

Clean and Green Village: Concept Note

(Let's make it a People's Pursuit)

The Indian Version of SDGs

Sustainable Development Goals (SDGs) are universal goals of development aspiration for humanity. The goals and related indicators are so interlinked that achievement of one goal can serve as a positive stimulus for many indicators of development. For India, the Government has subsumed SDGs into nine themes. Attainment of SDGs at local level can reflect in multiple ways in *ease of living* of people in Indian villages. The Ministry of Panchayati Raj is guiding and prodding the Gram Panchayats to join hands with various departments in order to prepare convergent and holistic planning.

The new Gram Panchayat Development Plan (GPDP) follows an inclusive and participatory process with the motto of 'Leave No One Behind'. The principle of 'inclusion and participation' in GPDP process at one level is about joining hands with various departments at the cutting edge level; and at another level it's about finding a place in the GPDP document the life those at the margins of the society value living and aspire to achieve. A deep desire to live in a *clean and green* place is innate and natural to everyone. Finding the ways to make this happen should get on the development agenda of the States especially because of its tendency to create a cascading effect on many SDGs.

Viewed from this perspective, *theme 5: Clean and Green Village* is closely related to SDG-6 on Water and Sanitation; SDG-7 on Affordable and Clean Energy; SDG-12 on Responsible Consumption and Production; SDG-13 on Climate Action; and SDG-15 on Life on Land. Thus, action initiated in any one theme, turns on the shower positively impacting on multiple development indicators. Therefore, clean and green is not merely about removing garbage or planting some tree saplings. It's about health; it's about climate action; it's about water conservation; it's about increasing life expectancy and well-being and so on. Thus, it's an ascetic practice *to cultivate a clean mind*, and responsible well-being.

The Purpose of this paper

This paper aims at expanding the idea of SDG Theme-5: ‘*Clean and Green Village*’. It attempts assembling components that possibly can make up Clean and Green village; identifies specific interventions required; suggests plans and an approach that might help accomplish the mission; points out training and capacity building requirements; manpower requirements; the indicators of the desired ultimate situation; and a monitoring mechanism to recognize that GPs are executing right plans and are on the road to realizing the mission: ‘Clean and Green Village’. The challenge we need to take on is: how to make it a *People’s Pursuit*. It should be made like: *My village, my pride*. With the support of an aspiring community, the goal is not difficult to reach.

A Working Definition of a ‘Green and Clean’ Village

Clean – in practical terms, refers to clean house, clean institutions, clean community settlements and clean environment that embrace all the elements of complete village sanitation, which manifests through visible cleanliness; and **green** refers to a culture that respects natural source of life-energy such as sustainable tree cover, healthy soil, water conservation, environmental protection and organic life style. Environmental surrounding of a clean and green village should enable people to lead healthy and productive lives.

Components of a Clean and Green Village

The broad components that constitute a Clean and Green Village are presented below. Each component consists of many elements, which will be broadly introduced here, and explained, in detail in annexure -1. Each component vis-a-vis the elements it is made of may be viewed as specific action points at the village level. In other words, they can be known as: *Ten Areas of Action*. A suggestive approach to take action is presented after introducing the ten areas of action.

Ten Areas of Action

1. Open Defecation Free Village
2. Clean and Green School

3. Clean and Green Anganwadi
4. Scientific Management of Solid Waste
5. Wastewater Management
6. Affordable and Clean Energy
7. Greening Development
8. Promotion of Organic Farming & Progressive Reduction of Chemicals
9. Celebrate Clean and Green Living
10. Strengthening Local Committee & Enhance Larger Participation

Components vis-a-vis the Elements

Sl	Components	Elements / Indicators
1	Open Defecation Free Village (end open defecation)	1.1. Every household has access to a 'functional toilet' Everyone in the family uses the toilet 1.2. Water is available inside or near the toilet 1.3. No visible feces found in the environment 1.4. There is at least one clean public toilet available with water facility in market area.
2	Clean and Green School	2.1. The school has functional toilet / urinal facilities separate for boys and girls 2.2. There is water available for handwashing and for use at toilet/urinal. 2.3. There is safe drinking water available 2.4. There is arrangement in place for maintaining cleanliness of the sanitary complex 2.5. Bio-gas / NARDEP compost is made using school mid-day meal waste. 2.6. There are trees planted / there is a nutria-garden maintained in the school, where compost made of mid-day meal waste is applied.
3	Clean and Green <i>Anganwadi</i>	3.1. The <i>anganwadi</i> has functional toilet / urinal facilities 3.2. There is water available for handwashing and for use at toilet/urinal. 3.3. There is safe drinking water available 3.4. There is arrangement in place for maintaining cleanliness of the sanitary complex 3.5. NARDEP compost is made using mid-day meal waste. 3.6. There are trees planted / there is a nutria-

		garden maintained, where compost is applied.
4	Scientific Management of Solid Waste	<p>4.1. There is notice issued to all the shops, restaurants, and function halls banning single use plastics, and campaigning for the use of reusable cloth bags.</p> <p>4.2. There is arrangement for 100% collection of plastic wastes from households</p> <p>4.3. Organic waste is home composted or collected from households and composted.</p> <p>4.4. Plastic waste collected are sold to the recyclers or sent to the Block PWM Unit</p> <p>4.5. The sanitation workers get regular wages, undergo health check-up and are supplied with uniforms and protective gearings.</p>
5	Wastewater Management	<p>5.1. There is drainage / soak pit arrangement available for wastewater not to stagnate on the streets or anywhere.</p> <p>5.2. Wastewater is diverted to recharge pits</p> <p>5.3. Wastewater is recycled and reused for cleaning public toilets or at solid waste management unit / for raising nursery and for watering tree plantation or expanding green cover through avenue plantations.</p>
6	Affordable & Clean Energy	<p>6.1. There bio-gas / solar / wind energy used for lighting, cooking, or pumping water either by public institutions or individuals</p> <p>6.2. In all public buildings replace ICL bulbs, with LED bulbs; Replace T8 Tube lights with T5 Tube lights.</p> <p>6.3. Encourage children to get out and play instead of watching TV or playing on computers and other devices.</p>
7	Green Development	<p>7.1. The Panchayat supports households and schools for tree plantation, nutri-garden etc.</p> <p>7.2. The Panchayat is highly active in raising nursery and in avenue plantation / tree plantation including fruit bearing trees etc.</p> <p>7.3. The Panchayat has designated common lands, where tree plantation is maintained.</p> <p>7.4. A considerable number of households have nutria-garden, or at least a few trees such as Papaya, moringa, banana etc.</p>
8	Promotion of Organic Farming	8.1. The Panchayat arranges campaigns to

	& Progressive Reduction of Chemicals	<p>promote natural farming, organic cultivation methods</p> <p>8.2. There is a general trend in this village to move towards chemical-free agriculture</p>
9	Celebrate Clean and Green Living	<p>9.1. There is a general trend among households to seek chemical-free / organic products</p> <p>9.2. There is an overall awareness with regard to responsible disposal of household waste, which is noticeable in people's behavior, and from the cleanliness of the village.</p> <p>9.3. The GP is involved in clean up campaigns and tree plantation at least four times a year</p> <p>9.4. The GP organizes celebration of 'Annual Clean and Green and Day', in order to recognize individuals, wards, and local institutions that contribute to Clean & Green Village. The GP recognizes 'clean wards' by instituting rolling trophy given away to cleanest ward in the GP in an annual event.</p>
10.	Strengthening Local Committee & Enhance Larger Participation	<p>10.1 Local Village Swachhata Committee or team of Swachhagrahis take responsibility for Clean & Green village.</p> <p>10.2. The Village Swachhata Committee inspects public toilets, school toilets, solid waste collection in practice, wastewater recycle / reuse arrangement etc. to report to the GP.</p> <p>10.3. Village Swachhata committee prepares Annual Action Plan for improving the overall village cleanliness, and green cover.</p> <p>10.4. The Action Taken on Annual Action Plan on Clean and Green is presented to the Gram Sabha (GS) in GS meetings.</p>

Setting a Benchmark

The elements indicated under each component above *serve as benchmark* to pursue and accomplish. These can be considered as essential / basic. These elements serve as *pointers in Panchayat level planning* exercises. Planning for it, setting them up, and sustaining the operation of these elements will help cross considerable mile stone in

terms of Clean and Green Village. These elements can serve as *reference points* for progressively moving towards attaining the status of Clean & Green village.

The Approach

Our approach to the attainment of Clean and Green Village should be so designed to create a kind of healthy competition between and among neighborhoods. Therefore, a Clean and Green Village Index (CGVI) has been developed (See Annexure – 1). This tool helps pin down as baseline where a given village (Gram Panchayat) stands in terms of cleanliness and green cover. People should pursue going up in the CGVI in their personal interest of a healthy living; for the chances of land value going up in such places; and for their general well-being and social status get elevated. The CGVI can be designed as an online tool for carrying it out as an annual exercise.

Approach to Planning

Action may have to be initiated on each component mentioned in the matrix given above. These become activities to plan for. For instance let's take action required on two of the components mentioned in the matrix above viz. Component - 4 & 5. For each of the 'element' mentioned, the action pointers (activity) may turn out as follows.

Sl.	Elements indicated in the matrix	Action that this 'Element' may require for incorporation into the Plan for CGV.
Component – 4: Solid Waste Management		
4.1	There is notice issued by the GP banning single-use-plastics, and campaigning for the use of reusable cloth bags.	The GP has to serve notice, and ensure that the ban is really implemented. Undertake campaigns for promoting reusable cloth bags. Involve local NGOs if possible.
4.2	There is arrangement for 100% collection of plastic wastes from households	First of all, community preparation is required for segregation of wastes at household level. Sanitation workers have to be trained and equipped. There must be collection vehicle and logistic arrangement; and a Material Recovery Centre for treating / processing the collected waste.
4.3	Organic waste is home composted	Community education for home-composting is

	or collected from households and centrally composted.	required. If collected from door to door, there needs to be centralized arrangement for processing wet waste into compost etc. Train sanitation workers to make composts. Construct compost pits and arrange water and other facilities required (using MGNREGS / SBM-G – II etc.)
4.4	Plastic waste collected are sold to the recyclers (or sent to the Block PWM Unit)	Identify and get the list of waste dealers of various types in the vicinity. There must be a functional Block level Plastic Waste Management Unit if non-biodegradable wastes have to be sent to Block PWM Unit. Urge the Block level SBM-G / or the BDOs to do it
4.5	The sanitation workers get regular wages, undergo health check-up and are supplied with uniforms and protective gearings.	The GP should arrange regular payment of wages to sanitation workers, and provide uniforms and protective gearings. Arrange for periodical health check. Collect service charges from households for paying the sanitation workers. Prudently use XV FC funds for maintenance
4.6	About 80% of waste collected get treated/ process and hardly 20% goes to the landfill.	The GP should ensure that about 80% of the waste collected joins appropriate treatment stream. The residual or inert waste sent to the landfill should be as low as 20%. This is an important indicator of successful waste management.
Component – 5: Wastewater Management		
5.1	There is no wastewater stagnation in anyplace in the village.	<u>Action Plan Required:</u> Plan for constructing proper drainage lines. Alternatively, go for household level soak pits if houses are scattered or landscape is uneven/hilly; or community level soak pits if houses are clustered; or divert wastewater to constructed recharge pits or abandoned open wells, and so on.
5.2	Wastewater is diverted constructed to recharge pits / abandoned well.	Constructed recharge pits or identify abandoned open wells and use them as recharge structures.
5.3	Wastewater is recycled and reused (e.g. cleaning public toilets or at solid waste management unit / raising nursery and for watering tree plantation/ expanding green cover with avenue plantation).	The wastewater drained through drainage lines cannot be let open in ponds or in open field. There must be recycling arrangement so that wastewater becomes reusable. Wastewater can be reused for flushing the public / school toilets; or for raising nursery; watering the avenue plantation; or expanding the green cover by planting fruit bearing trees that can help generate income to GP.

As shown above, activities have to be identified and planned for each of the component. The elements help clarify *the indicators* involved. In other words, the elements have been so worded to easily convert them as indicators, as well as to offer the cues one may need to list out activities for this project.

There can be two approaches to plan for attainment of Clean and Green Village. One is identifying the areas of improvement required through the CGV Index and incorporating such areas of intervention in the Gram Panchayat Development Plan (GPDP).

The second is considering CGV as a project with convergence mode funding, supported by a critical gap fund. A Gram Panchayat that decides to pursue this mission of Clean and Green Village can take up. They can make an exclusive plan detailing the activities depending on the baseline as shown by the CGV Index.

Training and Capacity Building

An exclusive training and capacity building package can be developed, which will include how to plan, execute and monitor the progress made in each component mentioned in CGV Index. A comprehensive training may be required, which will also include assessing the funding requirements, convergence possibilities, manpower requirements and the skill-sets required vis-à-vis various components of CGV.

Progress Monitoring

The previous year's status serve as a reference point for recognizing the progress made in a given year. Thus, the CGVI can also serve as a monitoring tool to measure and report progress.

In Place of a Conclusion

There is nothing that can be called garbage, until we create garbage. Almost all human activity generates some kind of garbage – either physically or in the form of anxiety and stress. Like the yogic breathing exercises cleanse the toxins from the body; meditation purifies the mind; keeping our house and our surrounding clean ensures environmental cleanliness. Living in a clean and green environment exemplifies removing the dirt in perception, and inhaling positive energy day and night. Thus, it is

linked to ‘cultivating the mind’. Clean and Green, in a way, is a project in cultivating the mind.

This concept note does not refer to technology options, manpower requirements, or budget. This is because technology options for each component indicated above are too many if one started listing out. Similarly, the appropriateness of technology may vary depending on population, location of village, terrain conditions etc. The number and capacity of manpower requirements to deliver various services tend to vary as well, depending on various local factors. Moreover, technology options are discussed / explained in many handbooks released by the Ministry of Jal Sakthi, Ministry of New and Renewable Energy, Ministry of Environment, Forest and Climate Change, and Ministry of Urban Development etc. It is possible to collate and bring out the technology options for most of the components indicated in the matrix at the annexure.

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Annexure - 1

Clean & Green Village Index

Sl	Components	Elements / Indicators	Weightage	Score
1	Open Defecation Free Village	<ul style="list-style-type: none"> Every household has access to a 'toilet' 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Technically, the toilet is 'usable' 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Everyone in the family uses the toilet 	2	Everyone -2 Some – 1 No one – 0
		<ul style="list-style-type: none"> Water is available inside or near the toilet 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> No visible feces found in the environment 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is at least one clean public toilet available with water facility in market area. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> The Public toilet facility is maintained clean 	2	Yes – 2 No – 0
		Sub-total Score	14	
2	Clean and Green School	<ul style="list-style-type: none"> There is toilet / urinal facilities available separately for boys and girls 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Students have access to use the toilet / urinal 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is water available for handwashing and for use at toilet/urinal. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is drinking water available 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is arrangement in place for maintaining cleanliness of the sanitary complex 	2	Yes – 2 No - 0

		<ul style="list-style-type: none"> Bio-gas / NARDEP compost is made using school mid-day meal waste. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There are trees planted / there is a nutria-garden maintained in the school, where compost is applied. 	2	Yes – 2 No - 0
		Sub-total Score	14	
3	Clean and Green Anganwadi	<ul style="list-style-type: none"> There is a child friendly toilet / urinal facility available in anganwadi 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> The children have access to the facility 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is water available for handwashing and for use at toilet / urinal. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is safe drinking water available 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is arrangement in place for maintaining cleanliness of the sanitary complex 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> NARDEP compost is made using mid-day meal waste. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There are trees planted / there is a nutria-garden maintained, where compost is applied. 	2	Yes – 2 No - 0
		Sub-total Score	14	
4	Scientific Management of Solid Waste	<ul style="list-style-type: none"> There is notice issued by the GP to all the shops, restaurants, and function halls banning single use plastics, and campaigning for the use of reusable cloth bags. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is arrangement for 100% collection of plastic wastes from households 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Organic waste is home composted or collected from households and centrally composted. 	2	Yes – 2 No - 0

		<ul style="list-style-type: none"> Plastic waste collected are sold to the recyclers (or sent to the Block PWM Unit) 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> The sanitation workers get regular wages, undergo health check-up and are supplied with uniforms and protective gearings. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> About 80% of waste collected get treated/ process and hardly 20% goes to the landfill. 	4	Yes – 4 No - 0
		Sub-total Score	14	
5	Wastewater Management	<ul style="list-style-type: none"> There is drainage / soak pit arrangement available for wastewater not to stagnate on the streets or anywhere. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Wastewater is diverted constructed to recharge pits / abandoned well. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Wastewater is recycled and reused(e.g. cleaning public toilets or at solid waste management unit / raising nursery and for watering tree plantation/ expanding green cover with avenue plantation). 	4	Yes – 2 No - 0
		Sub-total Score	8	
6	Affordable & Clean Energy	<ul style="list-style-type: none"> There bio-gas / solar / wind energy used for lighting, cooking, or pumping water either by public institutions or at least - a few families 	2	Yes – 2 Partially - 1 No - 0
		<ul style="list-style-type: none"> In all the public buildings LED bulbs have replaced ICL / CFL bulbs; The T5 tube lights have replaced T8 tube lights. 	2	Yes – 2 Partially - 1 No – 0
		Sub-total Score	4	

7	Greening Development	<ul style="list-style-type: none"> The Panchayat campaigns for households and schools for tree plantation, nutri-garden etc. 	2	Yes – 2 Partially - 1 No - 0
		<ul style="list-style-type: none"> The Panchayat is practically active in raising nursery and in avenue plantation / tree plantation including fruit bearing trees etc. 	2	Yes – 2 Partially - 1 No - 0
		<ul style="list-style-type: none"> The Panchayat has designated common lands, where tree plantation is maintained. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> A considerable number of households have nutri-garden, or at least a few trees such as Papaya, moringa, banana etc. 	2	Yes – 2 Partially - 1 No - 0
		Sub-total Score	8	
8	Promotion of Organic Farming & Progressive Reduction of Chemicals	<ul style="list-style-type: none"> The Panchayat arranges campaigns to promote natural farming, organic cultivation methods 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> There is a general trend in this village to move towards chemical-free agriculture 	2	Yes – 2 Partially - 1 No - 0
		Sub-total Score	4	
9.	Celebrate Clean and Green Living	<ul style="list-style-type: none"> There is a general trend among households to seek chemical-free / organic products 	2	Yes – 2 Partially - 1 No - 0
		<ul style="list-style-type: none"> There is an overall awareness with regard to responsible disposal of household waste, which is noticeable in people's behavior, and from the cleanliness of the village. 	2	Yes – 2 Partially - 1 No - 0
		<ul style="list-style-type: none"> The GP is involved in clean up campaigns and tree plantation drive at least four times a year 	4	Yes – 4 No - 0

		<ul style="list-style-type: none"> The GP organizes celebration of 'Annual Clean and Green and Day', in order to recognize individuals, local institutions and the GP wards that contribute to Clean & Green Villages. The GP recognizes 'clean wards' by instituting rolling trophy given away to cleanest ward in the GP in an annual event. 	4	Yes – 4 No - 0
		Sub-total Score	12	
10.	Strengthening Local Committee & Enhance Larger Participation	<ul style="list-style-type: none"> Village Swachhata Committee exists (or team of Swachhagrahis) that take responsibility for Clean & Green village. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> The Village Swachhata Committee inspects public toilets, school toilets, solid waste collection in practice, wastewater recycle / reuse arrangement etc. to report to the GP. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> Village Swachhata committee prepares Annual Action Plan for improving the overall village cleanliness, and green cover. 	2	Yes – 2 No - 0
		<ul style="list-style-type: none"> The Action Taken on Annual Action Plan on Clean and Green is presented to the Gram Sabha (GS) in GS meetings. 	2	Yes – 2 No - 0
		Sub-total Score	8	
		TOTAL SCORE	100	

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