest form of Freedom'. During the past few decades, screen time (television, computers and mobiles), especially among the younger generations, has skyrocketed, and this has cut-down their outdoor activities/games drastically. Hence, community-based awareness-generation campaigns for promoting physical activity are urgently needed.

The National Youth Policy also reiterates nation's commitment for all-round development of the India youth so that they can realize their full potential and contribute productively to the nation-building process. Since 1986, special awards are given to the winners of international sports events to encourage/motivate the star sports persons for better achievements as well as for attracting the younger generations. Awards are also given to the champions of Para-Olympics/Special-Olympics as well as for promoting competitive sports in colleges/universities. Sports Authority of India's 'Come and Play Scheme' has been initiated for optimal utilisation of the facilities in Delhi and across the country. The Target Olympic Podium Scheme provides assistance to the country's top athletes.

The Sports Authority of India supports and nurtures talent in youth, and provides them requisite infrastructure, equipment, coaching facilities and competition exposure for their overall development.

In everyone's life, importance of sports and fitness is invaluable. It inculcates team spirit, develops strategic/analytical thinking, leadership qualities, goal setting and risk taking abilities. Fit and healthy individuals form healthy society and a strong nation. During the last few years, India has made steady progress in the field of sports. It's time we inspire our young talent, provide them top-notch infrastructure/training and inculcate a strong spirit of participation enabling them to demonstrate their true potential in sports.

Malnutrition—in any or all forms, is unacceptable. Strategies for promoting good health should follow a holistic approach where fitness of body, mind and spirit is considered as an integrated concept. When our people are fit, there will be much lesser disease/disability burden and thus, far lesser expenditure on treatment and rehabilitation; this in turn will enhance individuals', families' and the nation's growth and development. To maintain overall fitness and good health, lifestyle modifications, improved dietary patterns, appropriate physical activity, cessation of smoking/tobacco consumption, restricting alcohol intake (if any) along with appropriate management of stress are mandatory. Spirituality has been in-built among our masses, especially the older generations; it is time to reinforce the same among our younger generations too. As is often said 'Rome was not built in a day', highlights the importance of step by step actions for achieving the desired goals and outcomes. Since nutritionally appropriate diet, good health and physical activity are essential for overall fitness, let us all contribute our bit in building this great nation and strive towards – *Saproshti India, Swasth India and Fit India !!*

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Entrepreneurship: A Catalyst for Social Change

Dr. H.L. Sharma

Entrepreneurship is identified as a key instrument in the process of industrialisation to particular and economic development in general. It acts as a driving force for new innovations and catalyst for social change. Rural areas provide abundant raw material from agricultural, horticultural and animal produce to start new enterprises in the field of food processing, dairy farming, sericulture, bee-keeping, mushroom cultivation, fisheries and other allied activities.

India has witnessed a tremendous growth in the field of agriculture, manufacturing, transport, communication, real estate, information-technology and service sector during the planned era of economic development. The net national income at constant prices was to the tune of Rs. 2,69,724 crores in 1950-51 which shot up by more than 43 times and stood at Rs. 1,17,18,380 crores in 2020-21. Per capita net national income also increased from Rs. 7,513 to Rs. 86,456 witnessing annual compound growth rate of 3.55 percent during the same period (Table 1).

Economic Inequalities in India:

The rapid growth in real per capita income has not percolated evenly to different sections of the society living in different regions of the country. The sector wise trends in the growth of Real Gross Value Added (RGVA) at factor cost reveal that during the last seven decades, primary

sector witnessed a meager growth rate (3.99 %) as compared to secondary (6.51%) and tertiary (6.36%) sectors (Table 2). The unequal growth of agriculture and industrial sector, has led to wide inter-sectoral, inter-regional and inter-personal variations in the distribution of income, wealth, employment, consumption and quality of life, leading to rural-urban drift. In fact, the economic rift between the haves and have-nots has widened rapidly during the last three decades particularly after the adoption of the LPG policy.

Consequences of Economic Inequality

Economic inequalities compromise the pace of poverty eradication and create inequalities among different social groups particularly the marginalised sections of society like SC/ST/OBC, minorities, women and children in terms of limited and unequal access to resources, education, skill, training, healthcare and employment. The marginalised groups of society have less economic,

Table 1: Trends in Net National Income and Per Capita NNI at Constant Prices

Year	NNI (Rs. Crs)	Per Capita NNI (Rs.)
1950-51	269724	7513
1960-61	411519	9482
1970-71	596470	11025
1980-81	795193	11711
1990-91	1342031	15906
2000-01	3291799	21491
2010-11	4657418	39270
2020-21	11718180	86458
ACGR (%)	5.54	3.55

Source: Economic Survey, 2020-21, Vol. 2, Table 1.3.

social and political opportunities as compared to others. The economic inequalities lead to concentrations of power (economic, political and social) only in a few hands, resulting in significant adverse impact on the society in the form of class-conflict, drug abuse, ill mental health and rising crimes. For better social cohesion in the country, it is essential to create equal opportunities for all and fairly distribute the fruits of growth across society (particularly the most vulnerable sections) through inclusive growth.

Role of Entrepreneurship

Entrepreneurship is identified as a key instrument in the process of industrialisation in particular and economic development in general. It acts as a driving force for new innovations and catalyst for social change through ameliorating the economic lot of vast majority of people living in poverty in rural and backward areas. Rural areas

Table 2: Real Gross Value Added at Factor Cost (Rs. Crs)

Year	Primary Sector	Secondary Sector	Tertiary Sector	All Sectors
1950-51	150191	40138	89389	279618
1960-61	190851	73555	143873	410279
1970-71	258685	176356	176009	561050
1980-81	305906	183070	308430	798506
1990-91	425075	325450	507364	1347889
2000-01	592227	570471	1185687	2348485
2010-11	828431	1261722	2427380	4518533
2020-21	2325548	3319280	6694147	12339175
ACGR (%)	3.99	6.51	6.36	5.56

Source: Economic Survey, 2020-21, Vol. 2, Table 2.3.

provide abundant raw material from agricultural, horticultural and animal produce to start new enterprises in the field of food processing, dairy farming, sericulture, bee-keeping, mushroom cultivation, fisheries and other allied activities. The rural enterprises not only provide job opportunities to the unemployed and under-employed youth, but also help in making the full utilisation of agricultural produce and thus pave the way to achieve the objective of balanced regional development. In fact, all the states of the country due to their varied agro-climatic conditions have some location specific strengths which provide ample opportunities to the budding entrepreneurs to start agribusiness and agripreneurship in varied fields.

Role of Youth

The young generation of the country, particularly the rural youth can play an important role in bridging the rural-urban economic divide through the establishment of rural enterprises. While most of the developed countries of the world face the risk of an ageing workforce, nearly 62 percent of total population of India is in working age group (15-59 years) and more than 54 percent of the total population is below 25 years of age. This demographic advantage is predicted to last until 2040. On the basis of its demographic dividend, India has the potential to achieve a much faster pace of economic growth leaving USA and China behind.

Role of Infrastructure

Infrastructure in the form of transport, power and communication is the basic requirement for the growth of entrepreneurial activities in a particular area. In order to improve rural infrastructure by connecting rural habitations with main roads, Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched by Government of India on December 25th, 2000. The primary objective of the scheme is to promote economic and entrepreneurial activities in rural India by providing all weather road connectivity to the

Table 3: Percentage of Households with Computer and Internet Facility

Indicator	Rural	Urban	Total
Computer	4.4	23.4	10.7
Internet	14.9	47	23.3

Source: NSSO, *Rural and Social Consumption on Education in India, 2020*, p. 241.

eligible un-connected habitations in rural areas. Up to September 12th, 2021, more than 1,64,856 road works spreading over 6.73 lakh km length highway construction under the scheme. The pace of highway construction in the country touched a record of 37 km per day in 2020-21 as against 12 km in 2014-15.

Power is also one of the basic requirements for promoting entrepreneurship in an area. In order to strengthen and enhance power supply in rural areas, Deen Dayal Upadhyaya Gram Jyoti Yojana was launched on July 25th, 2015 with an estimated outlay of Rs. 43,033 crore. It envisaged 100 percent village electrification by March 2019. Subsequently, Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) scheme was launched on 25th September, 2017, to provide access to energy throughout the country. As per saubhagya portal of Ministry of Power, out of 21.4492 crore rural household in the country, 21.4473 crore (99.99 percent) rural households were electrified up to September 12th, 2021.

In the bid to bridge the rural-urban digital divide, the Government is extending the outreach of telecom network to the far flung and remote hinterland through the Bharat Net project. The project aims at linking each of the 2.5 lakh Gram Panchayats of India through optical fiber network to facilitate the delivery of various e-Services. Phase II of Bharat Net project was launched on 13th November, 2017, with an outlay of Rs. 30,920 crore. It envisaged to connect 1.5 lakh Gram Panchayats of the country through high speed broadband connectivity, by March 2019.

Initiatives to Promote Entrepreneurship

Government of India (GOI) has taken various steps and launched various schemes to promote innovative entrepreneurial activities for achieving the motive of inclusive and sustainable income and employment generation in the country. The quality of human resources in the form of skill and knowledge is crucial for economic growth and social development for a country. India currently faces a severe shortage of well trained and skilled workers as well as entrepreneurs. It is estimated that only

2.3 percent of the workforce in the country has undergone any formal skill training as compared to 52 percent in USA, 68 percent in UK, 75 percent in Germany, 83 percent in Japan and 95 percent in South Korea. In order to improve the quality of human resources through skill development, Government of India formed Department of Skill Development and Entrepreneurship on July 31st, 2014, which subsequently led to the setting up of Ministry of Skill Development and Entrepreneurship on November 10th, 2014. Further, in a bid to improve employability of workers and promote entrepreneurial culture amongst youth, National Skill Development Mission was launched on July 15th, 2015 on the occasion of World Youth Skills Day. This mission aims at consolidating and coordinating

The young generation of the country, particularly the rural youth can play an important role in bridging the rural-urban economic divide through the establishment of rural enterprises. While most of the developed countries of the world face the risk of an ageing workforce, nearly 82 percent of total population of India is in working age group (15-59 years) and more than 54 percent of the total population is below 25 years of age.

the skilling efforts at the national level. The Mission aims at providing formal training to nearly 400 million people across the country by 2022. The trainees who aspire for self-employment or seek to be entrepreneurs are also given proper guidance to support them in achieving their objectives.

With the vision to transform rural poor youth into an economically independent and globally relevant human resource, a skill training and placement program of Government of India named as Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) was launched on September 25th, 2014. It occupies a unique position among the skill training programmes due to its focus on the rural poor youth in the age group 15-25 years, who due to their poverty driven constraints could not get formal education and marketable skills. Under this programme it is mandatory to give minimum 100 hours of training in soft skills, functional English and computer literacy etc. It emphasises on sustainable employment through post-placement tracking, retention and career progression. Under this programme, disbursement is made through a digital voucher directly into the bank account of the beneficiary. Presently DDU-GKY is being implemented in 558 districts of the country. It aims at giving training to over 26.85 lakh persons by March 31st, 2023. Up to July 23rd, 2021 over 11.18 Lakh persons were given training and nearly 6.56 Lakh were placed in various jobs under the programme.

In order to preserve and boost the rich heritage of traditional arts and crafts of minorities, a centrally sponsored project for Upgrading Skills and Training in Traditional Arts/crafts for Development, popularly known as Project USTAD was launched on May 31st, 2015 by the Ministry of Minority Affairs. It aims at capacity building and updating the traditional skills of master trainers/artisans belonging to minority communities and BPL families in the traditional art/craft fields of their choice. The trainees should be between 14 to 45 years of age and at least class V pass. The project envisages preserving and promoting the rich heritage of traditional arts and crafts like wood and bone carving, earl work, phulkari, tie & dye, gems & jewellery, patch work, embroidery, durrly making, blue printing etc. The project is expected to generate adequate means of livelihood to the marginalised minorities and bring them to the mainstream.

With the twin objective of achieving the goal of Swachh Bharat Mission and creating the spirit of entrepreneurship among 'Safai Karamcharis' for their better livelihood, a scheme named as Swachhita Udyami Yojana (SUY) was launched on 2nd October, 2014. Under the Scheme, entrepreneurs among 'Safai Karamcharis' and identified manual scavengers can avail loan up to Rs. 25 lakh at concessional rate of interest of 4 percent per annum for the construction, maintenance and operation of community toilets on Public Private Partnership (PPP) mode.

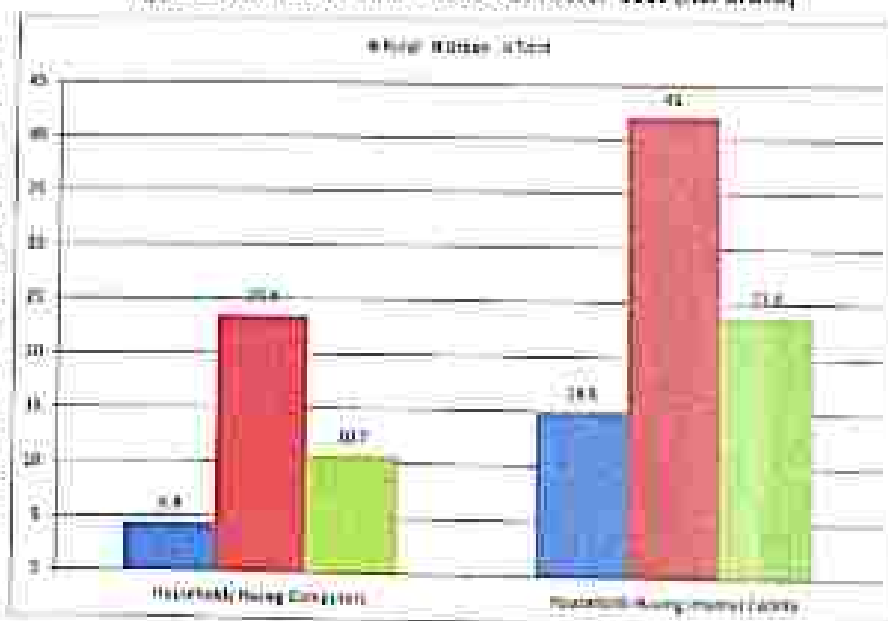
In a bid to boost entrepreneurship among Scheduled Castes, Venture Capital Fund for Scheduled Castes, with the initial capital of Rs. 200 crore was launched by Ministry of Social Justice and Empowerment. Under the scheme, concessional finance up to Rs.15.00 Crore for a maximum period of 6 years is provided to aspiring entrepreneurs belonging to SC category.

With a view to change the aptitude of youth towards

employable skills and to increase efficiency of probable and existing workforce, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was launched by GOI under the National Skill Development Mission on 15th July, 2015. The target groups of the PMKVY are the school/college dropouts and unemployed youth. Under this scheme, industry relevant short term skill training is provided to the youth to enable them to secure a better livelihood. Apart from providing skill training, the training centers also impart training in soft skills, entrepreneurship, financial and digital literacy. Upon successful completion of their assessment, candidates are provided placement assistance by the training partners. Under this scheme, the entire training and assessment fees is paid by the Government after the successful completion of an approved skill training programme. As on July 10th, 2021 around 1.29 crore candidates were trained/oriented across the country against the target of 1.32 crore under PMKVY. This scheme is expected to bring the unemployment rate in the country to a reasonably low level.

As per "Household Social Consumption on Education Survey", conducted by NSSO (75th Round), 14.9 percent of rural households in India have access to internet and only 4.4 percent had a computer at home (Fig 2). To promote digital awareness and education in rural areas, Pradhan Mantri Gramin Digital Shiksha Abhiyan (PMGDISHA) was launched on 7th October, 2017.

Figure 1: Rural Gross Value Added at Factor Cost (Rs. Crore)



Source: Economic Survey, 2020-21, Vol. 2, Table 5.3

with the aim to empower at least one person per rural household with crucial digital literacy skills. Under this abhiyan, rural people between the age group of 14 to 60 years are being trained without any fees to operate computers, tablets, smart phones, etc and access government e-services, undertake digital payment, compose e-mails through the use of internet. The scheme is expected to bridge the rural-urban digital divide especially targeting the marginalised sections of the society like SC/ST, minorities, BPL families, women and differently-abled persons. PMGDISHA envisaged making around 40 percent of rural households in country digital y literate by March 2020.

Education and training are essential and basic requirement for promoting skill-oriented enterprises in rural areas. In this context, Samagra Shiksha Scheme was launched by GOI in 2018. It aims at enhancing the learning outcomes at the school level with the use of technology to empower both teacher and taught. It subsumes the previous three schemes- Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE) by unifying the learning from pre-school to class XII. The scheme aims at providing equal and adequate opportunities for rural youth to participate in technology based educational and training programs. It also focuses on promoting vocational education to make it more job-oriented. The

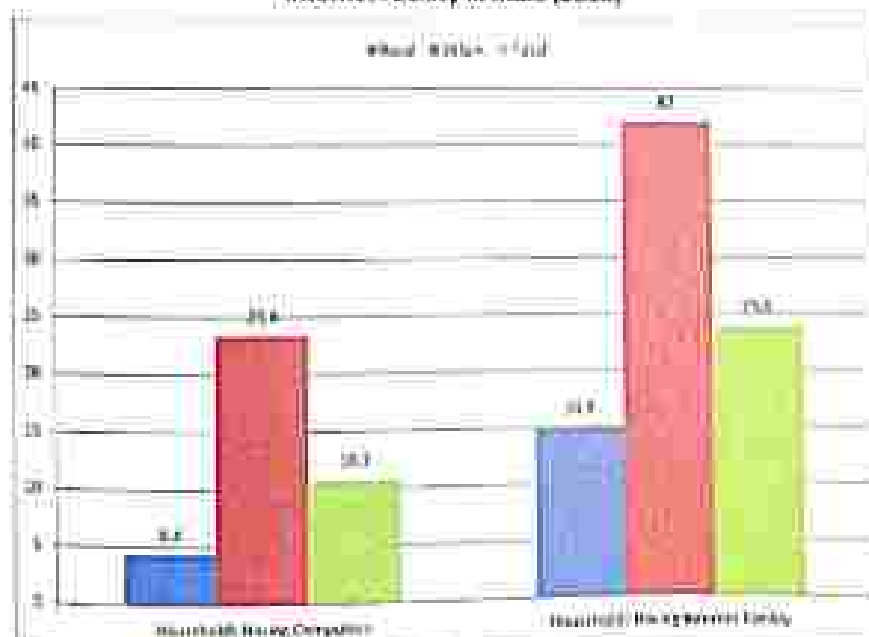
scheme has been extended for the period from 1st April, 2021 to 31st March, 2026 with an outlay of Rs. 2,94,283.04 crore which includes Central share of Rs. 1,85,198.32 crore.

In its endeavour to promote the culture of innovation and entrepreneurship by creating a scientific temper, Atal Innovation Mission (AIM) has been set up at NITI Aayog. It aims to develop new programmes and policies for fostering innovation in different sectors, provide platforms and collaboration opportunities for different stakeholders. AIM has adopted a holistic approach encompassing education and research institutions, industry, MSMEs, NGOs and various Ministries at district, state and national level. The initiatives under AIM have played a crucial role in improving India's position in the Global Innovation Index from 81st position in 2015 to 48th in 2020. In partnership with five different ministries and departments of central government, AIM has launched the Atal New India Challenge with the aim of bringing innovations and technologies in areas of national and social importance. The initiative is expected to promote technopreneurs who deserve to be supported because of their immense potential of taking India forward.

In fact, economic development doesn't always lead to social change in the form of community development. The community development requires social infrastructure in education, skill

training, healthcare, sanitation, labour welfare and other public services. Public investment in social infrastructure is essential for providing access to social services for the masses, especially the marginal and vulnerable sections of the society. Carrying forward the objective of growth with social justice, the present government at the Centre has been raising the expenditure on social services since its first year of installation. The combined expenditure on social services by the Centre and States Governments as a proportion of GDP has increased from 7.5 percent

Figure 2: Percentage of Households with Computers and Internet Facility in India (2018)



Source: NSSO, Household Social Consumption and Education Survey, 2018.

in 2019-20 (RE) to 2.8 percent in 2020-21(RE). It reflects the commitment of Government to mitigate the hardships of poor caused by the loss in livelihood due to the lockdown during the worldwide COVID-19 pandemic.

Summary

To conclude, growth with justice and inclusiveness has always been the cornerstone of the development agenda in India. Over the last few years, efforts in this direction have been accelerated by the Government through the mantra 'Sabka Saath, Sabka Vikaas', further extended to ensure 'Sabka Vishwas'. As India is a developing economy with economic inequalities and resource constraints, it is essential to promote entrepreneurial activities through various incentives in rural areas. To attract unemployed educated youth into agribusiness and agri entrepreneurship, impetus on creating scientific temper and fostering innovative spirit among the rural youth is the need of the hour. Public expenditure on social infrastructure is also

needed to be prioritised to promote sustainable and inclusive growth. Focus on public investment in human capital is required to be enhanced to bring social changes in the desired direction. In order to reap the advantages of demographic dividend, it is imperative to improve educational standards, skilling the youth, empowering women, providing affordable healthcare to all and enhance job opportunities in a big way. Above all, uplifting of socially and economically backward sections of the society is of paramount importance for bridging the gulf between the so-called more privileged and less privileged groups. It is earnestly hoped that a series of schemes in place for income and employment generation by promoting entrepreneurship will pave the way for attaining the goal of sustainable growth with social justice in the country.

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Sustainable Solid and Liquid Waste Management

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The Government of India has launched a number of initiatives for efficient and sustainable management of waste in the country. The Swachh Bharat Mission was launched to eliminate open defecation, improve cleanliness and eradicate manual scavenging. Swachhata Hi Sewa campaigns are being organized at regular intervals in the country to spread awareness about efficient management of waste among the masses.

Rapid economic growth has been instrumental in reducing poverty and unemployment across the world along with a significant improvement in standards of living. There has also been a substantial increase in global economic output coupled with a wider availability of goods and services to consumers. However, a higher economic growth has also resulted in an unexpected increase in the pace of industrialisation and urbanisation, a trend witnessed in majority of the countries as they move up the economic ladder. Fifty five percent of the global population currently lives in urban areas and this is expected to increase to sixty eight percent by 2050¹. A higher urban population has resulted in an unprecedented increase in waste generation in recent years. In 2016, the world's cities generated two billion tonnes of municipal solid waste, which is projected to increase to 3.4 billion tonnes by year 2050².

Such a gigantic quantity of waste is a threat to the global ecosystem, which is already reeling under the adverse effects of climate change. India, too, has witnessed an unparalleled increase in the pace of urbanisation in the recent decades due to large scale rural-urban migration. Around 400 million people living in India's urban areas generate 62 million tonnes of municipal solid waste annually³. The existing infrastructure is inadequate to provide civic amenities to all urban residents, which has consequently resulted in uneven urban development and also impeded the process of efficient collection and disposal of waste in cities. It is appalling that eighty

percent of this waste is disposed of at dump yards in an unhygienic and unscientific manner by the municipal authorities⁴.

Improper discharge of waste has severe social and environmental implications. The World Health Organisation (WHO) has observed that 22 types of diseases are associated with improper management of municipal solid waste⁵. This leads to formation of leachate in the ground and contaminates the groundwater, which subsequently accentuates the water crisis in the country. Untreated sewage results in agricultural contamination, environmental degradation and a plethora of diseases such as Cholera, Typhoid, Hepatitis A, Dysentery, Schistosomiasis, among others. Apart from this, the waste sector contributed to four percent of India's total GHG emission in year 2015⁶. Improper management of waste also disproportionately affects poorer communities living in slums and areas nearer to landfills and dumpsites. Millions of waste pickers are daily exposed to hazardous substances which seriously impacts their health and life expectancy.



Against this backdrop, the Government of India has launched a number of initiatives for efficient and sustainable management of waste in the country. Some of these initiatives are as follows:

1. The Swachh Bharat Mission (SBM) was launched in 2014 to eliminate open defecation, improve cleanliness, eradicate manual scavenging, establish modern and scientific management of municipal solid waste and hence achieve universal sanitation coverage in the country. The initiative has two thrust areas - SBM (Urban) and SBM (Rural).
2. A number of workshops have been conducted for Urban Local bodies (ULBs) by National Institute of Urban Affairs as part of the capacity building programme under SBM. The purpose is to enable ULB officials to understand solid waste management rules and recognise issues, challenges and constraints in waste management. In addition, sessions have been conducted on Swachh Survekshan, Open Defecation Free (ODF) and Faecal Sludge Management (ODF+) protocols, Star Rating of Garbage Free Cities and mandatory requirements for accessing SBM funds from the Central and State government exchequers.
3. The Government of India also revamped the Municipal Solid Waste (Management and Handling) Rules 2000 and notified the new Solid Waste Management Rules in 2016. The new Rules stipulate that all ULBs are responsible for proper collection, storage, transportation, processing and disposal of municipal waste and deciding a time-frame for setting up of solid waste management facilities. Responsibilities of waste generators have also been introduced to segregate waste into three streams wet, dry and domestic hazardous wastes.
4. Swachh Survekshan is an annual survey of cleanliness conducted by the Ministry of Housing and Urban Affairs to foster a spirit of healthy competition amongst towns and cities and to improve service delivery to their citizens. It is touted to be the largest cleanliness survey in the world. The first survey was conducted in 2015 and covered 73 cities and by 2020, the number of cities under the survey increased to 4,242 cities². As per the 2020 Survey, Indore was adjudged the cleanest city in India, followed by Surat and New Mumbai.
5. Swachhata Hi Sewa campaigns are organised at regular intervals in the country to spread awareness about efficient management of waste among the masses. A number of activities like cleanliness drives, essay and poster-making competitions, Swachhata pledge drives, etc., are organised in schools, colleges and government offices under this campaign. Swachhata Pakhwadas are also organised in different parts of India to ensure mass participation of citizens in cleanliness activities, and to transform Swachh Bharat Mission into a citizen's movement. In addition to these, government launched the Waste Segregation campaign in 2017 to spread awareness about the importance of waste segregation at source.
6. The Ministry of Urban Development launched the 'Compost Baniya, Compost Aaniya' scheme to convert biodegradable waste into compost, which can be used as fertilizer for agricultural production. Under this scheme, Resident Welfare Associations receive a government grant for purchase of a compost making machine.
7. Ministry of New and Renewable Energy is promoting Waste-to-Energy (WTE) technologies to generate energy from agricultural, industrial and urban wastes of renewable nature such as municipal solid wastes, vegetable market wastes, slaughterhouse waste, agricultural residues and industrial/STP wastes and effluents. The total estimated energy generation potential from urban and industrial organic waste in India is approximately 3,600 MW³. Hence, WTE is an excellent alternative to non-renewable sources of energy. To facilitate geographical mapping of waste availability and its energy generation potential across India, GIS-Based Waste Mapping Tool has also been developed under the MNRE-GFF-UNIDO project.
8. The Gobardhan scheme was launched under Swachh Bharat Mission (Rural) to convert biodegradable waste, such as cattle waste, kitchen leftovers, crop residue and market waste into biogas, to be used for domestic or

industrial purposes in rural areas. Bio-slurry, a by-product of the biogas production process, is converted into organic manure and can be sold to farmers. The initiative is expected to provide immense benefits to villagers in terms of cleanliness, availability of clean fuel and promotion of organic farming.

9. In addition to above-mentioned initiatives, Government of India launched the Jal Jeevan Mission (JJM) in Budget 2019 to ensure universal water supply in all 6,378 Urban Local Bodies and liquid waste management in 500 AMRUT cities. The Mission will be implemented over 5 years, with an outlay of Rs. 2,87,000 crores. Also, the Swachh Bharat Mission Urban 2.0 was announced with a total financial allocation of Rs. 1,41,675 crores over a period of 5 years from 2021-2026.

The various government interventions under the Swachh Bharat Mission have achieved great success since the campaign was launched. Under SBM(U), 96 percent wards practice 100 percent door to door collection, while 75 percent wards practice segregation at source¹⁹. At the time of launch of the Swachh Bharat Mission, the combined waste treatment capacity across processes such as composting, Bio-methanation, and Waste to Energy plants was 95,00,000 tonnes per annum (TPA). However, post the Swachh Bharat campaign, the functional capacity across various processes increased to 238, 00,000 TPA²⁰.

Cities like Durg and Ambikapur have achieved 100 percent door-to-door collection of waste through mass awareness campaigns, segregation of waste at source and availability of necessary infrastructure. Also, a number of employment opportunities have been provided to various informal workers in this sector. Through sustained efforts, these cities have become free of dustbins, dumpyards and landfills²¹.

Bengaluru has set up a strong system backed by technology to address the problem of waste generated by Bulk Waste Generators. Every BWG in Bengaluru is required to register on an online portal "BG Net", where all information of the Bulk Waste Generators such as the quantity of waste produced, method for on-site composting, etc. is recorded. BWGs have to carry out in situ management of organic waste and hand over dry waste, electronic waste and sanitary waste separately to Bruhat Bengaluru Mahanagara Palike

(BBMP) empanelled contractors. To incentivise the BWGs, a rebate of 50 percent of the SWM cost is provided²².

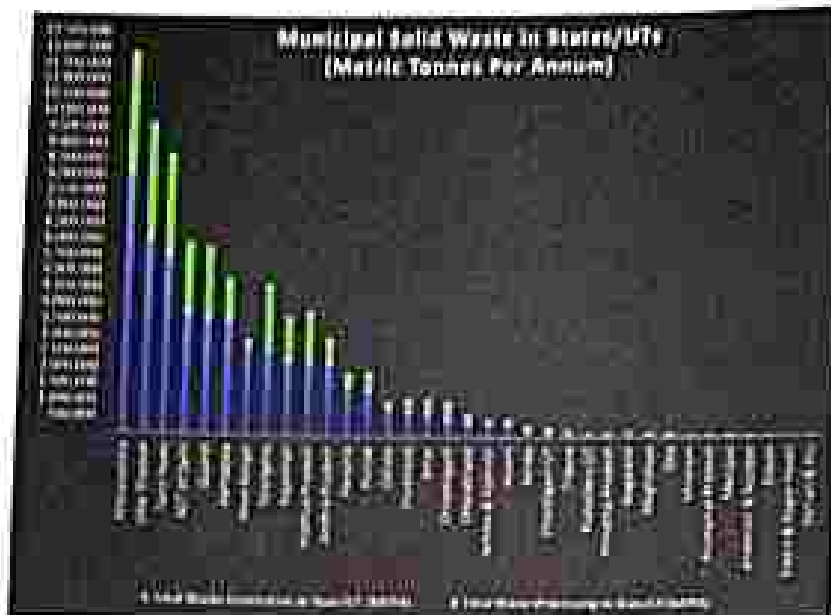
Pune has presented a decentralised model of waste management which is also socially relevant and inclusive in nature. Pune Municipal Corporation (PMC) has signed a contract worth Rs.3.87 Cr (per year) for a period of 5 years with a co-operative society SWACH to carry out waste collection, segregation and composting activities. The rag-pickers are now formally integrated into the system and have an average earning of Rs. 12-15,000 per month²³.

A number of best practices in liquid waste management are also being followed in certain States. The State of Maharashtra introduced a policy of reusing treated waste water for cooling thermal power plants, serving industrial estates and servicing other non-potable purposes. In 2017, Gujarat has also launched its waste water treatment and reuse policy in 2018, with the aim of increasing reuse of its treated waste water and reducing dependence on freshwater resources. In addition to this, Focal Sludge Treatment Plants (FSTPs) are also being run in the country, like in Devanahalli, Karnataka, through funding from Bill and Melinda Gates Foundation and Consortium for Decentralised Wastewater Treatment Systems (CDWATS) Dissemination (CDD) Society²⁴.

A number of initiatives have also been taken up by individuals and non-government organisations in India to contribute to efficient waste management. Greenloop is an organisation which collects discarded footwear in Navi Mumbai and refurbishes them to provide recycled footwear to the lesser privileged sections of society. The entity provided bins to all major societies in the NMWC area and also provided an on-call collection service for collection of footwear. In barely 3 months, 25 tonnes of waste was collected from citizens in the form of footwear and more than 5000 people were supplied with refurbished footwear products²⁵.

The above-mentioned schemes and initiatives are laudable and have contributed significantly towards a cleaner India. However, there is still a considerable gap in generation and processing of solid and liquid waste in the country.

As can be seen from the chart, the State of Maharashtra generates the highest quantity of municipal solid waste followed by Uttar



(As on November 2018¹⁷)

Pradesh, Tamil Nadu, Delhi and Gujarat. However, Chandigarh, Chhattisgarh and Telangana process significant quantities of waste.

The state wise generation of liquid waste is as follows¹⁸:

Around 72,000 million litres of sewage is generated in India on a daily basis but installed capacity exists for only 37,000 million litres and out of which, only 20,000 million litres is treated¹⁹. In a nutshell, only 28 percent of sewage generated in India is actually treated on a daily basis.

The States of Maharashtra, Uttar Pradesh, Tamil Nadu, West Bengal and Gujarat generate the highest quantities of sewage in the country. Chandigarh treats 100 percent of its sewage while Delhi, Punjab and Haryana also treat a significant portion of their liquid waste. Even though the number of operational sewage treatment plants doubled from 522 in year 2014 to 1093 in year 2020²⁰, treatment and installed capacity of sewage in the country remains way below the requisite levels. Operation and maintenance of existing sewage treatment plants and sewage pumping stations across the country is not satisfactory. Also, sewage treatment plants do not conform to the general standards prescribed under the Environmental (Protection) Rules for discharge into streams as per the CPCB's survey report²¹. Auxiliary power back-up facility is also a prerequisite for functioning of intermediate (IPS) and main pumping stations (MPS) at all the STPs. Consequently, the existing treatment capacity remains underutilised

and a lot of sewage is discharged without treatment.

Though SWM Rules 2010 had provided detailed guidelines to ULBs on setting up waste processing and disposal facilities, identification of sanitary landfill sites, and improvement of existing dumpsites, a significant number of Urban Local Bodies could not comply with these due to a number of reasons like inability of municipalities to implement waste segregation, inadequate institutional and financial means to implement waste processing and lack of access to sophisticated and efficient technologies. However, paucity of funds is the prime reason that has discouraged ULBs from engaging in efficient waste management till now

and this is where Public Private Partnerships can play a crucial role.

However, the concept of PPPs in waste management is not new to India. Cities like Nagpur and Indore have successfully roped in private players for efficient management of solid and liquid waste in their cities. In Indore, a private company has invested ₹10 crores under the Public-Private Partnership (PPP) model and pays ₹1.51 crore premium from its profits to the Indore Municipal Corporation (IMC). The civic body has also been producing compost and bio-CNG fuel from wet waste. Construction and demolition waste is being turned into bricks, tiles and other stuff, which fetches the civic body ₹2.5 crore annually²².

Nagpur Municipal Corporation (NMC) has privatised collection and transportation of solid waste. The NMC also started processing legacy waste along with some fresh waste using bioremediation/bio-mining technology at the existing dumpsite. In May 2017, NMC signed a contract for the development of a Waste-to-Energy facility of 800 TPD at the Bhandewadi dumpsite. M/s. Essel Infra Projects Ltd. Mumbai and Hitachi Zosen India (JV) have been selected as concessionaires for the project. The project is based on mass-burn incineration technology and is expected to generate 11.5 MW of electricity²³.

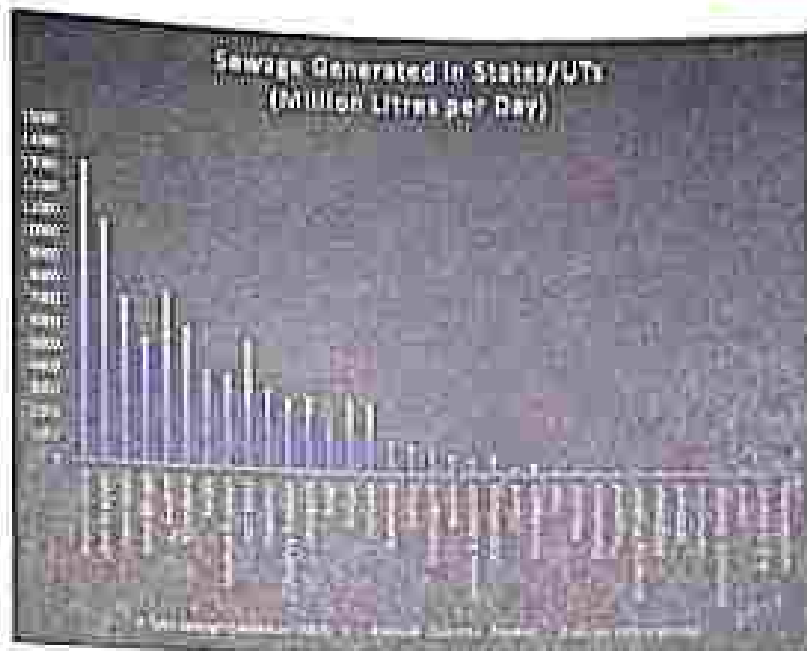
Though PPP models in waste management offer a plethora of benefits to ULBs and citizens, only a handful of civic bodies were successful in partnering with private players. Failure of the Tipping Fee model, non-availability of funds,

involvement of multiple contractors, skewed waste management contracts and lack of integration in the waste value chain are some of the factors which did not evince interest among private players. However, involvement of the private sector is essential to improve accountability and ensure adequate provision of quality services as the former can fill the huge gap in the sector in terms of availability of technological selection and financial resources.

Amidst this backdrop, NITI Aayog introduced the concept of Hybrid Annuity Model (HAM) to promote Public Private Partnerships and prepared Model Concession Agreements to facilitate ULBs in the waste management process. Under HAM, capital expenditure is shared solely by the Urban Local Body while the operational expenditure is shared by both private players and the civic bodies.

Under Solid Waste HAM, the concessionaire would be responsible for bio-remediation of legacy waste; setting up of waste treatment plants; primary and secondary collection; transportation, processing and disposal of solid waste; sale/disposal of processed waste, by-products and recycled items and operation and maintenance of the project. Under the Liquid Waste HAM, the concessionaire would be responsible for construction of Sewage Treatment Plants (STPs), Faecal Sludge Treatment Plants (FSTPs), door to door collection and transportation of faecal sludge and sale/disposal of processed waste and by-products and recycled items. Revenue arising from sale of recycled products would be collected by the concessionaire and shared with the civic body. The concessionaire would also collect user fees from the citizens to meet operational expenses of the project.

The Hybrid Annuity Model offers a plethora of benefits to both civic bodies and private players. The Model Concession Agreements (MCAs) provide government guarantee to lending institutions which makes a project bankable. In addition, the private partner can raise funds from multilateral agencies. Moreover, the entire waste value chain gets covered in the new model which obviates the need of hiring multiple



[As on 30th June, 2016]

contractors for independent components of waste management. The concessionaire also has the liberty to select any state-of-the-art technology within the ambit of environmental laws. The model encompasses integrated management of waste across the entire waste value chain by one concessionaire/consortium.

Countries like South Korea and Malaysia have one of the most efficient waste management systems across the world. In South Korea, most municipalities have entrusted parts of their responsibility to private companies with a short- or long-term contract. In addition, the country implemented a volume-based waste fee system in late 1980s which helped in reduction of municipal solid waste generation from 30.6 million metric tonnes in 1990 to 19.3 million metric tonnes in 2016. Landfill and incineration rates have also decreased dramatically from 94 percent in 1990 to 38 percent in 2016. With government support, the world's first landfill-powered hydrogen plant was built in 2011, and currently over 60 percent of new and renewable energy is produced from waste. South Korea is now the country with the second-highest recycling rate in the world (60%) after Germany¹⁴.

In Malaysia¹⁵, the concept of Waste Eco Park (WEP) was introduced to centralise recycling companies from various industries under the same location. Companies which develop WEP with a minimum investment of RM50 billion are considered for income tax exemption of 70 percent over the period 2016-2025 on income derived from the rental of buildings, fees from

usage of waste collection and wastewater treatment facility located in the Park.

From the above instances, we get to know how innovative ideas and solutions can sensitize people and bring a paradigm shift in their behaviour towards waste minimisation. Community awareness and participation can go a long way in reducing the quantum of waste and save the planet from further degradation.

Efficient waste management helps in attaining the Sustainable Development Goals (SDGs). SDG 11 focuses on inclusive and sustainable urbanisation in all countries while SDG 12 focuses on ensuring responsible consumption and production patterns across the world to minimise waste generation. The 3 Rs-Reduce, Reuse and Recycle minimise the use and consumption of resources on the planet and help in achieving the goal of circular economy.

In the words of Mahatma Gandhi-a strong country can only be built on the shoulders of cleanliness. He believed that cleanliness is next only to godliness and made sanitation an integral part of the Gandhian Way of living.

Considering the fact that waste generation in India is projected to increase to 165 million tonnes by 2031², there is an urgent need to start working towards efficient and sustainable management of liquid and solid waste in the country. This eventually requires a concerted effort by governments, urban local bodies, private sector, non-government organizations and citizens across the country.

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Education as Driver of Rural Transformation

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The scenario of transition in rural society, especially in the post-independence era suggests that the process of planned development has shaped a new rural society where education plays a key and fundamental role. The changes in rural India have brought about a process of rapid social restructuring. It is leading to a breakdown in the segmentary mode of social change. It has resulted in the rise of the new middle class to power. There has been massive use of science and technology in agriculture.

The early morning imagery of a peasant pulling a plough is fast giving way to a new rural vignette of village children in uniforms walking to schools in flocks. Even in 2001 a little over 25 percent of all rural 18-year-olds were attending schools, the rest having dropped out earlier. By 2016, the share of 18-year-olds in schools and colleges had gone up to 70 percent. Today, there is a rapidly rising trend of education in rural India as the wind of change is sweeping India's landscape with youngsters far surpassing their parents' levels of education.

Larger number of individuals in the age group of 14-18 years, opting to remain in the educational system is heartening, as girls have closed the gap with boys in rural areas: at age 14, 94 percent of girls and 95 percent of boys are enrolled in school; by age 18, 68 percent of girls and 72 percent of boys are still in school, a wholesome improvement on the proportions of a generation earlier. Modern economic growth has little room for people with rudimentary skills and low education levels. The age of assembly-line production has given way to new technologies consisting of complex processes, requiring a better trained workforce.

The belief has gained ground that education will be the road out of a cramped and precarious livelihood on the farm. Inspired by this hope, rural children have flocked to schools. Most of them are first-generation learners. It is like a huge social experiment in which rural parents across the land have invested heavily, letting their children study well beyond the age when they had themselves joined the workforce. Education is fundamental to development and growth. The human mind makes possible all development achievements, from health advances and agricultural innovations to efficient public administration and private sector growth. For countries to reap these benefits fully, they need to unleash the potential of the human mind. And there is no better tool for doing so than education.

The scenario of transition in rural society, especially in the post-independence era suggests that the process of planned development has shaped a new rural society where education plays a key and fundamental role. The changes in rural India have brought about a process of rapid social restructuring. It is leading to a breakdown in the segmentary mode of social change. It has resulted



In the rise of the new middle class to power. There has been massive use of science and technology in agriculture. The green revolution signifies not merely growth in agricultural production but also the use of new technology and social relationships in the production process. Substantial changes in values and beliefs are also taking place in rural India. These developments make the new phase of changes in rural economy and society a distinct process. A new interaction among technology, social relationship and culture is now taking place in the rural society.

Rural social transformation signifies a major shift in rural formation. Transformation in the rural context denotes the successive changing patterns conceived in the rural set, in its structure, fact, form and character, both in positive and negative direction. In sociology, the concept of rural transformation has been interpreted as a concrete process of restructuring in rural society. Noted sociologist, Yogendra Singh writes that the pace of social restructuring, the emergence of new classes and decline of traditional cultural institutions exemplify the phenomenon of contemporary transformation in rural India.

Innovation has been a potent policy tool for addressing the structural problems that characterise poverty in marginalised rural communities. In what ways are governments in developing countries involved in supporting innovation to achieve inclusive development objectives? The government support coupled with greater participation of local community members in the planning and implementation of innovative projects proved to produce greater potential for success. The contributions also emphasise the pivotal role that the state must play in supporting local capability building and bridging knowledge gaps between innovation producers and rural user communities, in order to facilitate local absorption of external technological solutions.

Putting in perspective, India is aiming for a US\$ 5 trillion economy and is fast racing to be the third-largest market after the US and China. That's a big leap, considering that if we rewind to 1980, when it was just a US\$ 190 billion financial system at the 13th position in the world ranking. Conjoined with one of the youngest demographics and a burgeoning middle-class society, this race, however, puts India's high-octane growth through several challenges. The government

launched Samagra Shiksha-an Integrated Scheme for school education, w.e.f. 2018-19, which is an overarching programme for the school education sector extending from pre-school to class XII and aims to ensure inclusive and equitable quality education at all levels of school education. It envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to senior secondary levels and subsumes the three erstwhile centrally sponsored schemes i.e. Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).

One of the most important factors for the growth of the Indian economy hinges on rural changes, especially its socio-economic structure. Agriculture contributes nearly one-fifth of the gross domestic product in India. In order to increase the growth of agriculture, the Government has planned several programmes pertaining to rural development in India. This is where education plays a role. It is fundamental to development and growth.

Education in rural India is a catalyst to improve the economic and social well-being of the nation. According to the Annual State of Education Report (ASER) 2019, only 15 percent of children in Class 1 in 26 surveyed rural districts in India, can read the text at the prescribed level, while almost 40 percent cannot even recognise letters. To achieve the dream of Skilled India, there has to be an enhanced focus on upgrading the rural education system. The advent of the latest technology, industrialisation, and the need for skilled manpower across industries makes it all important now to invest in the education sector to shape the future workforce. The disruption of education caused by COVID-19 has adversely impacted rural India wherein children could not cope up with the new normal, owing to lack of adequate digital infrastructural support. There is a need to provide a holistic solution to ensure quality education at the grassroots level.

Rural communities that are supported by a comprehensive education system allow their members to build their knowledge capacity, helping them cope with changing dynamics and make more informed decisions. Prioritising education can encourage them to actively participate in the economic and cultural development of their communities. This further leads to sustained rural development, a better quality of life, and improved

personal development. With the knowledge and power of education, these communities can flourish. There is a discernible gap between the rural and urban education system for which rural children face many difficulties.

According to the Annual State Education Report survey, two-thirds of rural children in India reported that they did not receive learning materials or activities at all during the period of the pandemic. Additionally, one in three children had no learning activity during this time. Lack of tools, inadequate number of schools and infrastructure, financial burdens and low digital literacy hinder them from receiving the schooling they desire. Gender also plays a role in the education of rural children with high rates of withdrawal from school among girls. Communities must be made aware of and encouraged to adopt gender-free education systems built on the foundations of equality and quality.

The Government has brought out holistic educational programmes such as DIKSHA or SWAYAM that enhance educational opportunities for children through digital learning tools and content. Though this made huge strides, the Indian education system, especially in rural areas, requires impactful policies and programmes that focus on providing vital infrastructure that can enable continuous education for its members. While the government has provided continuous support, there is required intervention by community stakeholders such as corporate trusts, who can create a positive impact on these communities. The right education can only be achieved from the right infrastructure. Corporates play an integral role in supporting government schools with smart learning facilities and better infrastructure which in turn will encourage students to take interest in education and enable a change in mindset. Holistic educational growth can provide the much needed economic and social progress, India requires to grow in the global arena.

Educating communities means developing schools and educating children and leaders. By doing so, rural communities will lead to a healthier and more sustainable future. The education system in rural communities has the opportunity to build capacity and knowledge in the rural populace, helping them to make informed decisions about their farms and to innovate in agricultural affairs. Education also exposes them to information and helps prevent the misinterpretation of information.

Educative can lead to many positive outcomes, such as an improved ability to understand policies, procedures, rights, duties, government schemes, legislation, available benefits, and protection laws.

It is important to understand the need for good quality education in rural areas, as it helps to keep rural areas populated. Young people move to urban areas for better opportunities in education and employment. Improved rural education is one possible strategy for keeping them earning in rural areas. It was recently documented that 69 percent of India's population lives in rural areas. Quality education is a pertinent tool for enhancing quality of life, creating awareness and capability, increasing freedom, and improving overall holistic human development for the people and the nation. Education is considered a vital element in the development of a society, a system, and a country and a well-supported, easily accessible education system is an efficient means to make people economically conscious, and thereby, make them actively participate in their economic prosperity and cultural development.

Women and Education

Education can create difference in the lives of children from underprivileged rural backgrounds. It transforms lives of people by driving a deep impact not only on the individuals but their families and communities as well. Education can be a catalytic force that allows women to break stereotypes and barriers of deep-rooted gender bias and inequality as well as empower them to create awareness about women rights, health and hygiene. Education of women is the most powerful tool to change their position in society especially in rural areas as it reduces inequalities and functions as a means of improving their status within the family and develops the concept of participation. Empowerment can be viewed as a means of creating a social environment in which one can make decisions and make choices either individually or collectively for social transformation. It strengthens the innate ability by way of acquiring knowledge, power and experience. Empowering women has become the focus of considerable discussion and attention all over the world. In an economy still coming to grips with and recuperating from a global pandemic, it is even more important, today, to recognise the role that women are playing and have the

potential to play when it comes to leading their families, communities, and the nation.

Conclusion

For the large majority of the population living in rural areas, education is highly dependent on government-run or aided schools and non-governmental organisations. But rural areas still face various barriers that directly impact the country's literacy rate. The National Education Policy 2020 emphasises digital learning as an alternative to the conventional classroom model but implementing this in rural India will face some challenges.

Financial issues: To start with, meagre incomes lead to education taking a backseat. Parents tend to see education as an expense rather than an investment. They would rather have the children work and earn. When it comes to higher education, lack of good institutions close by leads to students have to look at shifting to cities, which adds to their expenses. This leads to low rates of enrolment and higher dropout rates:

- **Lack of Guidance:** Students in smaller regions have great potential and are motivated to study but lack right mentoring. This is required not just for the children but also for their parents.
- **Lack of Infrastructure and Faculty:** Children have limited or no access to basic learning tools such as well-equipped classrooms, computers, labs, playgrounds, among other things. Often, the teachers are not qualified or do not turn up, leading to a poor quality of education. This also leads to low morale among students to attend school.
- **Gender Inequality:** In some places, girls are not allowed to go to school. Or if allowed, it is only upto a certain age. They are not allowed to move out of their hometown for higher education or better jobs.

While most of these areas need transformative changes, which will take time, technology can help drive it faster. With the increased use of smartphones in rural areas, e-learning platforms can be accessed easily. Many are also affordable. This new way of learning can be made attractive to children. Courses from the best educators, e-libraries for research material and teachers will all be available in an instant. Vulnerabilities such as lack of availability of quality

content and training mechanisms can be addressed. In these unprecedented times, the integration of technology with education holds great promise.

It is pertinent to note here, the numerous e-learning platforms that are using crowd-sourced educational materials where knowledge seekers can connect to a pool of knowledge providers, with the internet serving as an intermediary. The crowd-sourced knowledge base of the internet can effect positive change in communities by allowing people to connect and experience uniform knowledge exchange. Social interactions via technologies allow people to raise questions, share knowledge, ideas and discover human skills regardless of hierarchy. At its heart, the disparity of educational quality between rural and urban areas is due to unequal access to quality learning in its traditional form. This problem can be addressed by utilising the massive potential of the internet and cyber knowledge resources. Synchronous and blended initiatives have the potential to supplement traditional teaching methods and there are examples in the Indian context as well, such as Vedantu, eYdyaLoka, KexConnect and many more.

The problem of shortage of quality teachers in rural areas can be solved by accessing online teachers from urban areas using e-learning. The trending 'smart classrooms' supported by MNCs aim at improving learning outcomes among affluent urban schoolchildren. On the contrary, these online initiatives at a relatively lower cost pioneered by social entrepreneurs can spread 'smart classrooms' to remote rural areas. Our vision, as a society, should be to promote a level of ubiquitous internet presence and infrastructural support that enables any individual with an internet connection to tap into the vast array of resources that have been curated by collective effort. Only then can we truly hope to utilise the full extent of the benefits accruing due to the digital revolution.

To drive home the point again, education plays a critical role in rural development, as it is a key factor in developing the people of the rural area, the community, and the land itself. With education, there is always a bright future in store for rural communities. Raising the quality of education in rural schools is essential, and a nationwide dialogue is necessary for charting the way ahead. Business-as-usual will not fix the problem. Privatising the government system is not

a viable solution, either. The market for education performs poorly in situations where information flows are sparse and competition is limited or non-existent. Private rural schools perform no better than public rural schools in terms of learning outcomes.

There are few rewards for being a good teacher and few punishments for being a careless one. That is because of faulty designs which need to be repaired or replaced with more effective and accountable governance systems. What is currently a highly regimented and top-down system in India needs to give way to another in which teachers are innovative in the classroom and parents are involved as co-decision makers. Noteworthy smaller-scale innovations developed by state governments and non-government organisations provide indication of the larger potential of societal innovation. These reform efforts should serve as the starting points for a broader and increasingly essential public conversation.

In the long term, education in a rural setting should be focused on making rural people responsible for their participation in the following elements of rural development:

- **Employment and Income Opportunities:** Increasing the quality of education in rural areas can significantly impact the development of employment opportunities. Studies have shown that the availability of skilled labour, transportation infrastructure, and local markets are prime factors in selecting a community for an industrial placement.
- **Increase in Productivity of Rural Labour Force:** Education can improve labour productivity in rural areas, increasing the wealth of a region or area.
- **Education Develops Leadership:** With education, individuals gain confidence, knowledge, skills, and experience — all factors that increase an individual's ability to effectively and efficiently lead a group of people towards success. Education helps to identify and develop those leaders in our communities who will battle against low-quality education, and poverty, leading to a successful and strong community.

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Promoting Tribal Entrepreneurship: Towards a Holistic Strategy

Partho Pratim Sahu

Pradhan Mantri Van Dhan Yojna (PMVDY) is a market-linked Entrepreneurship Development Programme for forming cluster of tribal Self Help Groups (SHGs) and strengthening them into Tribal Producer Companies. There is an elaborate and systematic institutional framework to support enterprise development across tribal groups. These are multiple Central Government ministries such as Ministry of Micro, Small and Medium Enterprises (MSME) and Ministry of Skill Development and Entrepreneurship (MSDE), State Government department and agencies, financial financial institutions, training and capacity development institutions, incubation centres and so on responsible for inclusive and sustainable enterprise promotion.

In last few years, there have been considerable efforts both by central and state governments to achieve faster, inclusive and sustainable growth. But some sections of the society are still either being left out of or not being able to gain adequately from the growth process leading to growing inequalities between and within rural and urban areas and as well as across social group identities. Few socially and economically disadvantaged communities such as STs suffer various forms of discrimination while accessing resources including land and capital/credit, job, health, education, housing, basic amenities and other public services. But to mitigate this discrimination, in addition to constitutional provisions, there are series of initiatives, preferential treatments, protective and affirmative policies. The STs community is not a homogenous group and is diversely distributed across Indian states. A part of this community also resides in remote locations, depending primarily on forest resources for their livelihood. Expanding their livelihood portfolios by creating employment and entrepreneurial avenues will be crucial to mainstream them in larger development discourse. Further, there is a growing realisation that the conditions of tribal community may

have worsen in this pandemic and subsequent lockdown. With a looming livelihood crisis, jobs and incomes may have been lost, driving many from this community into poverty. This decade will be decisive for us, because it is imperative to build and work towards a sustainable, inclusive, and resilient growth for a better future of the people and planet.

Present Status and Challenges

As per 2011 census, STs constitutes 8.60 percent of total population. These groups are more concentrated in rural areas and often live in some of the poorest and most backward regions of the country, including areas severely affected by internal conflict and violence. STs are often constrained to start any new business due to limited resources, inadequate entrepreneurial abilities and lack of social networks and most of them end up in activities similar to their family/parental business. Marketing obstacles further restrict the possibility to start up a new venture and/or scale up the existing ones. Limited participation in business activities also obstructs the possibilities of skill formation and upward mobility.

As per latest available NSSO enterprises survey data, during 2015-16, in rural OMPs segment, STs owned only seven percent of



enterprises. They own 6.9, 8.4 and only 5.0 percent in manufacturing, trading and other services respectively (Table 1). In a relatively bigger sized enterprises, i.e. establishment segment their presence is even lower. They own 4.5, 3.3 and 5.9 percent in manufacturing, trading and other services respectively. In urban areas, the share of STs owned enterprises are lower as compared to their rural counterparts even in same activity; it is evident that STs community not only own a disproportionately low share as compared to their population weight but also operate mostly in tiny enterprises, i.e. OAEs. It also shows that this community finds it difficult to start a small and medium enterprises and scale up the existing ones.

We also found that the STs community operates in a very few industry groups largely in traditional industry groups with highly

labour-intensive production process. ST-owned enterprises are concentrated in industry groups such as retail trade, land transport, wearing apparels, wood and wood products, beverages, tobacco products and so on. In other words, their presence in capital-intensive/non-agro-based industry groups is very negligible. This is because to start or run enterprises in these sectors seems to require a high degree of skill and training and also large amount of investment. Even within the same product line, the ST-owned enterprises were higher in rural areas as compared to urban areas. Over the years, the urban areas seem to pose greater degree of entry barriers for the ST entrepreneurs. Both scale and locational attributes thus operate adversely for these groups to participate in private-business economy. Why ST entrepreneurs are not able to diversify their business activities or why they are not able to break away from parental or generational

Table 1: Percentage of enterprises owned by social group categories, 2015-16

Location/ Type of Enterprises/Sector	No. of Units (In Lakhs)	% of enterprises owned by			
		STs	SCs	OBCs	Others
1	2	3	4	5	6
Rural_OAEs					
Manufacturing	104.7 (36.6)	6.9	16.8	52.6	23.7
Trading activities	101.1 (35.5)	8.4	14.0	51.0	26.6
Other services	79.4 (27.9)	5.0	17.8	53.0	24.1
All	284.7 (100)	7.0	16.1	52.1	24.8
Rural_Ests.					
Manufacturing	9.1(33.4)	4.5	9.7	52.0	34.3
Trading activities	5.7(21.7)	3.3	5.3	47.8	43.8
Other services	11.4(41.9)	5.9	10.7	50.3	32.7
All	27.3(100)	4.8	8.8	50.4	36.0
Urban_OAEs					
Manufacturing	62.7(26.9)	1.4	10.7	57.4	30.5
Trading activities	92.0(39.4)	1.6	9.9	45.1	43.3
Other services	78.6(33.7)	1.7	13.0	49.1	36.1
All	233.3(100)	1.6	11.1	49.8	37.5
Urban_Ests.					
Manufacturing	19.2(27.0)	0.3	5.3	47.6	45.9
Trading activities	28.4(40.2)	0.6	2.8	37.6	59.0
Other services	23.2(32.8)	1.3	5.0	45.6	48.3
All	70.8(100)	0.9	4.3	42.9	51.9

Note: i) OAEs = Own account enterprises, Ests.= Establishments, ii) Figures in the parentheses are percentage distribution of enterprises across type of enterprise, iii) Own-account Enterprise: An enterprise, which is run without any hired worker employed on a fairly regular basis, is termed as an own-account enterprise. Establishment: An enterprise which is employing at least one hired worker on a fairly regular basis or termed as establishment. Paid or unpaid apprentice, paid household member/servant/ resident worker in an enterprise are considered as hired workers. iv) Other services include transport, storage, IT, real estate services, financial services, education, health, and other community, social and personal service activities. Source: Authors' own compilation based on NSSO, 2018.

entrepreneurship are questions that need further probe.

The social group identity not only plays a crucial role in participation but also in the economic performance of these enterprises. Based on standard structural coefficients such as per worker productivity, capital-labour ratio which provide considerable insights about the relative efficiency of enterprises, it has been observed that ST-owned enterprises are operating at very low levels of returns as compared to enterprises owned by other social groups. In other words, in terms of relative efficiency, ST-owned enterprises do not perform better than those owned and managed by SCs, OBCs and other social groups. Therefore, to create a level playing field for ST entrepreneurs, it is important to have an enabling environment that nurtures businesses run by STs Community. To sum up, we found that participation of STs in entrepreneurial landscape is of low order and is limited to very few product lines. However, it is important to understand, besides social group identity, what are the factors such as institutional, technological and marketing that hold back these community to start a new enterprise or scale up the existing ones.

Policies and Schemes

There is an elaborate and systematic institutional framework to support enterprise development across social groups. There are multiple Central Government ministries such as Ministry of Micro, Small and Medium Enterprises (MSME) and Ministry of Skill Development and Entrepreneurship (MSDE), State Government department and agencies, formal financial institutions, training and capacity development institutions, incubation centres and so on responsible for inclusive and sustainable enterprise promotion. But we have not yet witnessed any significant improvement in tribal entrepreneurship. In many of these programmes, a specific share of the total budget or total target (number of beneficiary) is exclusively earmarked for STs. At the state level as well, many initiatives are undertaken, such as providing free plots, loans at subsidised interest rates, relaxations in lending norms for term loans, providing free training programmes etc. to empower the entrepreneurs from STs communities. Big industry associations such as FICCI, CII as a part of Corporate Social

Responsibility (CSR), have envisaged steps for the creation of entrepreneurs from SCs and STs community. These include maintaining a database of entrepreneurs belonging to SCs and STs, mentoring them in quality control, productivity and cost standards, ensuring greater access to capital, facilitating business partnership with enterprises owned and promoted by SCs and STs, collaborating with SIDBI, NABARD for creation of entrepreneurs from SCs and STs communities and so on.

The National SC/ST Hub Scheme (NSSH) implemented by the Ministry of MSMEs aims to promote SC/ST entrepreneurs and improve their participation in Government procurement processes. It will hand-hold entrepreneurs with market access/linkage, monitoring, capacity building, financial support schemes, and industries best practices. This scheme provides skill training, subsidy for procurement of plant and machinery, subsidy for participation in domestic and international trade fairs, reimbursement of membership fees of Export Promotion Councils, subsidy on registration fees under single point registration fees of MSIC and so on. The public procurement mandated four percent annual procurement by Central Ministries/ Departments and Public Sector Undertakings from SC/ST enterprises.

To specifically cater the needs of STs community, Ministry of Tribal Affairs (MoTA), Ministry of Social Justice and Empowerment (MoSJE) and agencies working under these ministries (i.e. The Tribal Cooperative Marketing Development Federation of India (TRIFED), Tribal Research Institutes (TRIs)) are also implementing a large number of entrepreneurship development programmes and schemes. In December 2020, the Associated Chambers of Commerce and Industry of India (ASSOCHAM) in association with the Ministry of Tribal Affairs announced the Tribal Entrepreneurship Development Programme (TEDP), with a target to identify at least 350 tribal artists and help them expand their enterprises. Under this programme, artisans will be identified from all across the country engaged in Tribal Textiles, Paintings and Wall art, Super foods, Traditional Medicinal Plants and Products, and Forest Produce. Need based skill and training will be provided to improve the skill set based on the area of their expertise and developing new designs.

for their products as per market demand. Skills such as how to market their products on various platforms, maintaining checks and balances, better accounting practices for managing finances would be imparted and emphasised upon.

Pradhan Mantri Van Dhan Yojana (PMVDY) by the MoTA is a market-linked Entrepreneurship Development Programme for forming cluster of tribal Self Help Groups (SHGs) and strengthening them into Tribal Producer Companies. To address the challenges of inadequate financial linkages and market access, there are schemes such as Institutional Support for Development and Marketing of Tribal Products/Produce, Marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and Development of Value Chain for MFP, Tribes India E-Marketplace. MoTA and Ministry of Food Processing Industries (MoFPI) has been implementing TRIFOOD Scheme to promote value addition to Minor Forest Produce (MFP). Technological Interventions for Tribal Empowerment (TITE) is a grant-in-aid scheme of the Department Science and Technology (DST) under Tribal Sub Plan. It aims at improving living conditions and empowering scheduled tribes based on sustainable science and technology (S & T) activities/application. Recently, a mentorship-led entrepreneurship development programme

has been initiated by Ministry of Tribal Affairs (MoTA) in partnership with Facebook to boost entrepreneurship among tribal youth (See Box 1).

Various state governments also implement a large number of schemes and programmes to promote entrepreneurship among ST communities. For instance, the Gujarat Govt. signed an MoU with Amazon to support tribal entrepreneurs. The Triangana government recently announced Dalit Bandhu scheme for empowering Dalit families and enabling entrepreneurship among them through a direct benefit transfer of Rs 10 lakh per family. The government will provide reservation for Dalits in issuing licenses for small trading operations/shops, medical shops, fertiliser shops, rice mills, etc. Tribal communities are also rich in unique cuisine, jewellery, handicrafts, traditional products, medicinal herbs and so on. However, they face severe marketing constraints and to expand their marketing outreach, scheme such as Scheme of Fund for Regeneration of Traditional Industries (SFRTI) need to be leveraged. The tribal entrepreneurs from remote areas must also be encouraged and supported to participate in trade fairs and exhibitions.

Towards Formulating a Holistic Strategy

Social group identity does play an important role in providing the access to livelihood and entrepreneurial avenues. It is apparent that the proportion of enterprises owned and managed by STs is low as compared to other social groups and disproportionately low as compared to their share in total population. These entrepreneurs also operate mostly in labour-intensive, low remunerative activities which are not sustainable. The need of the hour is to formulate a cohesive strategy to promote tribal entrepreneurship. Towards this goal, the first step is to undertake a mapping or profiling exercise (of skills, capabilities and experience, potential for entrepreneurship) of STs communities. It is also necessary to ensure coherence of tribal entrepreneurship approach with the broader entrepreneurship approach. All local stakeholders (e.g. private sector, panchayats, line departments, community centres, incubators and accelerators) that could support entrepreneurship must be identified and

Box 1: Going Online As Leaders (GOAL)

- This programme aims to provide mentorship to tribal youth through digital mode;
- It support tribal youth and women to help them acquire skills and knowledge through mentorship in various sectors including horticulture, food processing, bee keeping, tribal art and culture, medicinal herbs etc.
- It operates through a meeting portal for mentor and mentee;
- All selected beneficiaries will get smartphones and Internet access (for one year) by Facebook and get connected with a designated mentor to get training on Digital Literacy, Life Skills and Leadership and Entrepreneurship;
- The program will also create awareness amongst tribal beneficiaries about various schemes initiated by Central and State Governments for welfare of STs as well as their fundamental duties.

work in close partnership. Accreditation and certification of existing skills through Recognition of Prior Learning must be leveraged. Customised training modules, curricula and content may be designed, keeping in mind the specific needs of the target groups and contexts. Entrepreneurship opportunities must be supplemented by social welfare schemes. Various insurance instruments and social safety nets must be developed to mitigate the immediate impacts of COVID-19 pandemic. The Dalit Indian Chamber of Commerce and Industry (DICC) must play a proactive role in providing necessary support and guidance to both existing and aspiring tribal entrepreneurs. Aggressive sensitisation of Government schemes and programmes and capacitating tribal communities to get benefitted from these will also be crucial. Tribal communities need extra guidance in terms of counselling, mentoring and hand holding to start a new business activity or expand the existing ones. The regulatory barriers that may hinder tribal entrepreneurship must be reviewed and simplified. A robust data-driven ecosystem is called for to improve the participation by marginalised social groups like STs in business and entrepreneurial avenues.

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MGNREGA: Transforming Rural Livelihoods

Tasneem Q Khan

Mahatma Gandhi National Rural Employment Guarantee Act or MGNREGA was introduced by Government of India in 2005 to target issues of poverty through the works that are undertaken, and thus ensuring sustainable development for all. MGNREGA is the largest work guarantee programme in the world with the primary objective of guaranteeing 100 days of wage employment per year to rural households. The programme emphasises on strengthening the process of decentralisation by giving a significant role to Panchayat Raj Institutions (PRIs) in planning and implementing these works. MGNREGA Scheme is perhaps one of the most popular schemes among villages over the years. At present, it is implemented in 715 districts all over India with 29.60 crore workers given 15.38 crore physical.

The social inclusion of every strata of society, more so of those who are vulnerable and disadvantaged, through social innovation is called, and rightly so, Social Transformation. In India, majority of the population lives in rural areas. As per the 2011 census, rural population in India is 833.1 million which is 68.84 percent of the total population of India. Hence, it is pertinent that the road to social transformation in India goes through our rural areas.

The concept of social transformation gained significance in social sciences post World War II. The meaning of this concept is "changing form or appearance or character or after out of recognition". Social transformation thus indicates change in the form of society.

India's vast rural areas witness irregular livelihood activities due to seasonal fluctuations in agriculture and allied activities. Such irregular fluctuations lead to periodic withdrawal of labour force who end up shifting back and forth between domestic and gainful work. Many workers migrate to various parts of the country in search of work, mostly irregular. One must consider that lack of alternate livelihoods and skill development are two major causes of migration from rural areas.

For long, India struggled to tackle this problem and thus borne the concept of the Mahatma Gandhi National Employment Guarantee Act or MGNREGA.



But before it, in 1991, the then Indian government proposed a pilot scheme to generate employment in rural areas with the aim to generate employment for the agricultural labour during the lean season, add to the infrastructure development and to enhance food security. This scheme then was called the Employment Assurance Scheme which later evolved into the MGNREGA after its merger with the Food for Work Programme in the early 2000s.

MGNREGA was officially launched on 2nd February, 2006, under the Mahatma Gandhi National Rural Employment Guarantee Act, which was passed on 23rd August, 2005. As of 11th February, 2021, a total of 708 districts have been covered under this scheme. The beneficiaries of this scheme are: Wage seekers, Gram Sabha (GS), three-tier Panchayat Raj Institutions (PRIs), Programme Officer at the Block level, District Programme Coordinator (DPC), State Government, Ministry of Rural Development (MoRD), Civil Society and other stakeholders (In

line departments, convergence departments, Self-Help Groups (SHGs).

Under Mahatma Gandhi NREGA, during FY 2020-21, a total of 389 crore person days have been generated, which is 17 percent more than the employment generated during the FY 2019-20. During FY 2020-21, a total of 1.89 crore new job card, have been issued and a total of 7.55 crore households have been provided employment which is 28 percent more than the previous financial year. During 2021-22, (as on 01.08.2021) a total of 54.8 lakh job card have been issued and 4.89 crore households have been provided employment. During the FY 2020-21, an amount of 1,11,170.86 crore has been released and during the current FY 2021-22 (as on 02.08.2021), an amount of Rs. 46,152.82 crore has been released under the scheme.

Recent data available on the NREGA portal shows that at least 6.5 lakh households have already completed 100 days of employment under the Mahatma Gandhi National Rural Employment Act (MGNREGA) in five months of the current financial year. And out of 5.73 crore households that have availed work under the rural job guarantee scheme from April 1st to September 4th to this year, 6.5 lakh have completed 100 days of employment. The data also shows that about 19.58 lakh households have completed between 71 and 80 days of work. In the last financial year, 5.48 crore households had availed of the scheme and 40.64 lakh households completed 100 days of work. In the last six years, the number of households completing 100 days of employment under the scheme has been in the range of 24-52 lakh but it is expected to reach a new high during the current financial year. The overall number of households that availed work under MGNREGA has already surged to an all-time high of 5.73 crore in just five months of the current financial year.

MGNREGA Mandate

As per the MGNREGA mandate, at least 60 percent of the allocated amount must be spent on wages to unskilled labours and the remaining 40 percent for semi-skilled/skilled labour and material. The scheme is implemented through the Gram Panchayats.

Section 17 of the MGNREGA has mandated Social audit of all Works executed under the MGNREGA. Social audits focus on the performance of a programme in fulfilling its intended social objectives and ethical vision through consultation with a range of stakeholders including social programme beneficiaries, community members, government officials and verifying the information obtained with documents and physical evidence. Thus, social audits examine and assess the social impact of specific programmes and policies.

Salient Features of MGNREGA

- Gives legal guarantee of wage employment to the adult members of rural households who are willing to do unskilled manual labour subject to a maximum of 100 days per household
- Applicable for all villages in the District
- Every rural household has the right to register under MGNREGA
- Job cards issued to every household registered under MGNREGA
- Job cards issued within 15 days from the date of receipt of application for the job card registration
- The registered job card holders can seek employment by giving a group / individual application
- A minimum of 10 job seekers shall apply to sanction a new work under MGNREGA
- Employment provided by sanctioning one of the works under "Shelf of Works" as identified and prioritised by the village community within 15 days from the date of receipt of applications for providing employment under MGNREGA
- The village community has the right to choose works under 5 permissible categories of works
- "Shelf of works" will be identified by the village community for 5 years which can be taken up in their villages as per the job demand and entitled person days
- The works proposed by the village community cannot be altered by anyone unless they are not in conformity with the guidelines of MGNREGA

- The work shall be provided within 5 kilometers jurisdiction from the village
- If the work provided is beyond 5 kilometers, the job seekers shall be given 10 percent of the minimum wages as additional amount
- State Government to pay 25 percent of minimum wage for the 1st 30 days as compensatory daily unemployment allowance on failure to provide employment for the families demanding the works under MGNREG Act, and 5% of wage for remaining period of the year
- Equal payment for men and women
- Wages to be paid within a fortnight
- 1/3 beneficiaries should be women
- Work site facilities such as creche, drinking water and shade have to be provided
- 60:40 wage and material ratio has to be maintained for all works undertaken under NREGA
- No contractors and machinery allowed
- Grievance redressal mechanism to be set up for ensuring a responsive implementation process
- Social Audit is a must for all the works implemented under NREGA
- Provisions of RTI Act shall be applicable in letter and spirit to ensure transparency and accountability

The office of the Ombudsman is vested with the following powers in order to redress grievances under MGNREGA:

- Receive complaints from NREGA workers and facilitate their disposal in accordance with law
- Require the NREGA Authority complained against to provide any information or issue direction for conducting spot investigation
- Lodge FIRs against the erring parties
- Initiate proceedings *sup motu* in the event of any circumstance arising jurisdiction that may cause any grievance
- Engage experts for facilitating the disposal of the complaint
- Direct redressal, disciplinary and punitive actions

- Report his findings to the Chief Secretary of the State and the Secretary, State
- Nodal Department for appropriate legal action against erring persons

Current Implementation of MGNREGA

Implementation of MGNREGA Scheme has seen major changes under the present Government. Use of ICT tools, space technology, focus on improving livelihood resource base of people, provision of diversified livelihood opportunities through convergent programme implementation etc. are some of the major features of changes brought in programme management under the present government. High budget allocation to meet the objectives of the Act and strengthening of monitoring system have been ensured. Measures like electronic fund management system (eFMS), Aadhaar seeding, Geo tagging of assets and strengthening of Social Audit System are some steps towards bringing in more transparency and accountability in the programme implementation. Emphasis on proper work file maintenance, setting up of Citizen Information Boards as part of Janata Information Systems are some of the other measures.¹

To ensure that MGNREGA workers receive their wages on time, National Electronic Fund Management System (NeFMS) has been put in place. Almost 96 percent of wages are being paid directly to the beneficiaries' bank accounts. Additionally, intense monitoring and fixing accountability for delays in payments has shown significant results. Around 65 percent of the wages are being paid to the workers in time. Strengthening the livelihood resource base of the poor is one of the main objectives of MGNREGS. Apart from meeting the demand for wage employment on the ground, the government is laying stress on strengthening the livelihood resource base of the poor and the vulnerable. According to a Ministry of Rural Development's press release² of 30th July 2021, "A total of 3,91,112 households have completed 100 days of work under Mahatma Gandhi National Rural Employment Guarantee Act (Mahatma Gandhi NREGA) in the months of April-June, 2021.

These completed works have been geo tagged and made available in public domain improving and enhancing transparency in programme management. More than 2-Crore assets have been

got tagged so far. Now, the Ministry has made it mandatory to tag three stages of an asset creation.

In order to optimise public investments, adequate focus is also being laid on convergence of MGNREGS with other schemes. A good example of convergence is houses being constructed under Pradhan Mantri Awas Yojana-Gramin (PMAY-G).

PMAY-G is one of the flagship programmes of the Government of India which is driven by the noble objective of providing "Housing for All" by the year 2022. It is a social welfare program through which the Government provides financial assistance to houseless beneficiaries identified using SECC 2011 data to help them construct a house of respectable quality for their personal living. The Scheme envisaged constructing 2.95 crore PMAY-G houses with all basic amenities by the year 2021-22. The scheme envisioned providing other facilities to make it an aspirational home for the beneficiaries through convergence with other schemes like Swachh Bharat Mission, PM Ujjwala Yojana for providing LPG connection and unskilled wage component of 90-95 days under MGNREGS. Significant progress has been made in this direction since the launch of the scheme by the Prime Minister in November 2016.

Independent Social Audit Units have been set up in 24 States and 3100 State Resource Persons have been trained to conduct social audit as per auditing standards. Large scale training of Self-Help Group women at Village Resource Persons for social audit is being undertaken.

All initiatives under MGNREGS have been taken in consultation with the States and UTs.

The government is committed to make the implementation of the program as effective as possible so that the objectives of the Act can be met.

Multiple assets to a household for augmentation of livelihood potential is a major thrust under MGNREGS. Besides this, skilling the MGNREGS workers through Sarfati Technician program is another initiative. So far, 53RD Rate Foot Technicians (RFT) have been trained so far in 19 States to provide technical support at field level.

Also, the Ministry had set up a Committee under the Chairmanship of Additional Secretary with representatives of relevant Central Ministries and five State Governments to examine the issue of Alignment of MGNREGA Wages with Minimum Agricultural Wages. The MGNREGA Wages were notified under Section 6.1 of the MGNREGA Act.

Over all, this scheme government has seen great changes which have brought relief to strained rural population of India. Although there are still some minor challenges but the government is committed to overcome them in time bound manner.

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Awards for Excellence in Book Production, 2021 to DPD

The Publications Division was conferred recently the prestigious 'FIP Awards for Excellence in Book Production 2021' in various categories. On behalf of DPD, Additional Director General, Ms. Shubha Gupta received the awards. Kurukshetra Journal was also conferred the award during the event in the category Journals and House Magazines (English).

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Empowering Senior Citizens

Tripti Math

Over the years, constant increase in life expectancy due to improvement in the healthcare facilities has contributed to increase in proportion of population of senior citizens. The number of elderly persons increased from 1.98 crore in 1951 to 7.6 crore in 2001. A decade later, the 2011 census reported that the population of senior citizens in India had increased to 10.38 crore, constituting 8.6 percent of the total population.

India's senior citizens will soon be able to register their grievances on a toll free national helpline and regain financial independence by exploring work opportunities on innovative government run portals. The toll free helpline, **ElderLINE**, reported to be working like a confidence building measure for the elderly in eight states, will now be extended to 22 more States. It is estimated that India presently has 14 crore senior citizens. **ElderLINE** is one of the numerous innovative and elderly friendly initiatives of the Ministry of Social Justice and Empowerment, **MoSJE**. As the nodal ministry for matters relating to the senior citizens (those who are 60 years or above), the **MoSJE** has taken many progressive steps for their welfare.

The ministry develops and implements acts, policies and programmes for senior citizens in collaboration with State Governments/ Union Territory administrations to ensure that senior citizens lead a secured, dignified and productive life. The elderly face many challenges related to financial security, healthcare and nutrition, shelter, protection of life and property and issues such as loneliness, abuse and neglect. The Ministry of Rural Development, Ministry of Health and Family Welfare and Ministry of Finance are also running schemes to ensure that the elderly are able to lead secure, dignified and productive lives. A new national policy for senior citizens is being worked upon and will incorporate issues such as financial and food security, healthcare and nutrition, safety and security, housing and welfare. The **MoSJE** confirmed that the new policy will replace the existing National Policy on Older Persons (NPOP) announced in 1999 to reaffirm the commitment to ensure the well-being of the Older Persons. The Policy envisaged State support to ensure financial and food security, healthcare, shelter and other needs of older persons, equitable share in development, protection against abuse and exploitation, and availability of services to improve the quality of their lives.



Over the years, constant increase in life expectancy due to improvement in the healthcare facilities has contributed to increase in proportion of population of senior citizens. The number of elderly persons increased from 1.98 crore in 1951 to 7.6 crore in 2001. A decade later, the 2011 census reported that the population of senior citizens in India had increased to 10.38 crore, constituting 8.6 percent of the total population. The population of senior citizens in India is projected to increase to 22.74 crores in 2036, according to the May 2006 Report of the Technical Group on Population Projections for India and States (2011-2036) published by the Registrar General of India. More than 70 percent of the population of senior citizens is in rural areas of India. The total population of India is projected to increase from 121.10 crore in 2011 to 152.20 crore in 2036. Therefore, the percentage of senior citizens

against total population is expected to increase to 14.9 percent. Demographic projections related to the elderly call for urgent action and out of the box thinking by policy makers. With around six lakh people over the age of 100, India is expected to have the highest number of centenarians by 2050.

Shri R. Subramanyam, Secretary, Ministry of Social Justice and Empowerment is hopeful that ELDERLINE will address the neglect faced by senior citizens during the COVID-19 pandemic. "ELDERLINE is meant to address such issues," the Secretary said. He explained that Elderline is a toll-free short code 14567 launched for registration and redressal of grievances and monitoring the performance of States and UTs. The National Institute of Social Defence (NISD), an autonomous institute under this Ministry, is the Implementing Agency of this helpline. As on date, the ELDERLINE works in Delhi, Karnataka, Madhya Pradesh, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and Uttarakhand. It can be reached from 8 a.m to 8 p.m. throughout the week. The remaining States/UTs are in the process of operationalising the ELDERLINE.

Every year on the International Day of Older Persons on October 1, the MoSJE organises health camps, inter-generational walkathons across the country with active participation of senior citizens, youth and celebrities. To mark this day, the *Vayoshrestha Samman* is conferred as a national award on eminent senior citizens and institutions under various categories for their contribution. Recipients for the award are drawn from diverse fields. Of the total elderly population of 10.38 crore according to the 2011 Census, it was found that a sizeable percentage (5.2 percent) of senior citizens were suffering from some sort of disabilities related to old age. The schemes currently being implemented for the welfare of senior citizens include the Atal Vayo Abhyuday Yojana (AVYAY) formerly known as National Action Plan for Senior Citizens (NAPSrC) and the Rashtriya Vayoshri Yojana (RVY). The mission of AVYAY is to create a society in which senior citizens live a healthy, happy, empowered, dignified and self-reliant life along with strong social and inter-generational bonding.

The NAPSrC has two components—the Integrated Programme for senior citizens (IPSrC) and the State Action Plan for Senior Citizens (SAPSrC). The IPSrC entails setting up homes to improve the quality of lives of senior citizens, especially indigent senior citizens by providing basic amenities like

shelter, food, medical care and entertainment opportunities and by encouraging productive and active ageing. Under the SAPSrC, each State/Union Territory is expected to frame their own State Action Plans for the welfare of their senior citizens. Under the Scheme of 'Rashtriya Vayoshri Yojana (RVY)' physical aids and assisted living devices are provided to senior citizens belonging to BPL (below Poverty Line) category, free of cost, to restore near normalcy in their bodily functions. The RVY was launched on April 1, 2017, after the government proposed in the 2015-16 Budget speech a Centre sector scheme to provide physical aids and assisted living devices for the senior citizens suffering from age related disabilities/infirmities, who belong to BPL category and for persons whose monthly family income is not more than Rs. 15,000.

One of the most talked about legislations to empower the elderly has been the Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act, 2007 which was enacted on December 29, 2007. Although India does not yet observe the World Elderly Abuse Awareness Day, the amendment of the MWPSC Act is before Parliament. The Act provides provisions for maintenance for parents and senior citizens by children or relatives as obligatory and justiciable measure through a Tribunal constituted for the purpose. It also provides revocation of conditional transfer of property by senior citizens in case of non-maintenance and envisages punishment for intentional abandonment of senior citizens by children or relatives.

The Ministry of Rural Development runs the National Social Assistance Programme (NSAP) that extends social assistance for poor households for the aged, women who have lost their husbands, 'Diyangis' and in cases of death of the primary breadwinner. This scheme provides financial assistance to persons of age 60 years and above and belonging to families living below poverty line. A monthly central assistance of Rs 200 is provided to person in the age group of 60-79 years and Rs. 500 per month to persons of age 80 years and above. The Annapurna scheme started by the Ministry of Rural Development in 2000 covers indigent senior citizens not able to get pension under the Indira Gandhi National Old Age Pension Scheme (IGNOAPS), get 10 kg of food grains per person per month free of cost under the scheme. Department of Food and Public Distribution also implements Antyodaya Anna Yojana (AAY), under which rice and wheat at a highly subsidised cost, is extended

to households, headed by widows/terminally ill/ disabled person/senior citizens, with no assured means of maintenance or societal support.

On April 1 this year, the Department of Social Justice and Empowerment launched five schemes under the umbrella Scheme- Atal Vayn Abhiyuday Yojana (AVYAY). The new schemes launched under this umbrella scheme are the Poshan Abhiyan for Elderly, Livelihood and Skilling Initiatives for senior citizens, Promoting silver economy, channellinging CSR funds for Elderly care and Awareness Generation and Capacity Building for welfare of senior citizens.

The scheme on Poshan Abhiyan addresses the nutritional deficiencies in senior citizens, especially indigent elderly. It aims to provide one nutritious, hot and cooked meal during the day (mid-day), through Gram Panchayats and Urban Municipalities. For the year 2021-22, an amount of Rs. 39.60 crore has been allocated for the Scheme, from the Senior Citizens Welfare Fund. Of the five schemes, the scheme on Poshan Abhiyan for Elderly has the maximum outlay for five financial years (2021-22 to 2025-26) followed by outlay of Rs. 637 crore for the scheme on Livelihood and Skilling for Senior Citizens. According to figures provided by the Ministry of Social Justice, the scheme on National Helpline, Awareness, Training, Research and Capacity Building, has a total outlay of Rs 429.56 crore for the same period.

The scheme on Livelihood and Skilling Initiatives for senior citizens include the Senior Able Citizens for Re-Employment in Dignity (SACRED) Portal. The formulation of this scheme stemmed from the realisation by policy makers that many senior citizens have experience, time and energy and this can be used by the business enterprises looking for stable employees with experience. The portal facilitates identification of such persons through virtual matching of preferences. For the year 2021-22, an amount of Rs. 12 crore has been allocated for this from the Senior Citizens Welfare Fund. The Skilling Initiatives scheme also includes Action Groups Aimed at Social Reconstruction (AGRASR Groups). Through these Elderly Self Help groups, senior Citizens are encouraged to form Self-Help-Groups (SHGs), which provide them a platform to share their time constructively with one other, to attain financial assistance under the Scheme, SHGs will function as 'Action Groups Aimed at Social Reconstruction (AGRASR Groups)'. Assistance under this scheme to any SHG will be independent of assistance under any other scheme of the Ministry

and a SHG can choose to avail assistance under any one or more Scheme(s). For the year 2021-22, an amount of Rs. 25 crore has been allocated from the Senior Citizens Welfare Fund.

The scheme on promoting silver economy is to encourage entrepreneurs develop innovative solutions to meet problems of elderly. It proposes to provide financial assistance for the start-ups which come with innovative products, process or services for the welfare of the elderly. The government hopes to achieve the objective by providing upto Rs. one crore as financial assistance through equity participation, through an open invitation on a portal named Seniorcare Ageing Growth Engine (SAGE). For the year 2021-22, an amount of Rs. 20 crore has been allocated for the scheme, from the senior citizens Welfare Fund constituted by the government in 2016 to provide funds for initiatives taken for the welfare of senior citizens.

Another scheme on Awareness Generation and Capacity Building for welfare of senior citizens includes components such as the national helpline for senior citizens, research, awareness generation, sensitisation, emotional empowerment etc. for the welfare of senior citizens, and spreading awareness and sensitising the youth and other sections of the society towards issues related to the elderly. For the year 2021-22, an amount of Rs. 55.47 crore has been allocated for the Scheme, from the Senior Citizens Welfare Fund.

The Ministry of Social Justice and Empowerment confirmed that a decision to fund the RVY scheme alongwith others from the Senior Citizens Welfare Fund, was taken at an Inter-Ministerial meeting held in February this year. According to figures provided by sources in the MoS&E, the total outlay for this scheme for the Financial Year 2021-22 is Rs 64.68 crore. This scheme will be implemented with 100 percent funding from the centre. For the next four financial years, the total outlay for this scheme is Rs 78.08 crore (FY 2022-23), Rs 86.50 crore (FY 2023-24), Rs 97.90 crore (2024-25), Rs 115.09 crore (2025-26). The total outlay for five financial years stands at Rs. 483.05 crore.

It is equally heartening to note that the total outlay for the scheme on Livelihood and Skilling for Senior Citizens is Rs 39.70 crore for the financial year 2021-22. There is a substantial increase in outlay for this scheme (Rs 67.00 crore) for the FY 2022-23, Rs 122.00 crore for the next financial year, Rs 177.00 crore for FY 2024-25 and Rs 232.00 crore for FY 2025-26. The total outlay (Rs 637

crore) of this scheme reflects the government's earnestness to empower senior citizens by laying emphasis on livelihood and skilling. This is a new initiative which will be funded by the Senior Citizens Welfare Fund (SCWF). It will comprise Elderly Self-Help Groups namely "Action Groups Aimed at Social Reconstruction (AGRASH) and Senior Able Citizens for Re-Employment in Dignity (SACRED) portal. Other new initiatives are the Poshan Abhiyan, Senior Aging Growth Engine (SAGE), Awareness and Capacity Building and Research on issues of elderly.

Policy makers who have conceptualised SACRED recognise that senior citizens are a valuable resource for the country and hope that the portal will provide them equal opportunities, protect their rights and enable their full participation in society. The scheme on promoting silver economy has an outlay of Rs. 390 crore for five financial years and the scheme on Channelisation of CSR (Corporate Social Responsibility) funds for elderly care has a total outlay of Rs 100 crore. Sources in MoS&E said that the Expenditure Finance Committee (EFC) has already considered and recommended the National Action Plan for Senior Citizens (NAPS-C and SAPS-C) in its meeting held in March 2021.

The Ministry of Health and Family Welfare (HFW) has been implementing National Programme for Health Care of the Elderly (NPHCE) from the Financial Year 2010-11 to provide dedicated healthcare services to the elderly people at various levels of state healthcare delivery system. Government has also launched Ayushman Bharat-PM-JAY during 2018-19 to cover over 10 crore poor and vulnerable families (approx. 50 crore beneficiaries) providing coverage upto Rs. 5 lakh per family per year for secondary and tertiary hospitalisation. The Health Ministry committed at the launch last year of the Decade of Healthy

Ageing (2020-2030), many activities throughout the year to bring issues related to elderly into the mainstream.

The Ministry of Finance runs the Varishtha Pension Bima Yojana (VPBY), a social security scheme for senior citizens intended to give income security as well as a guaranteed rate of return on the subscription amount. The Pradhan Mantri Vaya Vandana Yojana (PMVVY) was launched in May 2017 to provide social security during old age. This is a simplified version of the VPBY and is implemented by the Life Insurance Corporation (LIC) of India.

The MoS&E promotes inter-generational bonding through its autonomous body, the National Institute of Social Defense (NISD) by holding inter-generational bonding through Melas (fairs), sensitisation programmes and awareness workshops in schools and colleges. Mr Himanshu Rath, founder of Agewell Foundation, a 27 year old voluntary organisation who is closely associated with Ministry of Social Justice and Empowerment, NITI Aayog and National Human Rights Commission, says, "India is the only place in the world where the elderly have been getting reverence from time immemorial. In day-to-day expressions, the Hindi language celebrates old age. Longevity is an expression of our culture. In 1947, when India got Independence, the longevity was only 35 years and now it is 69 years for men and 73 years for women respectively. India is home to 140 million elderly people according to projections based on 2011 Census and there are 17,000 persons who turn 60 every day. The biggest empowerment that senior citizens need is emotional empowerment.

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Title	Category	Award Position
Chhantri le Saar-Rushipani/ Jain Nath Kovid	General and Trade Book (Hindi)	Second
Mahatma Gandhi: A Life Through Lenses	Art and Coffee Table Book (English)	Second
Courts of India-Past to Present	Art and Coffee Table Book	First
Matsya-Rumari	(Regional Languages) (Kannad)	
Women in Suryagraha	Children Books (General Interest) (0-12 Years) (Hindi)	Third
Economic Survey 2020-21 Volume-I	Children Books (General Interest) (Regional Languages) (Gujarati)	First
Kurukshetra Vol. 58 (September 2020)	Reference Books (English)	Third
Yojana (January 2021)	Journals and House Magazines (English)	Third
	Journals and House Magazines (Regional Languages) (Punjabi)	First

Governance and Public Service Delivery

Devika Chawla

Effective and efficient governance is a key ingredient in ensuring all-round development of rural areas at par with the urban ones and thus, analysing the performance on this front is crucial to getting an accurate picture of rural India's socio-economic journey. The need for an all-inclusive and sustainable development for rural areas has been felt much more strongly in the recent years, bringing issues of rural governance at the forefront of policy discourse and primacy in India.

Rural India has long been considered the spine of India's economy. Agriculture is not only one of the largest contributing sectors to the economy but also ensures food security in a constantly growing and developing country. Beyond food and economics lies another major (although understudied) dimension of sustainability and environmental conservation, of which the agri-economy is the primary stakeholder. Effective and efficient governance is a key ingredient in ensuring all-round development of rural areas at par with the urban ones and thus, analysing the performance on this front is crucial to getting an accurate picture of rural India's socio-economic journey. As a result, the need for an all-inclusive and sustainable development for rural areas has been felt much more strongly in the recent years, bringing issues of rural governance at the forefront of policy discourse and primacy in India.



This year the nation is marking 75 years of its independence with the 'Azadi Ka Amrit Mahotsav' campaign under which several celebrations and developmental initiatives are being undertaken for 75 weeks ending 15th August 2023. In this context, this piece unpacks the transformation of rural India over seven decades by specifically examining the governance and service delivery frameworks to trace the progress made so far, the challenges that lie ahead and the impact of inclusive development in rural India for the larger Indian economy in the coming years.

Rural India Over the Years

To comprehensively understand the rural India of today, we must go back in time to our

independence period and see how far the nation has come in the past 74 years. At the time of independence, the newly formed nation inherited an impoverished population, a famine and drought-prone geography and a ravaged economy. However, the miracle of the 'Green Revolution' and later the 'Operation Flood' in milk helped the economy leapfrog from being food grain and milk deficient to currently being among the largest producers and exporters of agri and dairy produce globally. Not for nothing are these initiatives likened as the '1991 moment for Indian agriculture,' thus, highlighting the large-scale effect they had and continue to have on India's agriculture sector in terms of making agri-economy a sustainable and profitable livelihood for millions of rural Indians.

However, rapid urbanisation in the last few decades due to increasing industrialisation and mobility, have contributed in diminishing dependence on agriculture and by extension, its rural areas. This was particularly true of rural governance and ease of living mechanisms, which have seen neglect, complacency and a lack of awareness and enthusiasm eventually leading to mass migrations of workers and labourers from Indian villages to its cities. While we all know and

have seen this picture all too well, in the recent years, this trend has changed and is even showing early signs of reversal.

Inspired by India's success story in milk and grain production, similar approaches are being planned and undertaken in the fisheries sector for instance, envisioning to make India a 'Blue Economy' in the next few years. Such endeavours are aimed at diversifying the agri-basket of our rural economy while also promoting village and local entrepreneurship.

Other noteworthy and impactful mechanisms include Self-Help Groups (SHGs), Farmer Producer Organisations (FPOs) and other community-based cooperative mechanisms that not only leverage the collective power of community to address an issue at hand but also act as shining examples of micro-entrepreneurship at the lowest level. In the 21st century, India's rural economy has witnessed a major mushrooming of such micro and nano-level institutions across a range of sectors including banking, business, agriculture, textiles and more recently, education.

Governance and Service Delivery Initiatives and Reforms

Several continuous measures, programs and initiatives aimed at bridging the rural-urban divide have been implemented across multiple levels, with renewed vigour in the last seven years. Beginning with the implementation of the Direct Benefit Transfer (DBT) to transfer monetary benefits directly into the accounts of beneficiaries (mostly rural residents) to opening over 400 million bank accounts of the unbanked, mostly rural people, under the Jan Dhan Yojana and later combining their synergies under the Jan Dhan-Aadhaar-Mobile (JAM Trinity) to ensure seamless delivery of public services, rural India has been undergoing a silent revolution.

Another notable initiative has been the setting up of Common Service Centres (CSCs) under the Digital India Mission, across rural India, to deliver essential public services to rural folk in one place. These centres act as access points for delivering essential public services relating to health, social security, agriculture, utilities, education, finance and grassroots-entrepreneurship.¹ Currently, over 4,12,000 CSCs are operational in our rural areas.²

This initiative works in tandem with the 'Smart Village' initiative through which over 1 lakh villages have been digitised and connected with Wi-Fi, optical fibre network and a host of other digital services.³ To make the best use of entrepreneurship, technology and better governance, these CSCs are operated by skilled, respected and driven members from each village called Village Level Entrepreneurs (VLEs) presently numbered at 3.74 lakh per India.⁴

Through the introduction and implementation of schemes like PM-KISAN and Public Distribution System (PDS) subsidies, money is directly transferred into the accounts of millions of farmers enabling them to utilise this money for their benefit. This has contributed to plugging leakages and corruption to unintended/fake beneficiaries and saved millions of rupees of public funds from going into wrong hands. Recent estimates peg cumulative DBT savings of over INR Rs. 1.7 lakh crore to the state exchequer since 2014.⁵

The role of Khadi both as a rural institution and as a common thread binding all of India, is very important yet very often ignored. A movement against colonialism initiated by none other than Mahatma Gandhi, Khadi evolved to become the backbone of India's rural and village economies by providing stable, vital sources of livelihood to traditional artisans and crafts people in villages. The last 5-7 years have seen Khadi becoming a mass movement, turning from a loss-making entity to a highly profitable one, recording gross turnover well over Rs. 5,000 crore last year despite the pandemic.⁶ Khadi is now a formidable brand on its own and has caught the eye and attention of fashionistas, both urban and international. The Khadi success story is, in many ways, the story of the remarkable change taking place across rural India as more and more opportunities open up in rural areas and transparency becomes a norm. Village industries are increasingly becoming lucrative career options for rural and urban youth of the country.

While connectivity and governance might not be directly related, they play an essential role in ease of living for people, and also promote better economic prospects. Better and higher mobility has been shown to bring about higher quality of life standards, access to more opportunities leading to more economic activity. Consequently, both add

and economic development take place on the back of better connectivity. For the longest period of time, rural India was marred by poor/negligible connectivity, which severely restricted their access to the economic boom taking place in the country's urban geography.

This issue gained centrality among policymakers a few years ago as a consequence of which, enhancing rural connectivity through roads, ports, rails and airports is being carried out in mission mode. Government flagship schemes such as Pradhan Mantri Gram Sadak Yojana (PMGSY), Bharatmala Pariyojana, Sagarmala Pariyojana, and Uda Deth Ka Aam Nagrik UDA'N) all focus on multiplying connectivity and mobility among our rural territories by different means of transport. The numbers so far are heartening: over 2.20 lakh kilometres of rural roads have been sanctioned under PMGSY¹⁰ while 57 previously unserved/under-served airports had been operationalised as part of the UDAN scheme as of March 2021.¹¹ Enhanced connectivity, besides boosting economic opportunities, also opens up avenues for social and community development as well. It increases urban-rural engagements and reduces the divide between 'Bharat' and 'India' as rural and urban India are commonly known, respectively.

Homelessness and abject poverty have been two of the most significant characteristics of rural India for a long time. However, in the past seven decades, we have made rapid strides towards curbing both, and have achieved significant results too. In terms of poverty rate, from being a nation of 70 percent poor people in 1947 to having a poverty rate around 6 percent at present, India's journey towards prosperity is tremendous, to say the least.¹² Similarly, to address the issue of homelessness, a major chunk of which is in the rural areas, the government launched the PM-Awas (Gramin) Yojana aimed at providing 2.95 crore houses to the eligible rural population in the country so as to achieve the PM's objective of "Housing for All." The scheme seeks to provide other facilities to make it an aspirational home for the beneficiaries through convergence with other schemes like Swachh Bharat Mission, PM-Ujjwala Yojana for providing LPG connections and an unskilled wage component of 90-95 days under the MGNREGS.¹³ Last year, under this scheme, 50 lakh houses were

sanctioned, out of which, over 34 lakh houses have been completed.¹⁴ Cumulatively, a total of more than 2.36 crore PMAY(G) houses (or 70 percent) have already been completed as of April 2021.¹⁵ A special feature that sets these houses apart is the fact that these properties are registered in the name of a family's female member, thus, providing a major fillip to women's empowerment and financial prudence.

To help rural areas avoid the trap of debt and property disputes that have for so long hampered land acquisition and monetisation for infrastructure and development projects, the government last year launched the Survey of Villages and Mapping with Improved Technology in Village Areas or SVAMITVA, as a tool to carry out large-scale mapping and surveys of rural properties using advanced drone and satellite technologies, and pave the way for using a property as a financial asset by villagers for availing loans and other financial benefits. The scheme is expected to cover about 6.62 lakh villages across India and create a formal mechanism for demarcating properties by providing electronic property cards to respective owners.¹⁶ Besides catalysing monetisation and better use of land in rural areas, this scheme will also free up our courts from mounts of property disputes, some dating back decades.

The use of technology for inculcating formalisation in rural governance has similarly been replicated in the newly launched e-SHRAM portal of the Ministry of Labour, which seeks to onboard millions of unorganised workers from across the country on a single portal and help prepare a single National Database of Unorganised Workers (NDUW) in the country. This portal was much needed for the majority of India's workforce engaged in the informal sector and based in rural and semi-urban areas in roles such as street vendors, construction labourers, domestic helps etc. Bringing these workers on an online portal will also enable them to transparently access the numerous central and state social security schemes for which they are eligible.¹⁷

The initiatives, programs and schemes mentioned above are multi-pronged in their approach and wide in their reach. While they all address different, but interconnected issues to make rural India more economically attractive and socially sustainable, they are bound by a common

