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Empowering Rural Youth



Rapid Expansion of Gas based Economy is a must to achieve Self-reliant India: PM

Prime Minister Shri Narendra Modi dedicated Kochi-Mangaluru Natural Gas Pipeline to the Nation through a video conference on January 05, 2021. The event marks an important milestone towards the creation of 'One Nation One Gas Grid'. Shri Modi termed the day as an important milestone for both the people of Kerala and Karnataka as the two states are being connected by a natural gas pipeline. The pipeline will have a positive impact on the economic growth of these two states, he added. He said, rapid expansion of Gas based economy is a must to achieve self reliant India and cited this as the reason behind Government's push for 'One Nation One Gas Grid'.

"Dedication of the Kochi-Mangaluru natural gas pipeline of GAIL is part of our journey to move towards One Nation One Gas Grid. Clean energy is important for a better future. This pipeline will help improve clean energy access" said the Prime Minister

Listing the advantages of the pipeline, Shri Modi said, the pipeline will improve the ease of living in both the states and reduce the expenses of the poor, middle class and entrepreneurs of both the states. He said, the pipeline would become the base of the Gas Distribution System in many cities and would form the base of the CNG based

PM Modi Dedicates Kochi - Mangaluru Natural Gas Pipeline to The Nation

my
GOV
मेरी सरकार

"Pipeline Would Improve the Ease of Living for the People of Kerala and Karnataka"

The pipeline would improve the ease of living & reduce the expenses of the poor, middle class & entrepreneurs of both the states

The pipeline would become the base of the Gas Distribution System in many cities & would form the base of the CNG based transport system in these cities

The pipeline would provide clean energy to Mangalore Refinery & play a major role in reducing the pollution in both the states

Clean energy is important for a better future; This pipeline will help improve clean energy access



transport system in these cities. He said the pipeline would provide clean energy to Mangalore Refinery and would play a major role in reducing the pollution in both the states. He said, the reduction of pollution will have a direct impact on the environment akin to planting millions of trees which would help in improving peoples' health and reducing their health related expenditure.

As the Prime Minister was speaking to the two coastal states, he laid out his vision of fast and balanced coastal area development. He said that a comprehensive plan for the development of the blue economy in the coastal states like Karnataka, Kerala and other South Indian states is under implementation. Shri Modi said, Blue Economy is going to be an important source of AatmaNirbhar India. He said, ports and coastal roads are being connected with a focus on multi-modal connectivity. He said, we are working with an aim to turn our coastal region into a role model of ease of living and ease of doing business.

(Source: Press Information Bureau)

PM Modi Dedicates Kochi - Mangaluru Natural Gas Pipeline to The Nation

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मेरी सरकार

"Government Plans to Achieve 'One Nation One Gas Grid' & Shift to a Gas-Based Economy"

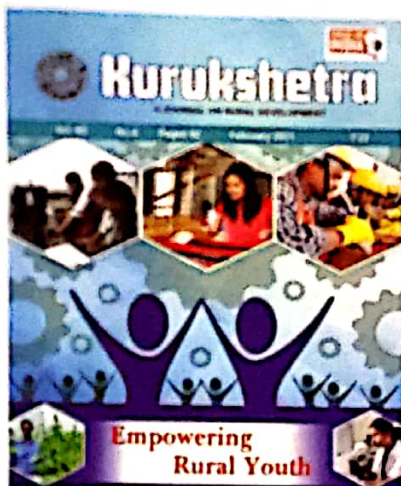
27 years before 2014, only a 15,000 km natural gas pipeline was built, but now work is underway on over 16,000 km pipeline that will be completed in the next 5-6 years

Increased CNG stations, PNG & LPG connections have reduced the shortage of kerosene & many States & UTs have declared themselves kerosene free

Govt is taking policy initiatives to increase the share of natural gas in India's energy basket from 6% to 15%

Sincere work is on for getting ethanol from rice and sugarcane. The goal of ethanol blending in petrol up to 20% in 10 years has been set





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Rural youth have huge potential to be the drivers of India's economic engine and play a critical role in sustaining its growth. It is paramount that young people are propelled to channelise their creativity, skill and knowledge for rebuilding rural India. The government through several measures has been focussing on empowering rural youth by giving thrust on skill development, employment, entrepreneurship, innovation and talent development. Thus, the theme of this issue is aptly titled 'Empowering Rural Youth'.

The Ministry of Rural Development is currently implementing programmes including Deen Dayal Upadhyaya Grameen Kaushalya Yojana and Deen Dayal Antyodaya Yojana-National Rural Livelihoods Mission for creating skills and livelihood in rural areas. The issue covers measures taken by the government in tapping and enhancing entrepreneurship skills amongst rural youth.

For attracting rural youth towards agriculture, the sector has to be transformed into a high-profitable business venture. Engaging rural youth in productive agricultural activities will help India to reap the benefits of the demographic dividend. Programmes like 'Start up India' and 'Stand up India' have been launched to promote Agri-Start-Ups along with several verticals of agriculture.

It is essential that Indian economy has the ability to support the increase in the labour force, provided the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy. Apart from the technical skills, the rural youth have to be trained in cognitive skills, management skills and interpersonal skills to adapt to a technology-enabled world.

This issue deals with the importance of agriculture and allied sectors like livestock including dairying, fisheries, horticulture, apiculture & sericulture in rural employment generation. We also talk about several employment and entrepreneurship opportunities for youth in the agriculture and agribusiness sector. In 2020, even during the lockdown to curb spread of COVID-19, the agriculture sector recorded an impressive performance which has fuelled expectations for an agriculture led recovery of India's economy.

The water and natural resources dependent industries and tourism sectors have potential to empower and engage rural youth. Revival of tourism industry, hit by COVID-19 related restrictions on global travel, has been the prime concern of the government wherein rural India could emerge as unexplored assets. When international travel destinations are found to be risky and unreachable, India boasts of varied travel destinations ranging from religious, nature friendly destinations to adventure destinations.

In the special India@75 series which focuses on the various sectors which have emerged and evolved since independence, a special write up covers aspects of enhancing employment and entrepreneurship opportunities for skilled youth in the agriculture and associated sectors.

The art and handicrafts sector is the second largest employment generator after agriculture. This issue also discusses existing opportunities and initiatives towards empowering rural artisans to be self-reliant or AatmaNirbhar. We hope our readers find information provided through various write-ups on empowering rural youth valuable and insightful.

Empowering Youth: Towards Rebuilding Rural India

Dr. K. Rajeswara Rao and Dr. Sakshi Khurana

A policy focus on empowering youth with an increased thrust on skill development, employment, entrepreneurship, innovation and talent development has been critical to the all-round development of youth. As a part of the 'Transformation of Aspirational Districts' programme launched in 2018 and anchored in NITI Aayog, there has been a special focus on skill training of youth in 112 aspirational districts, including those from vulnerable and marginalised sections of society, with various stakeholders and agencies coming forward to empower youth in aspirational districts. Past initiatives and campaigns have shown that when youth are mobilised to lead a social cause, a marked difference can be made and everyone else can be inspired to follow in the footsteps of young leaders.

Youth-led development is the key to a nation's advancement. With about 65 percent of its population under 35 years of age, India is one of the youngest nations in the world. According to Census 2011 estimates, 70 percent of youth population in India comprises of rural youth. India's rural youth then have the potential to be the drivers of its economic engine to power its growth. For this, it is important that young people are propelled to channelise their creativity, skill and knowledge for rebuilding rural India.

A policy focus on empowering youth with an increased thrust on skill development, employment, entrepreneurship, innovation and

talent development has been critical to the all-round development of youth. An exclusive ministry to advance skill development, Ministry of Skill Development and Entrepreneurship (MSDE) was formed in 2014. The National Skill Development Mission (NSDM) was launched on July 15, 2015 to provide a strong institutional framework to implement and scale up skill development efforts across the country. Under NSDM, more than one crore youth are being imparted skills training annually under various long term and short term training programme. A number of initiatives have been taken by the Government to bring in greater synergy in skill development initiatives, improve access, increase the scale of skill development



and meet the aspirations of youth. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is a skill and placement initiative for rural India and one of the clusters of initiatives of Ministry of Rural Development (MoRD) that seeks to promote rural livelihoods under the Deen Dayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM)-the Mission for poverty reduction. Skill development through the Rural Self Employment and Training Institutes (RSETIs), enables trainee to take bank credit and start his/her own Micro-enterprise. DDU-GKY and RSETI schemes cover rural areas in all States of the country.

Long-term skill training is provided through the Industrial Training Institutes (ITIs) functional across the country. It is important that the ITIs, particularly those in rural areas, work on stronger collaborations with industry partners so that ITI students can get hands-on industry exposure while undergoing training in the institutes. Such industry collaborations are also integral to post-training placements of the students.

Over one crore candidates have been trained under the short-term training programme: Pradhan Mantri Kaushal Vikas Yojana (PMKVY) that started in 2015. The 3.0 aims to achieve a more decentralised implementation structure with greater participation from states/UTs and districts. District Skill Committees (DSCs) under the guidance of State Skill Development Missions (SSDM) can play a key role in identifying unique challenges, strengths and potentials that can be tapped in a district. For instance, district administration and civil society organisations that may be working in a district would know about the local skills and the local produce that can be tapped and marketed. Decentralisation of skill development is important for enhancing outreach of skill training, it is also important from the point of view of social inclusion in rural areas, to ensure that different social groups such as women and girls, persons with disabilities and rural youth belonging to Scheduled Castes/Tribes and minorities are able to easily access skill development programmes. Kupwara district in Jammu and Kashmir for instance, runs a unique initiative of 'mobile skill training' in kani shawl

weaving and traditional crewel embroidery for women. A group of 25-30 women in a village are trained in sheds which are rented spaces in houses of local residents. Once women trainees in a particular village have finished with their course, the skill centres move to other localities and villages. A mapping of the existing skill imparting capacities and identification of potential skilling infrastructure can enable better capacity building and infrastructure utilisation. The District Skill Committees can organise Information, Education and Communication activities for creating awareness and for problem solving. They can come up with innovative methods for providing access to skill and for making skills relevant to the needs of the local population and realise their aspirations.

As a part of the 'Transformation of Aspirational Districts' programme launched in 2018 and anchored in NITI Aayog, there has been a special focus on skill training of youth in 112 aspirational districts, including those from vulnerable and marginalised

sections of society, with various stakeholders and agencies coming forward to empower youth in aspirational districts. The progress on various indicators of health and nutrition, agriculture and water resources, education, financial inclusion and skill

development in aspirational districts is significantly contributing to socio-economic development of rural youth.

Technology, which younger people use with greater skill and ease compared to the older generation, can help us reach new milestones in nation's advancement and the role of technology has been explored in post-COVID-19 times to address the most pressing problems facing the country. NITI Aayog, in collaboration with the Ministry of Labour and Employment, Ministry of MSME, Ministry of Youth Affairs and with support from corporate sector has taken the initiative to create a digital livelihood access platform – Unnati. The platform has immense potential to connect blue and grey collar workers of India with job opportunities offered by employers across the country.

Ministry of Skill Development and Entrepreneurship has also launched AI-based



'AatmaNirbhar Skilled Employee Employer Mapping (ASEEM)' digital platform to bridge the demand-supply gap of skilled workforce across sectors. The platform integrates candidate data coming to the Skill India portal from various State and Central Skilling Schemes, the database of labour migrants including those who returned to India under and aims to connect job seekers with relevant livelihood opportunities in their local communities especially in the post-COVID-19 situation.

The Digital India campaign launched by the Government of India is to provide encouragement to a digital-savvy youth

and leverage the growing internet penetration, especially among the younger population, which could be drivers of digital literacy and promotion in the entire country. The Digital India journey has impacted all aspects of the lives of Indian citizens, including youth with initiatives of Aadhaar, Direct Benefit Transfer, Common Services Centres, DigiLocker, mobile based UMANG services, participatory governance through MyGov,

The Digital India campaign launched by the Government of India is to provide encouragement to a digital-savvy youth and leverage the growing internet penetration, especially among the younger population, which could be drivers of digital literacy and promotion in the entire country. The Digital India journey has impacted all aspects of the lives of Indian citizens, including youth with initiatives of Aadhaar, Direct Benefit Transfer, Common Services Centres, DigiLocker, mobile based UMANG services, participatory governance through MyGov, JeevanPramaan, to UPI, Ayushman Bharat, e-Hospital, PM-Kisan, e-NAM, Soil Health Cards, SWAYAM, SWAYAM PRABHA, National Scholarship Portal, e-Pathshala, and so on.

JeevanPramaan, to UPI, Ayushman Bharat, e-Hospital, PM-Kisan, e-NAM, Soil Health Cards, SWAYAM, SWAYAM PRABHA, National Scholarship Portal, e-Pathshala, and so on. Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) was launched to promote digital literacy in rural India. PMGDISHA is strengthened through the network of the Common Service Centres (CSCs) that deliver various digital services to small towns and rural areas. The Common Service Centres have an important role to play in empowering citizens, particularly the youth, through access to information, knowledge and digital skills. A 'National AI Portal' and 'Responsible AI for Youth'

was launched recently to lay the foundation for an AI-powered future. Digital India's initiatives have also played a pivotal role during the COVID-19 situation with initiatives such as Aarogya Setu, E-Sanjeevani, sensitisation through MyGov and other social media platforms.

Past initiatives and campaigns have shown that when youth are mobilised to lead a social cause, a marked difference can be made and everyone else can be

inspired to follow in the footsteps of young leaders. Neighbourhood Youth Parliaments organised by the Nehru Yuva Kendra (NYK) Sangathan have played an important role in organising debates and discussions among youth and mobilising them for the Swachhata Abhiyaan and other shramdaan activities. Youth have also played a key role in leading COVID-19 protection campaigns and in supporting frontline workers. The NYK, NSS, SHGs will also have an important role to play in creating awareness and disseminating accurate information regarding the vaccination drive in the coming months.

The newly launched National Education Policy 2020 can become a great opportunity to the empowerment of youth. The policy targets phase-wise integration of vocational education programmes into mainstream education by exposing vocational subjects in middle and secondary schools. The emphasis on Vocational Education will be significant in enhancing employability and all-round development of rural youth. While more teachers will have to be recruited for vocational subjects, youth volunteers in rural areas can also play an important role in assisting school teachers and also in creating awareness among students and parents on how vocational education can benefit the career prospects of students.

Swami Vivekananda was of the view that the youth can lead a successful life for themselves or for others only when they are physically fit. The

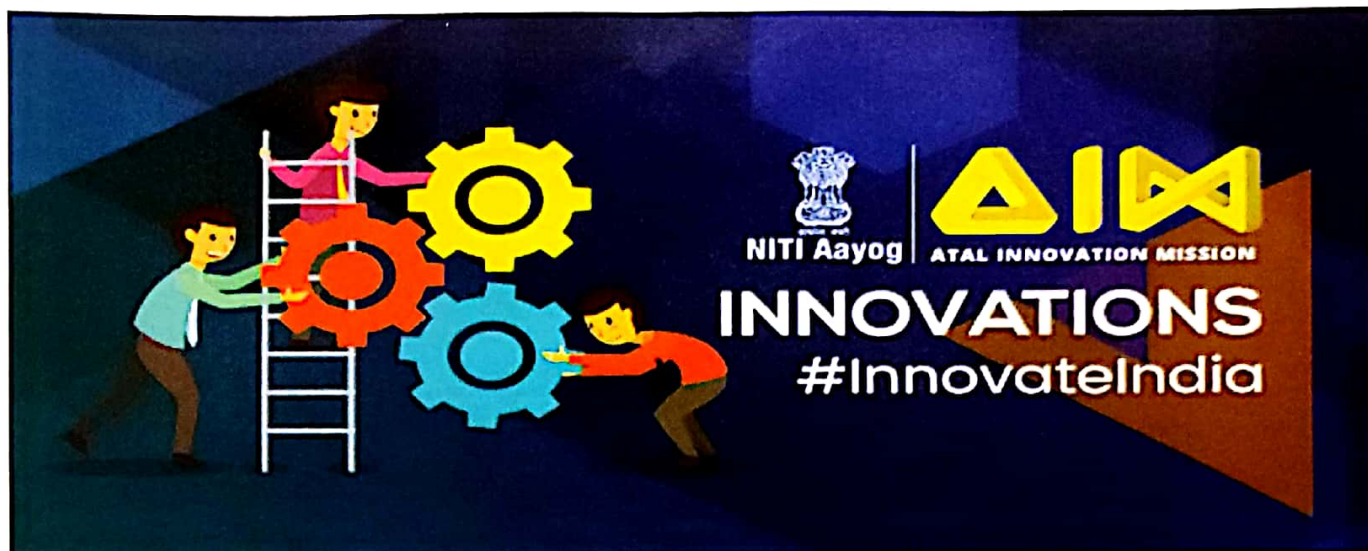
United Nations General Assembly adopted the International Yoga Day on India's proposal. Since 2015, International Yoga Day is celebrated across the world, with youth enthusiastically leading the celebration in India. The Fit India movement was launched by the Government to harness the power of youth with volunteers of Nehru Yuva Kendra Sangathan, National Service Scheme, along with Scouts and Guides, NCC and other youth organizations coming together to create mass awareness about the importance of fitness.

NITI Aayog, in its action plan 'Let's Play- An

Action Plan to achieve 50 Olympic Medals' ahead of the 2024 Summer Olympics presented a 20-point action plan in 2016 made a number of recommendations such as setting-up of more sports academies for individual sports, devotion of a fixed portion of school

expenditure towards maintaining and enhancing sporting infrastructure and equipment and harnessing the potential of indigenous and regional sports. A special emphasis is given to Sports and nurturing the talent of budding sports persons through 'Khelo India – National Programme for Development of Sports' launched in October, 2017. Indigenous sports such as KhoKho, Kabaddi, Mallakhamb, Kalaripayattu, Gatka and Thang-Ta are being encouraged and supported by the Government. The Ministry of sports and Youth Affairs has recently approved the inclusion of four indigenous games: Gatka, Kalaripayattu,





Thang-Ta and Mallakhamba to be a part of Khelo India Youth Games 2021 to be held in Haryana. This initiative will help these disciplines, along with Yogasana, to get national recognition and gain popularity among youth and sports enthusiasts in the country. In the coming years, the Ministry has also planned to add more indigenous sports at the Khelo Games. States may also provide further encouragement to regional sports through organising inter-district and inter-state competitions and nurturing talent of young sports persons from rural areas. Engagement of rural youth in sports at a competitive and recreational level will help instill pride and also provide them career and vocational opportunities.

Under the Government flagship initiative, Atal Innovation Mission (AIM), implemented by NITI Aayog, Atal Tinkering labs set-up across the country are helping school students find innovative solutions to problems facing their communities. 68 Atal Incubation Centres (AIC) support more than 1500 startups in the country and over 6000 Atal Tinkering Labs have been set-up to promote a culture of innovation and entrepreneurship in the country.

Keeping up the interest of youth in agriculture is crucial for the development of the country given the importance of the sector for our economy. New and innovative interventions need to be put in place to involve rural youth in agricultural development. Several agriculture start-ups are presently using data and technology to identify potential challenges to crops, build more efficient supply chains and deliver inputs to farmers at lower costs. Youth have played a leading role in such start-ups that can be scaled-up nationwide.

Initiatives need to be taken by State governments, private enterprises and civil society organisations to nurture talent of youth through various programmes, competitions, awards and hackathons aimed at greater outreach to rural youth. To allow for collaboration among rural youth across the country, a one-stop digital platform may be considered where youth can exchange ideas and come together to implement them. The platform can also link young entrepreneurs to financing and investment.

Moving forward, we need to continue to engage youth through cultural, digital and social media platforms so that they become aware about their rights and duties and emerge as forerunners in rebuilding rural India. We must be able to inculcate in the youth an appreciation for our rich heritage, for traditional, tribal, ethnic arts, crafts and community-specific skills, focussing on their overall personality development. Government functionaries – right down to the grassroots level of the village secretariat – should treat youth as stakeholders, as equal partners and not just as beneficiaries. Youth leaders, civil society, government and non-government organisations all need to work together in close coordination for the all-round development of youth in rural India.

(The authors are Dr. K. Rajeswara Rao (IAS), Additional Secretary, NITI Aayog and Dr. Sakshi Khurana, Consultant at the Skill Development and Employment Vertical, NITI Aayog. Email: sakshi.khurana@gov.in. Views expressed are personal)

Rural Youth and Agricultural Transformation

Dr. Jagdeep Saxena

The involvement of youth is integral to agriculture as they possess requisite zeal, energy and vigour along with innate drive to take risks and swim against the tide which is needed in farm sector. Besides, rural youth are now more qualified and tech-savvy with basic management skills and a little business orientation as well. To attract and sustain the youth in agriculture sector, we need to develop a potent strategy with comprehensive backing from government bodies and public policy making institutions. The Government is supporting and motivating country's youth to take up some off-beat agri-allied activities, such as beekeeping, sericulture, lac farming, as a profitable venture for livelihood.



Agriculture sector is vital for health and growth of national economy as it contributes around 17 percent in GDP, 13 percent to exports and 55 percent to employment. Even during the distress of COVID-19 or Coronavirus pandemic, among many other economic sectors, agriculture emerged as the only bright spot with the positive growth. Additionally, agriculture sustains food and nutritional security for a 1.32 billion strong nation in a self-reliant mode. However, India needs to constantly push-up agriculture and allied activities for enhancing per unit productivity in a sustainable manner to meet future demand of food, fodder and fiber. To meet the objective, Indian think-tank have suggested to transform agricultural practices leveraging science, technology and innovations with out-of-box solutions for persisting issues that mar productivity,

profitability and prospects for higher income. Here comes the critical role of rural youth that are widely regarded as the 'agents of change' because of their effectiveness in the process of dissemination and adoption of modern techniques and acceptance of innovations among rural people. The involvement of youth is integral to agriculture as they possess requisite zeal, energy and vigour along with innate drive to take risks and swim against the tide which is needed in farm sector. Besides, rural youth are now more qualified and tech-savvy with basic management skills and a little business orientation as well. In addition to farming and related enterprises, present day rural youth is also fit to take up specific entrepreneurship projects in agri-sector. According to the field reports, rural youth are keen to take up agri-enterprises that are comparatively risk-free and generate stable revenue.

Rural-Urban Migration – A Big Challenge

Currently, when India needs its youth power in farms and fields the most, the nation is struggling with the grim challenge of rural-urban migration. Every minute, 20-25 rural dwellers migrate to cities in search of better livelihood and lifestyle. If the trend and pace continues, Indian urban population is likely to reach 600 million by 2030. Out of total migrants from rural to urban areas, youth account for nearly 30 percent, which is an issue of worry for policy planners engaged in future of agriculture in India. Various studies and surveys indicate that majority of rural youth have lost interest and confidence in agriculture and allied activities mainly due to unstable income, depleting natural resources and poor image of farming as a profession. Shrinking land holdings, inadequate access to finance, limited marketing avenues, and paucity of mentorship or guidance are some other socio-economic factors responsible for exodus. Unlike their urban counterparts, rural youth have limited opportunities for higher education, especially for enhancing technical skills and competence. Rural youth move towards urban centres mainly for acquiring vocational education and technical skills that will fetch a secured and 'white-collar' job in cities. Waning interest of rural youth has led to ageing of Indian farming community

which is a bad omen for future of agriculture and food security. While the average age of Indian population is only 29 years, the average age of farmers is 55 years. If trend persists, very soon, there will not be enough able bodied farmers to feed the nation making the situation catastrophic to sustain food security. In this context, the development and harnessing of talents and energies of rural youth towards agriculture and allied activities has assumed greater significance. In 2006, the National Commission on Farmers, headed by renowned agricultural scientist and visionary, Dr. M.S. Swaminathan, first raised the issue of participation of rural youth in agricultural development. Later, the subject was included in the National Policy for Farmers, adopted by parliament in 2007, as one of its objectives. Since then the Government of India has been organising planned and systematic programmes to enhance

To attract rural youth towards agriculture, as a first step, agriculture needs to be transformed into a high-profitable venture with low risks and stable income. Farm activities will have to be diversified with cash yielding, low volume, high-value and demand-driven quality output.

greater participation of rural youth in agricultural sector. Majority of the programmes are designed to train, empower, orient and encourage rural youth to take up self-employment in agriculture and allied sector as a reliable livelihood.

Opportunities and Offers

To attract rural youth towards agriculture, as a first step, agriculture needs to be transformed



into a high-profitable venture with low risks and stable income. Farm activities will have to be diversified with cash yielding, low volume, high-value and demand-driven quality output. Adoption of integrated farming models, precision farming, organic farming, protected cultivation, multiple and vertical use of farmland and pisciculture are some other potential options to increase farming income multifold. Current thrust and market-demand (both domestic and overseas) of specialty horticultural products, such as exotic flowers and vegetables, medicinal mushrooms and herbs, high-value spices, have opened a new pathway to gain maximum profit from minimum land and resources. In animal husbandry sector, dairying has emerged as one of the most lucrative 'profession' mainly due to a wide range of new products that have captured market recently; these include flavored milk, A2 milk, organic milk, flavored and frozen yoghurt, dairy whiteners and whey. Consumers are increasingly inclined towards camel milk, goat milk and donkey milk due to their exclusive health benefits; and this opportunity needs to be explored by youth for business opportunities. The Government is supporting and motivating youth to take up some off-beat agri-allied activities, such as beekeeping, sericulture, lac farming etc. as a profitable venture for livelihood. Value-addition and primary food processing (cleaning), grading, packing whole or packing ready-to-cook normal or freeze-dried cuts are easy to adopt enterprises especially for youth. The Government is supporting farm-gate

processing facilities to increase income, enhance employment opportunities and also minimise wastage of produce.

In line with national missions, 'Start up India' and 'Stand up India' several programmes have been launched to promote agri-start-ups along with several verticals of agriculture. If supported and motivated, youth having new ideas and innovations have capacity to launch technology-based business models that can transform agriculture into a high-tech activity. As per 2019 NASSCOM report, India is home to more than 450 agritech start-ups, growing at a rate of 25 percent year-on-year basis. This sector has received more than 298 million US dollars in funding as of June 2019, a growth of 300 percent as compared to the previous year. This indicates the growth potential of agri-tech startups, that can be realised by rural youth for earning dignified livelihoods. Frontier areas of smart technologies, such as Artificial Intelligence, remote sensing, data analytics, various Internet of Things (IoT) devices, ICT apps, farming automations and drone technologies, are providing ample choices to select one, based on individual skills and resources. During the nationwide lockdown due to COVID-19 pandemic, agri-tech startups stepped up and connected farmers with buyers on digital platforms. Some startups helped farmers by even direct selling the produce to consumers. In the post COVID-19 era, agri-startups are likely to play a seminal role in strengthening rural economy by pushing agricultural growth.





To further attract and support rural youth towards agri-preneurship, Ministry of Agriculture and Farmers welfare organises an annual event wherein agri-tech startups are given opportunity to provide commercially viable and innovative solutions for identified challenge problem. Agri-India Hackathon 2020 is the latest in series being organised as the largest virtual gathering to create dialogues, and accelerate innovation in agriculture. India's young bright minds, creative startups and smart innovators are expected to present new tech-based solutions to tackle the big challenges Indian agriculture is facing today.

The winning innovations will get an exclusive preference for incubation support with pre-seed and seed stage funding of Rs. 5 lakhs and Rs. 25 lakhs respectively. Additionally, 24 best innovations from different focus areas will be awarded a cash prize of Rs. One lakh each. Innovative solutions are invited in the field of farm mechanisation, precision farming, supply chain and logistics, post-harvest and food-tech, waste-to-wealth and green energy.

'Agri-clinic and Agribusiness Centres' is another scheme of the Ministry of Agriculture and Farmers' welfare to foster entrepreneurship in agriculture sector. Under this scheme, fresh and unemployed agriculture graduates are imparted a short-term training (2 months) on entrepreneurship development, that is followed by establishment of need-based agribusiness

ventures. The objective of the scheme is to provide gainful employment to rural youth in their own villages vis-à-vis attract investment in agriculture.

ARYA to MAYA

The Indian Council of Agricultural Research (ICAR), apex body for spearheading agricultural research, education and extension in the country, launched a special project in 2015-16 to attract and empower rural youth to take up entrepreneurship in agriculture sector. Entitled as 'Attracting and Retaining Youth in Agriculture' (ARYA), this project identifies rural youth (under the age of 35 years) and orients them towards entrepreneurial skill development for gaining sustainable income and livelihood. Enabled youth are facilitated and supported to establish micro-entripse units in vocations such as apiary, mushroom, seed processing, poultry, dairy, goatry, carphatceryvermi compost etc. Initially, the program was implemented in 25 identified districts in 25 states through ICAR-KVKs (Krishi Vigyan Kendras) as nodal centres. ARYA has been successful in creation of economic models in villages that are manned by KVK-trained rural youth. Such gainful models are catalyzing and energising youth to become entrepreneurs in rural areas and guide others in their vicinity. During the year 2015-16 and 2016-17, ARYA successfully trained and engaged nearly 1,100 and 4,400 rural



youth respectively. Encouraged by the promising outcomes, Government enlarged this component to cover 100 districts by adding 75 more districts during 2017-20 period with a target to train 1.4 million rural youth annually.

Meanwhile, the massive reverse migration of people, most of them are youth, from urban areas to villages during nationwide lockdown due to COVID-19 pandemic has emphasised the importance of ARYA as a potential source of employment generation. Experts have suggested full-fledged implementation of the scheme in all rural districts of the country to support migrant rural youth who have returned to their roots. KVKs may be geared up to enable migrant youth for gainful employment in villages, otherwise they will have no other choice but to return to urban centres again in search of jobs. To steer the ARYA programme in the most gainful direction, ICAR took the initiative to develop a road map by organising a specific conference in 2018 on the theme, 'Motivating and Attracting Youth in Agriculture' (MAYA). The MAYA roadmap envisages grooming of rural youth in application of modern technologies in agriculture for economic growth and social respect. Rural youth can set up agri-service centres to offer custom-hiring facilities for small and marginal farmers for mechanising their farm operations to enhance per unit productivity. MAYA strategy proposes involvement of youth in

the marketing of agri-produce through physical and online markets.

Tapping Young Minds

The Government intends to make agricultural education more relevant and responsive for development of entrepreneurship skills in students. Hence, a comprehensive scheme, entitled 'Student READY' (Rural Entrepreneurship Awareness Development Yojana), was launched from the academics session 2016-17. This is a well structured one-year programme which includes several components designed to provide the requisite skills to agricultural graduates. The programme was implemented through 55 Agricultural Universities in the country as an essential pre-requisite for the award of undergraduate degree. The programme includes five critical components:

- Experiential Learning (Business mode, Hands-on training, skill development)
- RAWES- Rural Awareness Works Experience,
- In- Plant Training,
- Industrial Attachment or Internship and
- Student Project.

All these components are interactive and are conceptualised for developing skills in graduating students for project development

and execution, decision making, team spirit and approach towards problem solving. Most of the projects are being implemented in emerging and potential areas, such as farm mechanisation, food technology, biotechnology and community science in addition to traditional disciplines of agriculture and allied sciences.

So far, the Indian Council of Agricultural Research, has established 452 Experiential Learning Units in Agricultural Universities across the country with the objective to promote professional skills and knowledge through meaningful hands-on-experience. Hands-on-training make conditions as realistic as possible towards gaining knowledge and skill for doing the farm operations in a most productive manner. RAWE helps the students primarily to understand the rural situations, status of agricultural technologies adopted by farmers, prioritise the farmers' problems and to develop skills and attitude of working with farm families for overall development in rural areas. During In-Plant training or industrial attachments, students are exposed to industrial environment and familiarised with machines, materials, processes etc. with the objective to co-relate theoretical knowledge with actual practices in industries. The student project work provides opportunities to students to learn various aspects that cannot be taught in a class room or laboratory. The ICAR supports graduating students with a monthly stipend of Rs. 3,000 for maximum of six months while undertaking 'Student READY' programme. In a very short span of time, this novel approach effectively stimulated undergraduate students for starting up their own venture. This programme in true sense has trained the students to become job givers rather than job seekers and has contributed effectively towards the Startup India mission of the Government of India.

The enhanced pace in agricultural and rural development has increased demand of skilled workforce with industry orientation in agro-based industries across the country. Hence, the Indian Council of Agricultural Research recently

revamped the higher agricultural education network and launched World Bank assisted 'National Agricultural Higher Education Project' (NAHEP) in Agricultural Universities across the country. The project is promoting efficiency and competitiveness with a view to make agricultural education more attractive to talented students.

Quality enhancement with better employment and entrepreneurship opportunities for agriculture graduates will attract rural youth towards higher agricultural education, says the vision document of the project. Continuous emphasis on agricultural education has made the agricultural education system of India as one of the largest national networks in the world. Currently, it comprises 63 State Agricultural Universities, four Deemed Universities, three Central Agricultural Universities and 4 Central Universities with agriculture faculty. The intake

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capacity of students in these institutions, which was less than 5,000 in 1960, has now gone up to over 45,000 in a variety of disciplines. With about 410 constituent colleges, these Agricultural Universities enroll on an annual basis about 28,000 students at Under-graduate level and over 17,500 students at Masters and doctorate level. To attract students to higher agricultural education, a variety of scholarships and fellowships are awarded to students at UG, PG and doctoral levels. As a result, number of applicants for admission to different courses are increasing every year, especially for rural areas. Female students have recently made a significant presence in the landscape of higher agricultural education in the country.

To attract and sustain the youth in agriculture sector, we need to develop a potent strategy with comprehensive backing from government bodies and public policy making institutions. We need to assure that the core concerns of rural youth are addressed effectively.

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Empowering Rural Youth Need, Challenges and Way forward

Manjula Wadhwa

India is sitting on a goldmine of raw talent, waiting to be nurtured, developed, and added to the growing human resource pool. It is essential that our economy has the ability to support the increase in the labour force and the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy. Apart from the technical skills, the rural youth have to be trained in cognitive skills, management skills and interpersonal skills to adapt to a technology-enabled world.

Youth are the present and the future of humanity, as well as of nations. India is a young country, with 70 percent of people below the age of 35 years. It is this young population, which constitutes a potential demographic dividend, which needs to be properly addressed and harnessed towards positive, constructive and purposeful activities by imparting quality education, skill based training, access to Information and Communication Technology and urgent attention to improving their quality of life. Verily, our nation is sitting on a goldmine of raw talent, waiting to be nurtured, developed, and added to the growing human resource pool. It is estimated that by the beginning of third decade of 21st century, the population of India would have a median age of 28 years only as against 38 years for United States,

42 years for China and 48 years for Japan. In order to capture this demographic bonus, it is essential that our economy has the ability to support the increase in the labour force and the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy. As the renowned Political Economist, Joseph Schumpeter has aptly said, 'the rate of economic progress of a nation depends upon its rate of innovation which in turn depends on rate of increase in the entrepreneurial talent in the population'. However, in India, only 4.69 percent of the workforce has formal vocational skills compared to 60 to 90 percent of the workforce in developed countries.

In this mise-en-scène, is it not of paramount significance to engage the rural youth in a



productive way to make them future-ready and ensure them a sustainable livelihood?

Actually, Youth empowerment is an attitudinal, structural, and cultural process, whereby young people gain the ability, authority and agency to make decisions and implement change in their own lives as well as the lives of other people. The World Bank publication 'Empowerment and Poverty: A Source book' views empowerment broadly as increasing poor people's freedom of choice and action to shape their own lives, with control over their resources and decisions.

In this perspective, apart from the technical skills, the rural youth have to be trained in cognitive skills, management skills and interpersonal skills to adapt to a technology-enabled world. Cognitive skills include critical thinking, creative thinking, decision making and problem solving, interpersonal relationship skills include: communication skills, empathy, coping and management skills refer to the ability to recognise the source of stress and manage it in a constructive way and also the ability to manage resources and cope with difficult situations.

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Why Youth Employment is needed?

- In our country, rural folks' access to education and training is often limited by financial barriers (e.g. training and transportation costs) and non-financial barriers (e.g. scarce education and training infrastructure, inflexible training schedules).
- Especially for poor rural children and adults, the opportunity costs for education and training may be too high to give up their income-generating activities and unpaid duties that help sustain their families.
- Many rural people do not have basic education. This also hampers their access to technical and vocational training or other skills development. Moreover, unequal gender relations and traditional gender roles entail specific difficulties for rural girls and women in accessing education and training.
- Education and training is often of inadequate quality. Teachers and trainers may be unqualified, equipment and technology



outdated, and methods ill-suited to rural contexts.

- In many developing countries, training systems tend to operate in isolation from the labour market and employers' needs, so training does not always match skills demand.

With a view to fulfil the above mentioned objectives, the National Youth Policy, 2014 was formulated which seeks to define the vision of the Government of India, for youth of the country and identify the key areas in which action is required to realise their optimum potential and through them enable India to find its rightful place in the community of nations in the area of education, employment and skill development, entrepreneurship, health and healthy lifestyle, sports, promotion of social values, community engagement, participation in politics and governance, youth engagement, inclusion and social justice. The target groups identified in this policy are (i) Student Youth (ii) Migrant Youth (iii) Rural Youth (iv) Tribal Youth (v) Youth At Risk (vi) Youth in violent conflicts (vii) Out of school/dropouts (viii) Groups with social /moral stigma (ix) Youth in Institutional Care, Young women. The Youth belonging to socially and economically disadvantaged communities /groups, and differently-abled youth form the three priority groups among the target age group.

Moving further, let us discuss the various efforts being made by the Government and the non-government bodies for empowering our rural youth. Ministry of Skill Development and Entrepreneurship through National Skill Development Corporation has implemented Pradhan Mantri Kaushal Vikas Yojana (PMKVY-2015-16) with a target to cover 24 lakh youth in the country. The employment rate of the scheme reflects, out of the total trained candidates, around 2.53 lakh only have been reported as placed. Based on the learnings, the scheme has been revamped and modified as Pradhan Mantri Kaushal Vikas Yojana (PMKVY-2016-2020) as 'Skill Development Component' of umbrella PMKVY to skill 1 crore people over four years period, with an outlay of Rs.12,000 crore. PMKVY is a grant-based scheme, providing free of cost skill development training and skill certification in over 252 job=roles to increase the employability of the youth.

Ministry of Rural Development is undertaking the initiatives in skill development under the National Rural Livelihoods Mission (NRLM): Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is a placement linked skill development programme for rural youth between 15-35 years and allows skilling in a PPP mode and also assures placements in regular jobs and is being undertaken all over the country through Project Implementing Agencies (PIAs) registered with the Ministry. Further, guidelines of the scheme mandate State Governments to take up skill training projects with Corporate Social Responsibility funding, setting apart 15 percent of the funds for national level beneficiaries from among minority groups. Since 2012, DDU-GKY has committed an investment of more than Rs. 5,600 crore to upskill India's rural youth. As on September 2020, a total of 10.51 lakh rural youth have been trained and 6.65 lakh successfully placed under the scheme.

Skills Acquisition and Knowledge Awareness for Livelihood (SANKALP) is yet another centrally-sponsored scheme with a project of total size \$ 675 million, including World Bank assistance of \$500 million, aimed at creating convergence among all skill training activities, improve quality of skill development programmes through building a pool of quality trainers and assessors, model curriculum and content, establish robust monitoring and evaluation system. Further, Entrepreneurship Development Programme under PMEGP (EDP) aims to provide orientation and awareness pertaining to various managerial and operational functions like finance, production, marketing, enterprise management, banking formalities, book-keeping, etc through Rural Development and Self Employment Training Institutes (RUDSETI)/(RSETIs) and Khadi and Village Industries Commission/Board training centres as well as other national level Entrepreneurship Development Institutes (EDIs). Since inception till date, RSETIs have trained over 31 lakh candidates of which, over 21 lakhs have been successfully settled. Skills Strengthening for Industrial Value Enhancement (STRIVE) is yet another milestone, launched by GOI with World Bank assistance with a budgetary outlay of Rs. 2200 crore and targets improved performance of ITIs, increased capacities of state governments to support ITIs and apprenticeship training, improved teaching and learning, and improved as well as broadened apprenticeship training.

Another important intervention for providing right skills and generating employment for rural youth, is National Career Service (NCS), a Mission Mode project set in motion by Ministry of Labour and Employment, for establishing quick and efficient career related services across the country by revamping the existing nation-wide set-up of Employment Exchanges into IT-enabled Career Centers. Realising the fact that information and communication technology can prove a great enabler in improving the lot of modern-day tech-saavy young Indians, Digital India Programme, aimed at connecting rural young blood with high-speed internet networks is definitely a laudable step. Stand-Up India and Start-up India are another worth-mentioning feathers in the cap of Government of India to support entrepreneurship by funding support and incentives, Industry-Academia Partnership and Incubation, and Simplification and Handholding. Stand-up India scheme facilitates bank loans between 10 lakh and 01 crore to atleast one SC/ST borrower and one woman per bank branch for setting up a greenfield enterprise in manufacturing, service or trading sector. The beneficiaries are eligible for subsidy at Rs. 10000/- or 50 percent of unit cost, whichever is less. The latest data reveals that more than 105204 applications have been sanctioned with bank loan of Rs. 23573 crore.

Further, with a view to remove the rural-urban divide, Shyama Prasad Mukherjee Rurban

mission, started by the Govt. in 2016 aims at development of rural clusters which have latest potential for growth by provisioning of economic activities, developing skills and local entrepreneurship and providing infrastructural amenities and thus developing a cluster of smart villages. Under the mission, 300 Rurban clusters are envisaged to be developed in a time bound manner. Of these, 296 clusters have been selected and number of approved Integrated Cluster Action Plans (ICAPs) is 288. NITI Aayog has recently shared with Ministry that based on learning from the success of the Rurban clusters, a new and extended programme for over a 1,000 clusters in next 3 years may be planned. As a part of bouquet of Government initiatives, Gram Uday se Bharat Uday Abhiyan, started in 2016 is village self governance campaign, with a view to improve rural livelihoods, strengthen Panchayati Raj across the country, increase 'Social Harmony', create awareness about modern agri practices among the rural youth for retaining them in agriculture.

The role played by NABARD, the apex Development bank of the county and other similar institutions committed towards empowering rural Indian Youth is also worth mentioning here. On one hand, various incentives for promotion of Self-help groups, Joint Liability Groups (JLGs) of SF/ MF/ Tenant Farmers/ Oral Lessees and Share Croppers are extended by it, on the other hand, it has been



making all-out efforts for building the capacity of rural youth through its various skill development programmes like Rural Entrepreneurship Development Programme/Skill Development Programme (REDPs/SDPs). Similarly, through its different partners it has been giving grants for setting up of Rural Haats, Rural Marts, establishing Solar Home Lighting Systems, promoting Rural Tourism, Rural Housing etc.

If we cast a glance at the Non-Government sector, Several start-ups and organisations have set up skill training centers to deliver vocational training and skilling to help rural individuals with employment opportunities like Neev in Shivpuri, Madhya Pradesh, the IT services cos. Five Splash, The Aajeevika Bureau, based at Udaipur have been providing livelihood opportunities to the underprivileged-especially migrant workers, Dehradun based Purkal Youth Development Society, Jaipur based Quantum Career Academy-there is a long list of good NGOs operating in the length and breadth of India.

Last but not the least, Youth being the future of our nation, in order to achieve the goal of sustainable and balanced development, it is necessary that the young generation remains fit in body as well as mind. Hence, Fit India Movement has been initiated on 29th August 2019 to encourage people to remain healthy and fit by including physical activities and sports in their daily lives.

Coming to the implementation part, a highly relevant question crops up which is are we really investing in our youth? The latest data reveals that Central Government spends about Rs. 2,710 per youth on education, skill development, employment, healthcare and food subsidies, the total amount pegged at more than Rs. 90,000 crore. Assuming that States spend an equal amount, the total investment in our youth would be 1.28 percent of Gross Domestic Product on health and 3.1 percent on education, hardly commensurate with their population and potential. As of 2017-18, youth participation in India's labor force was 38.3 percent. Drawing from the 2018 state of Working India Report, we peg the youth unemployment rate to be at least 18.3 percent (3.47 crore youths), about 30 percent of youth fall under the 'neither in employment nor in education' category and 33 percent of our skilled

youth are unemployed. Further, around 50 lakh youth are expected to be entering the workforce annually following the COVID-19 lockdown, Centre for Monitoring Indian Economy (CMIE) estimated a loss of 14 crore jobs in April 2020 alone of which 2.7 crore concerned the youth. These numbers, coupled with impending grim implications of the pandemic, have landed us in uncharted turbulent economic waters.

The diverse challenges facing us in the accomplishment of our goal of youth empowerment are, increasing the access of young India to formal education and vocational training, Information and Communication technology etc. Although, Government of India, in Union Budget 2020-21, has taken special care by allocating Rs. 99300 Crore to the education sector, including Rs. 3000 Cr. for skill development initiative, however, it needs to be raised to nearly 6 percent of GDP by 2022. Apart from this, in order to provide quality education to the underprivileged, full-fledged online courses will be launched by the institutions featuring in the top 100 national rankings. In fact, poor quality education is one of the big risks, India faces, adding to its unemployment crisis. Since 2017, the total employment in the country declined by 9 million partly because of a low level of education, high drop-out rate, labour market asymmetries, a mismatch between the supply of skills and demand and the high aspirations of young people. This is primarily because of the lack of skills to match the changing needs of the digital world, such as Artificial Intelligence, Machine Learning and Cloud Computing etc. The shortage of these skill-sets can be met by the government by developing guidelines for various industries, in order to create mandatory learning hours for employees, especially in the key growth areas like ICT. As of now, the country has roughly 8.5 million teachers whereas the teacher training institutes are only 19000. To overcome this problem, in August 2019, erstwhile Ministry of Human Resource Development announced NISHTHA-National Initiative on School Teachers Holistic Advancement Programme, to train over 4.2 million teachers across the country.

Amidst the pandemic, the skill development programmes have been badly hit, and institutes being shut for a long time. Although remote education is the new normal; internet connectivity, availability of devices, learning platforms, the



preparedness of instructors and learners are some of the key challenges that need to be addressed in rural India. Skill India is encouraging skill seekers to acquire new skills and utilise their time effectively. NSDC's e-Learning aggregator portal-eSkill India has been offering curated courses in partnership with various knowledge partners to provide varied online skilling opportunities. India's New Education Policy 2020, based on the pillars of 'access, equity, quality, affordability and accountability, focuses on empowerment of rural youth by transforming India into a 'vibrant knowledge hub'. Under it, during grades 6-8, students will be required to take a course which will provide hands-on experience of a number of important vocational crafts as well. One of the important objectives of NEP is also to increase the Gross Enrolment Ratio in higher education, including vocational education from 26.3 percent of 2018 to 50 percent by 2035.

Future Landscape

The aspirational younger generation born after 1991 invariably hold the key to India's economic and political future. Therefore, it is an appropriate time to launch an Indian Youth Guarantee (IYG) programme, akin to the European Union Youth Guarantee (EU-YG) but tuned to our country's context. Such an initiative, with statutory backing, can function as a facilitatory framework for ensuring gainful and productive engagement of youth. Its strategic goal should be to ensure that within a fixed time frame, young people graduating from college or losing a job either find

a good quality job suited to their education and experience or acquire skills required to find a job through an apprenticeship. Roping-in the district administration and local bodies for effective outcomes would be better. Existing youth schemes and skilling infrastructure need to be dovetailed and streamlined while leveraging industry to enable an in-situ empowerment of youth.

The advisory and monitory tool for youth development, already instituted in our country-The Youth Development Index (YDI) can help recognise priority areas, gaps and alternative approaches specific to each State. The index also packs a new dimension of social inclusion to assess the inclusiveness of societal progress due to prevalence of systemic inequalities. Succinctly, YDI can be revisited and deployed to play a vital role in crafting a region-specific IYG. It is high time all the stakeholders seriously pay attention to guarantee our youth, especially the rural folks, a viable future. To sum up, we emphatically need to translate Kofi Annan's following words into reality:-

"Young people should be at the forefront of global change and innovation. Empowered, they can be key agents for development and peace. If, however, they are left on society's margins, all of us will be impoverished. Let us ensure that all young people have every opportunity to participate fully in the lives of their societies."

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Role of Allied Sector in Rural Employment Generation

Dr. H.L. Sharma

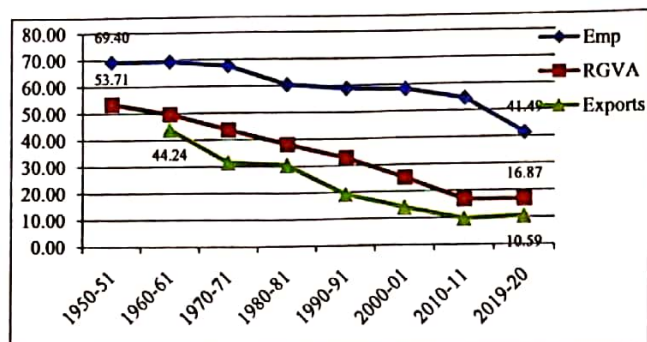
Employment generation coupled with improving employability of rural masses has always been the priority of the Government. Various steps and policy initiatives have been taken for generating employment through substantial investment and increased public expenditure on the schemes and programmes formulated for this purpose. The main focus is on strengthening the rural economy by reviving agriculture and allied sectors in the country. The importance of agriculture and allied sector is brought out by the fact that as per census 2011, of the 313 million main workers in the country, 166 million (56.6 percent) were engaged in these activities.



India is predominantly a rural economy where agriculture and allied sectors play a vital role in national income, output, employment generation and foreign exchange earnings. More than 50 percent population of the country is directly dependent on agriculture and allied sectors. There has been a tremendous increase in production of agriculture and allied sectors during the planned era of development. The real gross value added (RGVA) at constant prices by primary sector (including agriculture, forestry, fishing, mining and quarrying) which was to the tune of Rs. 1,50,191 crore in 1950-51, went up to Rs. 22,83,724 crore in 2019-20, registering a compound growth rate of 4.2 percent per annum. Due to structural changes in the

economy, the contribution of the primary sector to Gross Domestic Product has steadily declined from 53.71 percent in 1951 to 16.87 percent in 2020. Similarly, the contribution of this sector to foreign exchange earnings (share in exports) slide down from 44.24 percent in 1960-61 to 10.59 percent in 2019-20. On the contrary, the share of agricultural and allied products in employment generation not only declined at a slow pace from 69.40 percent in 1951 to 41.49 percent in 2020, but still is very high (See Figure 1). Despite a fall in its share in national output and employment, agriculture and allied sector still remains the country's major source of livelihood for more than half of the population of the country. The importance of agriculture and allied sector is brought out by the fact that as per

Figure1: Share of Agriculture & Allied Sector in RGVA, Employment and Exports (percent)



Source: Economic Survey 2019-20, Volume 2, pp. A5-A7, A109-A111

census 2011, of the 313 million main workers in the country, 166 million (56.6 percent) were engaged in these activities.

In fact, agriculture in India is considered as playing gamble with the monsoon because almost in all parts of the country, agricultural production is very much dependent upon the rainfall. It is highly susceptible to the natural calamities and risks like droughts, floods, pests, diseases etc. Apart from this, Indian agriculture is characterised with the presence of excess manpower in the form of large scale disguised and seasonal unemployment. According to an estimate, nearly 25 percent of manpower engaged in agriculture is disguisedly unemployed. In order to make agriculture a lucrative profession by protecting the farmers from income shocks and providing additional employment opportunities throughout the year, it is necessary to promote the allied sector activities like animal husbandry, pisciculture, horticulture, floriculture, apiculture, sericulture, forestry and logging and mining and quarrying etc.

Animal Husbandry

Among the ancillary activities, animal husbandry being an integral part of farming in India, is at the top. The livestock sector has emerged as a sustainable secondary source of income and generating gainful employment during the phases of seasonal unemployment, particularly to the landless, small and marginal farmers. India has been the largest producer of milk in the world since 1998 per capita availability of 394 grams per day as against the world average of 299 grams in 2018-19. Nearly 19 percent of the world's total milk production is contributed by India. Total

milk production in the country increased from 17 million tonnes in 1950-51 to 187.7 million tonnes in 2018-19 recording a growth rate of 3.59 percent per annum (See Table 1). The production of eggs in India increased from 1,832 to 1,03,318 million numbers registering ACRG of 6.11 percent from 1950-51 to 2018-19. Realising the potential of animal husbandry sector to strengthen the rural economy, the budgetary allocations have witnessed a rise through various schemes and initiatives like; National Livestock Mission, Rashtriya Gokul Mission, National Programme for Dairy Development, National Programme for Bovine Breeding, National Kamdhenu Breeding Centres etc.

Pisciculture

The fisheries sector is also an important source of income and employment generation in India. The country has rich and diverse fisheries resources due to its vast coast line and varied inland resources in the form of rivers, canals, lakes, ponds, tanks, reservoirs etc. The total fish production in the country was 7.52 lakh tonnes in 1950-51, which shot up to 134.2 lakh tones in 2018-19 registering ACRG of 4.33 percent (See Table 1). The sector provides livelihood to about 16 million fishers and fish farmers at the primary level and almost twice the number along the value chain. The sector has been one of the major sources of foreign exchange earnings, with India being one of the leading seafood exporting nations in the world. During 2019-20, exports of fish and fish preparations stood at 651 thousand tonnes and valued at Rs. 23,501 crore. There is an ample scope for the growth of aquaculture and fish farming in the country, as in 2018-19 only 58 percent of inland fisheries and 71 percent of marine fisheries potential was harnessed. In addition, there are job potential in the field of fish processing, fish seed hatcheries, fish feed industry, aquaculture etc. With a view to boost the fish production through the creation of additional infrastructure facilities in the country, Fisheries and Aquaculture Infrastructure Development Fund (FIDF) worth Rs. 7,522 crore was created in October 2018. The fund aims to boost annual fish production to 20 million tonnes by 2022-23 and generate over 9.40 lakh employment opportunities. To bring about blue revolution through sustainable development of the fisheries sector, Pradhan Mantri Matsya Sampada Yojana was launched on 10th September 2020. Under the scheme, total estimated investment of Rs. 20,050 crores is to be implemented over a period of 5 years

from FY 2020-21 to FY 2024-25. The scheme sets an ambitious target to enhance the fish production to 22 million tonnes by 2024-25 and generate about 15 lakhs direct gainful employment opportunities.

Table 1: Production of Major Livestock Products & Fish

Year	Milk (Million Tonnes)	Egg (Millions Nos.)	Fish (Million Tonnes)
1950-51	17	1832	0.75
1960-61	20	2881	1.16
1970-71	22	6172	1.76
1980-81	31.6	10060	2.44
1990-91	53.9	21101	3.84
2000-01	80.6	36632	5.66
2010-11	121.8	63024	8.40
2011-12	127.9	66450	8.70
2012-13	132.4	69731	9.04
2013-14	137.7	74752	9.57
2014-15	146.3	78484	10.16
2015-16	155.5	82929	10.80
2016-17	165.4	88137	11.42
2017-18	176.3	95217	12.61
2018-19	187.7	103318	13.42
ACGR9(%)	3.59	6.11	4.33

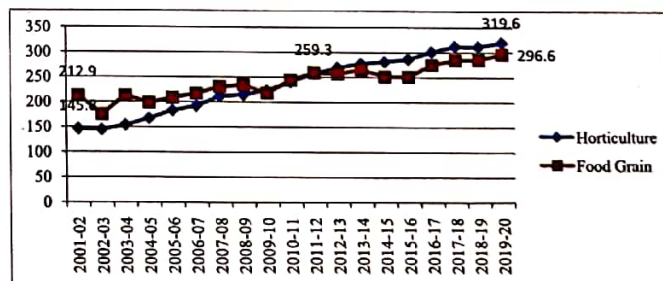
Source: Department of Animal Husbandry and Dairying

Horticulture

The Horticulture sector is recognised to have the potential to augment rural income, enhance employment opportunities and promote exports earnings. The diverse agro climatic conditions and wide varieties of soil in the country make it possible to grow almost all types of horticultural products like fresh fruits, vegetables, root and tuber crops, flowers, aromatic and medicinal crops, spices and plantation crops. There has been an unprecedented growth of this sector during the last two decades. As per third advance estimates of the Department of Agriculture, Co-operation and Farmers Welfare, total horticultural production has increased from 145.78 million tonnes in 2001-02 to 319.57 million tonnes in 2019-20, registering ACGR of 4.22 percent during this period. In fact, the production of horticulture crops in the country has outpaced the production of foodgrains since 2012-13 (See Fig 2). Fruits and

vegetables account for more than 90 percent of total horticulture production in the country. India ranks second in fruits and vegetables production in the world, after China. The country ranks first in the production of banana, papaya, mango, lemon, ginger and okra. The vast production of horticultural crops offers tremendous opportunities for their exports. As per the latest report of APEDA, during 2019-20, India exported fruits and vegetables worth Rs. 9,182.94 crores, comprising fruits worth Rs. 4,832.81 crores and vegetables worth Rs. 4,350.13 crores. Despite huge production of horticultural crops, India's share in world exports amounts to less than 1.5 percent. For the holistic growth of the horticulture sector, Mission for Integrated Development of Horticulture (MIDH) - a centrally sponsored scheme was launched from 1st April 2014. The MIDH provides financial, technical and administrative support to State Governments for the development of the horticulture sector covering fruits, vegetables, root & tuber crops, mushroom, spices, flowers, aromatic plants, coconut, cashew, cocoa, bamboo and saffron. Apart from this, to promote horticultural exports, several centers for perishable cargoes and for post harvest handling facilities have been set up with the assistance of APEDA in the country.

Figure 2: Horticulture vis-a -vis Foodgrains Production in India (Million Tonnes)



Source: Horticultural Statistics at a Glance-2018, Ministry of Agriculture & Farmers' Welfare, p. 4

Floriculture

Floriculture is an age-old farming activity practiced in India. It has immense potential for generating gainful self-employment among small and marginal farmers. The diverse agro-climatic conditions enable the growth of all types of flowers in one or the other part of the country round-the-year. Due to increased demand of floriculture products in the home market and abroad, farmers have been shifting from sustenance to commercial production of

flowers. As per the third advance estimate of the National Horticulture Board, the production of flowers reached at 2.99 million tonnes in 2019-20, witnessing 2.89 percent increase over the previous year. India's total exports of floriculture products increased sharply from Rs. 105 crore in 2000-01 to Rs. 541.61 crores in 2019-20. The major importing countries of Indian flower products are U.S.A., U.K., Netherland, Germany and UAE. Recognising the importance of this sector, Government of India has identified floriculture as a sunrise industry and accorded 100 percent export oriented status to it. The liberalisation of industrial and trade policies paved the way for the development of export oriented production of flowers. The Government has set up six agri-export zones for floriculture; one each in Karnataka, Maharashtra, Sikkim and Uttarakhand and two in Tamil Nadu. The Agricultural and Processed Food Products Export Development Authority (APEDA), has introduced several schemes for promoting floriculture exports from the country. These relate to development of infrastructure, packaging, market development, subsidy on air freight etc. With foreign technical collaborations, the Indian floriculture industry is poised to exhibit strong growth in its production and hence increase its share in world trade.

Apiculture

Apiculture or beekeeping is a lucrative profit giving venture with very low or negligible investment. If practiced in a scientific manner, it can generate huge employment and improve the economic condition of rural people. Beekeeping is not restricted to extraction of honey only, but other products such as royal jelly, bee wax, pollen, propolis and bee venom also yield good income to the farmers. With an output of 64,900 tonnes, India ranked eighth in the world in honey production in 2017-18. India is one of the leading honey exporting countries. According to an official report, India has a potential of about 200 million bee colonies as against the present level of 3.4 million. Increasing the number of bee colonies will not only increase the production of bee-related products, but will boost overall agricultural and horticultural productivity. The Department of Agriculture, Cooperation and Farmers Welfare has been giving thrust on promotion and development of scientific apiculture in the country in view of its crucial role in income and employment generation.

In this direction a new central sector scheme entitled National Beekeeping and Honey Mission (NBHM) has been launched to achieve the goal of Sweet Revolution in the country. The NBHM under its three sub-missions, thrusts up on (i) adoption of scientific beekeeping methods for improvement in production and productivity of honey; (ii) develop requisite infrastructural facilities for post-harvest management including collection, processing, storage, marketing & value addition and (iii) research and technology generation keeping in view the varied agro-climatic and socio-economic conditions of different regions/ states in the country.

Sericulture

Sericulture is an age old avocation in India. The Sericulture and silk industry has great potential to contribute towards rural income and employment generation, poverty alleviation and women empowerment. India is the second largest producer of silk (after China) in the world with its unique distinction of being the only country producing all the four commercially known varieties of silk viz. Mulberry, Eri, Tasar and Muga. The total silk production in the country stood at 35,820 MT in 2019-20 as against 28,708 MT in 2014-15. India's silk industry provides gainful employment to over 9.43 million persons of which a sizable number belong to the economically weaker sections of society. The Indian silk products have high export potential because of their distinctiveness and low cost of production. Total export earnings from silk and silk goods were to the tune of Rs. 1745.65 crore in 2019-20. For the development of sericulture and silk industry in the country, The Central Silk Board was established immediately after independence in 1948. It acts as a facilitator to the States in guiding them to improve productivity and quality of silk through Research and Development intervention, supply of basic seed, post cocoon technology intervention and capacity building. In 2017, in order to strengthen the beneficiary oriented components in sericulture, the central sector scheme-Silk Samagra, was launched with the provision of an outlay of Rs.2161.68 crore to be spent over a period of three years from 2017-18 to 2019-2020. It focuses on improving the quality and productivity of domestic silk and thereby reducing the country's dependence on imports of raw silk. To boost domestic silk production, anti-dumping duty is needed to be imposed on raw silk imports from China.

Agro Processing

Agro processing industry is seen as a key instrument for ameliorating the economic lot of the vast majority of people living in poverty in rural India. Rural areas provide abundant raw material from agricultural, horticultural and animal produce to start entrepreneurship in the field of agro-processing. Agro processing not only enables to reduce the post harvest wastages but also helps to fetch fair and remunerative prices to the producers through value addition in their agricultural produce. Presently, processing of fruits and vegetables is only two percent in India, in comparison to 80 percent in USA, 78 percent in Philippines, 70 percent in France and Brazil, 40 percent in China. The food processing sector faces a conducive growth environment, owing to the availability of fresh, abundant & affordable raw material on the one hand and favorable government policies on the other. Moreover, due to rising consumer affordability, rapid urbanization and change in lifestyle, the preference for processed agro-products has been increasing rapidly. There is an enormous and ever increasing demand for canned fruits, juice, jam, jelly, sauce, pickle and honey etc. in rural, semi-urban and urban areas. These activities can be started on part time as well as full time basis as they have very high employment potential with significantly low investment. Realising the importance of food processing sector for the economy, a central sector scheme, Pradhan Mantri Kisan Sampada Yojana, with the total outlay of Rs. 6,000 crore was launched in 2016. It aims at the creation of modern infrastructure with an efficient supply chain for the processed food industry. It is likely to provide a big boost to the growth of the food processing sector, creating huge employment opportunities particularly in the rural areas, reducing wastage of agricultural produce and boosting the export of the processed agricultural products.

Conclusion

Employment generation coupled with improving employability of rural masses has always been the priority of the Government. Various steps and policy initiatives have been taken for generating employment through substantial investment and increased public expenditure on the schemes and programmes formulated for this purpose. The main focus is on strengthening the rural economy by

reviving agriculture and allied sectors in the country. The Government is keen to double farmers' income by the targeted year 2022, through launching new schemes. In order to achieve this ambitious and gigantic goal within the stipulated time period, it is imperative to give impetus to various farm as well as non-farm activities in rural India. In addition to boost income from crop cultivation, the focus of attention should be on promoting allied and non-farm activities in rural areas so that farmers can get gainful employment during the slack season. These ancillary activities not only supplement the income generation from cultivation, but also act as insurance to the farmers against the shocks and fluctuations in farm income due to natural calamities. Further, the unemployed or underemployed educated rural youth are needed to be encouraged to enter into agribusiness and entrepreneurship in allied sector activities like floriculture, apiculture, sericulture & pisciculture. Agro-processing also offers bright opportunities for the creation of productive employment in rural areas and thus putting a check on the rural-urban migration. Special impetus on creating scientific temper and fostering innovative spirit among the rural youth to attract them to agro-processing, agribusiness and agri-preneurship deserve to be at the top priority of Government and policy makers. Last but not least, a joint effort on the part of the Government, private sector and self-help-groups supported by the public at large can play a vital role in promoting ancillary and allied activities and ultimately enhancing employment opportunities in rural India.

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Employment and Entrepreneurship Opportunities for Skilled Youth

Dr. Satender Singh Arya

Agriculture is truly the backbone of India's economy, reverberating with a new dynamism and excitement. The sector is poised for a big leap forward towards a sustainable future. There are umpteen opportunities for youth in the agriculture and agribusiness sector. Technological breakthroughs, increased concern for food safety and hygiene, innovations in agricultural marketing have created a range of new jobs across the agri value chain. Precision farming has created a demand for services of skilled professionals in farm machinery, greenhouse farming, pesticide and fertiliser application, micro-irrigation and solar energy.

A host of policy reforms, and expansion of agri business opportunities have brought in a rapid transformation in the agriculture and allied sector due to the introduction of several applications in the domain of crop science and with the use of innovative technologies. Last year, even during the lock down due to the advent of COVID-19, the sector recorded a remarkable performance which has fuelled expectations for an agriculture led recovery of India's economy.

Due to millions of workers moving back to their homes in rural India because of the lockdown, there was an additional uptake in agriculture, horticulture, animal husbandry and sanitation services which brought in additional focus on skilling and upskilling of people in the respective geographies. The Government of India also launched ambitious programmes for agri infrastructure, credit, market reforms, minimum basic income, and risk management, which are expected to improve profitability of farming and farm ventures. Agricultural marketing is expected to attract more investments with the introduction of landmark reforms, reduce the market unpredictability and improve price realisation. It gives me pride to highlight that every ninth agritech startup in the world is from India and these are growing at 25 percent, annually.

There are umpteen opportunities for youth in the agriculture and agri business sector. Technological breakthroughs, increased concern for food safety and hygiene, innovations in agricultural marketing have created a range of new jobs across the agri value chain. Precision



farming has created a demand for services of skilled professionals in farm machinery, greenhouse farming, pesticide and fertiliser application, micro-irrigation and solar energy. Organic farming has generated renewed interest worldwide and in India, organic products are growing between 25 and 30 percent, annually. In the fisheries sector, scientific cultivation and management practices such as cage culture, recirculation aquaculture systems, bio-floc culture, ornamental fisheries, seaweed cultivation, cold water fisheries and others have opened new window of opportunities.

A raft of smart technology applications based on AI, Big Data, Internet of Things have enabled farmer-entrepreneurs to take smart decisions, adopt better farm management practices and access the best of market opportunities. Genetic improvement, disease control, feeding and management practices have led to a record increase in the production of dairy and livestock products. This growth has triggered higher demand for professionals associated with scientific

farm management, animal health, breeding and insemination, etc. Record production of food and heightened awareness about quality has created various specialised job roles in agri warehouses, coldstorage, aggregation points. Market reforms would create additional demand for highly skilled professions associated with forward trading, risk analysis, commodity management, etc.

Despite this rapid expansion, All-India data from the Periodic Labour Force Survey (2018-19) shows that only 11.3 percent of the workforce in the age group of 15-59 years have received some form of Vocational Education and Training (VET) and share of formal VET is just 2.39 percent. The data highlights that in the demand for skilled professionals, there still exists a huge skill gap and the supply of skilled labour falls short of the demand. However, the picture is changing now due to a rapid expansion of short-term training infrastructure, improved coverage, and opportunities for socially and economically weaker sections, greater funding availability and higher participation of the industry and private sector.

With the institutional framework undergoing a radical change in the skilling ecosystem and with the increasing demand for skilled labour, growing concerns about the widespread skill mismatch are being addressed. The alignment of training programmes is being done matching the international standards which is making skill training aspirational and attractive to the youth, bringing a synergy between all skill development efforts among different ministries and State governments, and improving the scope for more private sector participation.

Some of the important milestones of the past few years are the foundation of the National Skill Development Corporation (NSDC) in 2008 and the launching of Skill India Mission in 2015. Agriculture Skill Council of India (ASCI), the nodal agency for designing the course curriculum, content, assessment and certification of skill programmes under the National Skill Qualification Framework (NSQF), was set up in 2013 and works under the aegis of NSDC.

Central Schemes

It was observed that the main challenges of skill development among the youth are the high cost of vocational training, less flexibility and mobility associated with vocational education. In order to

make skill courses more accessible to the youth, Pradhan Mantri Kaushal Vikas Yojana or PMKVY was launched with an aim to train 10 million youth between 2016 and 2020. Agriculture training can be taken in 182 different job roles under PMKVY. Other than PMKVY, opportunities for short-term training in agriculture-related job roles are available under Rashtriya Krishi Vikas Yojana (RKVY), Mission for Integrated Development of Horticulture (MIDH) and Deen Dayal Upadhyaya Grameen Kaushal Vikas Yojana (DDUGKY), Aajeevika under National Rural Livelihood Mission (NRLM), and Barefoot Technician Programme under Mahatma Gandhi National Employment Guarantee Act (MGNREGA). All youth aged 18 years and above who are citizens of India are eligible for these programmes. Besides, the Indian Council of Agriculture Research (ICAR) has a special scheme Attracting and Retaining Youth in Agriculture for aspirational youth in the agriculture sector.

State Schemes

Apart from the Central schemes, States run their own forward-looking and aspirational skill development schemes that are NSQF-aligned and linked to employed creation. Some such schemes in which ASCI is involved in curriculum design, assessment, and certification are the Utkarsh Bangla scheme of West Bengal, Placement Linked Skill Training Programme of Assam, SURYA scheme of Haryana, Employment Linked Skill Training Programme of Rajasthan, Entrepreneurship and Employment Linked Skill Training Programme of Uttarakhand, skill training Programmes under APSSDC, UPSDM, and BSDM.

Skill Courses in Schools and Colleges

The New Education Policy 2020 as cleared by the Union Cabinet has proposed to make VET as an integral part of school and higher education in a phased manner. This is a historic form that have potential to address the long-standing issues of integrating vocational and academic education, ensure mobility, and make skill programmes aspirational. At present vocational subjects can be taken at the secondary (classes 9-10) and higher secondary levels (classes 11-12) under Samagra Siksha Abhiyaan of the Ministry of Human Resources and Development (MHRD). Till now there 1527 schools across 22 States, which run agriculture courses assessed and certified courses.

Skill-based programmes can also be taken as part of the higher education system under

the University Grants Commission (UGC). The opportunities for doing a certificate, diploma, B.VOC. or M.VOC courses has expanded considerably. In these flexible credit-based skilling programmes there is also scope for multiple entries and exit enabling the candidates to enter job markets at the end of a course and re-join skilling programme at a higher level to upgrade skill competencies. At present, there are 130 UGC affiliated colleges where NSQF aligned skill-based training courses in agriculture are being run.

Apprenticeships

The National Apprenticeship Promotion Scheme (NAPS) has significantly improved the scope, access, and effectiveness of the apprenticeship programme. Apprentices are now eligible for a monthly stipend of Rs. 5,000-9,000 depending on educational qualification and experience. There are a wide range of opportunities provided by agri-input companies, agri-logistics, warehouses, pack houses and commodity management; crop insurance, organised retail, and technology-intensive modern farms, which require skilled labour to manage their activities. Aspirants can self-register in the NAPS portal (<https://apprenticeshipindia.org/>). The duration of apprenticeship ranges from 6 months to 3 years.

Involvement of Industry

Industry participation in the skill ecosystem is critical for bridging the skill gaps, in-service and apprenticeship training, training of trainers, and absorption of trained candidates. Certificates under Skill India Mission carry a greater weight and wider acceptability as all the agriculture modules have been approved by professional bodies and largest industry players. Certified skilled candidates have also been able to secure international placements.

Support for Entrepreneurs

Many of the youth want to start their business enterprises after the training programme. Opportunities are aplenty under venture capital funds of different ministries. Initiative for Development of Entrepreneurs in Agriculture (IDEA) under RKVY, Venture Capital Finance Assistance (VCA) of Small Farmers' Agribusiness Consortium (SFAC), ASPIRE scheme of the Ministry of MSME, Support to Training and Employment Programme for Women (STEP) are a few initiatives aimed at boosting entrepreneurship.

National Bank for Agriculture and Rural Development (NABARD) has issued a directive to its member banks to prioritise bank loans to the ASCI certified candidates.

Keeping with the needs of rapidly evolving training industry a host of blended learning courses have been introduced which can be accessed at <https://eskillindia.org/>. The online modules have made new skills, technology and knowledge easily accessible. Furthermore, there is host of support mechanisms for skilled candidates to get the right job placements through Rojgar Melas and job portals like ASEEM (<https://smis.nsdcindia.org/>) of NSDC and (<https://agriplacements.in/>) of ASCI. Success stories are galore in fisheries, dairy farming, vermicompost, mushroom, organic farming where attending a short term course has led to significant increase income, productivity and quality of work. All the efforts have been successful to capture interest of the youth, attract young people to undergo training, set up successful enterprises in farming or avail placement with the best class of employers.

Important strides have been made in capacity building and empowerment of farmers thorough Recognition of Prior Learning (RPL) in collaboration with State Governments, autonomous bodies, and industry leaders- Maharashtra Agri Skilling Programmes (2.5 lakh farmers in group farming), Kerala Agro-industries Corporation (40 thousand in solanaceous crops, coconut, and gardening), National Fisheries Development Board (12 thousand in fisheries), Spices Board (20 thousand in organic farming and vermicompost), Tea Board (20 thousand tea growers), Assam Skill Development Mission (20 thousand in sericulture, tea, bamboo plantation), Patanjali Bio Research Private limited (80 thousand in group farming and organic cultivation), etc.

In conclusion, I would say that agriculture is truly the backbone of India's economy, reverberating with a new dynamism and excitement. The sector is poised for a big leap forward towards a sustainable future. India's skill ecosystem has geared up to be an effective tool to harness the power and enthusiasm of youth who are at the forefront of this transformation and ASCI is committed to upgrade their skills by building necessary infrastructure, tools and the right capabilities.

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Empowering Rural Youth through Water and Tourism Sector

Avinash Mishra and Aakanksha Sharma

MGNREGA, the largest employment programme of the country proved to be great initiative for employment for post COVID-19 rural recovery. Besides this, there is certain untapped potential in rural India which can use local resources in synergy with the skills the rural youth possess to empower and boost the economy. It has been estimated that half of the world's workforce i.e., about 1.5 billion people are dependent and employed in one of the eight water and natural resources dependent industries. Hence, it is evident that the water sector in different facets has a potential to empower the rural youth.



The sudden spread of COVID-19 pandemic around the world has taken global economies a setback with a 5.2 percent contraction in global GDP in 2020¹. The Indian Economy was no different. India also witnessed a dip in the Gross Domestic Product, increase in unemployment, mass migration and other dire consequences of the ongoing pandemic.

Loss of livelihood and reverse migration to rural India not only upstretched the dissatisfaction among the youth but also created a strain on local resources to offer employment as per their skill set. Once debated, the migration seemed to be a blessing in disguise to boost the rural economies. MGNREGA, the largest employment programme of the country proved to be great initiative for post COVID-19 rural recovery. Besides this, there

is certain untapped potential in rural India which can use local resources in synergy with the skills the rural youth possess to empower and boost the economy.

Water Sector

Yet water is an essential resource for survival of mankind, we should also consider that water sector is also very necessary and irreplaceable resource for economic growth. As per the United Nations report on Water and jobs, it has been estimated that half of the world's workforce i.e., about 1.5 billion people are dependent and employed in one of the eight water and natural resources dependent industries². Hence, it is evident that the water sector in different facets has a potential to empower the rural youth.

As predicted that rapid population growth, climate change and urbanisation will put a pressure on the water resources, consuming and conserving each and every drop of water has become important. Currently, India generates approximately 61,948 MLD of sewage against the treatment capacity of 23,277 MLD i.e., 37 percent of waste water generated only³. Hence, there is an urgent need to promote and push economy to inculcate the habit of reusing, recycling and treating wastewater in the system. Making rural India ODF++, collecting and reusing wastewater has its own relevance which can only help in conserving and consuming water efficiently but can also create job opportunities in wastewater sector.

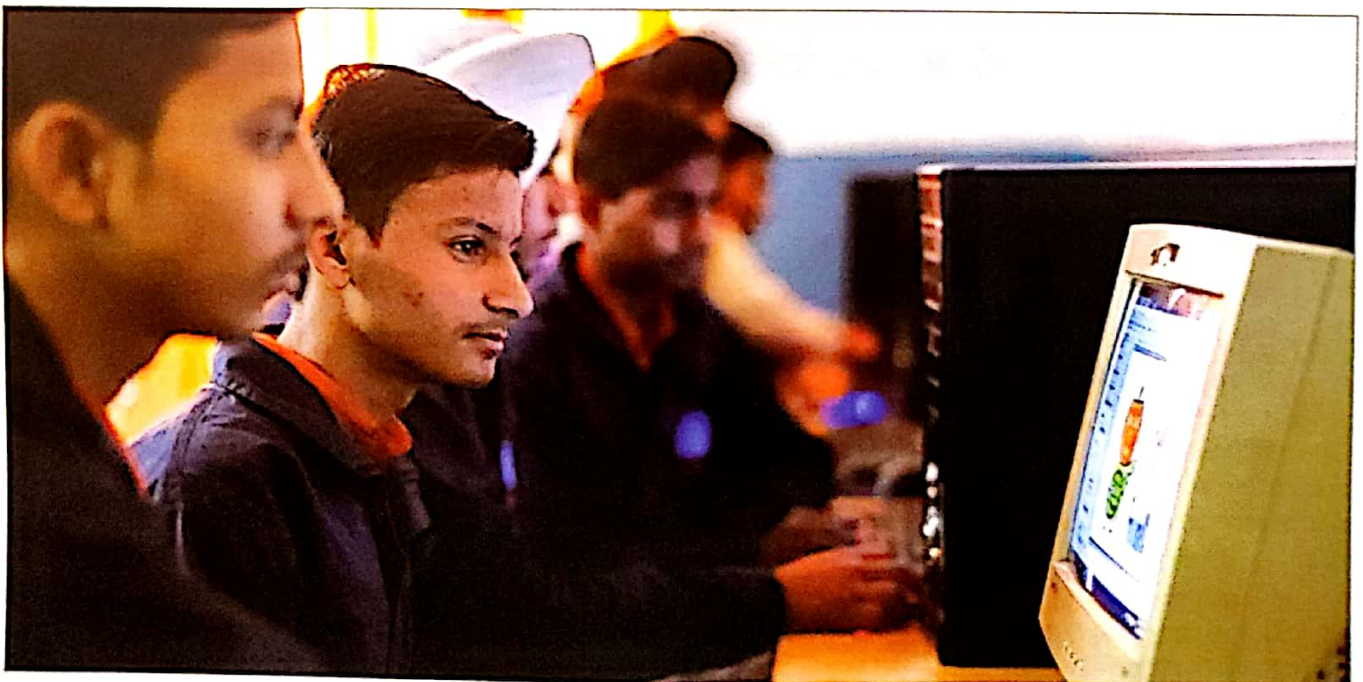
On a similar note, Water contamination is an important concern that poses huge health burden on rural community. The prolonged, persistent and post-limit exposure to toxins may lay a heavy toll on health of human and livestock population. Identification and removal of contamination is highly important as water borne diseases are directly proportional to water quality. The idea is to leverage communities and private firms offering them a platform to invest in water purification plants at decentralised levels. Jal Jeevan Mission (JMM) operational guidelines also mentioned to identify and train five women from every village to undertake water quality surveillance through Field Test Kits (FTKs) and sanitary inspection⁴. Additionally, the advisories issued for ensuring

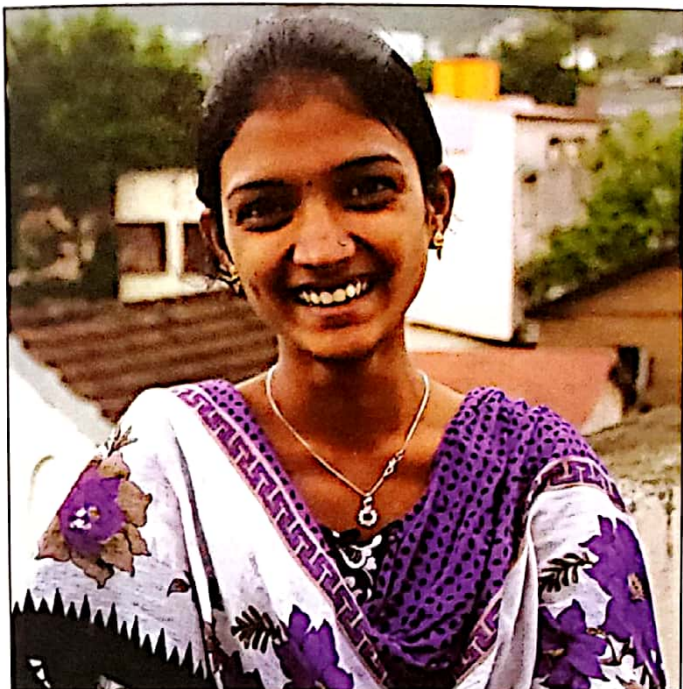
safe drinking water during Coronavirus pandemic by Government of India also advised to issue sufficient field test kits to the villagers trained in their use to do periodic testing of water supplied and alert all concerned in the event of any contamination.

Another role of water is to support major livelihood of the economy. Availability of water for effective irrigation is crucial to agriculture sector ensuring food security for the country. Unrestrained extraction of groundwater has started to put pressure on available resources hampering agricultural productivity. Around 89 percent of India's groundwater is consumed by irrigation sector. Hence, the need of the hour is to build and revive surface water sources. Realising the potential of traditional water harvesting structures in managing and supporting agriculture, several civil society organisations and government departments have tried and contributed in the reviving traditional water structures. However, any programme, strategy or policy cannot become successful if it lacks the sense of ownership on part of all stakeholders involved. The state, industry and community are required to step forward and take actions to reclaim the contemporary knowledge of water management.

Tourism Sector

The tourism industry, one of the largest contributor to India's GDP, has been hit due to





global spread of coronavirus pandemic. As per World Travel and Tourism Council (WTTC), Covid-19 pandemic costs tourism industry at least USD 22 billion resulting in a loss of 50 million jobs globally⁵. Revival of the tourism industry is one of the prime concerns of the Government of India wherein rural India can be proved to a hidden and unexplored asset to be scratched.

When international travel destinations are found to be risky and unreachable, the idea is to promote and revive domestic tourism. India boasts varied travel destinations ranging from religious destinations to nature friendly destinations to adventure destinations and much more. Uncharted rural India can attract large number of domestic travellers offering them an authentic taste and serene beauty of India. It is also to be acknowledged that India's natural heritage has been rated the sixth greatest in the world by the World Economic Forum. Hence, the promotion of domestic village tourism can empower rural youth offering them an opportunity to earn livelihood from logistics and accommodation support, travel guide services and much more. Recently launched, Government's scheme 'Dekho Apna Desh' is one such initiative to promote domestic tourism in India, intended to enhance tourist footfalls, so as to help develop the local economy⁶.

Another segment of tourism industry which can empower rural youth can be 'Education tourism'. Practical training and exposure have

always been considered important. There are several global organisations which used to develop educational tour programmes in India for international travellers. In the wake of pandemic, Indian schools and colleges should also consider it as a learning pathway to impart practical education to the students. It not only introduces the vast diversity of India to students but also proved to be crucial for their holistic development.

The pandemic created a disruption in our day to day lives while also impacting our livelihood. But as life goes on, one needs to adapt to changes and explore different options. The skilled and unskilled workers residing in rural India needs to be empowered through different interventions across sectors while defining their entrepreneurial skills to boost the Indian economy. Two such sectors can be water and tourism sectors which have some hidden potential to push start the economy by empowering rural youth.

Disclaimer: The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of NITI Aayog, Government of India.

Footnote

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Employment Opportunities for Rural Youth

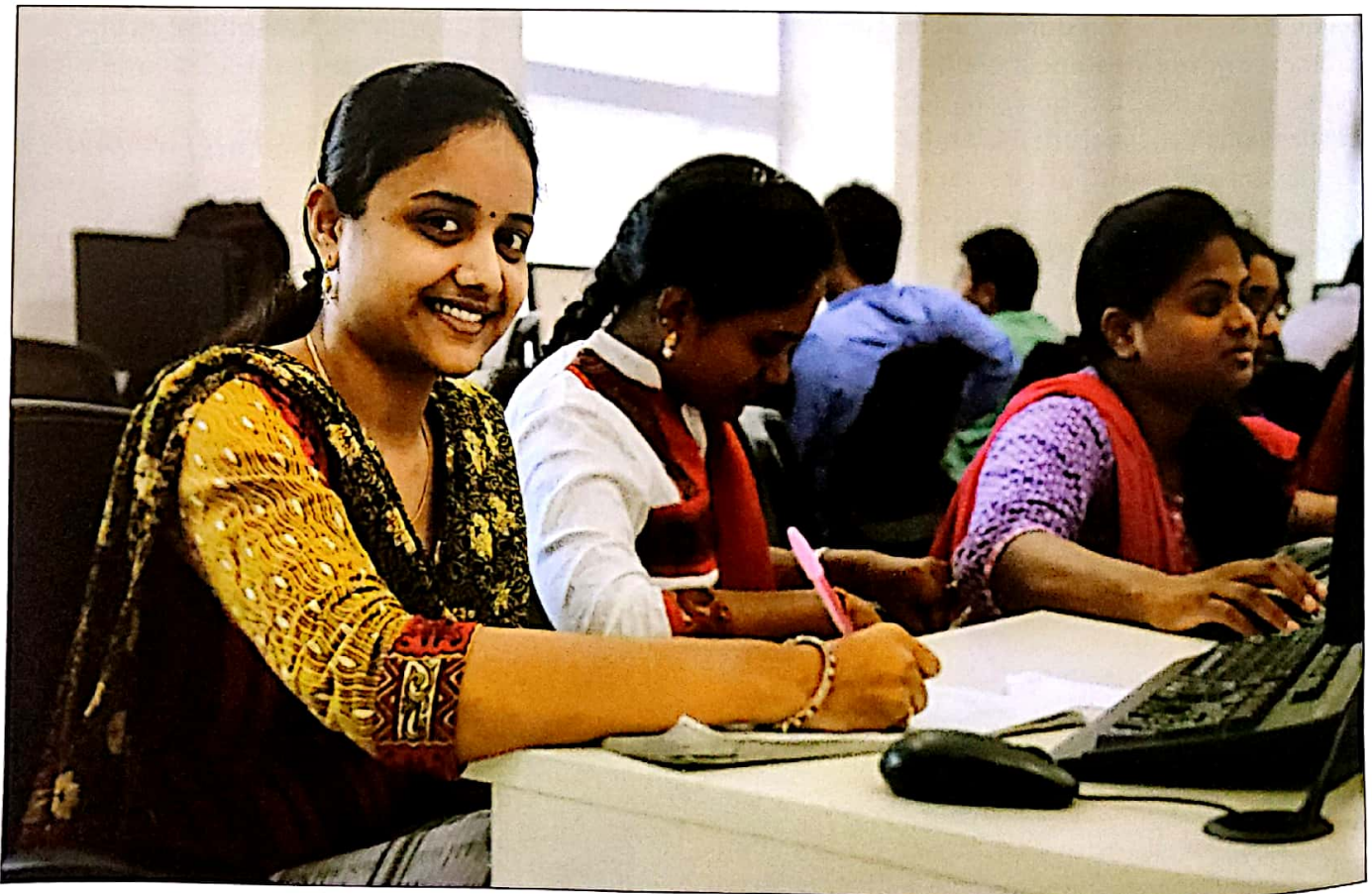
Dr. Sarala Dasari and Manthan Somvanshi

The rural youth have immense potential that can be nurtured in a right direction and be utilised to contribute to country's economic growth. The Government of India has made several efforts for the rural young employment seekers with most of the schemes targeting rural youths as beneficiaries. The Government schemes aimed at providing employment have played a significant role in improving the employment scenario for the rural youths, but Government schemes alone cannot bring along major required changes. A fraction of responsibility lies with the private sector via medium of Corporate Social Responsibility for providing such societal goals.

Carl Sagan rightly said "Extinction is the rule. Survival is the exception." In 21st Century with the shift in occupational structure over the past few decades, employment has turned out to be one of the key tools of survival in the country. With improving literacy rate and improving Human Development Index ranking, demand for employment has raised in the country. Despite of the good literacy figures, a fraction of population (especially the rural parts) lacks awareness about existing employment opportunities existing in the country.

Young population, irrespective of their location, whether rural or urban, are an asset for a country. The employment of an individual depends

on many factors. One of the major problems that exist is matching the requirements of employment generators to the profiles of the employment seekers. Literacy figures may provide a good picture of rising education amongst the masses, but the labour market is highly skill oriented. Those who have a good academic record and have all the desired skills, enter high paying jobs, while those with a poor economic background cannot avail the basic education. At times there are many who have the basic education with them, but it can provide them only a low paying job which may not improve their existing livelihood. The contribution of labour force of any country adds onto the growth of its economy. The rural youth



have immense potential that can be nurtured in a right direction and can be utilised which can further contribute to country's economic growth.

Since a large fraction (around 69 percent) of the population lives in the rural areas, thereby, seeing the existing gaps between employment opportunities and employment seekers in the rural India, many efforts have been made by the Government of India for the rural young employment seekers with most of the schemes targeting rural youths as beneficiaries. One of the oldest schemes, MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) offers 100 days of guaranteed wage employment to every household whose adult member volunteers to do unskilled manual work. The following table shows the figures of Households that gained benefits from the MGNREGA scheme as in 2020-21.

In Table(a), we can see that Uttar Pradesh has availed a maximum benefit with 81,29,138 households, followed by Uttar Pradesh, Rajasthan, Tamil Nadu and West Bengal. As per the available statistics, there are 28,87,70,467 workers working under the scheme in the time span 2020-21.

Another such scheme is Skill India which includes Pradhan Mantri Kaushal Vikas Yojana which provides training opportunities to the youth. There are short term training programmes under this scheme for the college/school dropouts and the unemployed. Further under this scheme comes Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP), UDAAN, Standard Training Assessment and Reward Scheme (STAR), Polytechnic Schemes and Vocationalisation of Education. SANKALP scheme focuses upon strengthening the institutional mechanisms for skill development and increase access to quality and market-relevant training for youth across the country. It was launched on 19th January 2018. SANKALP has a six-year implementation period till March 2023. The scheme aims at addressing the ongoing challenges, like bringing about convergence, infusing quality in skill development programs and making them market relevant and accessible while ensuring private participation in the context of short-term training. The Udaan scheme was an initiative of the Government of India for the state of Jammu and Kashmir (J&K). It is funded by the

Table (a) State wise figures of Houses that gained benefits from Mahatma Gandhi National Rural Employment Guarantee Act

S. No.	State/UT	Households Benefitted
1	Andaman and Nicobar	5,311
2	Andhra Pradesh	46,07,314
3	Arunachal Pradesh	1,99,473
4	Assam	12,80,065
5	Bihar	37,48,075
6	Chhattisgarh	26,40,959
7	Dadra & Nagar Haveli	0
8	Goa	1,646
9	Gujarat	9,66,824
10	Haryana	3,47,324
11	Himachal Pradesh	5,03,292
12	Jammu And Kashmir	2,66,018
13	Jharkhand	16,00,618
14	Karnataka	21,30,238
15	Kerala	11,06,500
16	Lakshadweep	59
17	Madhya Pradesh	40,79,750
18	Maharashtra	11,70,416
19	Manipur	5,01,061
20	Meghalaya	4,33,574
21	Mizoram	2,05,757
22	Nagaland	3,83,987
23	Odisha	26,30,736
24	Puducherry	46,335
25	Punjab	7,37,242
26	Rajasthan	66,40,296
27	Sikkim	57,509
28	Tamil Nadu	60,04,022
29	Telangana	29,15,645
30	Tripura	5,64,742
31	Uttar Pradesh	81,29,138
32	Uttarakhand	5,18,342
33	West Bengal	57,71,716
	Total	6,01,93,984

Source: https://www.nrega.nic.in/netnrega/mgnrega_new/Nrega_StateReport.aspx?typeN=5

Ministry of Home Affairs and was implemented by National Skill Development Corporation (NSDC). The following scheme is based on the recommendations of the Rangarajan Committee. It has been a major initiative of the Central Government towards making the educated youth (graduates, post-graduates and three-year diploma holders in engineering) of Jammu

and Kashmir employable. 44,369 candidates have joined training under this scheme, out of which, 38,798 candidates have completed training and 24,184 have been offered jobs across different sectors. Many prominent corporates across different sectors have taken part in 204 Udaan Mega selection drives. The National Skill Certification and Monetary Reward (STAR scheme) scheme is another such scheme. It has been launched for encouraging skill development among the youth by providing monetary rewards for successful completion of approved training programmes. Further, there is Advanced Vocational Training Scheme (AVTS). The aim of the scheme is to upgrade and update the skills of serving industrial workers, this was launched in 1977. It was launched by erstwhile DGE&T, Ministry of Labour and (now Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship) in collaboration with United Nations Development Programme/ International Labour Organisation in 1977 at the then 6 Advanced Training Institutes (ATIs) under DGE&T and 16 Industrial Training Institutes of the 15 State Governments. Under the scheme, training in selected skill areas is being imparted through short-term modular courses of one to six weeks' duration. Tailor-made courses suiting to the specific requirements of industrial establishments are also offered. Over 3.5 lakh industrial workers / technicians have made use of the training facilities at the National Skill Training Institute (NSTIs) (erstwhile ATIs) since September 2007. Training facilities in additional areas has been provided by ATIs and the existing training facilities were also strengthened with financial assistance from World Bank. Then there is Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) scheme is there which is a part of the National Rural Livelihood Mission (NRLM). One of the major goals of DDU-GKY is to provide career opportunities, free training, free uniform, free course material, free lodging and boarding in case of residential programs, reimbursements of expenses in non-residential programmes, post placement salary top-ups every month for 2-6 months depending on location of placement and also placement for at least 70 percent of all trained with a minimum salary of Rs. 6,000/- per month (as cost to company) are some of the key features of the scheme. All these policy interventions by

the government have significantly contributed to the employment scenario of country. The Government of India publishes Periodic Labour Force Survey Report annually. The following report states that the share of regular wage employees has increased by 5 percent from 18 per cent in 2011-12 to 23 percent in 2017-18. In absolute terms, there was a significant jump of around 2.62 crore new jobs in this category with 1.21 crore in rural areas. The primary motto of these scheme is not only about training the youths for getting a regular salaried job, but also to train such individuals who want to establish themselves as entrepreneur or training farm workers with necessary tools for improving their cultivation technique. The PLFS estimates also stated that among the self-employed category (employers, own account workers and unpaid family labour), the proportion of own account workers and employers increased, and that of unpaid family labour (helper) has declined, especially for females in the span between 2011-12 and 2017-18. The proportion of total self-employed workers however remained unchanged at 52 percent during this period. The distribution of workers in casual labour category decreased by five percentage points from 30 per cent in 2011-12 to 25 percent in 2017-18 with the decline being in rural areas.

Table (b) Number of Workers (principal status plus subsidiary status, all ages) by Sector, Sex and Employment Status in India (In crore)

Employment Status	Male		Female		Rural	
	2011-12	2017-18	2011-12	2017-18	2011-12	2017-18
Self Employed	17.33	18.68	18.81	18.26		
Own Account Workers	12.94	14.90	11.26	12.45		
Employers	0.64	0.9	0.39	0.49		
Unpaid Family Labour	3.75	2.88	7.16	5.32		
Regular Wage/ Salaried Employees	7.10	9.00	2.93	4.14		
Casual Labourer	9.95	8.61	11.91	9.18		

Source: https://www.indiabudget.gov.in/economic_survey/doc/vol2chapter/echap10_vol2.pdf

All the Government schemes aimed at providing employment have played a significant

role in improving the employment scenario for the rural youths, but the Government schemes alone cannot bring along major changes which are required. A fraction of responsibility lies with the private sector via medium of Corporate Social Responsibility for providing such societal goals. For instance, The National Skill Development Mission that was launched on 15th July 2015. Under this multiple initiatives have been taken to connect with the industries. So far there are 64 partners associated with this mission with an investment of Rs. 215.5 crore covering 237 districts. Under this mission, 71,438 people have been trained and out of them 41,858 have been trained.

Despite of combined efforts of Government and the private sector in the year 2020, the employment scenario was worst hit due to unexpected arrival of the COVID-19 or coronavirus pandemic that has grasped the entire world until now. Due to the announcement of lock down by the Central Government, the Skill Training Programmes had been halted for a while, thereby putting stake the career of many who are reliant on these schemes for getting a job. Though, all such Skill Training Programmes are slowly resuming with relaxation in rules by the State Governments and the Central Government.

One such bottlenecks affecting the employment of individuals in the rural region had been lack of skills possessed by the fraction of rural population. The government schemes along with corporate initiatives have played an immensely important role in removing these bottlenecks, but still there is a long way to go. All these initiatives and schemes may solve the problem of employment in the country, but there are many such factors affecting the employability of the youths. As mentioned, a larger fraction of youth labour force resides in the rural areas, and most of them have to struggle for their livelihood and basic amenities, like, food, clothes and shelter. Food Insecurity is one of the major problems in the Indian economy that has hampered the development process of a country. Nourishment of an individual affects the quality of human capital in a country. Besides nourishment health and education are other such parameters that affects the employment scenario. A person with a poor health reflects as a non-productive

human capital. So does any employing entity require a productive human capital which add on to their organisation as an asset rather than a liability. In this scenario, rural youths stand behind their urban counterparts who come from a decent economic background. Even after training, another challenge on the forefront in the present century is skill upgradation. With advancement in technology, the labour market requires individuals who can update themselves with new age technology, and those who failed to acquire such skills are forced to move out of the system. Thus, even after training, all such beneficiary under the scheme should be motivated to upgrade their skills with time. Besides these job-oriented schemes, further investment in educational sector may help the beneficiary getting Government jobs.

There had been a stigma of lack of employment opportunities in the past few years. It is a harsh reality that there is a mismatch between the employment opportunities for youth and demand for employment. India has high population figures affecting the employment opportunities in the country, but a major portion of the Indian Population is the youth. Youth force of any country is an advantage to its development goals if used in an appropriate productive manner. Thus, time is for training the youths of the nation for a better future ahead.

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Empowering Rural Artisans to make them AatmaNirbhar

Tripti Nath

Since rural artisans belong to the unorganised sector, government schemes are imperative to strengthen them economically. After all, they are custodians of our cultural heritage. Given the fact that so many ministries are putting their resources together and handholding artisans, the day is not far when India's rural artisans will arrive on global stage.

India's exceptionally gifted rural artisans have contributed significantly to nation's economy for many decades by their eye catching work. The art and handicrafts sector is the second largest employment generator after agriculture. According to the 2011 Census, there are over 68 lakh artisans in the country of which 55 percent are women. Handicrafts have sustained lakhs of artisans through the years. The sector provides employment to a large number of craftspersons in rural and semi urban areas and also generates substantial foreign exchange for the country. Its contribution in preserving India's cultural heritage deserves to be acknowledged.

India is the world's largest producer and exporter of handmade carpets since 2013-2014.

This is not surprising given the fact that 20 lakh of the total number of artisans are related to the carpet sector. The diversity of India's handicrafts is equally impressive. These include Dhokra, the oldest form of handicraft made by Tribals which originated in Madhya Pradesh. Apart from these, India has a rich variety of handicrafts of clay, paper, embroidery, bamboo, cane, jute, shell wood, rock, bell metal, bone, horn and brass. To organise and standardise the Indian handicrafts, approximately 22.85 lakh artisans have been trained under 'Pahchan' initiative.

Self reliance is the philosophy handed down to Indians by none other than the Father of the Nation Mahatma Gandhi and Prime Minister Shri Narendra Modi's continued emphasis on encouraging self reliance through the Make-in-India initiative is well known.



Prime Minister Shri Narendra Modi has given skill development much needed focus. He observed, "The mantra to remain relevant in today's rapidly changing business and market is skill, reskill and upskill. With this vision, we are constantly taking concrete steps to build a future-ready workforce."

Recognising that the artisans are constantly struggling to sustain themselves, the Central government launched, in its first term, a trade facilitation centre and crafts museum in Varanasi in 2014. The objective was to bring weavers and artisans under the same roof and give them marketing opportunities. The Ministry of Skill Development and Entrepreneurship (MSDE) conceptualised by Prime Minister Shri Narendra Modi in 2015, has left no stone unturned, to realise his dream of making India the enviable skill capital of the world. To take these noble objectives forward, the Government introduced a programme called *Poorv Kaushalya ko Manyata* better known as Recognition of Prior Learning (RPL) as a component of its flagship scheme- the Pradhan Mantri Kaushal Vikas Yojana.

PMKVY (2016-2020) is a grant based scheme, providing free of cost skill development training and skill certification in 371 job roles to increase employability of the youth. It is believed that almost 40 lakh persons in different corners of India have benefitted from the RPL programme. It is noteworthy that almost a lakh of these are artisans and weavers with traditional skill set who were so far in the unorganised sector but are now willing to take on the world with upscaled technology and digital literacy with newfound confidence and self reliance (*AatmaNirbharta*). These initiatives are being implemented in close coordination and cooperation with State Governments, Union Territories and related ministries such as Ministry of Rural Development, Ministry of Textiles, Ministry of Women and Child Development and Ministry of Ministry of Micro, Small and Medium Enterprises.

The Skill India programme of the government also has a dedicated handicrafts and carpet skill council aimed at preserving cultural heritage. In India, the handicrafts sector employs 7.3 million persons mostly from rural and semi urban areas whereas the carpet sector employs two million

weavers. According to projections made by a study conducted by the National Skill Development Corporation, the incremental employment growth in this export oriented sector stands at 3.86 million by 2022.

To begin with, a study is being conducted in 26 clusters/districts of various crafts covering artisans/beneficiaries. The Skill India programme has identified close to 90 job roles across sub sectors such as carpets, ceramics, glassware, traditional fashion jewellery, handcrafted textiles, handicrafts such as incense sticks and bamboo, metal ware, papier mache, stone craft, wood ware and handicraft toys.

Besides RPL, the Skill India programme imparts fresh training in the above mentioned sectors. In another unique initiative, the Ministry has collaborated with school boards such as the Central Board for Secondary Education to catch young citizens. The objective is to acquaint the youth with India's cultural heritage at an early age to equip them with skills and give them a possible career option. Similar initiatives have also been taken in Jharkhand and Punjab.

Last summer, the Odisha Government developed a project that aims to skill 3000 women artisans in golden grass craft in 12 villages of Kendrapara block in Kendrapara district. This project was developed by the District Skill Committee of Kendrapara in collaboration with State Institute for Development of Arts and Crafts (SIDAC). It was taken up as a national pilot project under a grassroots focussed initiative SANKALP (Skill Acquisition and Knowledge Awareness for Livelihood Promotion) of the Ministry of Skill Development. Sources in MSDE explained that SANKALP aims to encourage best practices at the local level. Inclusion is one of the key pillars of SANKALP and efforts are made to ensure that skill development programmes reach the under-served and marginalised groups. The project is focused on skilling women artisans to provide them basic, intermediate and advanced skill training along with entrepreneurship development and linkages. These women are economically weak and depend on seasonal agriculture as their main source of income. The idea is to help them turn this traditional art form into a lucrative livelihood option. Women artisans will also benefit by exposure visits as part of the pilot programme.

Another motivating component in the pilot programme is establishment of a Community Owned Company (COC).

The Ministry of Minority Affairs has been organising Hunar Haats under USTTAD (Upgrading the Skills and Training in Traditional Arts/Crafts for Development) scheme. The USTTAD scheme aims at preserving and promoting the rich heritage of the traditional arts and crafts of the minority communities.

The USTAAD scheme launched in 2015 is a centrally sponsored scheme. The Ministry invites applications for training under the scheme by putting out advertisements in newspapers across the country. The Ministry of Minority Affairs felt that although the minority communities in India are known for their traditional skills, the young generation needs to be adequately encouraged to pursue these skills and keep these arts and crafts alive. By building capacity of master craftsmen/artisans and getting these master craftsmen to train the young generation, the government has been running the USTAAD scheme with the help of implementing agencies. It also helps to create livelihood for marginalised minorities and bring them into mainstream. The Ministry has roped in agencies such as the National Institute of Fashion Technology and Export Promotion Councils to equip implementing agencies with technical inputs to upgrade the traditional skills of master

craftsmen and artisans. The scheme also supports craftsmen and artisans through Hunar Haat to market their products in exhibitions in India and overseas. Although the target beneficiaries of the scheme are members of the minority community, the Ministry has kept in mind inter-community solidarity. Therefore, 25 percent candidates from BPL (Below the Poverty Line) families of non-minority communities are also considered. In addition, three percent seats are reserved for differently-abled persons belonging to minority communities. Minimum 33 percent seats are earmarked for minority girls/women. The trainee should be between 14 to 45 years of age. Upper age limit can be relaxed for differently abled members of the minority community. Any person wishing to join the training must have studied atleast until Class V, but relaxation is made for differently-abled persons belonging to minorities.

While inaugurating the 22nd Hunar Haat last year after a COVID-19 necessitated gap of around seven months, Union Minister for Minority Affairs Mukhtar Abbas Naqvi said, 'Hunar Haat' is becoming an effective platform to strengthen the mission of "AatmaNirbhar Bharat" and "Vocal for Local" initiative by promoting and encouraging indigenous products of master artisans and craftsmen. The 22nd Hunar Haat was the first time the Ministry held a Haat in virtual and real space at the same time. Hunar Haat provides master artisans an enormous platform by way of market



access and opportunities. It has become a credible brand of rare exquisite indigenous handmade products. These magnificent indigenous products of master artisans are the local pride and have earned global praise for Hunar Haat. The Minister said that every corner of the country has a traditional and ancestral legacy of indigenous products which are on the verge of extinction. After Prime Minister Shri Narendra Modi pitched for 'Swadeshi', the indigenous industry has got a tremendous boost. The Ministry confirmed that 90 percent of those who have benefitted by participating in Hunar Haat are from rural areas through the length and breadth of India. These include tribals from Chhattisgarh, Jharkhand and Madhya Pradesh. The Minority Affairs Ministry has organised nearly two dozen Hunar Haats so far across the country where lakhs of artisans and craftsmen have been provided employment and employment opportunities.

The last Hunar Haat in real and virtual space in 2020 was held in Rampur, Uttar Pradesh in December. It attracted 200 stalls and double the number of artisans. Minority Affairs Minister Mukhtar Abbas Naqvi said in Rampur that Hunar Haat has become an effective mission of the government to provide backup to brilliance and encouragement to expertise. He hailed the participation of master artisans and craftsmen from Rajasthan, Nagaland, Madhya Pradesh, Manipur, Bihar, Andhra Pradesh, Jharkhand, Goa, Punjab, Ladakh, Karnataka, Gujarat, Haryana, Jammu-Kashmir, West Bengal, Maharashtra, Kerala and other places of the country who brought their indigenous products made with wood, brass, bamboo, glass, cloth, paper and clay. Besides fulfilling the commitment to AatmaNirbhar Bharat, Hunar Haat has also proved to be an effective platform to provide large scale employment and employment opportunities to master artisans and craftsmen from every corner of the country.

The first Hunar Haat of the New Year is already taking place. Applications for participation in Hunar Haats are invited on a wide range of media platform. The stalls are provided free of cost and the artisans are given daily allowance and travel allowance. The earnings from the stalls go entirely to the artisans.

Handicraft artisans can avail of MUDRA loan and margin money provided by the Office of

Development Commissioner (Handicrafts). Under the National Handicrafts Development Programme in 2018-19 and 2019-20, the office of Development Commissioner (Handicrafts) implemented the Direct Benefit Scheme for artisans as a welfare measure. Some of these schemes included the Handicrafts artisans comprehensive welfare scheme which gives the artisans an identity card to enable them avail of all the schemes of the government.

The schemes implemented by office of the Development Commissioner (Handicrafts) are composite in nature and not specific to area, caste or gender. The artisans belonging to all communities including women artisans draw benefits from the schemes. Office of Development Commissioner (Handicrafts), is implementing over half a dozen generic schemes for the development of the handicrafts sector. These are the Ambedkar Hastshilp Vikas Yojana, design and technology upgradation, marketing support and services, research and development, human and resource development, handicrafts artisans comprehensive welfare scheme and infrastructure and technology development scheme. While Baba Saheb Hastshilp Vikas Yojana launched in 2001-02 is a cluster specific scheme, the other schemes cut across clusters.

A subsection of the Ambedkar Hastshilp Vikas Yojana named Dastkar Sashaktikaran Yojana, facilitates community empowerment for mobilising artisans into self-help groups and societies. Once this is done, the implementing agency prepares a diagnostic study report (DSR) for proposing further interventions in the cluster. Under the design and technology upgradation sub section, a 25-day workshop is held to develop prototypes to cater to the tastes and preferences of contemporary market by using traditional skills of artisans. At the same time, new technologies and techniques are used to step up production. Apart from this, other welfare measures are the Pradhan Mantri Jeevan Bima Yojana/ Pradhan Mantri Suraksha Bima Yojana and Modified Aam Aadmi Bima Yojana through Life Insurance Corporation of India to provide life insurance protection to handicraft artisans.

The Mahila Coir Yojana scheme exclusively for training rural women artisans in spinning of coir yarn/various coir processing activities is provided to rural women. The scheme envisages distribution



of motorised ratts/motorised traditional rats and other coir processing equipment to women at subsidised rates after completion of training.

The Workshed scheme for Khadi artisans gives financial assistance for construction of work shed to artisans belonging to BPL category through Khadi institutions with which the Khadi artisans are associated. This is definitely empowering for Khadi spinners and weavers. Recognising that artisans hardly get any opportunities to sell their products in departmental stores and shopping malls, the government launched in 2017 the India Handmade Bazaar, an online portal to give them direct market access by listing their products.

The theme based handicrafts portal of the government known as Theme Crafts showcases more than 45,000 products of approximately 9000 artisans, retailers, exporters and government awardee. It focuses on five themes – Needle work, tribal crafts, natural fibre and eco-friendly crafts, fashion accessories and festive decorations.

The Ministry of Micro, Small and Medium Enterprises has been implementing a Scheme for Promoting Innovation, Rural Industry and Entrepreneurship (ASPIRE) to create new jobs in traditional and agri-based industries. Finance Minister Nirmala Sitharaman's maiden Budget presented in Parliament focussed on reviving traditional industries such as bamboo, khadi and honey, through a cluster-based approach. This will be done under the Scheme of Fund for Regeneration of Traditional Industries (SFURTI), which aims to organise such industries and artisans into clusters to make them competitive and provide support for their long-term sustainability, sustained employment, and enhanced marketability of products. SFURTI works towards development of khadi, village industries, and coir clusters by providing workers improved equipment, common facilities centres, business development services, training, capacity building and design, and marketing support.

The government has also taken positive steps to empower tribal artisans. India is home to a large number of tribal people known as Adivasis and has the second largest tribal population in the world. India still has more than 200 tribal communities. The government has initiated a number of steps to develop socio economic conditions of tribal population in the country. One of those initiatives led to the formation of Tribal Cooperative Marketing Development Federation of India Limited (TRIFED) in 1987. TRIFED enables the tribal artisans even from the innermost regions to participate in the process of their socio-economic development through formulation of decent earning methods. The sellers can directly sell their products to TRIFED from where they are marketed through its several retail outlets and e-commerce platforms to reach the genuine buyers out there.

Since rural artisans belong to the unorganised sector, government schemes are imperative to strengthen them economically. After all, they are custodians of our cultural heritage. Given the fact that so many ministries are putting their resources together and handholding artisans, the day is not far when India's rural artisans will arrive on global stage. According to Compendium of Geographical Indication Tags of India, a good number of handicraft products were registered crafts under Geographical Indication (GI) Tag. This will work wonders and help artisans get credibility for their products. Some of the handicrafts that have been given GI tags recently are Madhubani paintings of Bihar, Kangra paintings of Himachal Pradesh, Kutch embroidery of Gujarat, bronze ware from Karnataka, and Phulkari from Punjab.

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Rural India-The Periphery of Development

Remya Lakshmanan

In India, the rural areas have seen substantial development because government policies aimed at improving rural housing, sanitation and welfare have contributed to transforming its landscape. With half of India's population expected to be in rural India by 2050 and the bulk of workforce emanating from rural India accounting for 70 percent of the total workforce, it is widely acknowledged that the country's overall development will move parallel to the development of rural India.

Since independence, rural India has remained at the periphery of development that urban India has achieved. Benefits trickled down to the rural hinterlands, but they were a far cry from the prosperity urban India enjoyed. However, in recent times, the rural areas have seen substantial development because government policies aimed at improving rural housing, sanitation and welfare have contributed to transforming its landscape. India has more than 50 percent of its population below the age of 25¹. With half of India's population expected to be in rural India by 2050 and the bulk of workforce emanating from rural India accounting for 70 percent of the total workforce², it is widely acknowledged that the country's overall development will move parallel to the development of rural India.

The government, true to its motto of 'Sabka Saath, Sabka Vikas' has rolled out policies targeted at rural development with a particular focus on

providing employment to rural youth without them having to migrate to cities. For instance, the Deen Dayal Upadhyay Grameen Kaushal Yojana targets youth under the age group of 15–35 years. An amount of Rs. 5600 crores has been provided for the scheme which will help in enhancing youth employability. The scheme is present in 28 States and Union Territories across 689 districts and 7426 blocks, changing the lives of youth. Nearly, 1575 projects are being implemented by 717 partners. Over, 10.8 lakh candidates have been trained till now, and almost 6.3 lakh candidates have been placed in jobs.³ To accelerate the long-term vision of developing the potential of tribal youth and women and integrate them into the mainstream, Ministry of Tribal Affairs in collaboration with Facebook has introduced GOAL programme to provide mentorship to tribal youth through digital mode. Dedicated to preserve the tribal culture and enhance the entrepreneurial capacity of tribal youth, key focus is given to sectors like horticulture, food processing,



beekeeping, tribal art and culture and medicinal herbs that are native.⁴ Additionally, rural women-focused programmes such as 'Nai Roshni' have been instituted to empower women who are key change agents, contributing to inclusive and sustainable growth in rural communities.

Alongside, for the general development of rural areas, the government has assured to provide electricity and clean cooking facilities to all willing rural families by 2022 under Ujjwala and Saubhagya Yojana. Pradhan Mantri Awas Yojana – Gramin (PMAY-G) will provide 1.95 crore houses to eligible beneficiaries during its second phase (2019-20 to 2021-22) along with amenities like toilets, electricity and LPG connections.⁵ Swachh Bharat Mission will be expanded to undertake sustainable solid waste management in every village. These initiatives have radically improved the standards of rural living, improving prospects for youth.

Bridging the Urban-rural Divide

Besides the social welfare programme efforts, the Government's Digital India campaign that aims to connect the entire country digitally has provided a great impetus to transform rural India to match its urban counterpart. Internet today has become the bridge between urban and rural parts of the country as well as a catalyst to rural development. Hailing India as a land of opportunities, in his

keynote address at 'India Ideas Summit', Prime Minister Shri Narendra Modi mentioned that there are more rural internet users than urban ones⁶. This increased internet penetration, although relatively recent, has immense potential benefits for rural households.

In the meantime, digital technology has facilitated important 'quality of life' improvements in rural areas. Access to online markets, food delivery, and streaming entertainment, for example, has narrowed the gap between the experience of urban and rural populations. Besides enabling tech-ecosystems, digital infrastructure has helped attract higher-paying jobs and allows remote work too; thus, addressing migration from villages. Rural youth have increased gains from economic activities through easy access to market information and global markets. These parallel processes help provide a competitive landscape for pricing and fair competition.

Perhaps the most significant impact of internet penetration is the support it provides to rural entrepreneurship. New technologies are creating opportunities in rural areas that never previously existed. Today, a rural entrepreneur can start an online store to sell his product with a few clicks. Several online platforms have been set up to promote grassroots innovations to solve social challenges in rural areas and connect innovators with investors, venture capitalists, incubators,



and other stakeholders in the entrepreneurial ecosystem. For instance, the Rural Innovators Startup Conclave (RISC) 2019 organised by National Institute of Rural Development and Panchayati Raj (NIRDPR) in Hyderabad showcased startups, giving rural innovators a platform to showcase their technologies⁷.

Digital penetration has also improved access to finance, education, and healthcare, which are important pillars to enhancing the quality of life, affecting rural economic productivity in the long term. Technologies like UPI, Aadhaar have been a driving force of financial inclusion by providing financial products and services to the previously unbanked and/or underbanked. Advanced technology in healthcare through remote diagnostic capabilities and web portals that disseminate basic health information has improved healthcare outcomes and hence, the productivity in rural areas.

Despite several challenges, the nation saw the largest spike in online learning during the pandemic months. Digitally enabled education is envisaged as a panacea to solving issues in imparting quality education in rural India. Along with the National Education Policy 2019 that includes online learning as an alternative, the government has taken various initiatives to promote digital learning under the National Mission on Education through Information and Communication Technology (NMEICT). Other such initiatives include SWAYAM, SWAYAM Prabha, National Digital Library (NDL) and Free and Open-Source Software for Education (FOSSEE). National Skill Development Corporation (NSDC) e-Learning aggregator portal — eSkill India has been offering curated courses in partnership with various knowledge partners to provide numerous online skilling opportunities. Along with the support of public-private initiatives and ed-tech companies, these programmes can make digital education more robust. Through digital interventions, democratising education will help prepare rural youth to adapt to the evolving challenges and be the beneficiaries of equal opportunities.

Cultivating a new Breed of Farmers

There is vast potential if rural youth find farming a modern and attractive employment sector. Agriculture is still a primary source of

livelihood; it engages more than 50 percent of the workforce⁸. Although more than half the population is engaged in agriculture, its contribution in Gross Value Added (GVA) has seen a steady decline from 18.2 percent in 2014-15 to 16.5 percent in 2019-20⁹. Being digitally savvy, the new generation can use technology to bring dynamism to agriculture and solve some of its major challenges.

It is beneficial to expose young people to agriculture early on and involve them in all aspects of the value chain. The global increase in food demand, increased adoption of technology in agriculture and assistance in monitoring livestock performance and health are some of the key drivers to the rise of 'Smart Agriculture Market'. The seven sectors of satellite mapping, e-market platforms, livestock traceability, climate sensing stations, product traceability, agriculture drones, and smart farming together have the potential to create approximately 2.1 million additional jobs with an annual job value of around INR 34,000 crores for the agriculture sector in the next decade¹⁰.

Experiential learning programmes on the production of high-value products and critical interventions to develop supply chains and marketplaces, platforms to disseminate information and knowledge sharing for better sale of agriculture produce, can all help attract rural youth towards farming and its allied activities. There are immense opportunities and prospects beyond farming too. They can invest in agriculture-allied activities such as energy from farm waste, processing agri-products, food storage, and logistics to help rebalance rural India's contribution to the economy. Infusion of capital, combined with creating local champions, particularly women and youth, will be essential to develop a strong foundation for positive, long term social and economic outcomes. Developing a new generation of 'Agri-preneurs' will be a stimulant to achieve the government's goal of doubling farmers' income in real terms by 2022.

Looking to the Future

The pandemic has created a situation where even the urban dwellers chose to temporarily migrate to the safer, untouched rural lands for months or more. Many hospitality companies



have already started reaping benefits out of the opportunity this situation has created. Rural natives have also chosen to stay at their hometowns and engage in traditional economic activities. The government and other social development organisations must grab this opportunity and initiate policies explicitly targeted at reverse migration. Companies can explore this window of opportunity to test the possibilities of 'rural shoring'. 'Rural shoring' is a great option for companies who want to realise the benefits of outsourcing by giving work to service providers in rural locations where the cost of living and operations will be much lower. These sourcing providers can be set up near colleges and institutions with a high concentration of skilled and educated youth who want to enter the workforce. With the expanding digital infrastructure and targeted interventions in skilling, this could prove to be a win-win situation for both companies and rural youth.

The government ensures that social structures are set up to help rural youth in India move forward. This includes an improved education system, qualitative healthcare and connectivity. Rural areas enjoy better access to markets through information and transport, significantly increasing opportunities for the masses, especially the youth. Effective government policies and programmes

continue to strengthen social and human capital, develop skills, and stimulate self-confidence among our youth. As a result, their ability to act improves and their productivity increases.

Footnote

- 1 Report_Population_Projection_2019.pdf (nhm.gov.in)
- 2 Rural_Economy_DP_final.pdf (niti.gov.in)
- 3 <http://ddugky.gov.in/>
- 4 <https://pib.gov.in/PressReleasePage.aspx?PRID=1624021>
- 5 <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1577423>
- 6 <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1640501>
- 7 <http://www.nirdpr.org.in/risc2019/>
- 8 <http://agricoop.gov.in/sites/default/files/agristatglance2018.pdf>
- 9 <https://pib.gov.in/PressReleasePage.aspx?PRID=1601252>
- 10 https://www.researchgate.net/publication/342610795_Youth_and_Agri-Start-ups_A_Review_in_the_Indian_Context

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Frequently Asked Questions on COVID-19 Vaccine

Will COVID-19 vaccine be given to everyone simultaneously?	Based on the potential availability of vaccines the Government of India has selected the priority groups who will be vaccinated on priority as they are at higher risk. The first group includes healthcare and frontline workers. The second group to receive COVID-19 vaccine will be persons over 50 years of age and persons under 50 years with comorbid conditions.
Is it mandatory to take the vaccine?	Vaccination for COVID-19 is voluntary. However, it is advisable to receive the complete schedule of COVID-19 vaccine for protecting one-self against this disease and also to limit the spread of this disease to the close contacts including family members, friends, relatives and co-workers.
Will the vaccine be safe as it is being tested and introduced in a short span of time?	Vaccines will be introduced in the country only after the regulatory bodies clear it based on its safety and efficacy.
Can a person presently having COVID-19 (confirmed or suspected) infection be vaccinated?	Person with confirmed or suspected COVID-19 infection may increase the risk of spreading the same to others at vaccination site. For this reason, infected individuals should defer vaccination for 14 days after symptoms resolution.
Is it necessary for a COVID-19 recovered person to take the vaccine?	Yes, it is advisable to receive complete schedule of COVID-19 vaccine irrespective of past history of infection with COVID-19. This will help in developing a strong immune response against the disease.
Out of the multiple vaccines available, how is one or more vaccine chosen for administration?	The safety and efficacy data from clinical trials of vaccine candidates are examined by Drug regulator of our country before granting the license for the same. Hence, all the COVID-19 vaccines that receive license will have comparable safety and efficacy. However, it must be ensured that the entire schedule of vaccination is completed by only one type of vaccine as different COVID-19 vaccines are not interchangeable.
Does India have the capacity to store the COVID-19 vaccine at temperature of +2 to +8 degree Celsius and transport them at required temperature?	India runs one of the largest immunisation programme in the world, catering to the vaccination needs of more than 26 million newborns and 29 million pregnant women. The programme mechanisms are being strengthened / geared up to effectively cater to the country's large and diverse population.
Will the vaccine introduced in India be as effective as the ones introduced in other countries?	Yes. The COVID-19 vaccine introduced in India will be as effective as any vaccine developed by other countries. Various phases of vaccine trials are undertaken to ensure its safety and efficacy.
How will I know if I am eligible for vaccination?	In the initial phase, COVID-19 vaccine will be provided to the priority group- Health Care and Front-line workers. The 50 plus age group may also begin early based on vaccine availability. The eligible beneficiaries will be informed through their registered mobile number regarding the Health Facility where the vaccination will be provided and the scheduled time for the same. This will be done to avoid any inconvenience in registration and vaccination of beneficiaries.
Can a person get the COVID-19 vaccine without registration with Health Department?	No, registration of beneficiary is mandatory for vaccination for COVID-19. Only after registration the information on the session site to visit and time will be shared with the beneficiary.

Q & A With **Ranjitsinh Disale**

INNOVATION IN EDUCATION

Ranjitsinh Disale was awarded the prestigious Global Teacher Award in December 2020 for contributing in the field of education among tribals and girls in Solapur district of Maharashtra. The Editor of Yojana English, Shuchita Chaturvedi spoke with Shri Disale on his exemplary work with rural children.

Question: Tell us about your childhood, how you perceived education then. What was the support from the family, and how did you fill these gaps in imparting quality education?

Ranjitsinh: I was an ordinary child doing so many things. My brother was brilliant and sharp. I was completely different. Actually, I was inclined toward computers since childhood. I was many times kicked out of the schools by my teachers and they always complained about me for not performing well in the classroom.

Question: What are the biggest takeaways from that?

Ranjitsinh: I met Dr. Vijay Bhatkar - Supercomputer man of India. He was invited as a Chief Guest at our school's Annual Function. And that time, I had designed an oval-shaped computer screen. So that was my model. And when he saw that, he visited me and told me that you should design better for a better future. That was the moment which inspired me to work in the field of computer science and work for society. This is the only thing that I still remember from childhood. Even though my teachers were complaining about me and punishing me every time, but in reality, they were thinking for my betterment. I opted for computer science in fifth grade. It was an optional subject and we had to pay an extra fee for that. But I know continuously pushing my parents to pay the

fees. I wanted to learn about computer science. At that time, it was really a new thing.

Question: There is a perception that it is the end of the road after getting a government job. There is a stagnancy which comes to it. And it is evident in your case, the journey began with it. So tell us about how it started? Being a government servant, how do you see this road towards the transformation of the education system?

Ranjitsinh: When you get a job, you don't need to worry about the salary and any other things if it's not well-secured. Every day you're working with humans and those humans are the futuristic citizens of the country. And they're actually very innovative and energetic students. So you cannot be very cool, shy and reserved with them. You should always be ready and energetic to interact with the students. When I started working in 2009, I faced a lot of troubles. My classroom was in a cowshed with buffaloes and goats and cows, which was really shocking for me. And I never imagined that there are such classrooms in India that are using that as a catalyst. So when I got back home, I was really worried about the situation of the schools and the indifference of the parents towards education.

It took six months to get back to my classroom. And in those six months, I realised that if the parents could believe in education, if I could get them to trust that education is the only way to change your status or find out the solutions, they might change their mindsets. And I surveyed the entire village, found data about the population, their economic status, their educational level. I submitted the data, analysed it, and realised that all the girls are

more educated than the males. So this was really interesting to me as it was something different. So I am more focused on women's empowerment and their participation in education. And that's why I started the community engagement program with the parents. I rented a room and started living there. I participated in cultural programs. The interaction with the parents did not involve any questioning like why they are not sending their daughters and boys in the class. My goal was to show them how education can change their lives and open windows of opportunity for them. They finally realised that this man is trying to do something different. Simultaneously, I also worked towards increasing the attendance of students in the classrooms because marginally two or three students were attending the classrooms, but the rest of them were sitting at home, and others were lending the helping hand to the parents at the farm. So I started with it, and everyone was upset. I went back to their homes, taking them back to school every day. It was my job for at least six or seven months. Then, after a year long time, I was thinking to change something in the classroom to make it more interesting and enjoyable. But first I asked my father to buy a laptop for me because at that time my salary was merely two thousand rupees per month. So I asked my father to give me a laptop so that I can use it for students. So he gave me one, and that really changed the environment in our classroom. So we were enjoying watching the movies, singing songs and everything that they wanted to watch. I asked them, what do you want to see on the computer/on my laptop? They said, "Sir, we want this movie or this song". When they got back home they discussed with the colleagues and friends that, 'today we are watching this movie. Tomorrow we'll be watching this one.' So this was a method to catch the attention of others, those who were actually working in the farms and leaving the house. They thought school is something different. We can watch movies and enjoy them. Initially, the focus was not on education but to let them just enjoy and get them back in the class. Gradually, they started coming and attendance increased day by day. And then I saw entertainment turning into education. It's like edutainment how they can

learn enjoying the games and other things. We started making some small videos/ power point presentations and YouTube videos translating in Marathi and giving them some voice. So these were the initial steps to change the educational status of the system in their respective school districts.

Question: In terms of education, there are many other teachers in the world who are trying to bring out such a change in the society within their own limitations and we all have heard how you have decided to share the prize money with the other contestants. Do you have any plan to engage with teachers worldwide in a way to bring this transformation into grassroots sharing the best practices and maybe taking this journey forward?

Ranjitsinh: Yes, that's why I decided to collaborate and share that prize money with the intention that all the prize money they will be getting can be utilised for innovative practices and other things. I can interact with these kids and know if they have some innovative ideas to take back into my classroom. It's like a collective effort to grow together. So, already we have a network of such teachers at the international level. But now I am thinking about having mutual interactions and collaboration between them. Through one of my project, "*Let's cross the Borders*", Indian students interact with students of other countries. So that really helps me grow as a teacher and a human as well. Ultimately, it will help my students to broaden their horizons. Like ultimately we are global citizens, if you want to be a global citizen this experience is what exactly students in other class, other countries are thinking. Well, I think that collaboration will really help me and ultimately, education sector.

Question: Since introducing the QR codes and textbooks was such a basic idea but eventually turned out to be a big game changer. How did you go about it and how actually it reached the levels of NCERT that they actually do the textbooks?

Ranjitsinh: Yes, so actually the initiative was, I told you the computer based laptop. I was engaging them. At the end of every week, I created digital content. I transferred it through the memory card. The students bring their mobile phones. I transfer

the data from my laptop to their mobile phones. Sometimes the files get corrupted. Sometimes the file is not supported by their respective handsets. So I was trying to find out the solution because there were some students, still do, who were not coming to schools. They were living far away from the schools and I couldn't reach out to them every day. So how these students can access education and how education can be reached to them? I was working on that. We can give them access even though they are sitting at home. The only way was textbooks but a textbook will not help them because ultimately they need someone to explain the concept in a better way so I was just recording the videos in my classrooms. Whatever I was teaching, I was recording it and the videos were being uploaded on a drive.

Once I went to a shop. I saw the shopkeeper scanning the QR Code of a product and the price was displayed on the scanner. That really sparked my interest. So I thought how this could happen? I got back home and started searching it on the internet. At that time I really do not know what a QR Code was so I sorted through the image but I didn't know how to search and what to search? Then I started to make QR Codes and learned to embed data in it. I created 27 QR Codes for my students and all the content being embedded in the QR Code.

Question: Would you like to share some new experiences that can benefit teachers like you across the country, especially during the pandemic days when underprivileged children need equality?

Ranjitsinh: If you have the mobile devices then you have access to control. But access to the technology is really missing in the various part of the country. We need to focus more on the quantitative aspect of e-learning. Even the children who have access to technology, are at the receiving end in this age of pandemic. They do not have two-way communication in terms of the classes conducted online. And teachers are not trained for that right now and ultimately this pandemic had pushed the schools to shift from conventional teaching to online teaching. Ultimately, online teaching is

completely different. This is the opportunity for the policy makers to work on these aspects as well. We need to empower teachers as well, so that they could learn the nuances of online teaching.

Question: Coming to the policy, the policy change you have discussed how do you see the new education policy? It has a focus on the regional language and how can things be different for the children say ten years down the line?

Ranjitsinh: The New Education Policy is actually going to be the game changing policy in the educational system of India because so many years have passed still we are lacking the new idea. This policy focuses on student-centric pedagogy and will really change the pace of education. It will lead to teachers' empowerment as well.

And these initiatives are actually operated by the government. They have their own prototype and they have that structure. They're never flexible. So these initiatives should be taken from the grassroots level. It doesn't mean changing the lives of people. Your role is actually to target soft outcomes. So you see the difference between my perspective and the policy although I don't think they focused more on those statistical facts or the outcomes or the target. But I won't focus on the outcomes but ultimately I don't want to, every goal is now empowering. Everybody is getting the job. This is not my thought. You want them to have the confidence, self-esteem so they could actually become innovative with their own status in society.

Question: Publications Division has journals and newspaper including Yojana, Kurukshetra, Bal Bharti and Employment News published in 13 languages read by the children and the youth. So what would be your message to them?

Ranjitsinh: I think children should listen to their voice. They should not get bothered by the parents. Stick to your interests and do your best. I have seen fathers wanting their child to become scientist, engineer etc. but nobody is willing to listen to their child's wants and wishes. In my class, I make sure every student is heard. Always listen to the internal voice. □