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LOCAL AND GLOBAL PROGRESS AND CHALLENGES**

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Title of the Paper: Perspective on Creating an Ecosystem to be Self-Sustainable

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Abstract

Mission Life aims to make a real difference in the world we live in. Environment protection and preservation of natural resources for future generations are very vital for survival of mankind on Earth. Persistent endeavor for modernization and unrestricted exploitation of resources provided by mother nature has led to drastic repercussions. Nature fury and unheard catastrophes are a regular feature nowadays. Discarding old habits and attitudes for a higher goal has gained immense importance. Relinquishing the notion, that, eco-conscious living involves giving up on our everyday conveniences. This is the right time of finding innovative ways to adopt a green lifestyle that protects our planet and helps our local communities thrive. India has initiated and is taking preemptive measures in this direction. The mission Life, an initiative of Government of India, envisages holistic progress and prosperity of nation by creating such citizens who are sensitive towards environmental protection and preservation. It envisages adopting and promoting environment-friendly lifestyles.

Keywords: eco-conscious living, catastrophes, mission life, holistic progress, environment friendly lifestyles

Introduction

All that glitters is not gold. The Sun is shining, rivers are flowing, the birds are chirping, the trees are in bloom, the forests are in their glory, the cities are flourishing with their skyscrapers, but why then is everyone clamouring for 'Save the Mother Earth.' The Earth on which all living creatures thrive and survive is crying for existence. The planet Earth is the only planet in the entire universe which is endowed with precious drinking water and lifeline oxygen for existence of living creatures. All this is freely available in nature and bears no cost. The process of Industrialization, followed by reckless use and overutilization of raw materials, the carbon emissions, urbanization, increase in vehicular communication hence rising demand for fuel have all contributed towards a challenging situation for the entire mankind. The challenge has heightened to such a proportion that now the severity and frequency of occurrence of natural ferocities like earthquakes, flood, drought, unprecedented rainfalls, flash floods, ice breaks and cloudbursts have led to severe loss of life in recent years. The unprecedented COVID pandemic outbreak in 2019, and its fallout till 2022, devastated every family and mass graves in millions were reported from all over the world. The question that everyone should start asking is, Are we really conscious about what is good and bad for us? What would our life be without fresh oxygen and water? How are we limiting the resources available to us freely in nature? Why the hunger, impoverishment, poverty, malnutrition among children, unhygienic surroundings and related diseases increasing at an alarming rate? How to prevent further merciless cutting of trees in the name of progress and prosperity?

Self-sustainable Ecosystem

Creating a self-sustainable ecosystem is a multifaceted endeavor that involves the active participation of governments, institutions, and communities. The research findings suggest that the viability of smart urban ecosystems relies on the ability of focal actors to implement a techno-bureaucratic governance model which relies on an integrated policy framework that accounts for the tripartite social, economic, and environmental challenges faced by cities¹. India a developing nation, has started action plans and is contributing in a major way towards the millennium development goals of United Nations. Through large-scale behaviour change movements, the aim of Lifestyle for environment is, to bring about lasting and sustainable modification in individual and community which in turn will be beneficial to environment. Examples include the Swachh sagar surakshit sagar campaign, the Swachh Bharat Mission, the Ujjwala scheme, Give-it- up campaign, and others.

As part of Indian led global mass movement, 'LIFE', many such schemes which would nudge individual and community action to preserve the environment were initiated. Schemes like the Swachh Bharat Mission alone, for instance, led to the construction and use of over 100 million toilets in rural India within a short period of five years by harnessing the full power of collective action. Our country India, that is Bharat, has undertaken several initiatives to promote sustainability and self-sufficiency across various sectors, encompassing agriculture, renewable energy, education, healthcare, and more.

Endeavors of Indian Government towards Mission LIFE

The campaigns undertaken by Indian government for promoting and creating self-sustainable ecosystem are varied and in many sectors. Protecting mother Earth is everyone's responsibility. LIFE one-word movement announced at COP26 Summit in Glasgow, emphatically supported and highlighted actions taken towards sustainability and environment conscious living. LIFE vouches for every citizen to practice sustainability and encourages mindful utilization of resources. Sincere measures to uplift pro planet lifestyle by discouraging the approach of use and throw among masses. Efforts highlighted were lead-free emission by 2030 by Indian Railways, which is the lifeline of Indian transport and communication, usage of LED bulbs for lowering power consumption, institutional solutions suggested for ameliorating global problems also, measures undertaken for International solar alliance in Solar Energy and many such measures. Environment and sustainability are considered as commitment for which 'Vasudev kutumbhakam' and 'sarvey bhavantu sukhinah' are two guiding lights.

Namami Gangey Project for which 364 projects have been sanctioned, the Panchamrit, India's Green commitments, 500 GW non-fossil energy capacity by 2030, India's Green commitments net zero by 2070, Ujala, world's largest LED bulb distribution scheme to reduce carbon emissions. India's Green commitments will help reduce carbon emissions by one billion tonnes from now till 2030. Initiative has been undertaken in establishing an International Solar alliance and coalition for Disaster Resilient Infrastructure.

Challenges and Action Plan

Throwaway culture has been deeply rooted in our modern lifestyle. It emanates from the evolving consumerism and over mechanisation, where people tend to use items of single-use and disposable packaging. Reckless Environmental destruction, adverse climatic shifts, and the population without proper preventive actions, will face acute scarcity of basic needs like water, food, etc. Moreover, the global economy could lose up to 18% of GDP by 2050.

Some environmentalist writers suggest sustainable wealth creation based on Innovation and enabling Technologies designed to interlink economic models, policies and strategies. The purpose behind this is treating waste chain as multiple increasing returns cycles. Unlike regional circular economy cases in Germany, Japan and China where governments or industry have taken the lead on such initiatives - a top-down governance approach, the SWIT framework was developed for regions where government support for eco-initiatives is weak and where the participation of community stakeholders is critical – a bottom-up governance approach.

A circular economy is the solution suggested. Towards economic conservation, the behaviour of the citizens needs to change. Several policies and reforms have been undertaken in this direction. Swachh Bharat Abhiyan launched in 2014 with the mission of a massive behavioural change in people regarding healthy sanitation practices. Swachh Bharat Abhiyan emphasizes cleanliness and proper waste management. This initiative not only improves public health but also contributes to environmental sustainability. Almost 100 million restrooms were created since its inception within seven years. Pradhan Mantri Ujjwala Scheme, another wholehearted endeavour started in 2016. With a budget allocation of 80 billion INR, this scheme

incremented households with LPG from 62% to 99.8% in 2021. In 2022, for oceanic bodies, an enterprising campaign started. Surakshit Sagar Campaign is tuned towards conserving and transforming oceanic bodies.

Change in Demand, Change in Supply, Change in Policy are the key strategies to achieving the goals of lifestyle for environment. People in their daily lives are adopting easy and efficient eco-friendly practices, industries and businesses adjusting supply patterns based on changing demand, and government lawmakers setting influential norms, all contribute to supporting sustainable lifestyles and production P3 model, that is, Pro-Planet-People is the main spirit of this self-sustainable ecosystem mission.

The practices which were traditional are being encouraged. Clayware and biodegradable utensils used by our forefathers are to be preferred for cooking, serving and storing food items. Practice of handwashing and sun drying of clothes instead of excessive electronic means of washing is being highlighted. Traditional rainwater harvesting techniques like underground tankis, check dams, etc. are to be practiced for water storage and later consumption. Mission LiFE aims to integrate these foundational techniques into everyday habits for a more profound impact. Designed to mobilize citizens across India and the globe, its goal is to encourage collective action towards environmental conservation.

India has made significant strides in renewable energy, with initiatives like the National Solar Mission and wind energy projects. Incentives for solar power generation have been provided to promote clean energy sources. The government has introduced agricultural reforms to empower farmers, enhance productivity, and create a sustainable agricultural ecosystem. This

includes measures such as the Pradhan Mantri Fasal Bima Yojana (Crop Insurance Scheme) and e-NAM (National Agriculture Market). Skill development programs are essential for creating a self-sustainable ecosystem. Skill India Mission aims to train millions of youth, enhancing employability and fostering entrepreneurship. Initiatives like Ayushman Bharat focus on providing accessible and affordable healthcare to millions, ensuring a healthier workforce and consequently, a more productive nation. Swachh Bharat Abhiyan emphasizes cleanliness and proper waste management. This initiative not only improves public health but also contributes to environmental sustainability.

Institutional Measures

Educational institutions play a vital role in creating awareness about sustainability. Many universities and colleges have introduced courses on environmental studies and sustainable development. Research institutions are focusing on sustainable technologies, agriculture practices, and renewable energy solutions. This research is crucial for developing new methods and technologies. Many corporations are investing in sustainable initiatives as part of their CSR activities. This includes afforestation projects, clean energy adoption, and community development programs. Non-governmental organizations are actively involved in community-based sustainable development projects. They work closely with local communities to promote eco-friendly practices and livelihood opportunities.

Suggestions for a Self-Sustainable Ecosystem

Increasing awareness about sustainable practices through education and campaigns can encourage people to adopt eco-friendly lifestyles. The government can provide tax incentives and

subsidies to businesses and individuals adopting sustainable practices, encouraging a shift towards green technologies. Continued investment in research and innovation is essential. Encouraging startups and entrepreneurs in the green technology sector can lead to breakthroughs. Clear policies and regulations supporting sustainable practices are vital. Regular assessments and revisions of these policies can ensure their effectiveness. Including local communities in decision-making processes nurtures a feeling of ownership. Community-led sustainable initiatives are often more successful and enduring.

Conclusion

Creating a self-sustainable ecosystem requires a collective effort. Governments, institutions, and individuals must work together, leveraging innovative approaches, education, and policy support. By fostering a culture of sustainability, India can ensure a greener, healthier future for its citizens while contributing significantly to the global efforts towards environmental conservation.

References

- Aguiñaga, E., Henriques, I., Scheel, C., & Scheel, A. (2018). Building resilience: A self-sustainable community approach to the triple bottom line. *Journal of Cleaner Production*, 173, 186-196. <https://doi.org/10.1016/j.jclepro.2017.01.094>
- Biggeri, M., Testi, E., & Bellucci, M. (2017). Enabling ecosystems for social enterprises and social innovation: A capability approach perspective. *Journal of Human Development and Capabilities*, 18(2), 299-306. <https://doi.org/10.1080/19452829.2017.1306690>
- Palumbo, R., Manesh, M. F., Pellegrini, M. M., Caputo, A., & Flamini, G. (2021). Organizing a

sustainable smart urban ecosystem: Perspectives and insights from a bibliometric analysis and literature review. *Journal of Cleaner Production*, 297, 126622.
<https://doi.org/10.1016/j.jclepro.2021.126622>