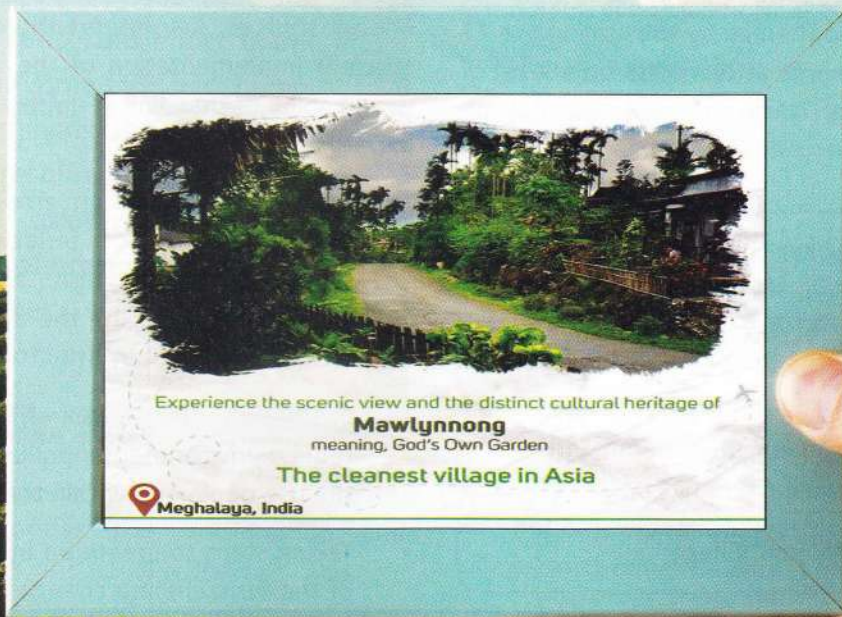


Vision for Green and Clean Rural India



“ I propose to you today a One-Word Movement. This One-Word, in the context of climate, can become the basic foundation of One World. This is a word- LIFE... L, I, F, E, i.e., Lifestyle for Environment. Today, there is a need for all of us to come together, together with collective participation, to take Lifestyle for Environment (LiFE) forward as a campaign. ”

- The Hon'ble Prime Minister Shri Narendra Modi at the COP26 Summit, Glasgow

Giriraj Singh

S

ustainable Development Goals (SDGs) are a blueprint to achieve a better and more sustainable future for all. The Government of India, being a signatory to the United Nations Sustainable Development Goals (SDG) 2030 Agenda is committed to achieving the goals and targets of the SDGs in a time-bound manner. India has also played a crucial role in shaping the SDGs.

The Ministry of Panchayati Raj (MoPR) is supplementing these efforts with the active involvement of Panchayati Raj Institutions (PRI), adopting the vision of the Hon'ble Prime Minister's 'Whole of Government



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and Whole of Society', approach to ensure an enhanced level of engagement and meaningful participation of different stakeholders through the localisation of SDGs (LSDGs) under nine themes by subsuming the 17 SDGs for their achievements at the grassroots level of panchayats and villages. These nine themes may be read as follows:

Theme 1 → Poverty free and enhanced livelihoods village

Theme 2 → Healthy Village

Theme 3 → Child Friendly Village

Theme 4 → Water Sufficient Village

Theme 5 → Clean and Green Village

Theme 6 → Self-Sufficient Infrastructure in Village

Theme 7 → Socially Secured Village

Theme 8 → Village with Good Governance

Theme 9 → Women Friendly Village

The MoPR has undertaken various initiatives and activities across line ministries, Panchayati Raj Institutions, departments, State Governments/ UT Administrations, civil society, communities, technical institutes such as IITs/IIMs, other academia, NGOs/ CBOs, International agencies, etc. to attain the localised SDGs with a focus on the nine Themes.

A multipronged strategy has been adopted to localise SDGs, through joint advisories and resolution signed with concerned ministries/department. A clear and conscious focus has been on the convergence of both resources and infrastructure.

Key Interventions

Global interest in the idea of a clean and green

society has grown in response to rising pollution, climate change, environmental degradation, and the need for cost-effective and affordable alternative clean energy sources. Key interventions are needed for an efficient implementation of the theme of 'Clean and Green Village' that will require a concentrated effort towards the following:

- Awareness generation amongst the citizens on the importance of reducing waste, ensuring sustainable production and consumption of energy, and reducing the adverse impact on the environment.
- Promotion of measures within the GP that would reduce environmental pollution, such as reducing the use of plastics within the GP area.
- Taking steps to create an in-depth understanding of the term climate change and its impact among the Gram Sabha, Panchayat committees, and other community volunteers.
- Mapping land use patterns, water bodies, forests, hill slopes, wetlands, and degraded forests within the GP; biodiversity registers.
- Developing appropriate norms for sustainable utilisation of resources from common lands, water bodies, and forests on materials like non-timber forest produce, sand, fish, and water. Assessing the water needs, sources, schemes, solid, and liquid waste being generated. Settling the water and sanitation goals and targets.
- Selection of appropriate technology for water supply and sanitation in the GP, based on participatory and area assessment.
- Ensuring maintenance of toilets, public spaces, including those in markets and GP premises.
- Developing a comprehensive energy programme based on need assessment.
- Promoting adoption of Resolution of Mission LiFE and taking steps towards becoming Mission LiFE certified Panchayat.

Gram Panchayats and Theme 5 of Clean and Green Village

To become a Clean and Green Village, a gram

The Ministry of Panchayati Raj is making a concerted effort under the 'Clean and Green Village' theme, wherein panchayats take up activities on natural resource management, biodiversity protection, waste management, afforestation activities, water resources, soil health, and management of land resources.

panchayat must prioritise the preservation and maintenance of water and land resources, and the promotion of the generation and consumption of clean energy. This includes effective management of solid and liquid waste, maintaining Open Defecation Free status, and preventing water source contamination. Additionally, the Green Village initiative entails addressing ecological, economic, and equity concerns through community

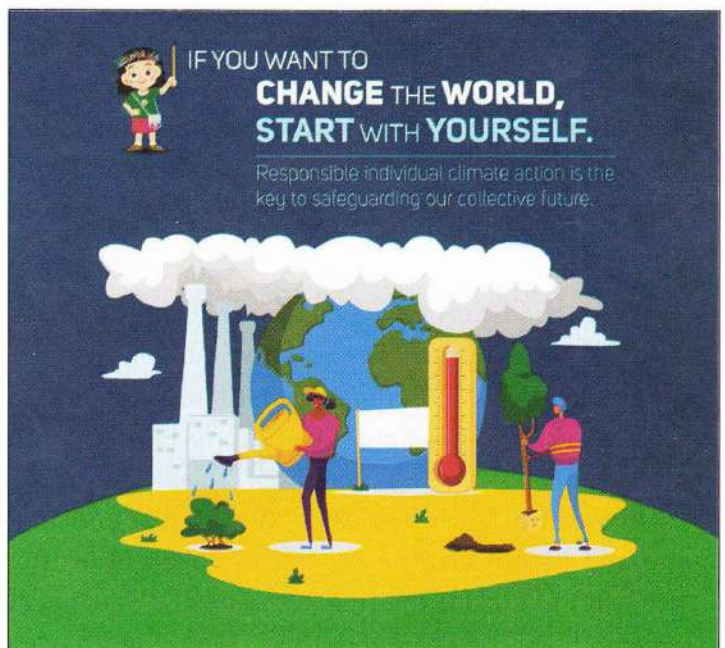


participation in activities like tree plantation, organic farming, and promoting renewable energy sources for a self-reliant, eco-resilient rural India.

Rural households are equally vulnerable to climate change effects, and Panchayats play a pivotal role in tackling many of the causes and consequences of global warming.

The Ministry of Panchayati Raj is making a concerted effort under the 'Clean and Green Village' theme, wherein panchayats take up activities on natural resource management, biodiversity protection, waste management, afforestation activities, water resources, soil health, and management of land resources. Across India, 16% of the Gram Panchayats have taken Sankalp (Resolution), with a focus primarily on Clean and Green Village, furthering the efforts under this theme.

While Gram Panchayats are taking steps towards the 'Clean and Green Village' theme, a wide variety of programmes can be carried out for economic development. Local entrepreneurs can produce LED bulbs as a group activity. Production and supply of smokeless stoves bring more employment opportunities. Organic farming and marketing are yet other areas where Panchayats can focus. Self Help Groups (SHGs) get additional employment opportunities when working for self-reliant energy. Self-sufficient Panchayats can be the target of Panchayats working for carbon neutrality.



Open Defecation Free (ODF)

Around, 52% of villages are ODF Plus villages, i.e., nearly 4,25,691 villages, have sustained its Open Defecation Free (ODF) status along with implementing either solid or liquid waste management systems.

2,22,637 villages having arrangement of Solid Waste Management and 3,60,103 villages have arrangement of Liquid Waste Management. Various community assets have been created across villages, contributing to the ODF plus status of the GPs.

Community Assest created under ODF plus



Gram Urja Swaraj Abhiyaan

The Ministry of Panchayati Raj has collaborated with the Ministry of New and Renewable Energy to include the Gram Panchayats under all its schemes focusing on the adoption of renewable energy. This will enable, in the upcoming years, Gram Panchayats to evolve as self-sufficient in terms of energy and become producers of energy instead of only being consumers. Moreover, widespread adoption of renewable energy applications in rural areas would enable the Gram Panchayats to develop own sources of Revenue (OSR) and employment opportunities for the local youth of the villages.

Under the Gram Urja Swaraj Abhiyaan, GPs have developed their own implementation models with the support of Renewable energy development Agencies of the states. For example, Odanthurai Panchayat in Tamil Nadu has its own windmill, Thikekarwadi GP in Maharashtra has established Biogas plant in PPP mode and Meenvallam, a project of Palakkad district Panchayat in Kerala is the first initiative of a Panchayat for micro hydel power generation. Many panchayats

have taken up solar energy models such as solar roof top models, solar kitchens, solar street lighting, and solar high-mast light owned by the Panchayats.

Under the Gram Urja Swaraj Abhiyaan, as on date, 2080 Gram Panchayats have taken up and implemented Renewable Energy Projects. Close to 2020 Gram Panchayats have solar energy systems that are installed and are fully functional. Around 60-70 Gram Panchayats have hydel energy systems and wind energy systems that are installed and there are 106 Gram Panchayats with existing biogas energy systems.

Further, a significant number of Panchayats are interested in making improvements in the clean and green energy domain and have interest through the Gram Urja Swaraj Abhiyaan under the following sectors:

Particulars	Solar Energy Systems	Hydel Energy Systems	Wind Energy Systems	Biogas Energy Systems
Number of Gram Panchayats	4202	296	296	366

Source: <https://egramswaraj.gov.in/urjaDashboard.do>

Mission LiFE

Mission LiFE, launched at COP26, promotes sustainable living by encouraging eco-friendly actions globally. It seeks to replace the prevalent 'use-and-dispose' economic model with a sustainable 'circular economy' by encouraging people worldwide to adopt environmentally friendly practices in their daily lives. With a multi-phase strategy, it begins with 'Change in Demand' by fostering simple actions and envisioning broader policy changes. Panchayats can play a pivotal role in implementing eco-friendly practices at the grassroots level.

In its inaugural year, 2022-23, Mission LiFE focuses on Phase I, 'Demand Shift', urging individuals, communities, and institutions to adopt 75 specific and measurable eco-actions spanning seven categories. These actions prioritise ease of adoption, minimal supply-side reliance, and economic compatibility, aligning with the mission's core aim of advancing sustainability.

Panchayats hold a strategic position to drive transformative change from the grassroots. They can effectively oversee the adoption of eco-friendly practices and encourage active community involvement in Mission LiFE's endeavours. Panchayats possess the capacity to champion environmentally responsible actions within their domains, spanning waste reduction, renewable energy adoption, and sustainable agriculture, while also providing incentives. Through collaboration with Panchayats, Mission LiFE could gain access to local expertise, resources, and established governance mechanisms, enabling a grassroots-driven approach to sustainable living that seamlessly aligns with the mission's overarching objectives.

Case Studies

MoPR has undertaken concerted efforts at block, district, State/UT and National Level for integration of the Clean and Green Theme. Panchayats are especially making considerable efforts and some noteworthy examples of their best practices are as follows:

a) **Kundal Gram Panchayat of Palus, Maharashtra**, with a total population of 18,287 and total households of 3,835, the Gram Panchayat has achieved 100% solid and waste management

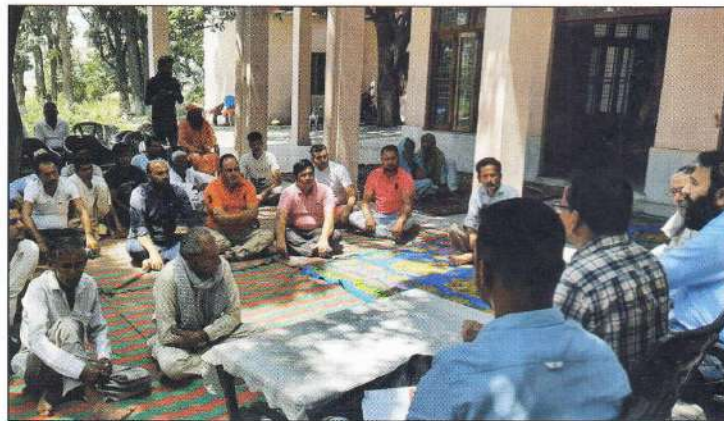
for all the households, government and semi-government buildings. It has implemented a greywater management system, ensuring 100% greywater treatment, and adopted a rooftop rainwater harvesting system to alleviate water scarcity in the village by storing and utilising rainwater. Kundal Gram Panchayat uses LED lights in its domestic consumption and has installed Water Treatment Plant that provides clean water to all the households. Approximately, 4,000 trees have been planted for afforestation and the preservation of wildlife and plants in the GP.

b) **Syasanambagam Gram Panchayat, Hinjilicut, Odisha**, has set up a system of door-to-door garbage collection on a daily basis, segregation, and recycling of waste through Management of Community Composting (MCC). Its village sanitation committee takes up regular cleanliness drives and has made considerable effort to create assets like the MCC Community Compost Pit, Institution Compost Pit, etc. The GP regularly undergoes massive plantation activities to mitigate the effects of afforestation and preserve wildlife and plants. They have installed energy-efficient solar pumps for micro-irrigation and have embraced community-based management of natural resources, including forests, water bodies, and sacred groves, thus ensuring conservation of biodiversity and sustainability of ecosystems.

c) **Sultanpur Gram Panchayat, Eligaid District, Telangana**, has constructed a waste management shed for segregation of waste, wherein wet waste is thoroughly used to separate compost. Additionally, a plantation drive is underway to boost greenery, by planting 50,000 saplings across the Gram Panchayat. A shared sense of responsibility has been imbibed among the villagers in the Gram Panchayat to maintain a clean and green environment by distributing 6 plants to their households. Every house has Individual Household Latrine (IHHL), Kitchen Garden, and well-maintained soak pits. This has helped GP to achieve 100% ODF status. Additionally, for the restoration of all kinds of water, community soak pits are constructed, and grey water is converted

with and purified in preserved pits for irrigation purposes.

- d) **Meenangadi Gram panchayat in Kerala's Wayanad district**, serves as a model to emulate under the concept of carbon neutrality. Several ingenious multi-sector schemes were implemented in Meenangadi to reduce its emissions, increase its carbon sequestration, preserve its ecology and biodiversity, and create resilience among the people. 'Tree Banking' is one of such landmark schemes introduced at Meenangadi to aid the carbon neutral work in the Panchayat. The scheme encourages people to plant and protect trees by providing them with interest-free loans. Around 1,58,816 trees were planted in the Panchayat in three years. Additionally, bamboo trees were planted on riverbanks to conserve soil and water resources. To ensure water availability, Panchayat rejuvenated existing water bodies and constructed new ponds on private lands. Waste and energy audits were conducted at 400 houses in two wards of Meenangadi to improve waste management and energy efficiency. A compost park was established to manage biodegradable waste, compost bins were built, and composting equipment was distributed throughout the Panchayat for decentralised waste management. A plastic shredding unit was established, and plastic and other non-biodegradable waste were collected through Haritha Karma Sena. For all its efforts, the Gram Panchayat has won the prestigious Carbon Neutral Vishesh Panchayat Puraskar under the National Panchayat Awards of the Ministry of Panchayati Raj for the award year 2023 for its work and efforts on attending carbon neutrality in the Panchayat.
- e) **Palli, a remote village in Jammu and Kashmir**, has been recognised for its efforts against Climate Change. During the National Panchayati Raj Day 2022, the Prime Minister recognised the Gram Panchayat striving for carbon neutrality. After his address, the Ministry of Panchayati Raj, along with experts, state representatives, and various stakeholders, began discussions on preparation of local climate action plan for the Gram Panchayat.



Unnat Bharat Abhiyan in collaboration with partners like IIT Jammu, conducted surveys of over 700 households in Palli Gram Panchayat, to assess waste and energy use. After analysing the data, the Jammu and Kashmir Government prepared a local climate action plan with a budget of Rs. 10.18 crore from 2022-23 to 2027-28. The Panchayati Raj Department of Jammu and Kashmir has incorporated these initiatives into the annual plans of relevant line departments, and the ongoing activities are now actively underway in Palli Gram Panchayat. These encompass various aspects such as solar installations, the distribution of solar devices, and dedicated conservation efforts. The J&K Government aims to replicate these efforts in other Gram Panchayats, with the development of a mobile app for energy and waste auditing as a crucial step towards carbon neutrality in local climate planning.

In Palli Gram Panchayat, several eco-friendly initiatives have been implemented, including a 500-kilowatt solar plant, 79 solar streetlights, 755 solar cookers for households, and the operation of six e-rickshaws and one e-bus. Additionally, two solar water pumps have been installed, and conservation efforts protected three out of five ponds while creating 35 soak pits for efficient greywater management. These actions exemplify the Panchayat's dedication to sustainability and serve as a model for other communities.

- f) **Thikekarwadi Gram Panchayat, Junnar Block, Thane, Maharashtra**, was awarded Gram Urja Swaraj Vishesh Panchayat Puraskar under the National Panchayati Raj Awards-2023 of the Ministry of Panchayati Raj. The Thikekarwadi GP

has also come forward to make its effort towards becoming Carbon Neutral Gram Panchayat through convergence of funds.

- g) **Hasudi Ausanpur, Gram Panchayat of Siddharthnagar, Uttar Pradesh** is yet another Panchayat to have come forward to work towards attaining 'Carbon Neutrality'. This Gram Panchayat has already made good progress in afforestation, renewable energy interventions (solar streetlights), installation of a smog tower, etc.

Capacity Building initiatives towards Clean and Green Village

Capacity Building of Panchayati Raj Institutions (PRIs) has been one of the major activities of MoPR. The Ministry has been providing technical and institutional support for strengthening of PRIs including advocacy support for inter-ministerial and multi-sectoral coordination.

Revamped Rashtriya Gram Swaraj Abhiyan (RGSA), a centrally sponsored scheme aims to strengthen the capacities of institutions for rural local governance to become more responsive towards local development needs, prepare participatory evidenced-based plans, leverage technology, and efficiently utilise available resources for realising sustainable solutions to the local problems linked to SDGs. Concentrated effort is being made at the Gram Panchayat level to encourage thematic trainings.

Convergence

A convergence of efforts and adequate support of ministry/departmental functionaries of drinking water and sanitation, new and renewable energy, environment, forest and climate change, rural development, land resources, agriculture, animal husbandry, fisheries and panchayati raj is needed to realise the noble goal of Clean and Green Panchayat. In addition, non-Governmental organisations, college students, youth organisations such as Nehru Yuvak Kendra volunteers, etc. also need to be involved for faster realisation of the goal.

The State Panchayati Raj Departments need to ensure activity and resource mapping are undertaken, factoring in the resources available under various schemes of the Central and State Government



culminating in the implementation of the Panchayat Action Plan on the theme, integrated into the Gram Panchayat Development Plan.

Convergent action by all concerned ministries and departments among others, at the Central and State Government levels will go a long way in protecting the future of the planet. Eventually, all Gram Panchayats/villages need to become Clean and Green, if the LSDGs are to be attained by 2030 and the challenges posed by climate change are to be addressed.

Under the able, strong and visionary leadership of our Hon'ble Prime Minister Shri Narendra Modi, the steps taken towards making rural India green and clean in almost a decade are remarkable and historic. The resolution of Swachh Bharat taken by Shri Narendra Modi on Gandhi Jayanti in 2014 became the world's largest social movement and a historic chapter was written in freeing rural India from open defecation.

The Government under the leadership of the Prime Minister has taken some major green initiatives during the last few years for sustainable energy development. India is among one of the few countries globally which has kept to its Paris Climate Change (COP21) commitments along with an exponential increase in renewable energy capacity. The total installed renewable energy capacity in India, excluding large hydro, has crossed the mile-stone of 100 GW. India stands at 4th position in the world in terms of installed renewable energy capacity, 5th in solar and 4th in wind in terms of installed capacity. Our rural areas have made a significant contribution to this movement. □