International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

TRANSFORMATIVE ROLE OF NATIONAL SKILL DEVELOPMENT COUNCIL (NSDC) FOR SUSTAINABLE SKILL DEVELOPMENT

Rev. Fr. Dr. Thumma Fatimareddy
St. Joseph's Degree & PG College
Hyderabad - 5000029
tfreddy23@gmail.com

Prof. R. Anita
Professor & Controller of Examinations
St. Joseph's Degree & PG College
Hyderabad - 5000029
anitarolla1972@gmail com

Abstract

Skill development is a vital sustainable goal and key priority of the Government of India at the national level. It is imperative for any country to adapt the required skills, attitude and survive in this disruptive economy. This research paper presents the importance of green skill development for sustainability and the role of NSDC is skilling the youth of the country. The paper concludes with the recommendations for imparting green skills and gives the areas/jobs which require green skills.

Keywords: Green skills, sustainable development, employability, NSDC

Introduction:

Skilling youth is one of the vital goals of the government of India. The primary objective is to develop skills with employability linkage. Though skill development was made a priority, still the shortage of skilled manpower is observed in the areas of forest, climate change, environment and other related sectors which need to be addressed correctly.

According to Ganeshan, M K & .C, Vethirajan. (2020), India's 65 percent of the population is below 35 years of age and 70 percent of the population will be of working age by 2025. If a maximum of this 70% of the population is trained, employed and made productive India can easily capitalize on the demographic dividend advantage and this can lead to sustainable development else it can be a demographic liability.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

The Government of India initiated the incorporation of National Skill Development Corporation (NSDC), a public-private partnership (PPP) in October 2009 to create the foundation for building a robust ecosystem in order to stimulate the Indian skill development sector across the country in various sectors. Pradhan Mantri Kaushal Vikas Yojana is the Government of India's flagship skill development scheme that was initiated to impart skill to ten million youth of the country. NSDC has made several interventions to ensure sustainable skill development in the country through training centres. Efforts were also initiated and carried out to enhance the entrepreneurial and employability skills. Furthermore, initiatives like training in green jobs were taken by NSDC to promote environmental sustainability. All the above efforts were taken to align emerging skills with the job requirements and supply required skilled manpower. Economic Survey (2018-19) mentions that 93% of the total workforce which is 45 crore in India is from the unorganized or informal sector which is approx. 41.85 crore (Riya Rana 2020). In order to train the unorganised sector workforce, a structured skilled development system was initiated by NSDC.

The 183 signatory states of the Paris Agreement 2015 on climate change recognized the urgent need to tackle the pressing challenges of Climate change and environmental degradation. action. The transition to a green economy has great potential to create millions of sustainable jobs.

Green skills/Sustainability skills are those skills that are needed for adapting the services, processes and products to the climate changes and regulations of the environment. These skills need to comply with the environmental requirements. They include the competencies and values needed to develop, live in and support resource efficient processes and technologies. These skills need to be integrated with the businesses and communities to form a sustainable society. According to Accenture's report, green economy skills are characterized as being vocational, hybrid and specialized.

It is the responsibility of the country to develop into a greener economy by simultaneously developing the required green skills, knowledge, values and abilities. In order capitalize on

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

environmental, social and economic benefits one need to identify, create and assess the green skills required for transition of the economy to low-carbon economy

Green jobs fall into three main categories:

1. Production of new green goods and services like solar panel designers, bio/nano fuel cell engineers etc.,
2. Modifying and Adapting the existing goods and services to be greener like energy efficient automotive designers, industrial ecologists etc.
3. Jobs that Manage and support the green economy like green educators, environmental economists and scientists etc..

Accenture's report mentions that there is a large gap between the available green jobs and the number of youth who want these jobs. Present day sustainability issues and problems demand fresh and hybrid talent that not only shape the future green economy, but also to successfully run it.

The present study is undertaken to study the transformative role of NSDC in the area of Skilling for the Green Economy. Conceptual Research study is undertaken for the present study. Data is collected from Secondary sources that are e- resources and various government websites.

Methods & Materials:

Initiatives were taken by the Ministry of Environment, Forest & Climate Change (MoEF&CC) from June, 2017 by currently offering 44 Green Skill Development Programme (GSDP) courses under the ongoing Environmental Information System (ENVIS) Scheme to skill youth in various sectors which include environment, forest and wildlife and enabling them to be employable or become entrepreneurs.. These courses covering diverse fields with duration ranging from 80 hours to 550 hours are being offered at 87 locations across the country.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

According to various literature reviews the following are the areas where green skills are required

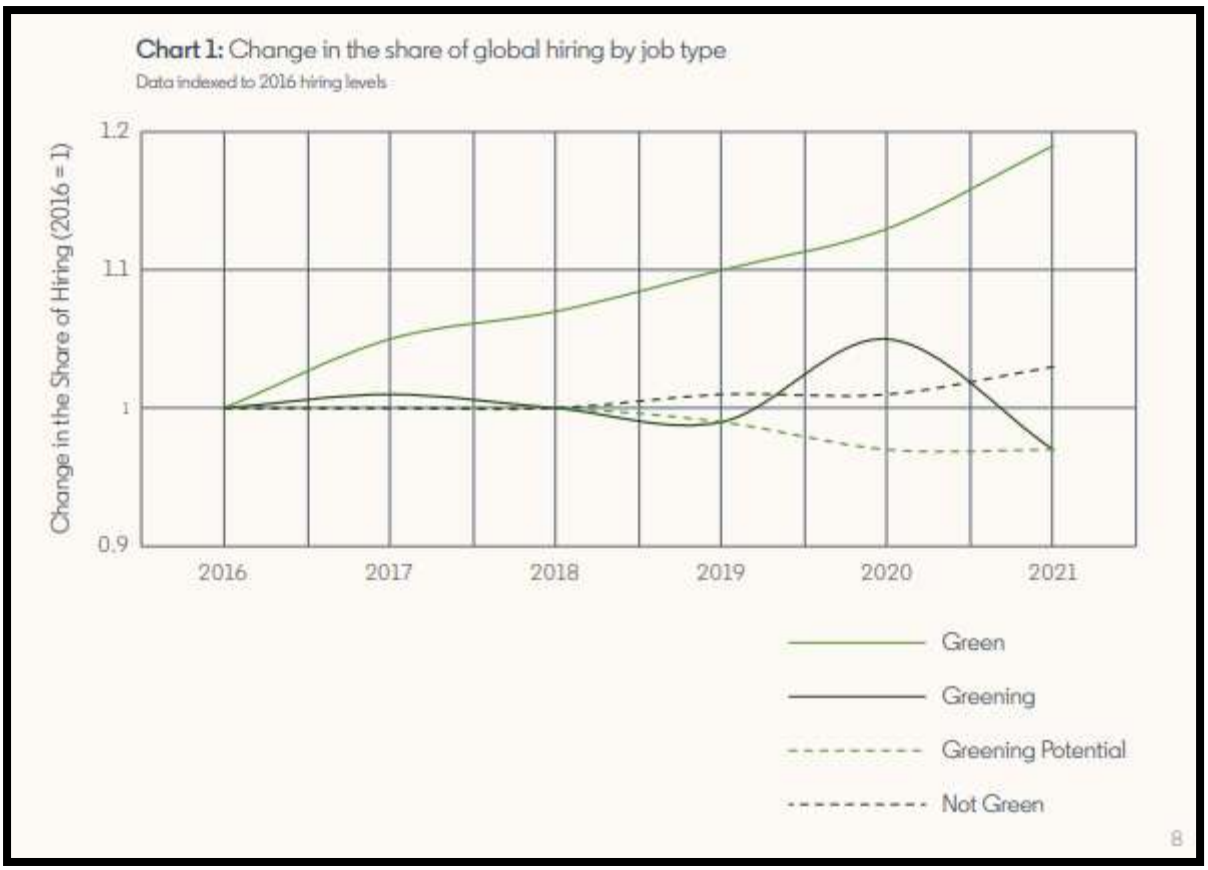
- environmental protection law/ impact assessment
- Ecological management
- Waste management/ e-waste recycling
- Emissions inventory/ accounting
- Pollution (air/water/soil) Monitoring
- Effluent Treatment Plant (ETP) operations and maintenance
- Forest Fire Management
- chemical engineering with innovation
- Bio Polymer Engineer (a combination of marine scientist, polymer expert and bio-tech researcher
- Nanotechnologist (using nanotechnology and nonmaterial).
- Climate science with AI.
- electric vehicle research and human psychology
- Water Budgeting & Auditing
- Conservation Of River Dolphins
- Wildlife Management
- Para Taxonomy Including People's Biodiversity Register (PBR)
- Fleet managers
- Valuation Of Ecosystem Services
- data scientists
- health workers
- green architects
- hydroelectric plant technicians
- Energy auditors.
- turbine service engineers
- Carbon market specialists
- climate risk managers

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

- agricultural meteorologists/ agricultural technicians
- Mangroves Conservation/Bamboo Management & Livelihood Generation
- construction managers
- technical sales representatives

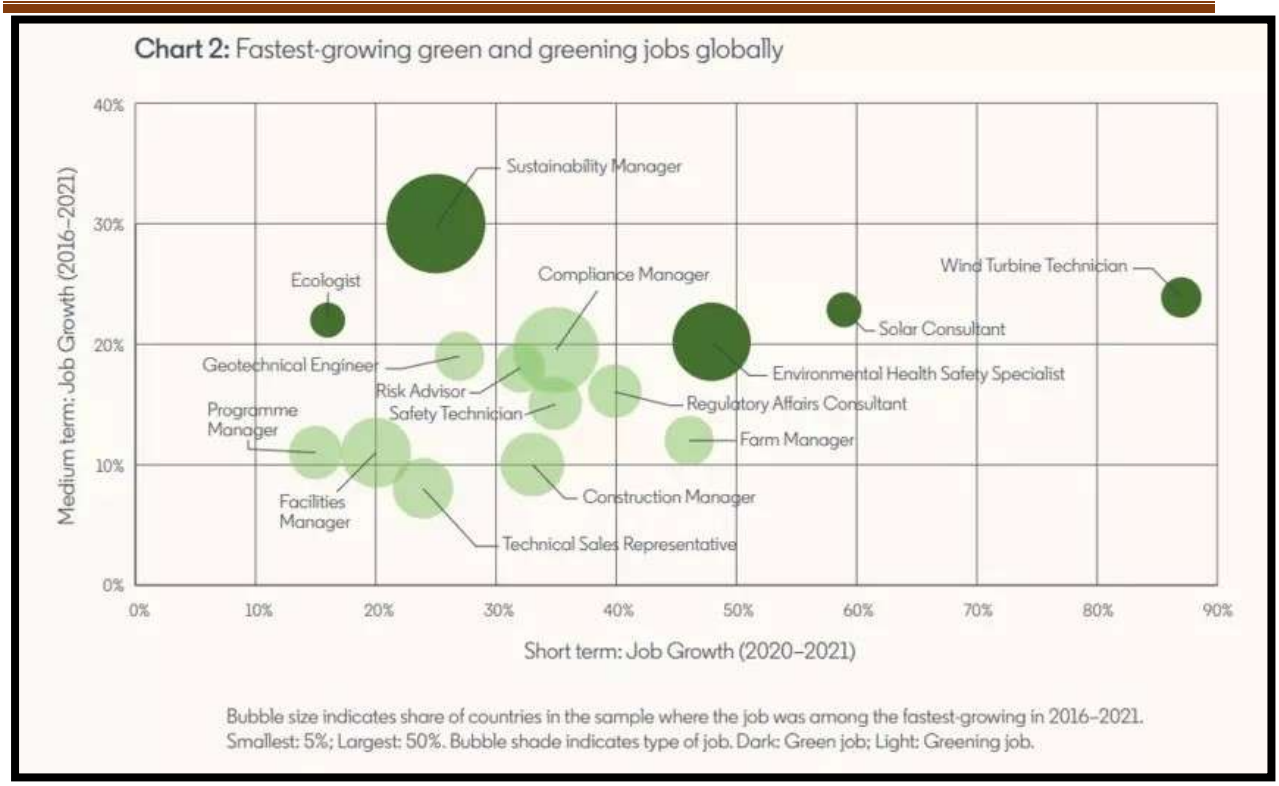
Results and Discussion:

According to a recent analysis by NRDC with the Council on Energy,Water and Environment one million job opportunities can be created in achieving India's wind and solar energy goals.



From the above Chart 1 depicts the growth of the share of hiring of green jobs in the global workforce.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

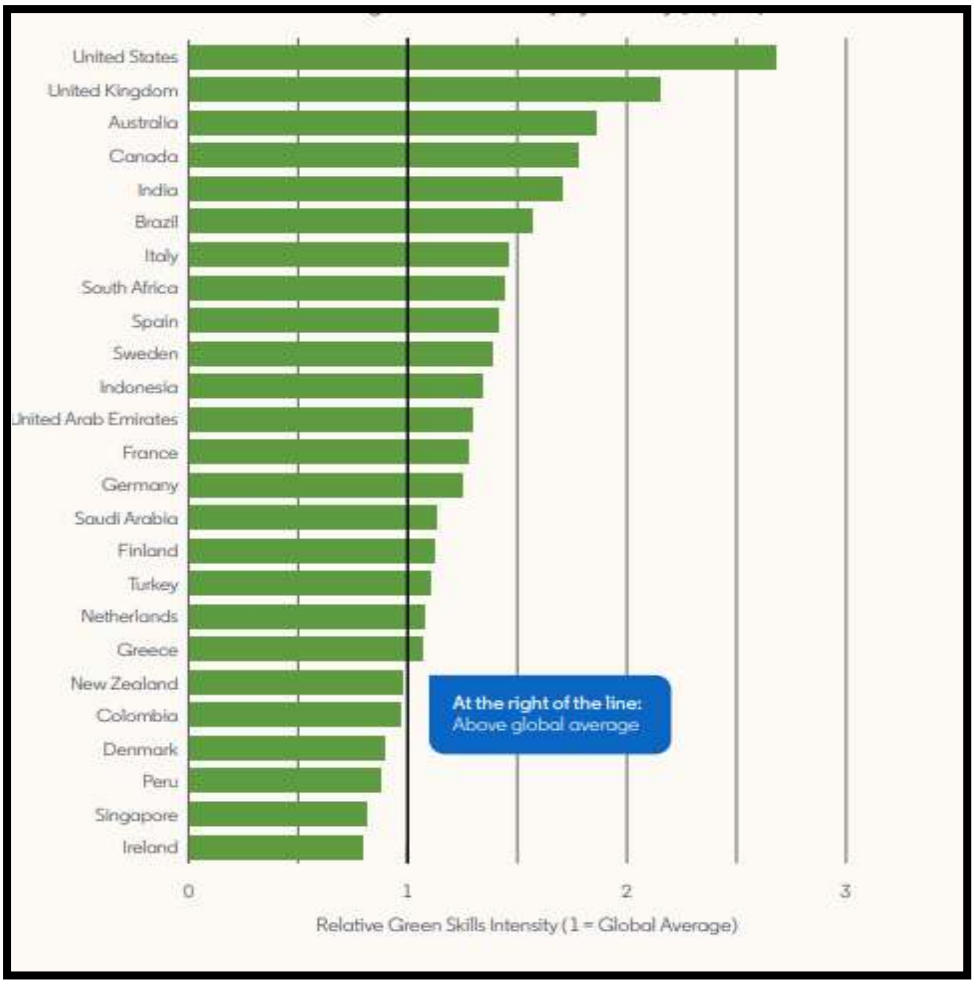


The above Chart 2 depicts various green jobs which are growing globally. Sustainability Manager (30%) is one of the top fastest annual growing green jobs between 2016 and 2021. Other jobs include Wind Turbine Technician (24%), Solar Consultant (23%), Ecologist (22%), and Environmental Health and Safety Specialist (20%).

According to LinkedIn Global Green Skills Report 2022, since 2015 there has been an increase of the share of green talent in the workforce by more than 38% with annual growth of 6% and job postings with green skills requirement grew at 8% annually over the past five year.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

Chart 3: relative green skill intensity by Country



The above Chart 3 depicts that India is in fifth position in terms of relative green skill intensity.

The sectors like arts, consumer goods, entertainment, healthcare, retail, wellness & fitness, real estate, transportation & logistics, media & communication, recreation and travel and software & IT services are trending positive in terms of green skill intensity

To promote green jobs, the Government of India in 2015 initiated the Skill Council for Green Jobs to align with the National Skill Development Mission. This helped the council to identify and assess the skills needed for green jobs and to develop educational/ training programs to provide green skills to advance a green economy in India.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

CHART 4: PROGRAM WISE ACHIEVEMENTS IN GREEN JOB ROLES

The above chart 4 depicts that NSDC has facilitated the training of 38,960 candidates (PMKVY accounted for 52% (with 93 training centers), NSDC's feebased program for 41% (with 117 training centers), Corporate Social Responsibility for 4% (with 19 training centers) and Special Projects for 3% (with 137 training centers)) in green job roles with placements being provided to 11,404 candidates (PMKVY with 76% share and rest 24% was accounted by Fee-based, CSR and Special Projects) with 2,271 employers.

NSDC has taken various initiatives to create an adequate training capacity across schemes/programs, introduced greening framework across sectors and qualifications, organised awareness workshops and established an industry- connect for placements.

All skilling programmes should be aligned with the National Skills Qualifications Framework (NSQF), National Skill Development Agency (NSDA) requirements and Ministry of Skill Development and Entrepreneurship (MSDE) for achieving environmentally sustainable business, industry or community outcomes.

Recommendations

NSDC action plans include transition to a low -carbon economy and climate -resilient society, to develop new sectors of activity by replacing environmentally unfriendly alternatives, to adapt eco -friendly processes in personal consumption and occupations, to develop skills that lead to avoiding the use of irreplaceable raw materials, recycling waste, minimizing energy use, and avoiding pollution.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

Companies can invest in training programs, establish on-the-job "upskilling" and specialisation pathways for employees that certify semi-skilled or unskilled workers, establish open entry-level employment paths through innovative partnerships with academic and vocational institutions and create exchange and rotation programs for young employees between their legacy and new business lines to maximise the opportunity to impart green skills for future sustainability of the country.

Educational institutions need to create awareness and bring out courses which help in imparting green competencies.

Conclusion:

India is in its nascent stage of developing green skills in the youth. Youth are eager to receive the specialized training, especially in the entry-level jobs hence companies should exploit their willingness to learn and create unique opportunities to invest in upskilling or reskilling these aspiring young workers and maximize their employment potential over time. In future, contemporary companies need to pay more attention to green skills/jobs and prepare youth for the new possibilities in the green economy for sustainability.

ACKNOWLEDGEMENTS

The authors (scholars) are the awardees of ICSSR major Research project. This paper is an outcome of the research project sponsored by Indian Council for Social Sciences Research (ICSSR). However the responsibility for the facts stated, opinions expressed and the conclusions drawn is entirely that of the authors.

International Journal of Research in Economics and Social Sciences(IJRESS)
Available online at: http://euroasiapub.org
Vol. 13 Issue 04 April- 2023
ISSN: 2249-7382 | Impact Factor: 8.018|
(An open access scholarly, peer-reviewed, interdisciplinary, monthly, and fully refereed journal.)

Reference:

- Ganeshan, M K & .C, Vethirajan. (2020). *Skill Development Initiatives and Employment Opportunity in India*. **SSRN Electronic Journal**. 1. 21-28. 10.2139/ssrn.3827893.
- Anjali Jaiswal & Madhura Joshi, (2019), *Women, Skills and Green Economic Growth in India*. Retrived from www.nrdc.org/experts/anjali-jaiswal/women-skills-and-green-economic-growth-india#:~:text=The%20Government%20of%20India%20created%20the%20Skill%20Council,programs%20to%20advance%20a%20green%20economy%20in%20India in November 2022.
- https://www.climatelinks.org/sites/default/files/asset/document/india%20ghg%20emissions %20factsheet%20final.pdf India's intended nationally determined contribution: working towards climate justice
- https://www4.unfccc.int/sites/ndcstaging/publisheddocuments/india%20first/india%20indc %20to%20unfccc.pdf Greening technical and vocational education and training a practical guide for institutions https://unevoc.unesco.org/up/gtg.pdf Greening TVET for sustainable development https://unevoc.unesco.org/fileadmin/user_upload/docs/eforum_synthesis_report_greening_tvet.pdf
- India Lockdown: Most Affected Is Unorganized Sector; It Is 93% Of The Total Workforce, 41 Crore People Lack Economic Security - Inventive, www.inventiva.co.in/stories/affected-unorganized-sector/
- www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_709084/lang--en/index.htm
- Skills for a greener future: A sustainable greener future needs green employment skills (ilo.org) Retrieved in Nov 2022.
- **https://www.oecd.org/cfe/leed/Greener%20skills_Highlights%20WEB.pdf**
- **https://www.google.com/amp/s/www.peoplematters.in/amp-skilling-young-people-in-the-green-economy-the-skills-they-need-for-the-future-34566**
- Green Skill Development Program | The Official Website of Ministry of Environment, Forest and Climate Change, Government of India (moef.gov.in), moef.gov.in/en/division/environment-divisions/environmental-information-ei/green-skill-development-programe/ Retrieved in Nov 2022.
- Workforce and Employment- Upskill for green jobs of the future, (2022), World economic forum. Retrieved from www.weforum.org/agenda/2022/04/upskill-for-green-jobs-of-the-future/ in Nov 2022.
- Global Green Skills Report 2022, Retrieved from li-green-economy-report-2022-annex.pdf (linkedin.com) in Nov, 2022.
- Future skilling for digital economy, India's Tech Industry Economy, getting future ready, Feb 2020. Retrieved from skillsip.nsdcindia.org/sites/default/files/kps-document/Impact%20Themes%20Assessment%20V3%20%281%29_0.pdf in November 2022.