GOAL 12 : RESPONSIBLE CONSUMPTION AND PRODUCTION

KERALA

1. DECENTRALISED SOLID WASTE MANAGEMENT, ALAPPUZHA-

The urban local body in coordination with district Suchitwa Mission (Cleanliness Mission), implements a project called 'Nirmala Bhavanam Nirmala Nagaram' (Clean Homes, Clean City) that focuses on decentralised solid waste management through segregation and treatment of wet waste at the source. Households with backyards are encouraged to set up portable or fixed biogas plants and those without enough space are given the option of piped composting. The municipality offers subsidies to promote the acceptance of these mini personal plants; it also formed a team of two to three trained women in every ward for maintenance.

TAMIL NADU

2. ANAADI SUSTAINABILITY AWARENESS FOR THE YOUNG (ASAY) - (CLOSELY TIES IN WITH **SDG 4**) -

ASAY is a volunteer-led SDG campaign and "a United Nations Partnership for the SDGs initiative". It was started in January 2017 with the aim to educate school and college students about the SDGs through immersive and experiential content. It is delivered as workshops at various educational institutions and is a blend of lectures, discussions, and hands-on group activities. An eco-centric approach to a sustainable planet is instilled into students at a young age. The program helps students think like global citizens and set a vision for themselves that will flow as beneficial actions in the future.

The key objectives of the workshop are to:

- Create awareness about UN Sustainable Development Goals (SDGs) and Sustainability among young people especially students
- Help students gain a perspective of global environmental issues and their role in solving them
- Give them exposure to real-world sustainability problems and encourage them to design solutions

- To jointly explore individual consumption along various dimensions: Food, Energy etc
- Work on real-world consumption problems through simulated learning and explore and evolve relevant solutions to identified problems.
- Help students understand sustainability both in a global and local context and take on the role of active global citizens

The program communicates the Global Goals through local examples and actionable, which students can easily understand and integrate into their lives. Itis delivered in the form of workshops in educational institutions. Students take up online free Moodle courses on "ASAY Sustainability Champions" which are loaded with learning materials and videos. They get the opportunity to work on real- world case studies in the areas of Education, Health, Food, and Environment,ideate on solutions and draw up plans to implement the explored solutions. The case studies require them to play their part in solving global problems by co- creating solutions that include themes like self sufficiency, soil management, reinventing the education system, energy management.

ANDHRA PRADESH

3. **ZERO BUDGET NATURAL FARMING (ZBNF)** -

ZBNF is an innovative way to promote sustainable agriculture, a key component of sustainable production efforts. ZBNF was targeted to cover 5 lakh farmers by 2019. Under the National Mission for Sustainable Agriculture, 200 post-harvest storage structures were targeted to be constructed in 2018-19. Under the Andhra Pradesh Food Processing Society, 15 primary processing units were planned to be set up, with the aim of reducing post-harvest losses.

Apart from the aforementioned best practices, Andhra Pradesh's SDG Vision Document "ACHIEVING SUSTAINABLE DEVELOPMENT GOALS 2030", details further major policies and strategies to achieve benchmarks for SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION, provided as follows-

- New and Renewable Energy Delivery Corporation of Andhra Pradesh (NREDCAP) for the promotion of Renewable Energy
- State renewable policy, MSME policy, solar parks, Climate Knowledge Centers (CKCs).
- Periodic monitoring of 80 Major Accident Hazard (MAH) units
- Saturated provision of LED street lights to reduce unnecessary power consumption
- Promotion of ecotourism, to facilitate job creation and growth.

- Promotion of food processing and value chain in the state.
- Urban waste management - Sewage treatment has increased and garbage lifting in urban areas has improved from 98% to almost 100% in 2017-18. Nearly all urban households are covered by the door-to-door waste collection.
- AP Solar Power Policy 2015 to encourage the generation of solar power by developing solar parks, promoting captive generation and deploy solar pumpsets.
- Energy Conservation Building Code – State Energy Conservation Initiative.
- National Policy on Biofuels, and National Clean Energy Fund etc.

KARNATAKA

As per Karnataka's SDG Vision Document, detailing the state's strategy to achieve benchmarks for SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION, the state has focused on the following-

- Small initiatives that can bring changes in the Sustainable Consumption and Production (SCP) patterns include - Sustainable procurement policies (SPP) to reduce the wastage of natural resources, awareness building and mobilization campaigns, promoting eco-friendly buildings and construction practices, inducting fewer consumptive processes and practices.
- Urban areas must stick to the provisions of the 2017 Karnataka Municipalities Model Building By-Laws to ensure sustainable water use for the construction of houses and buildings.
- Every Gram Panchayat (GP) must formulate an action plan for conducting annual 'water audits'. Necessary departments must provide the required technical and managerial support to all GPs and include them in the planning to enable effective water use at the local levels and facilitate sustainable water utilization by a way of institutionalizing the same through : efficient water use for both ground and surface water, water-3R Principle (reduce, reuse and recycle), rainwater harvesting, and conserving water.
- All public open spaces above 500 sq.m. must arrange for complete utilization and capture of storm water with scientific rainwater harvesting arrangements. The groundwater recharge should be mandatory for open spaces like parks, parking, plazas and playgrounds. Harvesting and recharge structures could be constructed by the Authority with the involvement of community-based organizations.
- All buildings on various plot sizes above 100 sq.m shall comply with the green norms and conform to requirements mandatory for sanction to reduce energy and water consumption.

MAHARASHTRA

4. WOMEN-LED CLIMATE RESILIENT FARMING (WCRF) MODEL

- (CLOSELY TIES IN WITH **SDGs 2, 5** AND **13**)

SSP's overall objective is to transform the role of marginalized woman and bring their work to the mainstream. It does so by empowering poor rural women as leaders and entrepreneurs, by providing them with access to skills, finance, and markets, and by increasing their economic resilience through sustainable agriculture and health-enhancing opportunities. SSP developed a multi-pronged farming approach to food and income security that positions women as farmers and decision-makers. This approach builds women's capacity to practice sustainable agriculture and water conservation with the aim of enhancing food and income security for marginal farming households. The WCRF enables them to make informed decisions related to what to grow, what to consume, and how much to sell. It aims to empower women as change- makers in agriculture to promote resilient livelihoods for small and marginal farming households. In the process, the model ensures farming becomes an economically viable venture for these small and marginal holders through integrated farming techniques, increasing livestock and farm-allied businesses, and increasing consumption and marketing of nutritious farm- grown food crops.

5. SOLAR POWER DRIVEN KHAWA CLUSTER TO BOOST MILK INDUSTRY AND SKILL DEVELOPMENT - (CLOSELY TIES IN WITH **SDGs 7,8** AND **13**)

To keep themselves afloat during severe droughts, farmers in Osmanabad District, within a Khawa cluster came together, as an alternative to selling only milk. Khoya or Khawa (reduced dry milk) as a product has more demand and shelf life than milk and every farmer makes a profit for every litre. Farmers organised themselves in cooperatives and pooled their cattle to make milk solids from their daily milk production. The profit margin is higher during festivals and wedding seasons and is distributed according to the share of the milk pooled-in by the farmers leading to a massive proliferation of cooperatives. The Khawa cluster concept has boosted the traditional milk industry & also promoted sustainable development, as modern induction machines are powered by solar energy. The cluster has helped in reducing deforestation in the district, as traditional milk and Khawa industry was running on wood-fired kilns. A Skill Development Centre is also part of the cluster and is training more than 1,000 youth every year and integrating them into the Khawa value-chain at different levels, also as self-employed individuals.

GUJARAT

6. **XTENDED LICENSING, LABORATORY AND LEGAL NODE** -

The issue of sales licenses to retailers by Food and Drugs Control Administration wasa decentralised process and was carried out manually leading to multiple illegalenrolments of pharmacists, delays in the issue of licenses and dissemination ofinformation from head office to circle offices and no information access to thepublic. A web-based information technology solution covering various functionsof FDCA was proposed to tackle these issues. Major features of the project are:

- Standardization of procedures of issue licenses.
- Effective monitoring of circle offices through online application.
- Highlight multiple enrolments of pharmacies through the software.
- Reduction in the number of visits by applicants to the circle offices.
- Effective and quick recall of NSQ medicines through mass messaging.
- Provision of information regarding medical stores/wholesalers and blood banks in the public domain.

The system has prevented multiple enrolments of pharmacists working in more than one shop, provided access to the status of application for grant of new licenses and renewal of licenses, reduced the time taken to expedite various applications, increased the numbers of sample drawn, tested and raids conducted, and informed citizens about substandard drugs in the public domain and nearest blood bank to get or donate blood, thus improving the operational efficiency of the department.

TELANGANA

As per Telangana's SDG Implementation Document 2018, the state's strategy to achieve benchmarks for SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION, the state has focused on the following major policies and strategies -

- Solid Waste Management
- Agriculture, horticulture marketing
- Construction of godowns and cold storage
- Encouraging Micro irrigation practices

HARYANA

7. **WATER MANAGEMENT INTERVENTION** -

The Government of Haryana has been working towards recharging ground water supplies by implementing a compulsory rainwater harvesting system and promoting crop diversification to move towards less water-intensive crops.

Farmers are slowly shifting away from regular rice/wheat crop cycles towards the adoption of micro-irrigation techniques, which has lowered the overall reliance on flood irrigation, saving water in the agricultural sector, and improving water use techniques.

Apart from the Best Practices, Haryana has also taken additional steps to promote opportunities under SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION that have met with success-

- **"Cluster Based Approach" to municipal solid waste management -** implementation of door-to-door solid waste collection, solid waste management sites have been constructed, and sewerage lines have been installed in all major cities. The state has also installed 117 sewage treatment plants with a capacity of 1,491.06 million litres per day to treat sewage.
- 1134.24 lakh MT of crop residue in the form of wheat stubble and paddy straw made available for use as a source of carbon credit
- **Installation of a common effluent treatment plant** (CETP) in all industrial areas, and installation of three co-generation power plants focusing on industrial waste
- Enhancement of landfill sites to better respond to state-wide needs
- **Increasing the state budget** towards waste prevention measures; **public-private partnerships** to facilitate solid waste management in towns under the Swachh Bharat Mission
- **Construction of waste-to-energy plants** in Gurugram, Faridabad and Sonipat
- 85 units have been registered for the recycling and reprocessing of hazardous waste.
- To modernize Haryana's power grid, multiple interventions (rebate programs, subsidies, cogeneration, and regulations concerning mandatory installation of environment-friendly technologies) have been put in place to lower the agricultural dependence on non-renewable energy.

TRIPURA

As per the Draft Vision 2030 document, detailing Tripura's 7 year strategy to ensure sustainable consumption and production patterns, the state has focused on the following-

- Emphasis on efficient energy use with minimum transmission/distribution loss

- Use of water for both drinking and irrigation purposes will be so regulated to have minimum wastage to keep a balance between the distribution of water and consumption by users
- Food wastage will be minimized through awareness generation and education
- Reasonable disposal of toxic waste and pollutants by providing incentives to industries, businesses, and consumers units for proper recycling and treatment of the waste material
- Investment in natural resource management particularly for forestry
- Investment in solid waste management especially in urban areas and recycling of wastes; in sewerage, sanitation and liquid waste treatment
- Awareness generation among consumers through education on sustainable consumption and lifestyles
- Providing consumers with sufficient information about engaging in sustainable public procurement.

ODISHA

As per Odisha's SDG Indicator Framework Document, some state-sponsored schemes implemented to achieve benchmarks for SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION include -

- Promotion of Sericulture Industries
- Food Storage & Warehousing Procurement Operation Support System
- Supply of Rice at Rs.1 per Kg
- Backyard Poultry Rearing
- UD - Solid Waste Management
- Layer Farming in Deep Litter
- Genetic Upgradation of small animals
- New Tourism Policy and Critical Gap Funding, Development and Management of Tourist Infrastructure, Tourism publicity

JHARKHAND

As per the Jharkhand Vision & Action Plan 2021, Jharkhand's best practices, policies, and strategies to achieve benchmarks for SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION, are mentioned as follows-

- Focus on Rural Industrialization by adopting 10 additional clusters every year for the development of rural enterprises
- MSME startup Ecosystem developed in Ranchi & East Singhbhum to foster growth

- Agriculture Entrepreneur Scheme - aimed at imparting training to selected 'Agri-Entrepreneurs' for incorporation of sustainable practices in farming for a cost-effective and profitable model of agricultural development
- Market Development Assistance for khadi and polyvastra will be provided to artisans.
- Establishing the Jharkhand Handicraft Development
- Establishing the Mukhyamantri Entrepreneur Development Board for the development of traditional handicraft and Lac Udyog and other rural cottage industries to provide technical and financial support to rural industries resulting in additional employment.
- Engagement of more than 3 lakh farmers in sericulture
- Training in reeling and spinning will be provided to more than 9,000 women beneficiaries
- Strengthening of Jharkhand Skill Development Mission to coordinate State-level skill development initiatives to provide direct employment
- Improving ease of doing business and reducing the business transaction cost for entrepreneurs.
- Development of the tourism sector by promoting heritage and ecotourism.

BIHAR

8. **FLY ASH BRICKS** - (CLOSELY TIES IN WITH **SDGs 9** AND **13**)

The housing shortage situation has forced India to increase bricks and cement production. Conventional brick production procedures involve topsoil removal from fertile land at the end of every growing season. The consequences of the activities are releasing a large amount of carbon, degrading the soil, and also threatening the farmers from losing their fertile land. These issues are being addressed in India by an inspiring green business initiative, spearheaded by Development Alternatives (DA), a research Non-Governmental Organization (NGO), and social enterprise hybrid. The new approach for brick production usesfly ash, a by-product from thermal power plants, instead of topsoil removal from fertile productive land. Fly ash causes severe respiratory problems to the Indianpopulation and power plant operators to face significant costs for disposal of fly ash.Alternative brick production and sale of bricks with low carbon content creates amutual win-win situation for both power plant operators, as it helps cut downcosts related to ash waste disposal, and local communities, as less environmentaldamage occurs. The fly-ash brick requires relatively simple technologies forproduction, is inexpensive, and is more resilient than traditional bricks. Fly ashbricks are more sustainable and reduce adverse impacts to the environment.

Having uniform colour like cement, they reduce plastering requirements, are lighter in weight, dense composition, and more durable.