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## Innovative Skilling and Livelihood





India's most valuable asset is its youth population which is the largest in the world. As youth population is a key factor that is expected to propel economic growth, there has been a greater push to develop skills and improve livelihood opportunities. The government through several measures has been focusing on empowering and skilling youth. Thus, the theme of this issue of Kurukshetra is 'Innovative Skilling and Livelihood'. According to our lead article, the Skill India Mission and the recently launched National Education Policy 2020, with their several innovations and bold reforms, are concrete steps in this direction. The integration of vocational education with school and higher education and skilling in futuristic technologies will play a defining role in creating a highly skilled workforce which will make India Atmanirbhar.

The article titled as *Skill Requirements for Sustainable Livelihood in Rural Farm-based Cooperatives* states that cooperatives are an essential instrument of social and economic policy and have inherent advantages in tackling the problems of poverty alleviation, food security, and employment generation.

The skilled workforce is the requirement for every sector of the country. The Indian Micro, Small and Medium Enterprises (MSME) sector is the backbone of the national economic structure and has unremittingly acted as the bulwark for the Indian economy, providing it resilience to ward off global economic shocks and adversities. The MSME sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. Furthermore, innovative practices and skilled youth in this sector can bring new energy into this sector.

We have also published an initiative of Ministry of Rural Development launched recently to enable rural SHG women to earn at least Rs.1 lakh per annum. It will bring a sharper focus on moving women to the higher economic order.

As agriculture and allied sectors are the main source of livelihood for several people, there is a need to sustain farming and youth also need non-farm employment opportunities to meet their aspirations and lifestyle. As 90 percent of agricultural workers in India have no formal training, they need skills for the respectable employability. Skills emerge from the technologies and innovations are important for the emergence of new technologies.

This issue also focuses on the impact of digital transformation on livelihood generation. The digital transformation that India is in the midst of is marked by inclusivity rather than exclusive use of latest technology by those on top and empowering people to create employment rather than seeking it. Contrary to the popular notion of technology taking over human jobs, campaigns such as Digital India and 'Vocal for local' have not only generated new jobs but also created facilitator employment in the country and this is an impact of the digital transformation itself.

We wish our readers a very happy reading. Stay Safe.



## Skilling For Future: Reaping Demographic Dividend for AatmaNirbhar Bharat

Dr. K Rajeswara Rao and Piyush Prakash

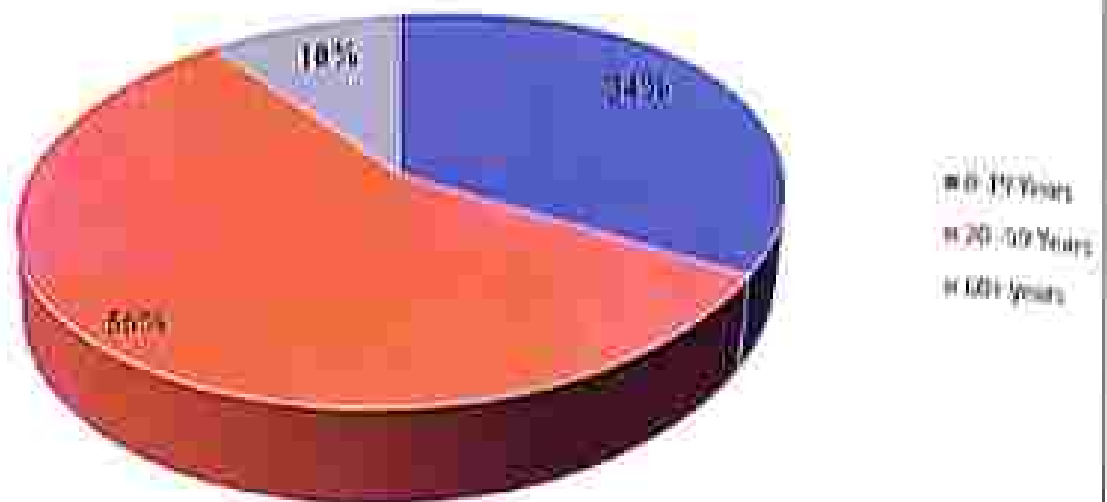
India has set an ambitious goal of becoming a \$5 trillion economy. One of the pillars of such a transformation is its youth power. With nearly two-thirds of its population in the working-age group, India could benefit immensely from this demographic dividend provided the youth are empowered with the right skills. The year 2014 marks an important milestone in the Indian skilling evolution when a dedicated ministry for skilling (MSDE) was launched – a vision to transform India into the skill capital of the world was set. Skill India mission and the recently launched National Education Policy 2020, with their several innovations and bold reforms, are concrete steps in this direction. The integration of vocational education with school and higher education and skilling in futuristic technologies will play a defining role in creating a highly skilled workforce which will make India *AatmaNirbhar*.

**I**ndia is among one of the youngest nations in the world today, at a median age of 28-29 years. It enjoys a unique phase of demographic transition where the working-age population is larger than the number of dependents and thus allowing India to reap the benefits of this demographic dividend. At present, 55.8 percent of the Indian population is in the working-age group of 20-59 years which will peak at 58.9 percent in 2041<sup>1</sup>. The demography

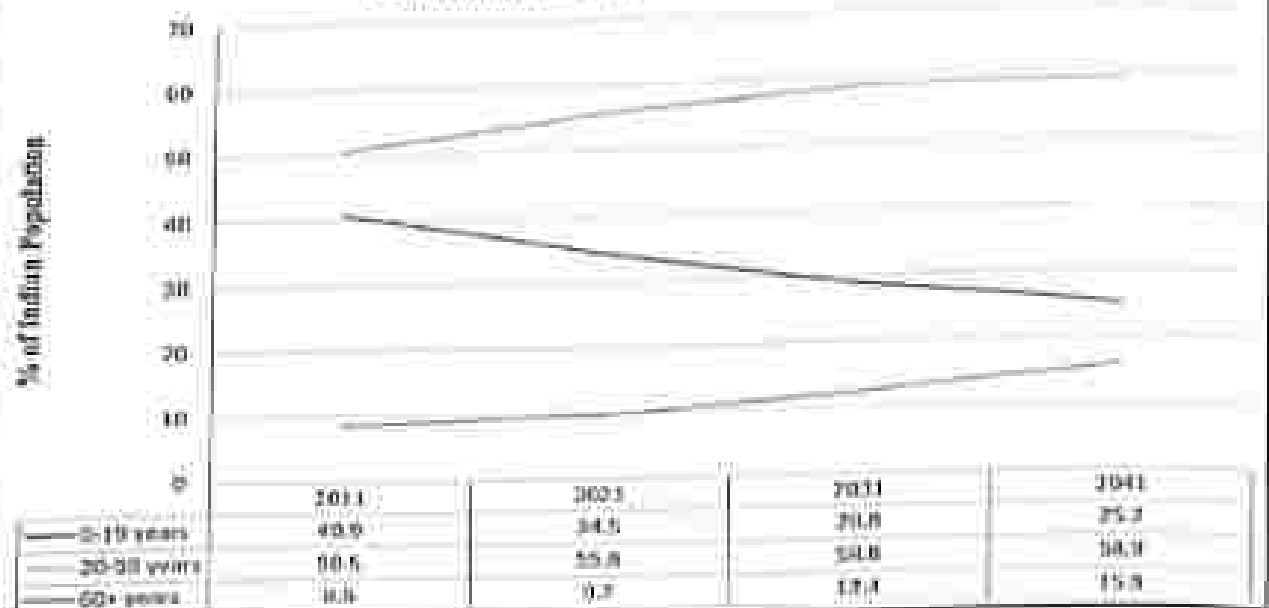
is placed favourably for India as can be seen in the trends.

India's working-age population is projected to grow by roughly 2.7 million per year during the decade 2021-31 and 4.2 million per year between 2031-41. The coming decades are a window of opportunity for India to leapfrog into a \$5 trillion economy by transforming its human capital into a highly skilled workforce for the national and global market.

### Demographic Split 2021



### Projected Demographic Trend In India



### Skilling in India: From Then to Now

India has been a country of skilled men, women and craftspeople throughout its history. There is enough evidence in the form of manuscripts and archeological excavations which highlight the high quality of craftsmanship that existed in the country. An elaborate system of vocational system of education flourished wherein master craftsmen and artisans taught their skills to students who worked as an apprentice under them. An equal emphasis on vocational education was at the core of the teaching and learning at the world-renowned universities

of Takshashila and Nalanda. Ancient Indian literary works such as Banabhatta's *Kadambari* described a good education as knowledge of the 64 *Kalas* or arts. The very idea that all branches of creative human endeavour, including mathematics, science, vocational subjects, professional subjects, and soft skills should be considered 'arts' has distinctly Indian origins. This notion of 'knowledge of many arts' or what in modern times is often called the 'liberal arts' has been integral to the Indian Education system.

The beginning of the modern system of

schooling saw a departure from the tradition of hitherto apprentice-based education followed for centuries in India. The formalisation of the study of 3B's (Reading, Writing, and Arithmetic), though, a welcome step in the direction of democratising learning, led towards a distinction between vocational and formal education. The former was and till date is often looked down upon and treated as an option for those who are supposedly 'not great' in formal education. However, these artificial distinctions were challenged during the national independence movement, particularly by the *Nai Talim* philosophy and *Wardha* model of development propounded by Gandhiji.

*Nai Talim* or Basic Education considered knowledge and work as inseparable entities. It challenged the distinction between 'manual work' and 'intellectual work' that existed in society. It propounded a holistic education where the body, mind, and soul were given equal importance. Education through craft became the central pivot for *Nai Talim*'s form of education to develop a child as a physically fit, intellectually sound, and skilled human whose learned and lived experiences converged. The essence of *Nai Talim* as a unique blend of theoretical and experiential vocation-based education has been best captured in Gandhiji's own words as below:

#### *Nai Talim in Gandhiji's Words*

Supposing he (the child) is set to some useful occupation like spinning, carpentry, agriculture, etc., for his education and in that connection is given a thorough comprehensive knowledge relating to the theory of the various operations that he is to perform and the use and construction of the tools that he would be wielding. He would not only develop a fine healthy body but also a sound, vigorous intellect that is not merely academic but is firmly rooted in and is tested from day to day by experience. His intellectual education would include a knowledge of mathematics and the various sciences that are useful for an intelligent and efficient exercise of his vocation. If to this is added literature by way of recreation, it would give him a perfect well-balanced, all-round education in which the intellect, the body, and the spirit have all full play and develop together into a natural, harmonious whole.

#### Skilling in Independent India

Independent India saw a push towards skill-based education. Polytechnics, Industrial Training

Institutes, and *Nai Talim* Training Institutes were opened across the country. Craftsmen Training Scheme, initiated in 1956, has been shaping craftsmen to meet the existing as well as future manpower need, through a vast network of 15,042 ITIs located all over the country with a trainee count of 22.66 lakh at a time in 138 trades. These are laudable achievements in themselves. However, these initiatives could not mainstream vocational education or skilling. Nevertheless, they helped build a foundation of vocational education in the country. The inflection point came with the launch of the Skill India Mission in 2015 which ushered a series of bold measures towards massification of skilling in the country.

As per a 2014 government report, India faced a shortage of well-trained, skilled workers. It was estimated that only 2.3 percent of the workforce in India had undergone formal skill training as compared to 68 percent in the UK, 75 percent in Germany, 52 percent in the USA, 80 percent in Japan, and 96 percent in South Korea. Large sections of the educated workforce have little or no job skills, making them largely unemployable<sup>1</sup>. 67 percent of the Indian population is in the working-age group (15-58 years) and as highlighted earlier, India has a limited window of opportunity till 2041 to harness this youthful energy and reap the dividends of its favourable demography for accelerated economic growth. It was in this background that the Government of India created a dedicated ministry for skill development – The Ministry of Skill Development and Entrepreneurship in November 2014.

#### Skill India Mission: A Game Changer

On the eve of World Skills Day on July 15, 2015, the Government of India launched the ambitious Skill India Mission to train over 40 crore people in India in different skills by 2022. The Skill India Mission also known as National Skill Development Mission was created to rapidly scale up skill development efforts in India, by creating an end-to-end, outcome-focused implementation framework, which aligns demands of the employers for a well-trained skilled workforce with aspirations of Indian citizens for sustainable livelihoods<sup>2</sup>. The Mission is directly chaired by the Prime Minister of India within the spirit of cooperative federalism.



Source: NSDM\*

The Mission has taken a systemic approach towards skill development and is responsible for convergence in skill development efforts between the Centre and States on the one hand and the industry needs and aspirations of the youth on the other. The mission took several innovative steps to bridge the gap between the skills that the industries needed and what was being offered in various skill training institutes in the country.

First, the mission gave a boost to the National Skill Development Corporation which was set up as a not-for-profit public limited company in a Public-Private Partnership (PPP) model. The Government of India through the Ministry of Skill Development and Entrepreneurship (MSDE) holds 49 percent of the share capital of NSDC, while the private sector has 51 percent of the share capital. This model helped in bringing

private sector expertise and industry insights for developing a skilled workforce.

Second, the Government of India prepared the National Policy on Skill Development and Entrepreneurship, 2015 which recommended the creation of Sector Skill Councils (SSCs). This may be considered the most critical aspect of the Skill India Mission. SSCs are a professional standard-setting and capacity-building bodies comprising of representatives from public and private industries for various sectors such as the Agriculture Skill Council of India, Aerospace and Aviation Sector Skill Council, Automotive Skills Development Council, Tourism and Hospitality Skill Council, Hydrocarbon Sector Skill Council, etc. 36 such SSCs are operational today. Since the SSCs have a heavy presence of leading industry players of various sectors, they are uniquely placed to design a curriculum that is relevant for industry,



Snapshots of NSDC's reach and impact\*



offer internships, apprenticeships, and jobs to the candidates and set high-quality parameters to ensure a robust skilling ecosystem in the country. Their mandate includes the following:

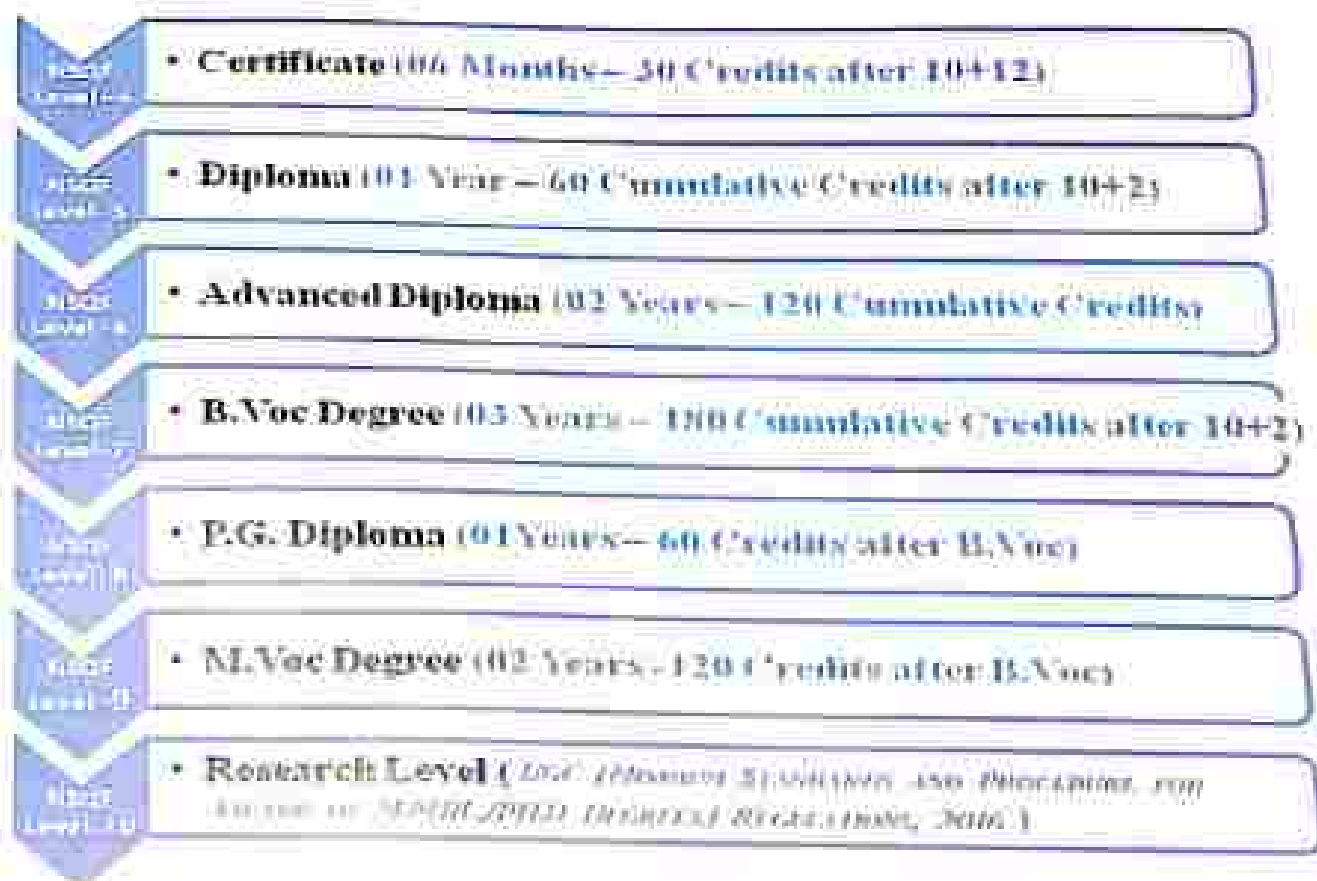
- Identification of skill development needs
- Development of a sector skill development plan and maintaining skill inventory
- Determining skills/competency standards and qualifications
- Standardisation of affiliation, accreditation, examination, and certification

SSCs have developed placement portals that are linked to demand aggregation and are aimed at meeting the skill needs of the industry. The 360-degree interface of the portal connects candidates and training partners with recruitment firms and potential employers<sup>7</sup>.

Third, a National Skill Qualification Framework (NSQF) has been created which organises qualifications according to a series of levels of knowledge, skills, and aptitude. These levels are defined in terms of learning outcomes which the learner must possess regardless of whether they were acquired through formal, non-formal, or informal learning. In that sense, the NSQF is a quality assurance framework.

NSQF has defined ten levels in its framework which is a game-changer in the penetration of vocational education in the country. As highlighted earlier, the division between manual labour and intellectual labour has done great harm to the cause of vocational education in the country. Vocational education is often considered by a majority as an education option for those who are academically not strong. It is seen as less aspirational and demeaning. There used to be no option for either horizontal or vertical mobility for those who would opt for vocational education. NSQF has broken this archaic structure by creating an equivalence between skills learned in vocational streams and the formal educational structure through the NSQF levels and thus has paved a way for people opting for vocational education to achieve horizontal as well as vertical mobility.

Fourth, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 1.0 was launched in 2015 to encourage and promote skill development in the country by providing free short duration skill training and incentivising this by providing monetary rewards to youth for skill certification. PMKVY 1.0 was a progressive move to make skill development aspirational by financially



NSQF Equivalence to Formal Education<sup>8</sup>

supporting the trainees through rewards. Based on its success, PMKVY 2.0 was launched from 2016-2020. It expanded the scope of skill development initiatives by certifying people who had skills but were not recognised. This Recognition of Prior Learning (RPL) initiative helped many skilled people in getting certified and getting jobs. PMKVY was further expanded through version 3.0 which focuses on AatmaNirbhar Bharat by offering skilling courses in Industry 4.0 and high-end skills across 717 districts spread across 28 states and 8 UTs. It also uses the 'vocal for local' strategy in skilling by leveraging the expertise of District Skill Committees for decentralised projection of demands of specific skills and planning to fulfill the skill gap. PMKVY 3.0 is a progressive step towards achieving the vision by establishing increased connections at state, district and block-level.

With such measures, both the access and quality of vocational education are bound to improve in the country. There has been a marked improvement in the aspirations of youth towards vocational education especially in the areas of IT/ITES, BFSI, and new-age skills. However, there is a long way to go in achieving higher penetration of vocational education in the country as is seen in developed countries. The integration of vocational education with the school and higher education system holds great potential in getting more and more youth skilled and hence employable.

### National Education Policy—2020: A Catalyst for Vocational Education

There are 1,12,674 government secondary and higher secondary schools in India catering to 1, 10, 84, 787 students. Out of these schools, 10,992 (~10%) schools are offering vocational courses under NSQF to 12, 08, 485 (~10%) students across the country". NSDC has worked with the Ministry of Education to restructure the implementation model of skill development training in schools from 4-year (1 entry at 9<sup>th</sup> class and 1 exit at 12<sup>th</sup> class) to 2-year model (entry at 9<sup>th</sup> and exit at 10<sup>th</sup>; again entry 11<sup>th</sup> and exit at 12<sup>th</sup> class) to offer skill training under 73 job roles (pegged at NSQF Level 2 to 4) across 21 Sectors. Though these are great efforts, more students at the school level

need to be brought under the ambit of vocational education for creating a skilled society. The National Education Policy (NEP) 2020 paves the way forward.

NEP-2020 recognises that one of the primary reasons for the small numbers of students receiving vocational education is the fact that vocational education has in the past focused largely on grades 11-12 and dropouts in grade 8 and upwards. It aims to overcome the social status hierarchy associated with vocational education and requires the integration of vocational education and programs into mainstream education in all educational institutions in a phased manner. Beginning with vocational exposure at early ages in middle and secondary school, quality vocational education will be integrated smoothly into higher education. It will ensure that every child learns at least one vocation". NEP-2020 aims to expose 50 percent of the learners in school and higher education to vocational education by 2025, while it also aims to start coding classes for students starting at class 6 for future job readiness. Some of the key initiatives which will be instrumental in integrating vocational education are as follows.

- A National Committee for the Integration of Vocational Education (NCIVE), composed of experts in vocational education and representatives from across ministries, in collaboration with industry, has been recommended to oversee the integration and identification of domains based on skill gap analysis.
- Secondary schools will also collaborate with ITIs, polytechnics, local industry, etc. Skill labs will be set up and created in the schools in a hub and spoke model which will allow other schools to use the facility of ITIs and polytechnics for skilling purposes.
- 'Lok Vidya', i.e., important vocational knowledge developed in India, will be made accessible to students through integration into vocational education courses.
- Higher Education Institutions will also be allowed to conduct short-term certificate courses in various skills including soft skills, which are highly sought after in the industry.
- Every higher education institution and even every school or school complex will aim to

have Arts/IT) in residence to expose students to art, creativity, and the rich treasures of the region/country and also train the students in local crafts.

### Global Models for Vocational Education

There are several global and local models to learn from in integrating vocational education in schools and higher education. NITI Aayog through its three prominent programs is working on two fronts: a) mainstreaming vocational education and b) skilling students in Industry 4.0 to groom them as future job creators rather than job seekers. The first program is Sustainable Action for Transformation of Human Capital- Education (SATH-E) where NITI Aayog has partnered with the States of Jharkhand, Odisha, and Madhya Pradesh for systemic transformation in school education. One of the initiatives is to create Schools of Excellence which will be composite schools having high enrolment, best-in-class infrastructure, and providing holistic education with a special focus on job-ready skills. Approximately 10,000 such schools are being developed in the three states which will also offer high-quality vocational education as an integral part of the curriculum.

The second program is the Atal Innovation Mission (AIM) under which NITI Aayog has established over 10000+ Atal Tinkering Labs across the nation. These labs offer exposure and skills in Science, Technology, Engineering, and Mathematics (STEM) disciplines such as robotics, 3-D printing, the Internet of Things (IoT), etc. The school students are also groomed to design socio-techno solutions for problems around them which are often incubated as products. In the higher education sector, the Atal Incubation Centres offer grooming, mentoring, and technical as well as financial handholding to budding studentpreneurs. AIM is, thus, creating an outstanding skilled workforce as well as those who will generate more jobs in the country.

The third program is the Aspirational District Program (ADP) launched by NITI Aayog in 112 districts across the country. Traditionally these districts have been socio-economically backward. The broad contours of the programme are Convergence (of Central and State Schemes), Collaboration (of Central, State level 'Pradhan' Officers and District Collectors), and Competition among districts through monthly delta ranking – all driven by a mass movement. With

States as the main drivers, this program focuses on the strengths of each district, identifying low-hanging fruits for immediate improvement and measuring progress by ranking districts on a monthly basis. The ranking is based on the incremental progress made across 49 Key Performance Indicators (KPIs) under 5 broad socio-economic themes – Health and Nutrition, Education, Agriculture and Water Resources, Financial Inclusion and Skill Development, and Infrastructure. To give impetus to skilled manpower in these districts following key performance indicators were identified at the launch of the ADP program<sup>11</sup>.

Data-points/Indicator	Weight in Skill Development Index
No. of youth certified in short term training schemes/No. of youth in district in age group 15-29	35
No. of certified youth placed/ No. of youth trained under short-term & long-term in age group 15-29	35
No. of apprentices completing/Total number of trainees registered on the portal	35
No. of people certified under Recognition of Prior Learning/Non formally skilled workforce	70
No. of vulnerable/marginalized youth certified under short-term & long-term training	15

The districts are ranked on the incremental performance in skill development as well. Monthly top performers are declared through the Champions of Change Dashboard and the top consistent performers are monetarily rewarded to incentivise to drive developmental projects.

### German Dual Vocational Education Training (VET)<sup>12</sup>

Dual vocational education and training systems (Dual VET-systems) stand out due to the two learning venues company and the vocational school. Such a system also facilitates the transition from learning to employment and responds to the skills needs of the labour market. In Germany, the stakeholders are the Federal Government, Länder, and Industry. The German government had identified the benefits of vocational education very back in 1949 by introducing the Vocational Training Act which introduced a national legal framework for the different traditional training paths in the skilled trades and industry and commerce.

In Germany, compulsory schooling starts at age 6 and lasts for 8-10 years. After four years of primary school, students typically get tracked into three different education pathways: *Gymnasium*, with a demanding academic program culminating in a university entrance qualification, *Realschule*, with a less demanding academic program leading to a lower secondary diploma signifying useful academic skills, and *Hauptschule*, with a program designed for those deemed to have limited academic ability or interests and culminating in a school-leaving certificate. *Realschule* and *Hauptschule* graduates typically enroll in a vocational pathway (including the transition system) at age 15 or 16.

The students who opt for vocational education are provided theoretical training at the vocational schools, while the practical skills are learnt as an apprentice on shop floors. This kind of model helps the student in being job-ready while the industry gets manpower who is job-ready as day 1 of their jobs, unlike other systems where the new jobbers have to undergo training before becoming taking for the full responsibility of their jobs.

### Conclusion

India is one of the youngest nations in the world. It is often touted as the next big economic power. 62 percent of its population is in the working-age (15-59 years) group, which offers India a demographic advantage to leapfrog in a developed economy. However, the benefits of young demography could only be reaped if the concerned population is productive and skilled. India has launched the ambitious mission of Skill India to develop the full potential of its youth. The National Education Policy 2020 will further catalyze this mission by bringing millions of youth under the ambit of vocation education in the coming decade. India has taken a systemic approach to offer vocational training across a spectrum of skills – masonry to coding to artificial intelligence – through the power of public-private partnership. The newly launched PMKVY 3.0 which focuses on 'local for local', decentralised planning and

cooperation with States is set to lead India towards self-sufficiency (AtmaNirbhar) and transform India into the skill capital of the world.

### Reference

1. Economic Survey, 2018-19, Government of India
2. National Education Policy, 2020
3. National Skill Development Mission, A Framework for Implementation, The Ministry of Skill Development and Entrepreneurship, Government of India
4. National Skill Development Mission, A Framework for Implementation, The Ministry of Skill Development and Entrepreneurship, Government of India
5. Ibid
6. National Skill Development Corporation
7. Ibid
8. Guidelines for providing Skill Based Education under National Skill Qualification Framework, UGC
9. <https://pib.gov.in/PressReleasePage.aspx?PRID=1688836>
10. VOISE 2019-20, Ministry of Education, Government of India
11. National Education Policy 2020
12. Aspirational District Meta Data Document, NITI Aayog
13. An Introduction to The Dual VET System –The Secret Behind the success of Germany and Austria, A study commissioned by European Commission
14. Learning for Jobs OECD Reviews of Vocational Education and Training Germany, Kathrin Hoeckel and Robert Schwartz, OECD

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## Kurukshetra

FORTHCOMING ISSUE

January 2022 : Smart Agriculture

# Skill Requirements for Sustainable Livelihood in Rural Farm-based Cooperatives

Dr. K. K. Tripathy and Dr. S. K. Wadkar

*Cooperation is the culture of India's socio-economic fabric. Rural farm-based cooperatives as an institutional mechanism have potential to achieve food and nutritional security and thereby increase income and well-being of members. In the current market and consumer centric and technology driven economic environment, cooperatives need entrepreneurial orientation, business acumen and skill sets in order to make themselves smart, competitive and sustainable. The success of cooperatives lies in 4 S – Standardisation of institutional and business practices; Scaling up of membership and business volume; Skilling of hard/technical and soft/process skills, and Sustenance of good-governance and management practices.*

**C**ooperatives are self-supporting community associations which are expected to realise social, economic and political objectives ranging from self-help and grassroots participation to production, distribution and social control over the nation's resource allocation and mobilisation. Cooperatives are accepted as an essential instrument of social and economic policy and have inherent advantages in tackling the problems of poverty alleviation, food security, and employment generation. These have immense potential to deliver goods and services in areas where both the State and the private sectors have remained not so successful and effective. Cooperatives are people-

centred rather than capital-centred organisations and hence, require timely and adequate skill upgradation and capacity development initiatives for facilitating community leaderships, time management abilities, creativity and innovation in business system, effective business management, etc. Skilled personnel in community business organisations are adept in exploring situation-specific problem solving mechanism so as to assure sustainable livelihoods.

India's cooperative movement started when there was a serious impact of the then industrial revolution on village industries, agriculture, rural income and employment during the last quarter of 19<sup>th</sup> Century. In pre-independence



India, the movement was successful in getting its first ever Co-operative Credit Societies Act passed in 1904. This legal status to co-operation gave a quick momentum in the co-operative movement, but availability of skilled cooperators, technically qualified and expert personnel in the sector remained a challenge. Keeping in view the emerging skill needs in community business organisations like cooperatives, the doyen of co-operative movement of India – Late Sri Vallabhbhai Mehta once said, “Cooperative training is not merely a prerequisite, but is a permanent condition of cooperative activities”. This implied that there was an emerging need for enhancing capabilities of members and board of directors of the Cooperatives through thematic training and capacity building programmes so that they would be prepared to respond to a dynamic and ever-changing economic environment.

### Status and Significance of Skilling

The degree and intensity of economic growth and the inclusivity depend largely on skill development and capacity improvement of the youth – the most productive human resources in demography. Today's youth need updated knowledge and competence

improvement rather than traditional training and sensitisation to ensure a sustainable livelihood, income and employment. NSS 61<sup>st</sup> Round results show that among persons of age 15–29 years, only about 2 per cent are reported to have

received formal vocational training and another 8 per cent reported to have received non-formal vocational training indicating that very few young people actually enter the world of work with any kind of formal vocational training. This proportion of trained youth is one of the lowest in the world. The corresponding figures for industrialised countries are much higher, varying between 60 per cent and 96 percent of the youth in the age group of 20–24 years. One reason for this poor performance is the near exclusive reliance upon a few training courses with long duration (2 to 3 years) covering around 100 skill categories. In China, for example, there exist about 4000 short

duration modular courses which provide skills closely tailored to employment requirements.

duration modular courses which provide skills closely tailored to employment requirements.

The National Policy for Skill Development and Entrepreneurship (2015) aims at creating an ecosystem of empowerment by skilling people on a large scale with high standards and to promote a culture of innovation based entrepreneurship in the country. India's rural population mainly depends on agriculture and allied sectors for their livelihood. A nation progressing towards development requires institutions, entrepreneurship and skill development to initiate and achieve the course of change and the changing societal structure and livelihood profiles. India is rich in human resources, what is needed now is a long-term policy for the development of human resources through education, training, skill development, empowerment and creation of congenial socio-economic, institutional and political environment for the fullest possible utilisation of the vast, untapped reservoir of human power and ingenuity.

### Skilling Challenges

Research studies and reports state that the policy makers and planners accord low priority to

the activities of skilling. It is often viewed as the last option for those who did not progress or opted out of formal academic system. More than 20 Ministries/Departments have schemes and programmes related to skilling and

entrepreneurship development. Absence of a robust coordination and monitoring mechanism has not yet ensured appropriate convergence for their optimal implementation. The following major challenges often hamper the sustainable skilling ecosystem and hence need immediate policy attention:

- Multiple assessment and skill certification systems
- Paucity of expert trainers, inability to attract practitioners from the industry as faculty
- Mismatch between demand and supply at sectoral and spatial levels.

- Limited mobility between skill and higher education programmes and vocational education
- Low coverage of apprenticeship programmes
- Narrow and obsolete skill curricula
- Declining women labour force participation rate
- Predominant non-farm/unorganised sector employment with low productivity
- Non-inclusion of entrepreneurship in formal education system
- Lack of mentorship and finance for startups encouraging skilling
- Inadequate impetus to innovation-driven entrepreneurship

### Skilling Cooperatives for Economic Prosperity

Strong cooperatives create enabling atmosphere in rural areas to spearhead agriculture and rural development initiatives and the recently announced pro-people AatmaNirbhar Bharat mission activities. They have the capability to ensure equitable and concerted efforts towards enhancing the flow of timely, adequate and doorstep credit supports in various critical infrastructures such as input services, irrigation, marketing, processing, storage, etc., and also for other activities such as poultry, horticulture, dairying, textiles, processing, housing, health, etc. Cooperatives as collectives need to be oriented and strengthened on governance, organisational skills, team spirit of work, interpersonal communication, work allocation, payment/transaction, market systems, supply chain, etc.

Our nation requires meaningful participation of the cooperative sector to bring in a smooth entrepreneurial culture with sufficient strength to sustain global competition through local means. Despite the phenomenal expansion of outreach and volume of operations in the country, the cooperative societies are facing difficulties,

particularly in mobilising adequate resources so as to become self-reliant and economically viable units. Businesses are becoming more consumer-driven, market-driven, and technology-driven. This compels the cooperatives to adapt to innovative business processes and procedures to stay competitive in the market. This calls for effective capacity building and skilling of cooperative human resources.

Efforts are to be made by the government to train, recapitalise and revive the Indian Cooperative Sector. Cooperation is a State subject and is heavily guided by State level plans and implementations. These institutions need a

complete overhaul in their approach towards the operation of their business. Professionalisation of cooperatives along with modernisation of their operational procedures would facilitate their development as self-reliant and economically viable rural financial organisations, after ensuring better managerial

skills with efficient risk management, safeguarding against market imperfections, transparency, accountability, quality services and achieving higher recovery ratio with minimal or no subsidy support from the Government. With the creation of a separate Ministry of Co-operation in the Government of India, a renewed interest has been put on the revival of cooperative movement in India. The country has got a direction to work towards realising the mission of "Sahakar-Se-Samridhhi".

### Skilling Rural Form based Cooperatives

Out of a total 8.5 lakh cooperatives in India, around 20 per cent (1.77 lakhs) are credit cooperatives (Table 1), and the remaining 80 per cent are non-credit cooperatives involved in diverse activities viz. Fishery, Textile, Handicrafts, Dairy, Producer, Processing, Consumer, Industrial, Marketing, Tourism, Hospital, Housing, Transport, Labour, Farming, Service, Livestock, Multi-purpose Cooperatives (NCUI, 2018). In terms of



membership, about 390 million farmers have enrolled in the cooperatives. The community level cooperative society known as Primary Agriculture

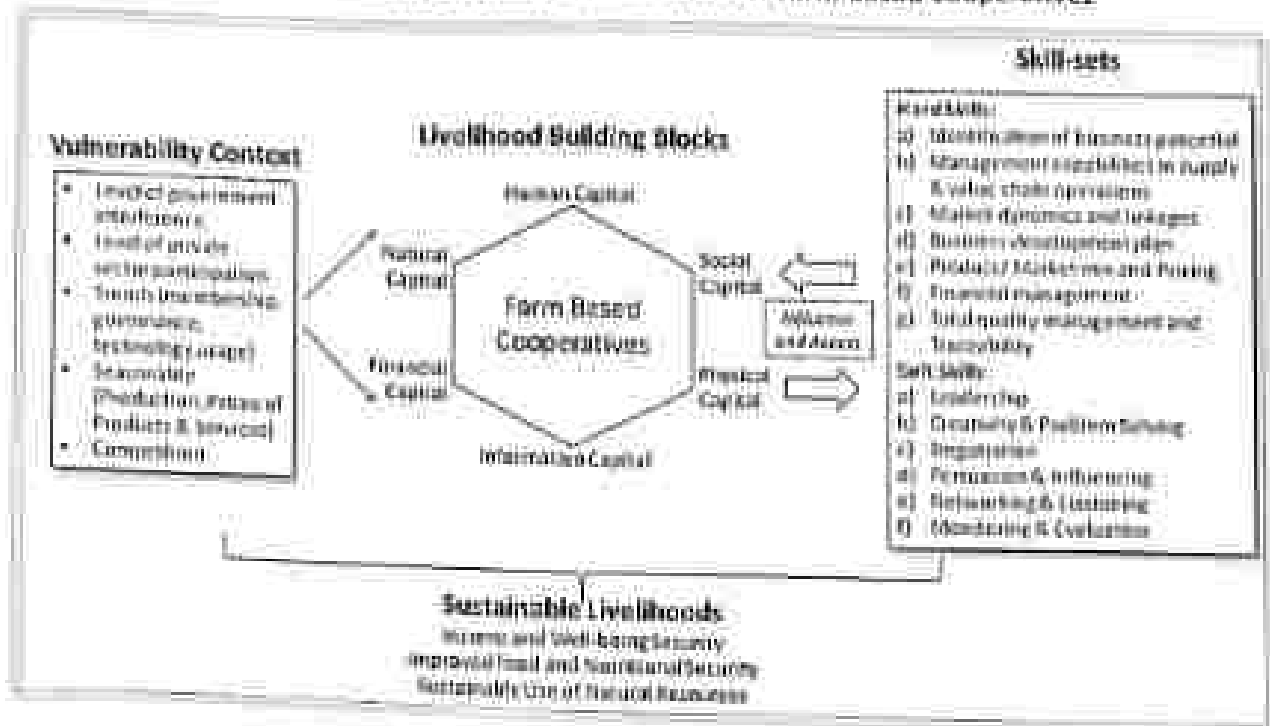
Credit Society (PACS) is an all-farmer member driven cooperative institution. The objective of PACS is to overcome farmers from the clutches

Table 1: Cooperatives in India

S.No.	Cooperatives Category	No. of Coops.	% to Total Non-Credit Coops
<b>A. Non-Credit Cooperatives</b>			
1	Marketing	7,399	1.09
2	Consumer	26,333	3.90
3	Dairy	1,51,956	22.45
4	Sugar	694	0.06
5	Labour	46,953	6.93
6	Fishery/aquaculture	21,470	3.10
7	Livestock	8,383	1.23
8	Textiles/handicrafts	17,307	2.60
9	Agri-processing	29,901	4.43
10	Multi-purpose	14,937	2.20
11	Sericulture	3,779	0.55
12	Tribal/SC-ST	1,707	0.25
13	Others	3,43,552	50.76
<b>Non-Credit Cooperatives</b>		<b>6,76,790</b>	<b>100.00</b>
<b>B. Credit Cooperatives</b>		<b>1,77,605</b>	—
<b>Total (A + B)</b>		<b>8,54,395</b>	

Source: *Indian Cooperative Movement: A Statistical Profile*, NCLR, 15<sup>th</sup> Edition, 2018

Figure 1: Sustainable Livelihood Framework for Farm-based Cooperatives



(Source: Authors' own depiction, adapted from DFID, 2001)

of moneylenders and middlemen. It is expected that these PACS should have multiple services/activities as per the need and interest of their member farmers. The non-credit cooperatives, particularly the producer's cooperatives like Fishery, Dairy, Processing, Farming, Service, Livestock, Multi-purpose Cooperatives, etc. can also be considered as "rural farm-based cooperatives".

In the 21<sup>st</sup> century, as science progresses, the knowledge domains and skill domains also multiply and become more and more complex. In a new knowledge economy, the skill sets can range from professional, conceptual, managerial, operational, behavioural to interpersonal skills and inter-domain skills. Hence, the need of the hour is to find out the skill gap and roll out effective and time tested mechanisms for skilling all rural farm-based cooperative personnel periodically, in order to ensure sustainable business environment in the cooperative sphere.

### Sustainable Livelihood and Skill-Sets

Promoting sustainable livelihood opportunities is a complex task that involves a number of processes. DFID states, "A livelihood comprises

the capabilities, assets (store, resources, claims and access) and activities required for a means of living; a livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term" (DFID, 2001). Thus, it is important to understand the local people's needs and problems, knowledge, perceptions, and interests, their resilience practices, local institutional mechanisms, and organisational structures. This would help in adopting a holistic perspective in order to understand the present livelihood pattern and related issues and thereby would help in constructing strategic interventions for promoting livelihood development at the local level. Farm-based cooperatives as an institutional form should construct a more diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their members' income and standard of living (Figure 1).

Community-owned and farmer member driven cooperative business units need to practice market-oriented farming. They need greater farm management and entrepreneurial skill sets. The Cooperatives have to integrate six capitals for their business growth viz. (a) Human capital where skills, knowledge, ability would help pursuing different livelihood strategies (b) Social capital where social resources, networks, membership of groups, relationship of trust encourages people to draw in the pursuit of livelihoods (c) Physical capital where basic infrastructure, production equipment enable people to follow livelihoods (d) Natural capital where land, water, biodiversity, environmental resources manage flow to derive livelihoods (e) Financial capital where savings, supply of credit broadens livelihood options and (f) Information capital where accessibility and affordability of information, weather, market intelligence empowers the people to take appropriate and timely business decisions.

In addition, there is a requirement for improvement in hard and soft skill-sets of the cooperative managers. A few significant hard skill requirement areas include, inter alia, (i) identification of business potential, (ii) management capabilities in supply chain operations, (iii) market dynamics and linkages, (iv) business planning, (v) product/ market mix and pricing, (vi) financial management, (vii) Total Quality Management and Traceability etc. Similarly, some of the important soft skill areas are (i) negotiation skills, (ii) persuasion and use of influence strategies, (iii) monitoring and evaluation, (iv) creativity and problem solving, (v) networking and liaising, (vi) leadership, etc.

### Way forward

The cooperative sector has a big role in bridging the urban-rural divide and creating opportunities for income generation. In the 21<sup>st</sup> Century, the significance of cooperatives in the Indian economy and its function in social and economic milieu has evolved a new dimension which needs immediate attention. There is a need to look at cooperatives in the rapid competitive environment, especially to evaluate their strengths, weaknesses, opportunities, and threats

from a new perspective. Further, there is a need to design a strategic roadmap for cooperative movement to play a key role in making India a \$5-trillion economy, helping unlock the full potential of the rural economy. There is a need for collaboration and convergence to ensure that members of cooperatives, farmers, women and youth are able to enhance their employability skills and undertake income generating activities in cooperatives.

Cooperatives have to reinvigorate these perspectives in order to respond to the changing contours and structures of the business landscape and thereby making them competitive and sustainable. The cooperatives should understand that entrepreneurship development would make them empowered and strengthened to take farming decisions in case in a complex competitive environment. Further, in the current competitive consumer and technology driven environment, the cooperatives need entrepreneurial orientation, business acumen and skill-sets in order to make themselves smart, competitive and sustainable. The success of cooperatives lies in 4S-Standardization of institutional and business practices, Scaling-up of membership and business volume, Skilling of hard/technical and soft/process skills, and Sustenance of good-governance and management practices.

### References

1. DFID (2001). Sustainable livelihoods guidance sheets, The Department for International Development, London, UK.
2. NSSO (2005). Report on Consumer Expenditure, Employment-Unemployment Survey (45<sup>th</sup> Round: July 2004 – June 2005), Ministry of Statistics and Programme Implementation, Government of India, New Delhi.
3. NCUI (2018). Indian Cooperative Movement: A Statistical Profile-2018, 15<sup>th</sup> Edition, National Cooperative Union of India, New Delhi.

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# Vibrant MSMEs - Towards Inclusive Growth

Dr. Sriparna B. Baruah

Micro, Small and Medium Enterprises (MSMEs) are widely recognised for the important contributions they make towards sustainable development in terms of contributions to economic growth, creation of decent jobs, provision of public goods and services, as well as poverty alleviation and reduced inequality. The critical contribution of MSMEs to broader socio-economic objectives, including job creation makes them a key priority area for achieving the Sustainable Development Goals (SDGs). Job creation through MSMEs directly benefits the poor and vulnerable, particularly women and youth, thereby directly reducing poverty, increasing income and positively impacting on household investments in education and health care. In fact, there will be huge opportunities for MSMEs in the next few years. Moreover, with the government's focus on enhancing credit flow to MSMEs' technological upgradation and digitising MSMEs, they can not only compete effectively with global counterparts, but also play a bigger role in the 'Make in India' campaign.

**T**he Indian MSMEs sector is the backbone of the national economic structure and has unremittingly acted as the bulwark for the Indian economy; providing it resilience to ward off global economic shocks and adversities. The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. It contributes significantly in the economic and social development of the country by fostering entrepreneurship and generating large employment opportunities at comparatively lower capital cost next to agriculture. MSMEs are complementary to large industries as Ancillary units and this sector contributes significantly in the Inclusive Industrial development of the country. The MSMEs are

widening their domain across sectors of the economy, producing diverse range of products and services to meet demands of domestic as well as global markets. The importance of a vibrant MSME sector in the context of the aggregate economy cannot be overestimated as it accounts for:

- Nearly one third of aggregate economy gross value added.
- Approximately one-third of manufacturing output in the country.
- Three fourths of all establishments in the country.

With around 36.1 million units throughout the geographical expanse of the country, MSMEs contribute:



5.11 percent of the manufacturing GDP;

24.62 percent of the GDP from service activities and

33.4 percent of India's manufacturing output.

They have been able to provide employment to around 120 million people and contribute around 45 percent of the overall exports from India. The sector has consistently maintained a growth rate of over 10 percent. About 20 percent of the MSMEs are based out of rural areas, which indicate the deployment of significant rural workforce in the MSME sector and is an exhibit to the importance of these enterprises in promoting sustainable and inclusive development as well as generating large scale employment, especially in the rural areas. In developing countries like India, a large share of MSMEs is informal enterprises and serve as a source of livelihood for base pyramid population. MSMEs also recruit, train and employ local community members including those being in poverty and integrate them into the MSME value chain.

A distinctive feature of MSMEs is that a very large proportion of them are concentrated around likely 6,000 clusters plus 1,157 traditional industrial clusters, 3,091 handicrafts clusters, and 563 handloom clusters. According to the assessments of the Ministry of MSME, Government of India, the sector generates around 100 million jobs through over 46 million units situated throughout the geographical expanse of the country.

Besides the wide range of services provided by the sector, the sector is further engaged in the engineering of over 6,000 products ranging from traditional to hi-tech items. The Indian MSME sector offers maximum opportunities for both self-employment and wage-employment outside the agricultural sector and contributes in constructing an inclusive and sustainable society in numerous ways through making of non-farm livelihood at meagre cost, balanced regional development, gender and social balance, environmentally sustainable development. The MSME sector is a nursery of entrepreneurship often driven by individual creativity and innovation.

MSME's help in inclusive growth of our country by:

- generating large scale employment.

- sustaining economic growth and increase exports.
- making growth inclusive.

#### Generating Large Scale Employment

In India, capital is scarce and labour abundant. MSMEs are thought to have lower capital-output and capital-labour ratios than large-scale industries, and therefore, better serve growth and employment objectives. The MSME sector in India has grown significantly since 1960 – with an average annual growth rate of 4.4 percent in the number of units and 4.02 percent in employment (currently employing 30 million). Not only do MSMEs generate the highest employment per capita investment, they also go a long way in checking rural-urban migration by providing people living in isolated areas with a sustainable source of employment.

#### Sustaining Economic Growth and Increasing Exports

Non-traditional products account for more than 95 percent of the MSME exports (dominating in the export of sports goods, ready made garments, plastic products etc.). Since these products are mostly handcrafted and hence eco-friendly, there exists a tremendous potential to expand the quantum of MSME led exports. Also, MSMEs act as ancillary industries for large scale industries providing them with raw materials, vital components and backward linkages; e.g., large scale cycle manufacturers of Ludhiana rely heavily on the MSMEs of Malerkotla which produces cycle parts.

#### Making Growth Inclusive

MSMEs are instruments of inclusive growth which touch upon the lives of the most vulnerable and marginalised. For many families, it is the only source of livelihood. Thus, instead of taking a welfare approach, this sector seeks to empower people to break the cycle of poverty and deprivation. It focuses on people's skills and agency. However, different segments of the MSME sector are dominated by different social groups.

#### MSMEs and Employment Generation

The Micro, Small and Medium Enterprises (MSME), if nurtured well, can bridge the gap and create one crore jobs in the next 4-5 years. Among

all the sectors, MSME was the largest job creator in the last four years. Survey by CII, report titled 'Survey of Job Creation and Outlook in MSME sector', said hospitality and tourism, followed by textiles and apparel and metal products were the top job creating sectors. Machinery parts and transport and logistics were next on the list.

As per the annual report 2017-18 of the Ministry of MSME, the sector contributed around 3.6 crore jobs (70%) in the manufacturing sector. The micro firms created the largest number of jobs and are expected to continue with the trend in the coming three years as well. The world is debating strategies to revive global growth, but there are challenges like climate change and growing unemployment rate. MSMEs can play a key role in employment, thus countering growing unemployment. There is also a complimentary relationship between big enterprises and MSMEs. Only if the small survive, the big will prosper. Big enterprises and MNCs require global value and supply chain which is not possible without MSMEs. Need of the hour is to strengthen these linkages between the big and small, and together they can propel the global economy. If MSMEs grow, there will be a balanced growth all over India as they are in rural areas and also urban areas.

### Challenges Faced by MSMEs

MSMEs however face a number of challenges and some of the major challenges are listed below.

- Most of the unregistered MSMEs predominantly comprise micro enterprises, particularly confined to rural India, operating with obsolete technology, limited access to institutional finance etc. There is a need to transform the huge numbers of unregistered MSMEs into registered MSMEs.
- There is a need to improve the competitiveness of the overall MSME sector by covering areas like access to technology, IPR related issues, design related issues, wasteful usage of resources/manpower, energy inefficiency and associated high cost, low ICT usage, low market penetration, quality assurance/certification, and standardisation of products and proper marketing channels to penetrate new markets.

### Government Initiatives for MSMEs

The government has initiated the following five key aspects for facilitating the MSME sector.

1. **Access to credit:** Launch of the 59 minute loan portal to enable easy access to credit for MSMEs. Loans upto one crore can be granted in-principle sanction. There is also a provision for 2 percent interest subvention for all GST registered MSMEs on fresh or incremental loans.
2. **Access to market:** Public sector companies now have to compulsorily procure 25 percent of their total purchase from MSMEs.
- 3) **Technology Upgradation:** For better access to technology, 20 technology hubs with 100 spokes in the form of tool rooms will be set up throughout the country.
- 4) **Ease of Doing Business:** A number of initiatives have been initiated for facilitating business for getting clearances and certifications.
- 5) **Social Security for MSME Sector Employees:** A mission has been launched that ensures that employees have access to Jan Dhan Accounts, Provident fund and Insurance.

These policy initiatives are clear and consistent, aimed at transforming the ecosystem for the MSMEs sector by influencing: (1) Birth (encouraging start-ups) (2) Operations and growth (by simplifying laws and regulations and facilitating their access to credit, by providing better technology and dynamic markets, apart from skilled labour and reliable infrastructure) (3) Orderly and easy exit. Thus, the emerging focus of India's MSME policy aims at covering the entire lifecycle of MSMEs to ensure a healthy, vibrant and competitive MSME sector. The vision is to increase MSMEs' contribution to India's GDP to over 50 percent from the current 29 percent for the Indian economy to scale the \$5 trillion mark. Exports contribution aims to be increased to 75 percent from the present 50 percent and employment generation from 11.10 crore at present to 15 crore.

The phenomenon of simultaneous cooperation and competition between firms has become increasingly popular in recent years. The importance of cooperation seems to be even greater in the context of Micro, Small and Medium

Enterprises (MSMEs). As technological battles have intensified and technologies have become more complex, MSMEs face numerous challenges such as rising research and development costs, high risk and uncertainty in technological development, as well as lack of resources to pursue large scale innovation projects. MSMEs in an industry that needs to collaborate with competitors so that they can create economies of scale, mitigate risk and leverage resources together. The MSME sector contributes significantly to the India-economy in terms of GDP, exports and employment generation.

It has been found that clustering facilitate MSMEs helps to combat the challenges thrown up by globalisation—cluster policies work towards strengthening of inter-firm collaboration and business networking and budding up/strengthening of organisations for technology transfer. In effect, countries, world over, in recent times have been relying on a cluster approach which increasingly stresses on ensuring networks amongst small firms and in their external environment with the support institutions and policy framework. Moreover, globalisation has seen introduction of policies for financial assistance to MSMEs in the form of loans, credit guarantees, and promotion of venture capital etc., through commercial banks as well as specialised MSME bank branches/ counters of nationalised banks. The era of globalisation in support of MSMEs is thus working its way out. As in countries worldwide, in India too, the MSME sector across regions and states is charting a path towards achievements in terms of growth and development.

Cluster is not only a means to improve the competitiveness but also for alleviation of poverty, generation of sustainable employment, fostering innovation, infusing technology, enabling better credit flow and sustenance of environmental issues more effectively and sustainably. Cluster development has been undertaken in more than 50 countries across the world and at least 20 diverse independent initiatives are in progress or being planned in India alone. Probably no other country in the world can boast of more than 6,000 clusters that have been in existence for decades and centuries. While there has been an immense interest generated on the subject, the

understanding of clusters and cluster development has led to confusions and contradictions.

The micro sector grows on its own like a hydra because of compulsion. The compulsion is either to generate livelihood and income as in the case of traditional manufacturing industries or additional livelihood and income as in the case of sectors like handloom, handicrafts and sectors falling under Khadi and Village Industries Commission (KVIC). Overall the MSME sector (barring IT, ancillaries to large units, certain specified services coming up recently), is dogged by obsolete technology, inefficiency in cost of production, limited market and a host of problems. This has resulted in an era where traditional industries are making a natural exit in the face of stiff competition both from established national and international players.

All these factors are not possible to be provided to vast number of MSMEs spread across the country nor can they afford to get these on their own. The only way to resolve this impasse is through clustering and cluster development approach which will give a fresh lease of life to MSMEs. In India, the lesser developed regions which have limited industrialisation, MSMEs are mostly focussed on Handloom, craft and agri-sector and most clusters are traditional and livelihood clusters. It is seen that from these clusters household units graduate to micro enterprises. With cluster interventions, the unorganised sector starts getting more structured.

Enterprises can better improve their competitiveness due to the presence of specialised supplier of raw materials, parts and components, machinery, skills and technology as well as other supporting services. The research on clusters clearly reflects the advantages of focusing on clusters with positive interrelationships amongst the stakeholders. Developing clusters is not only a means to improve the competitiveness of industry but also an instrument for alleviation of poverty, generation of sustainable employment, fostering innovations, and enabling better, effective and sustainable credit flow.

MSME sector is next to agriculture in terms of providing employment. It accounts for 48 percent of Indian exports. With strong and complex backward and forward linkages, the sector provides essential support to large

enterprises and their value chain. In the making of AtmaNirbhar Bharat, its role is instrumental. One fifth of these MSMEs are based in rural areas. This also indicates the role they play in promoting sustainable and inclusive development and generating large scale employment in rural areas.

COVID-19 is a crisis with an unforeseeable ending. It is clear, though, that the government and businesses—both large and small—will have to work together to ensure the protection of workers, be ready for risk management in terms of phased re-starting of business operations and be prepared to open structural changes in business activity.

New solutions is the need of the hour that may not have been foreseen as yet. Post this pandemic, the business scenario is expected to completely change and every sector will have to be looked at in a different way for sustainability.

For MSMEs to recover from the COVID-19 crisis and identify opportunities, they need to:

- Embrace technology and digitisation.
- Change mindset and focus on business innovation.
- Monitor labour productivity on a daily basis.
- Think of strategies that can revive revenues of the businesses within a short span of time, e.g. launching an e-commerce vertical.
- Business needs to be more agile and come up with crisis management strategies.
- Focus on factors like managing short term disruptions, catering to medium term needs and planning for long term changes.
- Building resilient and local supply chain.
- Digitising supply chain completely.
- Divesting unprofitable verticals of business.
- Sticking to core and focussing on strengthening it.

MSMEs not only play a crucial role in providing large scale employment opportunities at a comparatively lower capital cost than large industries but also help in industrialisation of backward areas. They also help in reducing regional imbalances, assuring equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary

units and this sector contributes enormously to the socio-economic development of the country.

The Ministry of Micro, Small and Medium Enterprises (MSMEs) adopted the cluster approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of small enterprises (including small scale industries) and small scale service and business enterprises and their collectives in the country. Among other things, this approach was preferred as it facilitates economies of scale in terms of deployment of available resources for effective implementation and leads to sustainable results in the medium to long term.

While the role of MSMEs is often highlighted in the context of their contribution to employment, economic growth and balanced regional development, it is important that these enterprises are sustainable and can deliver scale. Even though we contribute significantly to exports, Indian MSMEs are still not regarded as a force to reckon with in the international markets. Looking ahead, the challenges are in building the next generation of MSMEs that can function as power houses of the economy with intense competition at global level and the demands arising from globalisation, it is imperative for MSMEs to demonstrate greater competitiveness, position themselves strategically and leverage their engagements in global value chains.

## Conclusion

To reach the \$5 trillion economy, MSMEs have to play a much bigger role in employment generation, in exports, in skilling people and in making the sector more formalised so that they start reaping the benefits of reforms such as GST. This will also pave the way for easier access to credit flow. In fact, there will be huge opportunities for MSMEs in the next five years. Moreover, with the government's focus on enhancing credit flow, to MSMEs, technological upgradation and digitising MSMEs, they can not only compete effectively with global counterparts, but also play a bigger role in the 'Make in India' campaign. With the focus on industrial clustering, real advantages will stem from the economies of scale.

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## Ministry of Rural Development Launches an Initiative to Enable Rural SHG Women To Earn at Least Rs.1 lakh per Annum

To bring a sharper focus on moving women to the higher economic order, the Ministry of Rural Development recently launched an initiative on creating 'Lakhpati' SHG women, to enable rural SHG women to earn at least Rs.1 lakh per annum. For the realisation of this ambitious goal, the Ministry has envisioned livelihood support to 25 million rural SHG women in the next 2 years. Based on various models existing across the country, a detailed advisory has been issued to the State Governments. A stakeholders consultation workshop was held with the States, BANGF (Bali and Meinda Gates Foundation) and TRIF (Transformation Rural India Foundation) for further discussion on this subject on 28<sup>th</sup> October, 2021.



In the consultation on 28 October, 2021, the importance of well planned interventions to diversify livelihood activities at the household level ranging from Agriculture and allied, Livestock, NTFP (Non-Timber Forest Products) and other interventions through convergence were emphasised to realise an annual income of Rs. 1 lakh on a sustained basis. The importance of strengthening SHG, VO (Village Organization) and CLFs (Cluster Level Federations) to anchor these kinds of interventions was also highlighted and stressed upon. The dedicated Community Carriers of SHG members trained in different fields would be instrumental in realising their goal. The role of Civil Society Organisations, KVKs (Krishi Vigyan Kendras) and other private market players is critical in this intervention. States were advised to encourage and forge these partnerships as well.

National Rural Livelihood Mission works on a saturation approach. As of date, 6,768 blocks have been covered under the programme with mobilising 7.7 crore women into 70 lakh SHGs. From providing initial capitalisation support to the SHGs are being credited to the tune of almost 80 thousand crore rupees annually. Under the mission, poor women from different cross-sections of class and caste form into Self Help Groups and their federations, providing financial, economic and social development services to their members for enhancing their income and quality of life.

Over the years, this money borrowed by SHGs through bank capitalisation support is now being used for creating diversified livelihood opportunities. While all these efforts are yielding positive transformation, it is realised that for ensuring sustainable livelihoods and dignified life of women SHG members, there is a need to make concerted effort for ensuring at least Rs. 1,00,000 income per annum for the household i.e. enabling them to become a *Lakhpati*. The figure of Rs. 1 lakh is both aspirational and inspirational for rural SHG women.

Deen Dayal Antyodaya Yojana is a flagship scheme of the Ministry of Rural Development organising the rural poor into self-governed institutions with a focus on building capacity and creating diversified livelihood opportunities for Rural Poor Women. The mission has made successful strides through the Mahila Kisan Sashaktikaran Pariyojana bringing focus on the role of women as farmers. Moving from the phase of community mobilisation and building institutions of women, now the focus is on envisaging SHG women in higher-order economic activities through producer groups, FPOs and producer companies.

(Source: Press Information Bureau)

# Rural Women: Key to New India's Agrarian Revolution

Dr. Noolam Patel and Dr. Tanu Sothi

Rural women are trailblazers for social, economic and environment transformation for the "New India". In India, Agriculture employs about 28 percent of total women. Empowering and mainstreaming rural women workforce in agriculture can bring paradigm shift towards economic growth. It will enhance food and nutrition security and alleviate poverty and hunger. It's a win-win strategy for achieving Sustainable Development Goals by 2030.

**I**ndia is celebrating and commemorating the progressive 75 years of India after independence with 'Azadi Ka Amrit Mahotsav' and promulgating mission of warranting women as "Empowered women-Empowered Nation". India is an agrarian economy with about 54.6 percent of total workforce engaged in agricultural and allied sector activities (Census 2011). Women are extensively engaged in the activities pertaining to agriculture and allied sector. The workforce participation rate for rural females is significantly higher at 41.8 percent against urban women participation rate of 35.31 percent (MoSPI, 2017).

In India, reforms are underlined for holistic development of women, enabling socio-economic and health security. Since Independence, several government flagship schemes and programmes are initiated to improve rural women stature in society by creating livelihood opportunities and engagements in paid employments. Various schemes, such as the Prime Minister's Employment Generation Program (PMEGP), National Livelihoods Mission, Deen Dayal Upadhyay Grameen Krushalya Yojana (DDU-GKY), Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Beti Bachao Beti Padhao, Pradhan Mantri Matru Vandana Yojana

(PMMVY), etc. has made significant contributions in creating gender parity and socio-economic empowerment of women in India.

Now, rural women have availing access to education, productive resources, capacity building, skill development, healthcare facilities and diversified livelihood opportunities through government beneficiary schemes.

## Rural Women Workforce in Agriculture Sector

In rural communities, agriculture and allied sector is the primary source of livelihood that includes 80 percent of all economically active women, out of which 33 percent constitute agricultural labour force and 48 percent are self-employed farmers. Rural women are engaged at all levels of agricultural value chain; i.e., production- pre-harvest, post-harvest processing, packaging, marketing to increase productivity in agriculture. As per Pingali et al. (2019), the ratio of women to men working in agricultural sector has increased over the time and made greater amount of contribution to GDP per capita. They are the momentous demographic group for sustainable food system (FAQ, 2011). It is projected that women-oriented reforms, ensuring equal access to resources, skill development and opportunities



in agriculture would increase agricultural output in developing countries between 2.5 and 4 percent (FAO, 2011).

In recent announcement under Aatmanirbhar Bharat, earmarking funds were allocated to mainstream the women engaged in agriculture development and equal provision of rural services.

### Gender Mainstreaming in Agriculture

As per the Prime Minister's vision of Aatmanirbhar Bharat, the Government of India has prioritised agenda of 'Gender Mainstreaming in Agriculture' to provide access to resources/schemes to rural women engaged in agriculture and allied sector. Special beneficiary-oriented schemes are laid by Department of Agriculture and Farmers' Welfare to mainstream the participation of rural women. These special schemes provide for States and other implementing agencies to incur at least 30 percent expenditure on women farmer.

For skill development and capacity building amongst women farmer, various skill-training are being imparted under schemes of Ministry of Agriculture and Farmers' Welfare and Ministry of Rural Development. These include Support to State Extension Programmes for Extension Reforms (ATMA Scheme) under Sub-Mission on Agriculture Extension (SMAE). Skill training courses in agriculture and allied areas (of minimum 200 hours duration) are also being conducted for women farmers through National Training Institutes, State Agricultural Management and Extension Training (SAMETs), Krishi Vigyan Kendras (KVKs) and State Agricultural Universities (SAUs), across the country (Ministry of Agriculture and Farmers Welfare, 2021).

With increased feminisation and pro-women initiatives, the percentage of female operational holdings in the country has increased from 12.78 percent during 2010-11 to 13.78 percent during 2015-16 (Ministry of Agriculture and Farmers Welfare, 2019). Several farm women's food security groups, undertaking macro/micro level studies in critical thrust area related to women in agriculture, delivery of Gender Sensitisation Module on Gender Learning through training programmes at National/Region/State level, compilation and documentation of gender friendly tools/technologies, Farm Women Friendly Handbook and compilation of best practices/success stories of the women farmers, etc are

undertaken by Ministry of Agriculture and Farmers Welfare (Ministry of Agriculture and Farmers Welfare, 2011).

### Empowering Women Farmers: Skill and Capacity Building

Several inter-ministerial initiatives of Government of India have helped women farmers in receiving access to resources to enhance their livelihood, social and economic gains. The Ministry of Agriculture and Farmers' Welfare and Ministry of Rural Development through various schemes have encouraged participation of rural women farmer.

The Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme was launched by Ministry of Rural Development to impart skill development and capacity building programmes for rural women. This scheme was introduced as a sub component of DAY-NRLM (Deendayal Antyodaya Yojana – National Rural Livelihoods Mission) and implemented through State Rural Livelihoods Mission (SRLM) across India. Under DAY-NRLM scheme, trainings on use of latest agriculture, allied techniques, agro-ecological best practices are being imparted to women farmers through the community resource persons and extension agencies. Specific women farmer training programmes on topics like household food security by kitchen gardening and nutrition gardening; design and development of low/minimum cost diet; designing and development for high nutrient efficiency diet; Processing and cooking; Gender mainstreaming through SHGs; Storage loss minimisation techniques; Value addition; Women empowerment; Location specific drudgery reduction technologies; Rural Crafts; and Women and child care are organised through extension bodies (Ministry of Agriculture and Farmers' Welfare, 2021). These training programmes have opened avenues for new livelihood opportunities for rural women.

Parallel research projects on introduction of new interventions in streamlining women engagement in farming sector, technology testing and refinement, gender sensitive extension approaches, and reduction etc. are led by ICAI-Central Institute for Women in Agriculture, Bhubneshwar for enhancing participation of women in agriculture.

Over the years, rural women participation in training sessions has been increased to many

fold). Also, gender-specific interventions and its adoption are encouraged through these trainings and awareness camps. About 58,295 Krishi Sakhi were trained by 735 State Level Resource Persons under Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) and 1.23 lakh women farmers participated in special women farming training conducted by KVE (Ministry of Agriculture and Farmers' Welfare, 2021a).

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) implemented by Ministry of Skill Development and Entrepreneurship provides several short duration skill training programmes viz. Short-Term Training (STT) and Recognition of Prior Learning (RPL), etc. for rural youth and women to earn their livelihood. Government schemes viz. The Deen Dayal Upadhyaya Gramin Kaushalya Yojana (DDU-GKY) is a placement linked skill development program for wage employment for rural youth.

Also, Farmers Producer Organisation (FPO) and women self-help groups (SHG's) played significant role in dissemination of these programmes amongst rural women. The Mahila Shakti Kendra (MSK) developed by Ministry of Women and Child Development has empowered rural women through community participation and raising awareness on girl education, maternal care and health etc.

Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) Programme was initiated by The Department of Biotechnology (DBT) provide scientific solutions to farmers in north east region to link available innovative agriculture technologies to the farm with the small and marginal farmers, especially women farmers of the region (Ministry of Science and Technology, 2021).

### Reforms for Social Empowerment: Sabka Saath, Sabka Vikas

The participation of rural women in workforce can be encouraged by providing safety, security, good health, education, skill development and equal rights. Prime step for empowering women is conservation of sex ratio percentage in the population and preventing female-infanticides in the country. In this pursuance, Beti Bachao Beti Padhao scheme has provided a significant mass-mobilisation drive towards elimination of gender discrimination and improved sex ratio at birth. Girls' rights and opportunities for higher education were

promoted under Sukanya Samridhi Yojana. Various schemes/programmes for holistic empowerment of women and development of children viz. Beti Bachao Beti Padhao, Pradhan Mantri Matru Vandana Yojana (PMMVY), Scheme for Adolescent Girls, Pradhan Mantri Mahila Shakti Kendra scheme, National Creche Scheme, Rastriya Mahila Kosh (RMK), Swadhar Greh, UJIWALA scheme, Schemes of One Stop Centre (OSC), Women Helpline (WH) and Gender Budgeting Scheme are implemented by the Ministry of Women and Child Development across the country. These schemes are now integrated into new umbrella scheme as "Mission Shakti" (Ministry of Women and Child Development, 2021). Schemes implementation strategy under Mission Shakti will include components such as National, State and District level Hubs for Empowerment of Women, Women Help Lines, One Stop Centres, Sakhi Hives or Working Women Hostels, Shakti Sadans or homes for destitute and troubled women, crèches, etc.

Initiatives like Pradhan Mantri Ujjwala Yojana (PMUY), Swachh Vidyalaya Abhiyan, setting of toilet under Swachh Bharat Abhiyan, etc. are building confidence amongst rural women. Thirty-three percent reservations for participation in politics is the key reform for political women empowerment and facilitate them to emerge as great leaders. Today, local women occupy as much as 43 percent of the seats at village and district levels.

### Financial Empowerment

India has taken a significant initiative in extending banking outreach to rural areas. The financial inclusion and accessibility to banking through Pradhan Mantri Jan-Dhan Yojana (PMJDY) has boosted confidence and prospects of rural women participation in economic activities. Jan Dhan campaign has ensured access to financial services, viz. banking/ savings and deposit accounts, remittance, credit, insurance, pension in an affordable manner to rural women. These financial accessibility measures have ensured transparent mode of transaction and timely access to financial services through direct benefits transfer (DBT) facility provided under various Government of India schemes. Over 7 years of the implementation of this scheme, 43.04 Crore accounts has been opened in the country. Further, this constitute 55.47 percent (23.87 crore) women account holders and 66.69 percent (28.70 crore) are Jan Dhan accounts in rural and semi-urban areas (Ministry of Finance, 2021).

This financial inclusion has helped rural population to fight the crisis during COVID-19 pandemic outbreak with uninterrupted access to financial aid. Other initiatives like Pradhan Mantri MUDRA Yojana (PMMY), Stand-Up India Scheme, Prime Minister's Employment Generation Programme (PMEGP) are the additional supporting steps towards financial empowerment and entrepreneurship development of rural women. Over 9 crore women have benefitted jointly from Mudra and Stand-Up India (Ashish Kumar, 2019).

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India's performance has improved from 0.665 in 2018 to 0.568 in 2020 (Global Gender Gap Index Report 2020). Initiatives for mainstreaming women participation in economic activities could work as catalyst in achieving goals set under United Nation's Sustainable Development Goals. Promotion of gender equality and access to Government schemes/programmes will encourage women participation in agriculture sector. This will help in alleviating extreme poverty and hunger and support in improving the country's economy.

Further, adequate investment in pro-rural women schemes and more community level participation will expedite the empowerment in a mission mode for better future prospects. Skill development and access to education, health care and digital ecosystem can play a significant role in lives of rural women. Proper training and capacity building on new agricultural technologies can help women farmer.

#### Conclusion

Rural women are major stakeholders in growth of agricultural sector for the New India. Acknowledging and mainstreaming of rural women via ensured access to resources, technology, education, health facilities, ownership rights and skill development will improve agriculture productivity and help in building an empowered nation.

#### References

1. Ashish Kumar, 2019. Women's empowerment under Modi Government. Report (URL: Women's empowerment under Modi Government (opindia.com))
2. Census (2011). POPULATION. Census of India [Chapter: 1]. Government of India.

3. MoSPI, 2017. PARTICIPATION IN ECONOMY. Chapter 4, Ministry of Statistics & Programme Implementation. WM17Chapter4.pdf (mospi.nic.in)
4. Prabhu Pingali, Anaka Aryar Mathew Abraham and Andaleeb Rahman, 2019. Transforming Food Systems for a Rising India. Falgrave Studies in Agricultural Economics and Food Policy. ISBN 978-3-030-14409-1 ISBN 978-3-030-14409-8 [eBook] <https://doi.org/10.1007/978-3-030-14409-8>
5. FAO, 2011. The State of Food and Agriculture 2010-11: Women in agriculture: Closing the gender gap for development. ESA Working Paper No. 11-02. Agricultural Development Economics Division, The Food and Agriculture Organization of the United Nations. <http://www.fao.org/publications/sofa/en/>
6. Ministry of Science & Technology, 2021. DIT Issues a Special Call under Biotech KISAN Programme for improving Agriculture Productivity in the North East Region. PIB Release, 19 June 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1726507>
7. Ministry of Agriculture & Farmers Welfare, 2021. Schemes for Women Farmers: Creating Sustainable Livelihoods for Rural Women. PIB Release, 06 August 2021. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1743360>
8. Ministry of Agriculture & Farmers Welfare (2019). Feminization of Agriculture. PIB Release, 09 July 2019. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1577924>
9. Ministry of Agriculture & Farmers Welfare, 2021(a). Training to Women in Agriculture. PIB Release, 09 March 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1703540>
10. Ministry of Finance, 2021. Pradhan Mantri Jan-Dhan Yojana (PMJDY) - National Mission for Financial Inclusion, completes seven years of successful implementation. PIB Release 28 AUG 2021. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1749749>
11. Ministry of Women and Child Development, 2021. Empowerment of Rural Women. PIB Release 29 July 2021. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1740324>

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## Fostering Innovation and Entrepreneurial Skills among Rural Youth

Dr. Harinder Raj Gautam

Agriculture in India needs youth to sustain farming and provide them with employment opportunities to meet their aspirations and lifestyle. As 99 percent of agricultural workers in India have no formal training, they need skills for the respectable employability. Skills among how the technologies and innovations are important for the emergence of new technologies. As majority of the youth in the rural areas are engaged in agriculture, there is a need to equip them with skills blended with new technologies like Big Data analytics, Supply Chain/Market-Linked model, Internet of Things (IoT) in agriculture.



**Y**outh are the growth engine of any economy and India has the relative advantage of youth population with share of 34.33 percent in total population. As per India's Census, the total youth population increased from 168 million in 1971 to 422 million in 2011. As the focus of development is primarily on youth, we need policies that focus on their aspirations so that their participation is ensured in the development push. Knowledge and education are key factors to the full and effective participation of youth in the process of social, economic and political development. Increased attention is required to improve participation rates of young people, particularly of rural and marginalised

areas, to ensure that they acquire the knowledge, capacities, skills and ethical values needed to fulfil their role as agents of development, good governance, social inclusion, tolerance and peace. Youth employment is now a top priority in most countries across all regions and efforts need to be further accelerated in this post COVID era to negate the ill effects of this period. At the international level, it is being translated into the development of a global strategy for youth employment and embedded into the 2030 development agenda under Sustainable Development Goals.

Majority of our population lives in the rural areas and agriculture is the main source of

livelihoods in the rural areas. But, as agriculture cannot sustain the living of majority of the farmers, an increasing share of rural households' income comes from non-farm activities. Here, the skill plays an important role to get respectable non-farm job opportunities. Innovations increase and bring diversity to the skills and opportunities. Blend of education and skills increases the ability to innovate and helps in adopting new technologies in agriculture and enhance farmers' performance. Evidence from Asia suggests that better education and training increases the chances to find high-paying non-farm employment. Still access to training is a major constraint among rural people in developing countries, for instance, nearly 90 percent of agricultural workers in India have no formal training. Training outside the formal training system is often the most important source of skills training in developing countries.

Startups are the platforms where the innovative ideas can be incubated to develop new technologies. Opportunities to develop and hone skills can also be created by identifying the potentialities of our local attitudes and our mass mini enterprises based in rural areas where innovations can bring quality and more demand to the local products coming out from such enterprises. With funding, promotion of local talent and Mip to the culture of innovation, the incubator bases concentrated in villages and smaller towns can create huge demand for skills and employment in our rural areas.

### Equipping Youth with Skills

In India, there still exists wide gap between the availability and demand of skilled workforce. Recognising the imperative need for skill development, National Skill Development Policy was formulated in 2009 to enhance the availability of skilled workforce. However, the experience gained through implementation of various skill development programmes was significant, still need was felt to revisit the existing policy to align the policy framework with the emerging trends in the national and international milieu. Accordingly, Central Government framed the National Policy for Skill Development and Entrepreneurship 2015 to accelerate the pace of skilling. The primary objective of this policy is to meet the challenge of skilling at a higher scale, requisite quality and sustainability. Also a separate Ministry of Skill Development and Entrepreneurship was created, which is responsible for coordination of all skill

development efforts across the country, removal of disconnect between demand and supply of skilled workforce, building the vocational and technical training framework, skill upgradation, building of new skills and innovative thinking not only for existing jobs but also for jobs that are to be created. Under Skill India Mission, the Government is implementing more than 40 skill development schemes/programmes across 26 Central Ministries/Departments, for providing a variety of skill development training programmes on pan India basis in which 558.1 lakhs persons have been trained. The Government has taken various steps for generating employment in the country through various projects and schemes like Prime Minister's Employment Generation Programme (PMEGP), Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), and Deendayal Antodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) run by Ministry of Micro, Small and Medium Enterprises, Ministry of Rural Development and Ministry of Housing and Urban Affairs, respectively. These initiatives are aided by other Central Government agencies like Directorate General of Training (DGT), National Skill Development Agency (NSDA), National Council for Vocational Education and Training (NCVT), National Skill Development Corporation (NSDC), National Skill Development Fund (NSDF) and 30 Sector Skill Councils (SSCs) as well as 33 National Skill Training Institutes (NSTIs/NSTIWs), about 15,000 Industrial Training Institutes (ITI) under DGT and 187 training partners registered with NSDC. NSDC acts as a catalyst in skill development by providing funding to enterprises, companies and organisations that provide skill training and it works with 267 training partners that represent the core ideology of this organisation. Over the past 4 years, NSDC along with its partners have produced over 2 million skilled people in more than 25 sectors. The Ministry of Skill Development and Entrepreneurship is expanding its outreach to work with the existing network of Skill Development centres, universities and other available agencies in the field. Some of the important schemes are mentioned below.

- a. National Rural Livelihood Mission - Aajeeva Skills: Aajeeva- National Rural Livelihood

Mission is an initiative launched by Ministry of Rural Development. Under this mission, the Aajeevika Skill Development Programme has



been launched which aims to understand the professional aspirations and interests of youth and increase their daily income. This mission provides young people from poor communities an opportunity to upgrade their skills and enter the skilled workforce of the country and some of the key features of the scheme include, post placement support, food and transport during training and assured placement.

b. **Pradhan Mantri Koushal Yojana (PMKVY):** Under this unique initiative, Government of India aims to train about 24 lakh youth to be industry relevant, skilled and prepared for the global market. In addition, the trainees will also be given financial support and a certificate on successful completion of training and assessment, which will help them in securing a job for a better future. The Central Government has decided to set up skill development training centers in schools and colleges to increase the employability of the students. Here, interested candidates should first get enrolled in a training center, learn the required skill, be a part of an assessment and a certification program and gain a reward at the end.

c. **Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP):** This scheme is a World Bank loan assisted programme of the Ministry of Skill Development and Entrepreneurship where the focus will be on three key result areas namely (i) Institutional Strengthening at Central, State, and District level; (ii) Quality Assurance of skill development programmes; and (iii) Inclusion of marginalised population in skill development programmes. Primarily, it is a supporting programme to skill training schemes which focuses inter-alia on improvement of quality, strengthening of institutions and inclusion of weaker sections in skill training. Under this scheme 'Mahatma Gandhi National Fellowship' will be provided to cadre of professionals at District level who not only know about governance and public

policy in general but vocational education too. MGNF is a unique blend of academic and work-based training managed at the IIM campuses and the districts, respectively. Under this scheme, the sharp focus is on developing skills for local needs which gives impetus to the 'vocal for local', build an industry-relevant skill base which will help the cause of 'Atmanirbhar Bharat'. This scheme is an opportunity for young women and men in the age group of 21-30 years who already possess some level of academic or professional expertise for providing catalytic support to the district administration to improve the skill development programme delivery.

### Innovations in Startups for Skilling

Startups play a crucial role in promoting innovations in the entrepreneurial ecosystem which help to diversify the skills and employment. Through innovation, several startups are not only challenging the dominance of established corporate but are also providing easier and innovative solutions to several emerging problems. These startups are vibrant with novel ideas and possess practical approach to identify creative ways to solve issues and also provide better services. These startups, equipped with their innovations, have come to the rescue of afflicted farmers in solving the problems of Indian agriculture. To bring efficiency in input usage and productivity, it has become imperative to blend our crop production techniques with technological innovations. Technologies like Big Data analytics, Supply Chain/market-linked model, Internet of Things (IoT), are the primary sub-sectors where agri startups are emerging which can help us with ready to use technologies like Information Communication Technologies (ICTs), mobile apps, farm automation, weather forecasting, and drone use to inputs retailing, equipment renting and online vegetable marketing. Agri-startups offer a critical solution across the agricultural value chain in the form of a product, service or application. The Government of India has taken several initiatives to boost support to the agri-startups for agriculture sector to flourish. Further, some major initiatives that have been taken to promote innovation in agriculture and allied sectors for accelerating the pace of development in the rural areas are as follows.

a. **Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY – RAFTAAR):** This scheme was launched in 2017-18 by the Ministry of Agriculture and Farmers' Welfare to give impetus to agriculture and allied sectors through promotion of innovation and agripreneurship by facilitation of financial aid to agribusiness incubation centres. The objective of RKVY-RAFTAAR is to support incubation of agribusiness by tapping and harnessing the innovations and technologies for creating new ventures in agriculture. It primarily supports incubation centres, Krishi Vigyan Kendras (KVKs) to promote agri-preneurship and agri-startups. In this process, incubation facilities and expertise already available with participating academic, technical, management and R&D institutions in the country shall be utilised on an individual or collective basis to harness their synergies. At national level, National Institute of Agricultural Extension Management (MANAGE) strives to nourish agri-preneur startups at every stage and reinforces its unflinching support to all such agri-startups and 'agripreneurs', who contribute to the betterment of the agricultural and allied sectors. MANAGE – Centre for Innovation and Agripreneurship is a Centre of Excellence in Agribusiness Incubation and Knowledge Partner for strengthening, hand-holding and demonstrating best practices to the RKVY-RAFTAAR Agri-Business Incubators.

b. **DigiSaksham:** It is a digital skills programme to enhance the employability of youth by imparting digital skills that are required in an increasingly technology driven era. This joint initiative with Microsoft India is an extension of the Central Government's ongoing programme to support the youth from rural and semi-urban areas. Through DigiSaksham initiative, free-of-cost training in digital skills including basic skills as well as advance computing will be provided to more than 3 lakh youth. The jobseekers can access the training through National Career Service (NCS) Portal where there will be basically three types of training viz. Digital Skills – Self paced learning, VILT mode training (Virtual Instructor led) and ILT mode training (Instructor led). The ILT training

would be conducted at the Model Career Centres and National Career Service Centres for SC/STs across the country. Through this initiative, nearly 10 million active jobseekers registered on National Career Service Portal will be able to access training in areas like Data Script, Data Visualisation, Advance Excel, Power BI, HTML, Programming languages, software development, fundamental introduction to coding, etc, equipping them with the skills required in a digital economy. DigiSaksham will be implemented in the field by Aga Khan Rural Support Programme India.

Rural entrepreneurship can also show the way for inventive and cost-effective models for startup development. Rural innovation, with limited funds, relies on the acumen of individual innovators who come up with solutions to local needs which lead to prominent breakthroughs. Arunachalam Muruganantham from Coimbatore, popularly known as 'Padman', invented low-cost sanitary pad-making machines, which run all over the country. He is internationally credited for his solution to the problem of hygiene among women in rural India. He is appreciated as a total entrepreneur who has generated tremendous local employment and social impact and his success story is an example of the untapped excellence that lies in the non-urban parts of the country. Several such innovators populate the landscape of Indian talent.

In Jharkhand, for instance, the National Innovation Foundation recognised rural inventions ranging from portable welding machines to tower irrigation systems. This created the awareness and also paved the way for the incubation of rural innovation. Here, it can be discerned that it is not simply an ethical choice to make, but also a certain way to integrate specialisations and skills from the rural economy into the mainstream and generate massive amounts of revenue. Successful incubation programmes do not merely launch businesses but bring regional networks of contact and capital in synergy with the national economy. For example, Sasisekar Krish's 'nanoPro', based in the Hubli district of Karnataka, founded with donations and loans amounting to approximately Rs. 10 million, makes image and video processing products for agriculture and healthcare and

could generate revenues of over Rs.22 million in the year 2014.

Craftsmanship and creativity of local artisans in rural India effectively need greater acknowledgement for its novel creations and need greater financial and promotional support. Incubators dedicated to this mission can make all the difference in this regard and governments must energise such ventures. In Simour district of Himachal Pradesh, roadside amenities 'She-Haas' have been created which includes a shop, a restaurant, a guest room and a 'kushal vikas kendra' in a single complex, which is being run by a self-help group of 25 women. Here, Women Self Help Group underwent multitasking training for nine months before venturing to run this facility where stalls are managed by women where they sell the handicraft and other products, all created by those women from the small hamlets of Daggashree Gram Panchayat in Pachhad block of Simour district. She-Haas also provides a glimpse of the State's culture, cuisine and tradition. The state government of Telangana has established 'Telangana State Innovation Cell' which aims to promote grassroots innovation and has supported noteworthy rural-origin businesses like Vishwajay Reddy's HiCode and has reached all 33 districts of the State. WE-Hub, the government-backed startup incubator for women, one of its kinds in the country engaged over 3,000 women entrepreneurs and bridged the urban-rural divide.

The AGNI Mission, in partnership with Common Service Center, successfully conducted a series of Digital Technology showcases focused on innovations for rural India. Seven technologies described ahead, reaffirm the capability of Indian innovations to tackle challenges faced by Indian villages. 'Dharashakti' is easy-to-use soil organic carbon detection and testing kit which can help the farmers in optimum use of fertilisers. To aid our soil analysis further, 'Soil Saathi' is a lightweight chemistry analyzer with the ability to test 22 parameters in soil and water and advise fertilizer requirements based on crop and agro-climatic conditions. 'Tan90' is a portable cold storage unit to plug the gaps in cold chain which can help to reduce post-harvest losses in crops. Further, 'Saptrikshi' is also a low-cost, technological solution that extends the shelf life

of perishable horticultural produce. 'Krishtakti' with blend of technology is a smart and intelligent precision spraying drones for crops and can drastically reduce the indiscriminate sprays of pesticides. On similar lines, 'THANOS' is also a drone based autonomous spraying platform that sprays an acre in a fraction of the time uniformly. Similarly, 'Avatar Small Wind Turbines' are wind turbines and can be deployed as decentralised and distributed renewable energy solutions for urban and rural India. The AGNI Mission remains committed to introducing emerging technologies in rural India to address the complex and unique challenges it faces today. Such technologies can transform agriculture in our rural landscape with vast potential for skill to man these ventures.

There are several other agri-startups and 'agripreneurs' and their innovations in the agribusiness field have made a significant impact in modernising our crop production technology and improving productivity in some important crops. With funding, promotion of local talent and fillip to the culture of innovation, the incubator boom concentrated on villages and smaller towns can create huge demand for skills and employment in our rural areas.

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**CCBA Extends Road Connectivity Project for Left Wing-Extremism Affected Areas**

- CCBA extends scheme upto March 2022 to complete balance works
- 4,490 Km road length & 105 bridges completed since 2016 in 64 districts in 9 states
- 5,714 Km road length & 258 bridge works are balance
- 1,087 Km road length and 40 bridges sanctioned additionally

# Innovative Approaches in Farm-based Livelihoods

Digambar Chimankar

The rural non-agriculture activities possess the potential for an alternative that can make an impact on the economic situation. Thus, community based livelihood centres around a core of farm, allied sector activities and non-farm skills. The aim is to facilitate the beneficiaries to become self-reliant, be in control of their own lives and be independent of intermediaries. The whole process is designed to enable simple semi-literate and illiterate village women to grow in diverse directions as they learn to earn. Community-based livelihood empowers a woman to think, act and venture on her own, to not only produce but to market products, and to face the world without being intimidated by it.



**D**espite continued efforts from the different governments during last seven decades after independence, poverty continues to impair the lives of a large section of population of the country. The government has continuously targeted the poor in the development process, especially the rural poor who are mainly concentrated in the dry and rain-fed areas and largely dependent on agricultural income. Because of limited and inequitable access to productive resources such as land, water, improved inputs and technologies, and natural calamities livelihoods become a challenge. Though majority of families, in both the farm and non-farm sectors, derive their livelihood from agriculture, sustainability of agriculture cannot be discussed or even defined in isolation of the issue of livelihoods. Livelihood is defined as adequate

stock and flow of food and cash with an individual or a family to meet their basic needs. Livelihood security means secured ownership of, or access to, resources and income-earning activities, including reserves and assets to offset risks, ease shocks and meet contingencies.

There are four principal ways of acquiring livelihoods.

1. **Production-based Livelihood:** A large proportion of the small and marginal farmers gain livelihood through production on small pieces of land. For these households, availability or access to inputs and improved methods of production are quite critical for their livelihood.
2. **Labour-based Livelihood:** Most of the small landholders and landless rural households

derive livelihood by selling their labour. For their livelihood, demand for labour, wage rates, and prices of food are the critical factors.

**3. The Exchange-or Market-based Livelihood:** Those rural households which produce surplus food and non-food agricultural products or non-farm goods earn their livelihoods by selling these products in the market. The marketing system for these products and relative prices of what they sell and what they buy, affect their livelihood.

**4. Transfer-based Entitlements:** The households without any income-earning asset or able-bodied person to work depend for their livelihood on transfers from the government or other social organisations. Government's social security and food assistance programmes are relevant for this group of rural households in fulfilling their livelihood requirements. The rural livelihood systems in the developing countries that encompass a broad range of factors and depend on several macro-subsystems of the economy.

### Innovative Approaches

#### 1. Participatory Approach: Involving Panchayats in Decision Making

Panchayats sit, think and discuss together village problems and find solutions to them. They work as a guide and friend for the rural community to build up their capacities to grasp up livelihood opportunities. People critically examining the prevailing rural development scenarios and studying the gaps in the implementation of rural development schemes and identifying missing links in the planning processes and government officials can work on that.

#### 2. Diversification and Intensification: Restructuring Extension and Adaptive Research Delivery

- a) Convergence with schemes and departments
- b) Social mobilization
- c) Formation of Block Technology Team (BTT) and Farmer Advisory Committees (FAC) at different levels of Panchayat Raj Institutions (PRIs)
- d) SHGs for commodity marketing

#### e) Farmer Field School (FFS)

f) Upgrading production system in agriculture, horticulture, animal husbandry, dairy, food processing and fisheries

g) Risk mitigation through weather insurance, Small and Marginal Farmers (SMF) drought safety net insurance, price risk management, warehouse receipt based financing for pulses and oil seeds.

**(3) Holistic Integrated Approach:** Issues relating to i) productivity, ii) marketing, iii) post harvest, iv) agro-processing, v) credit, vi) rural infrastructure, vii) research, viii) technology dissemination, ix) natural resource management should be addressed.

**(4) Technology Development and Dissemination:** This should not be limited to delivery of goods and services only but towards new methods of technology development and dissemination as well. This includes plan and for setting up web portal including agronomic information, crop diagnostic services, market intelligence, weather advice and market price information. There should also be provisions for phone based service contract where content provider will provide information on market prices through SMS and voice services. Other plans are toll phone based information services via FFS marketing master trainers and commodity marketing groups.

**(5) Group Farming System Approach:** Farmers Interest Groups (FIGs) and Farmers Associations work well than single individuals. A group approach to involve farming community in decision making and the implementation could be strengthened.

**(6) Participatory Planning, Management and Monitoring:** This involves devolution of powers to village Panchayats and village panchayat participation in planning and management of rural assets, participation of farmers in identifying needs, planning, implementation and monitoring.

**(7) Creating Enabling Environment for Privatisation and Commercialisation:** For privatisation of input supply and marketing, increasing private investment and creating enabling environment, it is aimed to encourage greater private sector participation in input

The farm and allied sector activities are as follows:

### Livelihoods around Farm: Farm and Allied Sector Activities

Item	Description
Crops include:	<p>a. main crop of the area and improved techniques of cultivation such as System of Rice Intensification (SRI), System of Wheat Intensification (SWI), Zero sowing, etc.</p> <p>b. mixed crops – main crop with other nitrogen fixing crops such as horse gram, peas, mung, etc.</p> <p>c. cash crop promotion such as turmeric, ginger, seasonal vegetables, horticulture, medicinal and herbal plants, mushroom cultivation, etc.</p>
Promoting organic farming for sustainable farming through:	<p>a. vermicompost,</p> <p>b. panchajanya,</p> <p>c. amrit jal,</p> <p>d. matka khad, or livestock such as</p> <p>a. dairy,</p> <p>b. backyard poultry,</p> <p>c. goat and sheep rearing,</p> <p>d. fish farming,</p> <p>e. bee keeping,</p> <p>f. terracotta.</p>
Horticulture	This includes promoting fruit plantations such as mangoes, citrus species, bananas, cashew, nuts, coconuts, nutmegs, pineapples, papaya (Carpa), etc.
Livelihood from non-timber forest product	Such as leaf plumes, medicinal plants, wild food such as jamun, bilwa, amla, mahua, rhododendron, kutson, injera (fig), etc. Depending upon the area, terrain, climatic, soil types and conditions and water availability the crops, vegetation, trees, forest products vary. Hence, it is important to understand each area specifically. In this context, we will only touch on some of the aspects that can be commonly adopted in most areas.
Liquid Organic Manure	Different types of liquid manure can be prepared with natural material and used as insecticides. The manure prepared are diluted 1-10 before use on crops. The following are the types of liquid manure:
Value addition	1. Yarn wash 2. Panchgavya 3. Matka khad 4. Amrit jal 5. Fasal rakshak ghol
Value addition	The quality of the farm/NTFP products are improved so as to get reasonable rate in the local market.
Marketing of the Farm produce	Community Based Organisations (CBOs), primarily SHGs should operate a non-exclusive channel for the marketing of products. Most of the farmers do not get good price in the market for their products.
Livestock rearing activities	This includes rearing of cows, buffaloes, goats, pigs, ducks and other livestock that are part of farm livelihoods in rural India.
Fishery	Fish rearing is an important activity which ensures healthy livelihoods.

arrangement and post-harvest activities through establishment of Project Development Facility (PDF) and privatisation of services which includes promotion of private nurseries, vets, para-workers and farm polyclinics.

- (8) **Farmer Self Help Groups:** To execute the plan of development people are organised into Farmers Self Help Groups (FSHGs) and farmer Interest Groups (FIGS) based on their common interest. These groups should be involved in activities related to input supply, marketing and

other backward and forward linkages with the objective of creating self-reliant mechanisms.

- (9) **Privatisation of Services:** With the objective of providing better services to farmers, an alternate line of private services is promoted. The farming community is encouraged to pay for good quality, timely and doorstep services.
- (10) **Farm Polyclinic:** Farm polyclinic should be established in every Gram Panchayat or in a cluster of Panchayats to address the various problems related to crops.



- (11) **Marketing Linkages:** The Farmers Self-Help Groups and entrepreneurs to be facilitated to take up input supply activities like seed production, private nursery raising and marketing linkages.
- (12) **Involvement of Private Veterinary Doctors:** As a part of privatisation of services, the private veterinary doctors should be promoted.
- (13) **Concept of Bio-village:** In these villages, activities like bio-dynamic fertilisation, compost, vermin-culture, Cow Pat Pit (CIPP), green-manuring, bio control agents, Integrated Pest Management (IPM), Integrated Plant Nutrient Management (IPNM), Integrated Crop Management (ICM), etc. to be promoted.
- (14) **Concept of Seed Village:** With a view to attaining self-sufficiency in good quality planting material, 'Seed Village' concept should be promoted.
- (15) **Concept of Farmers' Field School:** For facilitation of convergence of all services related to agriculture and allied sectors, and better outputs these are important.
- (16) **The Collective Marketing Model:** Collective Marketing has Armed Community Based Organizations (CBOs), and primarily SRGs with the knowledge, confidence and processes to operate a non-exploitative channel for the marketing of products. These CBOs have captured value by conducting a range of local level activities including drying, sorting, grading, weighing and packaging, for which a range of marketing infrastructures have been created in villages. Having been tested across a wide array of local situations, the methodologies have been proven for application across a variety of contexts to enrich marginal producers through participation in marketing channels. This is one of the successful models adopted in Orissa.
- (17) **Enhancing Knowledge through Radio**

Improving access to information on agricultural practices and enhancing productivity has been another approach towards rural development. As part of a broader strategy on agriculture extension and in partnership with the Development Support Centre in Gujarat, an innovative radio program on agriculture has been developed to inform and empower small and marginal farmers, by addressing knowledge needs in an effective way. The radio

programming aims at promoting agriculture as a viable livelihood option, focusing on agricultural practices that enhance productivity, reduce input costs and mitigate risks. The idea of a radio program on improved agricultural practices emerged from the need to facilitate access to information and bridge existing knowledge gaps on agricultural practices using radio, a widely used communication medium in rural areas.

To be responsive and relevant, the program is designed around the three cropping seasons (Monsoon, Winter and Summer). For each season, the focus is on seed selection, treatment and sowing, crop growth, harvesting and storage of different crops grown. Other related topics include soil testing and improvement, animal husbandry, rainfall insurance, weather information and pest management. Providing relevant information at the required time and simplifying technical aspects for easy comprehension and adoption are the two other key design features of the program. Careful attention has been given to the agro-climatic regions of the state and the resulting diversity in the nature of crops and related agricultural practices, including the diversity in the local dialect.

Special highlights of this radio programme include the following:

**'Discussion Mode'** Efforts are made to identify problems and issues that represent different regions and provide possible solutions in a 'discussion mode' that is more participatory in nature and less prescriptive. A special section in each episode highlights innovative practices and ideas implemented by farmers themselves. In addition to the informational value of this section, it greatly motivates farmers to experiment and share their experiences.

**'Phone-in'** - The 'phone-in' session provides farmers an opportunity to communicate and discuss in further detail queries on farming practices. A panel of experts from agricultural universities, development organisations and individuals address the phone-in queries.

**Listeners Club** - Another innovative approach is the promotion of informal farmer groups of listeners or *Shrota Mandal*, with the objective of developing a 'collective approach' to identifying and collating problems and queries from a particular village or region and for generating ideas for developing the content of future episodes. In addition, *Shrota Mandal* also provide a platform to farmers to collectively discuss aspects related to

farming, related problems and possible solutions. The radio program, which is of 15 minute duration, is aired every Thursday evening on All India Radio, covering the state of Gujarat and reaching out to over half a million listeners. The program has successfully broadcast more than 150 episodes in over three years of its popular functioning.

### Engaging Women in Community-based Livelihoods

The rural non-agriculture activities possess the potential for an alternative that can make an impact on the economic situation. Thus, community-based livelihood centres around a mix of farm, allied sector activities and non-farm skills. The aim is to facilitate the beneficiaries to become self-reliant, be in control of their own lives and be independent of intermediaries. The whole process is designed to enable simple semi-literate and illiterate village women to grow in diverse directions as they learn to earn. Community-based livelihood empowers a woman to think, act and venture on her own, to not only procure but to market products, and to face the world without being intimidated by it. Not only does she become an entrepreneur but she also learns to become a woman of substance who transforms herself and her family's future. It is thus very important to treat women as entrepreneurs, however small, so that

unfolding of their innate potential is realised. The core idea is to facilitate transfer of responsibilities of buying and selling to the budding entrepreneurs in such a way that the change is permanent without undue dependence on intermediaries. When a woman is made to work herself on the entire process of purchasing raw materials and selling, she joins the mainstream market. She is neither dependent on an organisation nor on middlemen. The idea is that she employs other family members in it, creating jobs for people around her. It is a very slow process with no instant results, as it is a participatory intervention method. It involves and evolves people to become equal partners in development, from being beneficiaries they shift to become resource persons uplifting others with their success. They mingle so well with the mainstream market that it is difficult to identify them separately from others. The various kinds of approaches are being adopted by the NGO's, government agencies to enhance the livelihoods of the poor. Modern technology and community participation are the two major components of the farm based livelihoods.

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### Clean Green Village Week under Mahatma Gandhi NREGA Conducted

As part of Azadi Ka Amrit Mahotsav, a 75-week long celebration, States/UTs have conducted one-week-long Clean Green Village activity under Mahatma Gandhi NREGA between 29<sup>th</sup> October to 4<sup>th</sup> November 2021. During the Clean Green Village Week, the focus was on the identification and construction of Soak pits, Vermicompost/NADEP pit and Waste to wealth initiatives such as vermicomposting, reuse of waste materials, recycling of non-biodegradable waste.

The activity has seen enthusiastic involvement of villagers nationwide. Various meetings, workshops and on-site demos were conducted during the week at a large number of gram panchayats. 1,570 events were reported by the States/UTs, in which 2,397 waste to wealth initiatives were completed as well as 8,887 soak pits and 2,262 compost pits reported as completed during the week.

Ministry of Rural Development has taken various steps through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) by educating and encouraging Gram Panchayats to look towards the importance of cleanliness in their villages and to take up works, which can improve the livelihood of individuals in the village. Ministry has laid emphasis on taking up permissible works like construction of Soak pits, Solid waste management (Vermi/NADEP compost pit) and SLWM works (drainage channel, liquid bio manure, recharge pits, School and Anganwadi toilets, soakage channel, village drain and stabilisation pond).

*(Source: Press Information Bureau)*

## Culture Ministry Launches three Unique Competitions to Celebrate Azadi Ka Amrit Mahotsav

### Key Highlights

- Ministry of culture is holding competitions for Deshbhakti Geet writing, Rangoli Making and Lori writing nationwide, from Tehsil/Taluka level to National level.
- The initiative was announced by the Prime Minister, Shri Narendra Modi in Mann Ki Baat dated 24<sup>th</sup> October 2021 and entries have been opened from 31<sup>st</sup> October 2021 on National Unity Day for public participation introduced by eminent personalities on social media.
- This comes under Azadi Ka Amrit Mahotsav which is a unique initiative to celebrate and commemorate India's 75 years of Independence.

'Azadi Ka Amrit Mahotsav' is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements. This Mahotsav is dedicated to the people of India who have not only been instrumental in bringing India this far in its journey but also to India's social, cultural, political and economic identity.

As the Prime Minister had said that "Amrit Mahotsav must be filled with colours of art, culture, songs and music". Following three activities have been taken up which will witness larger public participation:

- i. Deshbhakti Geet writing
- ii. Lori writing
- iii. Rangoli making

Ministry of culture is holding a nationwide competition as #UnityInCreativity for all the above three activities starting from Tehsil/Taluka level to National level. The detailed guidelines for participation are available at 'Azadi Ka Amrit Mahotsav' (AKAM) website [amritmahotsav.nic.in](http://amritmahotsav.nic.in). This initiative aims to encourage participation so as to ensure substantive 'Jai bhagidat'.

These competitions were digitally introduced to public by eminent personalities like Bharat Ratna holder Lata Mangeshkar ji tweeted for Deshbhakti Geet competition, Oscar winner A.R Rahman did for Lori/lullaby writing competition and Padma Shri Sudarsan Pattnaik did for Rangoli making competition. Followed by Home Ministry, Ministers of Culture, various media units of M/o I & S including PIB, AIR, DD, BoC, My Gov, various Ministers and ministries alongwith citizens posted about it.

This competition will go on for a couple of months and there will be great rewards to the winners. Exhorting people to participate in big numbers, the Minister of Culture, Tourism and Development of North East Region (DoNER), Shri G Kishan Reddy posted about it.

The Minister says that the Prime Minister has expressed that our 75<sup>th</sup> year of independence through Azadi Ka Amrit Mahotsav should become a people's movement. The Ministry of Culture is working with various ministries to identify such programmes and is working with communities at the grassroots level to make it a celebration befitting the occasion.

(Source: Press Information Bureau)

# Vocal for Local

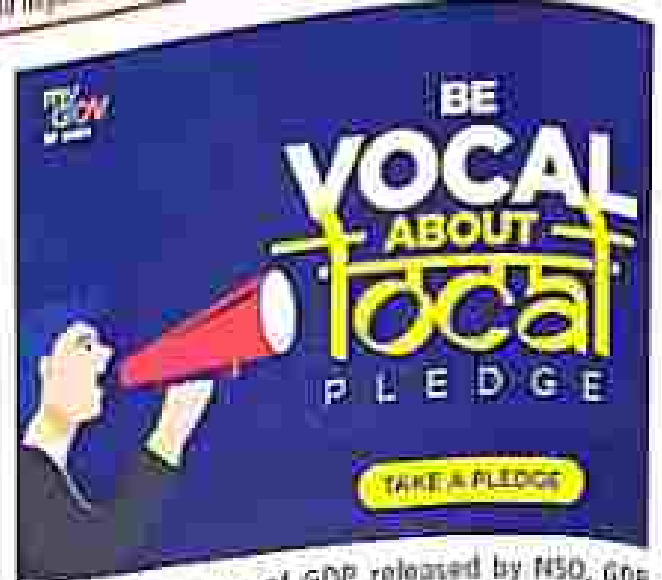
Vishnu Sharma

In his Independence Day speech in 2020, Prime Minister Shri Narendra Modi gave a clarion call to nation to go Vocal for Local. He emphasised that the mindset of independent India should be 'Vocal for Local'. He said, "We should take pride in our local products. If we do not praise and support our indigenous products, then how will they get an opportunity to flourish and improve how will they gain strength? Come, let's pledge that as we move towards the 75<sup>th</sup> year of our independence, we shall adopt the philosophy of 'Vocal for Local' and together let's strengthen ourselves." Ever since then, the government has taken various steps and measures to take forward India in an age of self-reliance and dependent on locally manufactured goods.

**T**he outbreak of COVID-19 pandemic has an unprecedented impact on economies worldwide. According to a joint statement issued by International Labour Organisation, Food and Agriculture Organisation, International Fund for Agricultural Development, and World Health Organization on 13 October 2020, "The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year." The statement further says, "Millions of enterprises face an existential threat. Nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. Informal economy workers are particularly vulnerable because the majority lacks social protection and access to quality health care and have lost access to productive assets. Without the means to earn an income during lockdowns, many are unable to feed themselves and their families. For most, no income means no food, or, at best, less food and less nutritious food."

In the face of the crisis the statement suggests that "Priority should be given to addressing underlying food security and malnutrition challenges, tackling rural poverty, in particular through more and better jobs in the rural economy, extending social protection to all, facilitating safe migration pathways and promoting the formalisation of the informal economy."

India, too, had its share of hardship during the pandemic. According to a Ministry of Finance press release of 8 February 2021, "as per the first



advance estimates of GDP released by NSO, GDP growth is estimated to contract by 7.7 per cent in 2020-21." Although agriculture and allied sector are estimated to grow at 3.4 per cent in 2020-21 and are likely to cushion the shock of the COVID-19 pandemic on the Indian economy in 2020-21 nevertheless, the same release says, "Industry and services sector are estimated to contract by 8.6 per cent and 8.8 per cent respectively during the year 2020-21."

Sailing through the crisis as big as this has been a major challenge for the governments across the world. The World Bank had forecasted in June 2020 that the global economy will shrink by 5.2 per cent in the year 2020. The Bank said that this would represent the deepest recession since the Second World War, with the largest fraction of economies experiencing declines in per capita output since 1870.

## Clarion Call for Vocal for Local

In his Independence Day speech in 2020, Prime Minister Shri Narendra Modi gave a clarion call to nation to go Vocal for Local. He emphasised that the mindset of independent India should be 'Vocal for Local'. He said "We should take pride in

our local products. If we do not praise and support our indigenous products, then how will they get an opportunity to flourish and improve, how will they gain strength? Come, let's pledge that as we move towards the 75<sup>th</sup> year of our independence, we shall adopt the talisman of 'Vocal for Local' and together let's strengthen ourselves."

He further asked people to take pledge that "we will contribute towards reducing the import dependence, we will empower our small-scale industries, we all will be vocal for local. We will innovate more, empower our youth, women, scheduled tribes, scheduled castes, especially differently-abled, economically weaker sections, villages, backward classes, and everyone."

Addressing the nation, amid the pandemic, on 12 May 2020, Shri Modi gave a clarion call for 'Aatmanirbhar Bharat' and 'Vocal for Local' saying, "a virus has destroyed the world. Crores of people around the world are facing a crisis. World all over is engaged in a battle to save precious lives. We have never seen or heard of such a crisis. This crisis is unthinkable as well as unprecedented for mankind." In his speech Shri Modi highlighted that the Building of self-reliant India will stand on five pillars which are: Economy, Infrastructure, Our System, Our Demography and Demand.

Announcing the economic package for the country to the tune of Rs. 20 lakh crore or around 10 per cent of the GDP, he said, "the Corona crisis has also explained to us the importance of local manufacturing, local market and local supply chain." Shri Modi said that time has taught us that we must make the 'local' as a mantra of our life. He added, "Therefore, from today every Indian has to become vocal for their local, not only to buy local products, but also to promote them proudly. I am confident that our country can do this. Your efforts have increased my reverence for you every time."

Prime Minister Shri Modi has asked India's spiritual leaders to help popularise Vocal for Local to give boost to Aatmanirbhar Bharat. On 16 November 2020, speaking after unveiling the 'Statue of Peace' to mark the 151<sup>st</sup> birth anniversary celebrations of Jnanacharya Shree Vgaj Vaidath Srishtwer Ji Maharaj, via video conferencing, Mr Modi said, "as the base of the freedom struggle was provided by the bhakti movement, similarly, today, base of the Aatmanirbhar Bharat will be provided



by the saints, mahatma, mahants and acharyas of our country." He requested the mahatmas to relentlessly preach the message of 'vocal for local' wherever they address their disciples or spiritual gatherings. He said that the message of 'vocal for local' will gain strength with its endorsement by the spiritual leaders. This will inspire the nation to become Aatmanirbhar as it electrified the country during the freedom struggle."

The Prime Minister believes that success of 'vocal for local' and Aatmanirbhar Bharat is dependent on our youth. Interacting in an 'At Home' event with Tribal Guests, NCC Cadets, NSS volunteers and tableaux artists before the Republic Day on 24 January 2021, Prime Minister said, "Ek Bharat Shrotrih Bharat" will give strength to 'local for vocal' movement. When one region will feel pride for the product of the other region and will promote that, only then the local product will have national and global reach. Success of 'vocal for local' and Aatmanirbhar Bharat Abhiyan is dependent on our youth."

Ever since then Prime Minister Modi has been advocating people to buy local products. On 24<sup>th</sup> June this year, interacting with the participants of Boycathon-2021 through video conferencing he said, "The global toy market is about 100 billion USD and India's share is only around 1.5 billion USD. Today we import about 80 per cent of our toys from abroad. That is, crores of rupees are slipping out of the country on these toys. It is very necessary

to change this situation." Mr Modi spoke about the importance for locally developed toys for downtrodden segments of our society such as dalits and tribal people. He remarked, "A lot of cottage industries, art, poor, Dalit and tribal artisans related to sports exist in large numbers in our villages. With very limited resources, these colleagues have been molding our tradition and culture in their toys with their finest art. In this regard, especially our sisters and daughters are playing a huge role. The development of the toy sector will immensely benefit such women, our tribal and poor friends living in far-flung areas of the country." But he also emphasised that "this is possible only when we will be vocal for our local toys. It is necessary to be vocal for locals." He ensured that his government will provide "encouragement at every level to improve them so as to make them competitive in the global market."

Ever since COVID-19 pandemic began, the Indian manufacturing sector has taken a hit. Although its agriculture sector remained strong but "contact-based services, manufacturing, construction were hit hardest", as per the Economic Survey 2021. Accordingly, to tackle this situation the government has announced a Production-Linked Incentive (PLI) Scheme in the 10 key sectors under the aegis of Aatmanirbhar Bharat for enhancing India's manufacturing capabilities and exports: Advance Chemistry Cell (ACC) Battery, Electronic/Technology Products, Automobiles and Auto Components, Pharmaceuticals drugs, Telecom and Networking Products, Textile Products: MMF segment and technical textiles, Food Products, High Efficiency Solar PV Modules, White Goods (ACs and LED) and Speciality Steel. The PLI scheme is to be implemented by the concerned ministries with an overall expenditure estimated at nearly Rs.1.97 lakh crores and with sector specific financial limits.

The PLI scheme across these 10 key specific sectors will make Indian manufacturers globally competitive; attract investment in the areas of core competency and cutting-edge technology; ensure efficiencies; create economies of scale; enhance exports and make India an integral part of the global supply chain.

- ACC battery manufacturing represents one of the largest economic opportunities of the 21<sup>st</sup> century for several global growth sectors, such as consumer electronics, electric vehicles, and renewable energy. The PLI scheme for ACC battery will incentivise large domestic

and international players in establishing a competitive ACC battery set-up in the country.

- India is expected to have a USD 1 trillion digital economy by 2025. Additionally, the Government's push for data localisation, Internet of Things market in India, projects such as Smart City and Digital India are expected to increase the demand for electronic products. The PLI scheme will boost the production of electronic products in India.
- The automotive industry is a major economic contributor in India. The PLI scheme will make the Indian automotive industry more competitive and will enhance globalisation of the Indian automotive sector.
- The Indian pharmaceutical industry is the third largest in the world by volume and 14<sup>th</sup> largest in terms of value. It contributes 3.5 per cent of the total drugs and medicines exported globally. India possesses the complete ecosystem for development and manufacturing of pharmaceuticals and a robust ecosystem of allied industries. The PLI scheme will incentivise the global and domestic players to engage in high value production.
- Telecom equipment forms a critical and strategic element of building a secured telecom infrastructure and India aspires to become a major original equipment manufacturer of telecom and networking products. The PLI scheme is expected to attract large investments from global players and help domestic companies seize the emerging opportunities and become big players in the export market.
- The Indian textile industry is one of the largest in the world and has a share of ~5 per cent of global exports in textiles and apparel. But India's share in the manmade fibre (MMF) segment is low in contrast to the global consumption pattern, which is majorly in this segment. The PLI scheme will attract large investment in the sector to further boost domestic manufacturing, especially in the MMF segment and technical textiles.
- The growth of the processed food industry leads to better price for farmers and reduces high levels of wastage. Specific product lines having high growth potential and capabilities to generate medium to large-scale employment have been identified for providing support through PLI scheme.

- Large imports of solar PV panels pose risks in supply-chain resilience and have strategic security challenges considering the electronic (blacklist) nature of the value chain. A focused PLI scheme for solar PV modules will incentivise domestic and global players to build large-scale solar PV capacity in India and help India leapfrog in capturing the global value chains for solar PV manufacturing.
- White goods (air conditioners and LEDs) have very high potential of domestic value addition and making these products globally competitive. A PLI scheme for the sector will lead to more domestic manufacturing, generation of jobs and increased exports.
- Steel is a strategically important industry and India is the world's second largest steel producer in the world. It is a net exporter of finished steel and has the potential to become a champion in certain grades of steel. A PLI scheme in Specialty Steel will help in enhancing manufacturing capabilities for value added steel leading to increase in total exports.

The 21<sup>st</sup> century belongs to India. Since India got independence from the British in 1947, its

achievements have been great in every field. Now, for almost three decades India is in a steady growth trajectory and is aiming to become a five trillion economy. To achieve this milestone, India has to put emphasis on its manufacturing sector and expand its consumer base with locally produced and manufactured goods. Initiatives of the current government like *Aatmanirbhar Bharat* and *'Vocal for Local'* have very vital role to build India's dream. It's a duty of every citizen of this country to give its best to achieve it.

#### References

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=1673416>
2. <https://pib.gov.in/PressReleasePage.aspx?PRID=1673177>
3. <https://pib.gov.in/PressReleaseoframePage.aspx?PRID=1691893>
4. [https://www.pmindia.gov.in/en/news\\_updates/pm-speech-at-10y-cathon-2021/](https://www.pmindia.gov.in/en/news_updates/pm-speech-at-10y-cathon-2021/)
5. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1671912>

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TECHNICS

## Ganga Utsav Celebrated

**"Nadi Utsav will sow the seed for reviving tradition of respecting rivers", says Shri Gajendra Singh Shekhawat**

The three day long Ganga Utsav 2021 was held recently. The River Festival began with glimpses of folk two days followed by Kathak dance performance by famous dancer Smt. Shovana Natayan. She performed the story of pains and sufferings of mother Ganga and appealed all to help in keeping it healthy through her dance. This Indian classical dance form powerfully communicated the message of preservation of nature. Welcoming Shri Kiren Rijju, Minister for Law and Justice and Shri Gajendra Singh Shekhawat, Jal Shakti Minister and other delegates, Shri Pooja Ranjan Mishra, Director General, NMCG informed that well-known singers, musicians, artists, story-tellers, scholars and literary figures performed and participated in Ganga Utsav 2021. He also informed that there were some very important launches like 1<sup>st</sup> Chacha Chaudhary comics on Ganga rejuvenation, a song on Rivers of India by IIT Madras and much more. He informed that this year Ganga Utsav is being celebrated across India, celebrations are happening from Surat to Nagaland and from Leh to Kanyakumari. "Ganga Utsav has shaped into nation-wide Nadi Utsav and this is just the beginning" he said.

Congratulating NMCG for their contribution to Azadi Ka Amrit Mahotsav in his keynote address Shri Kiren Rijju, Minister for Law and Justice said, "I have travelled to almost origin of every river in the country. Ganga especially looked very polluted few years back but today, it looks cleaner and magnificent. The work is inspiring and I pledge my full support to the mission and would always be happy to join and contribute." He attributed to this success to Hon'ble Prime Minister's vision, NMCG's holistic approach and volunteer's hard work.

Shri Gajendra Singh Shekhawat, Jal Shakti Minister recalling Prime Minister's call for celebrating Nadi Utsav said, "India has a tradition of reverence for rivers but with rise of consumerism this connect was lost somewhere" in his valedictory Address at Ganga Utsav 2021. "Nadi Utsav will sow the seed for reviving this tradition of respecting rivers. This will encourage people to conserve and protect our rivers," he added. He complimented Namami Gange for "laying the foundation of Nadi Utsav through successful conduct of Ganga Utsavs over last few years and the Ganga Utsav this year has laid foundation for strong Nadi Utsav in country".

Expressing his joy on success of Ganga Utsav 2021 Shri Pankaj Kumar, Secretary, MOUS thanked the NMCG team and all volunteers working as Ganga Sewaks. A report on Ganga Quest 2021 was launched at the final session of Ganga Utsav 2021. The Quiz is conducted by NMCG with the support of Tree Craze Foundation. Ms. Shweta Bidola, CEO, Tree Craze Foundation announced the winners of the mini-Ganga Quest as part of Ganga Utsav and her colleague Ms. Pallavi announced winners of other activities organised during Ganga Utsav as part of CLAP initiative.



(Source: Press Information Bureau)

# Impact of Digital Transformation on Livelihood Generation

Karishma Sharma

India really started digitising as a whole only after the trailblazing Digital India Campaign that took the country by storm post 2015. The digital empowerment that followed ranged from improving India's services industry to enabling a robust manufacturing sector, and to securing India's global competitive sector. The digital transformation that India is in the midst of is marked by inclusivity rather than exclusive use of latest technology by those on top and encouraging people to create employment rather than seeking it.



**H**istorically, industrial revolutions and onset of new technology have had a positive impact on the living standards of the entire world owing to increased productivity and creation of new markets. Mass production machinery fastened the pace of manufacturing in the economy, creating a consumer base that is driven by wants as opposed to needs while computers and internet created a whole new sector in the world economy and opened up a host of possibilities for employers and employees alike. Digitalisation, widely cited as the fourth industrial revolution, has been no different in this regard. Revolutions take place to serve the changing needs of a society. It is the growing and ambitious world population that industrial revolutions served but not so much by

the new products and services created but by the improved lifestyle that it brought along. Contrary to the popular notion of technology taking over human jobs, improvement in technology throughout history has led to creation of new jobs for the rising population and better opportunities for growth. Whether we speak of better lifestyle, innovations, medical improvements or even globalisation, everything boils down to the economics of employment not just for its creation that facilitates development but also for mass availability or affordability of the creation that leads to positive changes.

Coming back to our revolution at hand, while digital waves were strong since the late 2000s, India really started digitising as a whole only after the trailblazing Digital India Campaign

that took the country by a storm post 2015. The digital empowerment that followed ranged from improving India's services industry to moulding of a robust manufacturing sector, and to reviving India's glorious agriculture sector. The digital transformation that India is in the midst of is marked by inclusivity rather than exclusive use of latest technology by those on top and empowering people to create employment rather than seeking it. The Startup India campaign that came out post Digital India Campaign has probably been the biggest beneficiary of the latter. As mentioned, mass transformation or a revolution in industries and economies is to serve the larger purpose of employment generation which in turn handholds other development targets. Through Startup India, India tweaked the employment generation target that every government chases by making its citizens capable of providing employment even as they get employed themselves. Traditionally, demand in the economy has led to creation of employment. Entrepreneurship for masses has challenged that idea in the sense that entrepreneurship has followed innovation which has led to new demands instead of just increased demand. This additional demand creates more employment and also creates a society that is not dependent on a select few at the top for employment.

It is needless to say that startups of the country could not have achieved the feat that they have without the technological support that was provided to them by widespread digitisation. For starters, online payments did not just become a whole new industry that many new players continue to enter but also facilitated existing industries, enabling entrepreneurs to rise out of all parts and regions of India rather than just the metropolitan cities. A producer sitting in a remote part of India can sell his product to a customer in another part of the country and receive remuneration almost instantly through digital payment interfaces. Digitisation, in general, and digital payments, in particular, have brought markets to the producers rather than producer reaching the market, reviving and enhancing employment alongside generating new employment opportunities.

India's most remarkable contribution to the digital payments segment in world economy-

the UPI-has also been a product of widespread digitisation. The service was created by experiment but its success only came from its use by masses. In FY 2018-19, UPI accounted for 17 percent of the total 31 billion digital transactions in the country. The next fiscal year saw UPI's share increase to more than 27 percent as it processed 12.5 billion transactions of the total 46 billion digital transactions. In FY 2020-21, UPI accounted for 46 percent of the total 55 billion digital transactions. To put this number into context, a large part of commodity sales was carried out through digital transactions owing to the pandemic in 2020. This is to say that if business continued to languish during pandemic and in turn, employment lost was revived only because of the digitisation that saw immense success by the close of the previous decade.

With almost all businesses adopting work-from-home model during the pandemic, the pandemic showed how digitalisation first created employment and then facilitated it by enabling lakhs and crores of people to make their home their workplace when the novel corona virus threatened to paralyse the economy that 1/6<sup>th</sup> of the world depends on directly, and even more indirectly. Not just this, but it was the widespread availability of broadband throughout the country that led to creation of hundreds of new businesses right in the midst of the pandemic to address the new needs that emerged out of the new normal. Digitalisation in this way helped India's women to grab opportunities in real time and innovate to create more opportunities.

While digital transformation has had impact on all sectors of the economy, agriculture technology deserves a special mention in India's digital transformation as it is this sector that has the power of eliminating poverty in the country and enabling a reverse migration that can lead to uniform development of the entire country. India's agriculture has remained orthodox for years and is yet to achieve the productivity that it has the potential of achieving. And this is saying something when India's agriculture exports during 2020-21 have registered an increase of 17.37 percent as compared to exports during 2019-20.<sup>2</sup> India is one of the leading producers of milk, jute, sugarcane, among other important agricultural produce and also dominates glass

production of spices, fish, poultry, livestock, and plantation crops.<sup>2</sup> This is to say that the potential of our agriculture is more than most countries in the world and it is time that revolution reaches this sector of our economy.

The potential of the agriculture sector remains marred by disguised unemployment and inadequate benefits to farmers. National Agriculture Market or eNAM is an online trading platform for agricultural commodities in India. The market facilitates farmers, traders and buyers with online trading in commodities. The market is helping in better price discovery and providing facilities for smooth marketing of their produce. The eNAM, powered by mass digitisation has enhanced farm employment by providing better compensation to the people employed in this sector.

Agriculture technology has enabled the private players to enter agriculture sector with many startups coming out of solely the modernisation process of agriculture. Founded in 2016, Intello Labs offers digital products like Intello Track, Intello Sort, Intello Pack and Intello Deep which uses technologies like computer vision and deep learning to help farmers, retailers and exporters to assess the quality of their fruits and vegetables. Founded in 2019, Bijaak enables traders and wholesalers to discover new suppliers, maintain ledgers, make payments, and access working capital through its app to scale their business. There are a total of 1,288 Agritech startups in India and these businesses have ripple effects for employment generation in the entire country and not just agriculture development.

While the biggest challenge for any economy is the spread of digitalisation, the challenges remain in terms of preparing workers for structural unemployment and equipping new workers to enter a market dominated by technology. After creating a robust digital network in the country, the government has taken efforts like introducing National Education Policy 2020 to provide necessary skills to the incoming workers of the economy so as to facilitate their smooth entry into job markets. Continued employment facilitated by digitalisation will require continued upskilling of labour and initiatives like Skill India will come in handy when this is needed.

In terms of a conclusive impact on employment, digitisation has had a twofold impact. Regional disparities in employment have improved with the possibility of remote working and entrepreneurship coming from the Tier-2 and Tier-3 cities. Sectoral disparities continue to improve with digitisation facilitating a manufacturing revolution and agriculture changing through technology. Services sector contributes the most to the GDP of our country and has attracted a majority of foreign Direct Investment (FDI) since at least two decades. With digitisation, the other sectors in the economy, that have large share in employment generation, will get their due share in GDP as well.

Digital India Campaign itself has generated employment in form of people employed in the execution of its various schemes. From Common Service Centers to Aadhaar technicians, Digital India Campaign, in its massiveness, has created facilitator employment in the country and this also has to be an impact of the digital transformation itself. Concluding on a forward looking note, the latest impact that digitisation has had on employment is the numerous young entrepreneurs, often as young as teenagers, owning small businesses that run primarily on social media. Many of these businesses emerged out of the pandemic and are providing first income to many young Indians who are yet to join the job market formally. Many of these small businesses have the potential of becoming the primary livelihood of incoming workers of the country, reducing stress on existing employment channels and potentially creating new employment channels in the economy.

#### References

1. <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/oct/doc2021101211.pdf>
2. <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1725891>
3. <http://www.fao.org/india/fao-in-india/india-at-a-glance/en/>

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