Role of Sustainable Development Goals in Promoting Income Generation

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Abstract - **The current Indian economy has been in the deflating phase succeeding global recession, demonetization, GST (Goods and Services Tax), and the most recently Covid-19 pandemic leaving lakhs of Indians jobless. It has not only affected people's earning but also their savings, thereby reducing per capita income and increasing poverty. So, the grave need is felt to give a thought to resolve this issue and to accelerate the recovery. The current review paper thus focuses on individual's efforts in this direction which are not only environment friendly but also financially productive.**

Index Terms- **Environmental Protection, Entrepreneurship, Self-Employment, Sustainable Development Goals (SDGs), Waste Management.**

I.INTRODUCTION

The global recession (2007-2008) has strained the Indian economy. Demonetization (2016) and Goods and Services Tax (GST 2017), referred to as 'Twin blows' pushed it into a more deflationary phase (Verma et al. 2020). A COVID-19 outbreak in 2020 exacerbated the problem (Victor et al. 2021). Thousands of people have lost their jobs around the world, with Indians losing 73.5 lakh jobs in April after the second wave (www.hindustantimes.com, May 04, 2021, 12:53 AM IST). The employed person declined from 39.81 crores in March to 39.08 crores in April, according to the Centre of Monitoring Indian Economy (CMIE), which includes both salaried and non-salaried workers. In India, environmental health is also a major problem. In the Environmental Performance Index (EPI, 2020), (Yale & Columbia University in collaboration with the World Economic Forum), it is placed 168th out of 180 countries (IANS-Indo-Asian News Service, 09 Jun 2020, 4:00 PM).

Natural disasters in India claimed around 2,400 lives (Environment ministry, 2018-19). The increased creation of municipal solid waste (MSW) per person as a result of urbanization and industrialization has generated a new major concern in solid waste management (SWM). India generates a massive 65 million tonnes of municipal solid trash per year (Central Pollution Control Board, 2019-2020), and these amounts are rising every day as the population grows. In India's smallest cities, full disdain for urbanization and pollution-related imperatives has reached catastrophic proportions. A proper waste management infrastructure system is essential for sustainable development.

II.PEOPLE'S ROLE IN ENVIRONMENTAL PROTECTION

People have been involved in environmental protection since ancient times, such as the famous Chipko Andolan (against forest deforestation in Uttarakhand in 1974), when women of the village led by Gauri Devi embraced the trees from cutting down by sawyers for a company of sports goods. It raised social awareness, boosted ecological awareness, and highlighted the feasibility of people's power by demonstrating the necessity to save trees. Sunderlal Bahuguna gave the movement a proper direction and used the slogan "Ecology is the permanent economy". Starting from here, being backed up by non-governmental organizations (NGOs), social activists, and human rights groups, environmental movements gained a certain amount of success, Similarly, many Dam Projects were criticized as they pose threat to the environment. They were opposed due to the negligence of the government in rehabilitating

displaced people and danger to ecological sustainability. Some of these were: Anti – Tehri Dam Movement (1972), The Silent Valley Project (1978), Narmada BachaoAandolan (NBA,1985).

In the last decade, people have become increasingly conscious of global warming, air, water, and land pollution, and the ever-growing concern of waste management (Desa et al. 2011). World waste production by 2050 is likely to reach over 27 billion tonnes/ year, with one-third of it coming from Asia mainly China and India (Kumar et al. 2017). Food loss has an annual economic, environmental, and social impact of roughly $1 trillion, $700 billion, and $900 billion, respectively (Vilarino et al, 2017). Governmental failure in terms of effective enforcement of environmental laws and waste management systems has led people to take the matter into their own hands (Shekdar, A. 2009).

III.PEOPLE'S ROLE IN WASTE MANAGEMENT

A major challenge faced by growing countries like India is waste management (Kumar and Agrawal, 2020). In the last decades' people's role towards waste management has intensified among the masses. Across the country, both public and private bodies are working in this direction. There are end number of examples from across the country who are contributing significantly to waste management.

1. Recycling Disposable Plastic Waste

Kalpana Thakur (Mrs. India 2017 finalist) recycles and reuses *hotel disposable waste* in her picturesque tourist resort 'The BykeNeelkanth' in Himachal Pradesh. Here ornaments and fruit baskets are being made from paper napkins, egg trays, and packaging materials, Plastic bottles are converted into a bird feeders, flower pots, and pen stands. She believes that recycling is critical for the environment (Manali, 2017).

A *wall (275 ft. l ×15 ft h)* has been built in Shimla from 5 *lacs caps of plastic bottles and recycled plastic-* a step towards environmental protection (Dainik Tribune, 2021).

A project by the name "Give me trees trust" in Delhi asks for *plastic waste - delivery packets, milk packets* - anything and utilizes them in their tree planting work

- as tree sapling bags, to collect seeds, mulch material, garden waste, etc (https://givemetrees.org/).

Plastic cutlery is also a huge problem. In 2050, we will have more plastic than fish in our seas. However, the Stuff Project (an NGO by Narayana Peesapaty) has come up with the idea of *an edible spoon* (made up of dough being baked in a spoon mold). (The Hindu, 2018)

Lakshmi Menon from Kerala initiated a *plastic pen drive* and promoted ink pen rather than using plastic ball pens, and collected 7 lakh plastic pens (NDTV.com, 2017)

Manisha Bhandari from Pune learned to drive to *collect waste daily* with her co-workers and collects around 1-tonne solid waste.

Raddi Bazar, a startup by 3 friends (also called modern Raddiwalas) and their team have installed a kiosk to collect waste from streets, localities, and companies and in exchange provide people either with cash or upcycled stationery. By far, their team has managed to collect around 450 tonnes of waste/month and are also able to protect lacs of trees from being cut and around 1 crore liter of water from being polluted (The Better India, 2021).

A 7 to 9 Green Store in Kerala by Bittu John is on a mission of *Zero Waste store* by modifying traditional stores into eco-friendly stores such as bamboo toothbrushes, natural loofah scrubbers, sustainable detergents, and toiletries, dispensers for all items, and no room for plastics. The store bills also tell customers how much plastic they had saved. (Brut India, 2020).

2. Tree Plantation Drive

Tulsi Gowda, a 72-year-old environmentalist from Karnataka (known as Encyclopedia of Forest, though not formally educated) has been awarded Padma Shree. She has planted more than *1 lakh trees over 60 years.* (Brut India, 2020)

M Yoanathan (a bus conductor by profession from Coimbatore, Chennai) is also following the path and has planted more than *38, 000 trees in 28 years.* (The Better India, 2019)

3. Sanitation and Hygiene

Kunwar Bai (105 years old) from Chhattisgarh sold off her goats, the only source of her income to *build toilet*s

at home. Today, both her village and district boast 100% sanitation.

Kajal Roy, a women sarpanch, (Chhattisgarh) mortgaged her jewelry worth Rs. 87,000 to start her *firm to train women in constructing toilets.*

Bihar girl sold the gold saved for her marriage to build a toilet in her home.

An 11-year-old girl of Jamshedpur named MonidrittaChaterjee has been saving all her pocket money to build toilets for underprivileged girls that too with used *plastic bottles and fly ash* to motivate people about recycling.

The construction record of *1,70,000 toilets within 20 days,* were made by around *1.5 million women of Jharkhand* when the district administration failed to do so.

Women-led SHGs in Trichy, Tamil Nadu, mobilizing funds for *water and sanitation* in their area. (Ahluwalia, 2011)

4.   Industrial Waste Management

Ila Kapoor Chaddah   (a DU alumnus) after recognizing the environmentally *exploitative nature of fast fashion,* left a decade career as her management consultant at IBM to start *ZibaBy Hand*. Her venture curates the work of homegrown designers and craftspeople who infuse traditional Indian techniques with modernity. It promotes everything that is handmade and aims to amplify the cause of sustainability in everyday lifestyle choices. Her online platform has overcome several challenges of market accessibility and taxation laws in the country to empower hundreds of women who populate the handicrafts sector in India (Ritzmagazine, 2019)

Another one in this line is kriti Tula who runs *Doodlage - a fashion house that creates wearable fashion, home furnishing & bags out of industrial waste.* It utilizes every inch of scrap material that it collects as fashion is the second largest polluting industry in the world (News 18.com, 2021).

Fragrant soaps, incense sticks, and natural compost are manufactured by processing *floral waste of temples* at Holy Waste- a social enterprise of Maya Vivek and Minal Dalmia in Kompally (The Hindu, 2019).

5.   Food Waste Management

Ankit Alok Bagadia (an IITian) says that *rotten food* can also brighten the luck and utilizes millions of tonnes of food waste generated/day in grain and vegetable markets, restaurants, and hotels. He prepares organic matter and also earns double by producing *Black Scholzer Fly* (a special type of worm used in the food of fish and chickens). He and his friend Abhiearns around 5-8 lacs/month by supplying manure to farmers and insects to poultry and fish traders. They say they are fulfilling their responsibility toward society both in terms of environmental protection and by employing more than a hundred people directly and indirectly (Singh, 2020)

Shanti Life, by Sheetal Mehta been working tirelessly to deal with the *food insecurity crisis* and other *economic crises* faced by the community as a result of the Covid-19 pandemic. They also help the poor take microfinance loans at low-interest rates and educate them about financial planning. Their work is strongly based on principles of *grassroots-level* strengthening (inventiva.co.,2020)

Jsamey Biotech Pvt. Ltd by Amey Marathe- a Hyderabad Startup to curb *restaurant food waste* in India (Restaurant India, 2019)

Kern Agarwal and RanjaniPrabakaran's Chennai-based Startup makes money from food waste (The Hindu, 2019).

Similarly, an 18 year of Bengaluru old boy is making people Organic Farmers in their own home through his youtube channel "My Organic Farming" sharing his organic farming activities.

Apart from these, Tribal women (over 200) of Udaipur of different self-help groups (SHGs) under the Rajasthan GraminAajeevika Vikas Parishad (Rajeevika) along with IIT-Mumbai experts are acquiring technical training from and in turn are training their peers to make solar lamps at their respective clusters. These women, who have never been to school are now transformed into *solar lamp engineers* and are determined to manufacture 60,000 lamps within three months (Pillai, 2016)

Similarly, more and more young people are changing the trend of 'Big Fat Indian Wedding' by going *paperless with e-invites* at practically no cost and ditching the printed bulky invites (bad for trees and expensive). Another thing is the personalized gift (as over 1 lakh crore is spent on wedding gifts for the couple who they don't want and end up re-gifting). India's first gift registry website 'Wedding Wish list',

enables couples to control their gifting experience, making it meaningful, and waste-free. (Khanna, 2019).

From all the above examples it is easily understandable that individuals' awareness, their efforts, and their role in environmental protection and waste management are contributing towards Sustainable Development.

IV.SUSTAINABLE DEVELOPMENT (SD)

Sustainable development (SD) is a development that meets both the present needs and demands of future generations(UN). The earlier discussions have mostly focused on climatic and environmental challenges, but the current sustainability model, as worked out in the past three years, encompasses all initiatives toward a more comprehensive, sustainable, and resilient future for human beings and the earth. Elimination of poverty eradication in every aspect forms is inevitable requisite for sustainable development," according to the United Nations. For its fulfillment, the Sustainable Development Goals, or SDGs, were launched in September 2015. The SDGs comprise 17 universal, indivisible goals with 169 targets to be achieved by 2030. They came into effect from 1st January 2016. These are:

Source:https://www.un.org/sustainabledevelopment/sustainable-development-goals/

India also certified these goals in 2016 and is committed to putting them into action based on nationally defined indicators (NIF) that react to national priorities and requirements.

Sustainable Development (SD) can be achieved by enhancing profits from several variables, rather than from a single one. Partnerships between NGOs (Non-Governmental Organizations), CBOs (Community Based Organizations), corporate bodies, academic and research institutions, trade unions, and others, can harness the diversity of people's skills and must be integrated into planning and implementation for sustainable development.

The above-cited example of people's effort in community work, their inclination towards environmental sustainability and waste management have contributed to SDGs fulfillment mainly SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-Being), SDG 6 (Clean Water and Sanitation), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and infrastructure), SDG 11 (Sustainable Cities and Communities). SDG 13 (Climate Action) SDG 14 (Life Below Water), SDG 14 (Life on Land).

And along the process, this has paved the way for self-employment and entrepreneurship. The 9th International Conference on Sustainable Development (ICSD 2021) held on 8 - 9 September in Rome, Italy, also emphasized that fulfillment of SDGs will create greater opportunities for entrepreneurship. The European Commission (EC) has said that achieving smart, sustainable, and inclusive growth, will result in self-employment and entrepreneurship and will play a key role not only in job creation but also in improved labor market options for the unemployed and other economically weaker groups. Sustainable Development helps promote self-employment and entrepreneurship (Europe 2020 strategy).

V.CONCLUSION

India's development and environmental issues are exceedingly complicated. People from earlier times have actively participated in environmental conservation and recently there has been a growing trend among masses in sustainable management of waste. However, fulfillment of the SDGs is a huge task as Sustainable Development in India faces some unparalleled challenges. Nonetheless, people on their level as well as the government is working towards achieving smart, sustainable, and inclusive growth. From the above discussion, it can be concluded that the individual's efforts in Environmental Protection and Waste Management are fulfilling the 'Twin Goals' of "Sustainable Development and Income generation" through self-employment and entrepreneurship as depicted in fig. 1.

Figure 1

This also improves labor market opportunities for the jobless and other economically disadvantaged groups (Europe 2020 strategy). This helps realize Prime Minister Narendra Modi's objective of "sabka saath, sabka vikas" (collective effort, inclusive growth).

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