



INSIGHTSIAS

SIMPLIFYING IAS EXAM PREPARATION

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Swachhata from Idea to Reality

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On the Road to Swachh Bharat

Introduction

- When the Prime Minister gave a call for Swachh Bharat on October 2, 2014, the sanitation infrastructure in the country was inadequate, millions of people defecated in the open, effective waste management was an almost alien concept and maintaining cleanliness occupied little or no priority in society.
- The government has worked towards creating sanitation infrastructure like toilets and waste management facilities and running sustained awareness campaigns to motivate people to adopt cleanliness as a way of life.

Cleaning River Ganga

- For the Ministry of Water Resources, River Development and Ganga Rejuvenation, one of the major Swachhata challenges has been the cleaning of River Ganga to restore its **Aviralta** and **Nirmalta** – its continuous and unpolluted flow.
- Ganga has multiple sources of pollution. About 2953 million litres of sewage generated by 97 towns along the banks enter the river untreated every day.
- The sewage treatment infrastructure in these towns is inadequate, and in many cases defunct for want of proper maintenance.
- The problem will only get compounded as population grows in these towns, generating more waste.
- Then there are untreated effluents from industrial sources, solid waste from the towns and villages along the river banks, agricultural waste, open defecation waste, and polluted tributaries and nallahs emptying into the river all contributing to the load of pollutants.
- Comprehensive cleaning of the river requires infrastructure, systems and practices on a sustained basis. This calls for **coordinated and concerted action from central, state, private** as well as the participation of people living along the river.
- **Namami Gange programme** launched in 2015 has made good headway to clean Ganga. For the first time a separate ministry was made for Ganga Rejuvenation in 2014.

Innovative Models

- Innovative models like the **Hybrid Annuity Model** and **one-city one-operator concept** where all new and existing Sewage Treatment Plants (STPs) will be under charge of one private operator, ensuring better upkeep and maintenance.
- Many private companies are also taking up projects to clean Ganga, renovate the ghats and crematoria or do afforestation along the banks under their **CSR activities**.
- Many self-motivated individuals are also coming forward for cleaning and other such works. Known as **Ganga Praharis** they motivate other people to help keep the river and its banks clean.

Swachhata in the Roads

- The government is promoting the use of waterways as a cheaper and more environment friendly mode of transport. Around 111 waterways have been declared as **National Waterways** and will be developed for transport.
- The government is also trying to promote the use of cleaner fuel like Ethanol, Methanol, Bio-Diesel, Bio CNG and electricity in the transport sector as alternatives to petrol and diesel.
- Road ministry is also trying for generation of less waste during road building and using waste material like fly ash, plastic, oil slag and municipal waste for construction of highways.

Questions

1. The next step in addressing sanitation woes should be a focus on waste management. Analyse.
2. To hear the call of the Ganga, both political will and ethical responsibility are required. Analyse in the context of recent developments with respect to Ganga River.
3. Critically examine the magnitude of Ganga river pollution, its causes and challenges faced by the government in cleaning the river.
4. The 'GOBAR-Dhan' scheme will be implemented by
 - a) Ministry of Environment, Forests and Climate Change
 - b) Ministry of New and Renewable Energy
 - c) Ministry of Rural Development
 - d) Ministry of Drinking Water and Sanitation

Solution: d)

The scheme falls under Swachh Bharat Mission – Gramin which is being implemented by the Ministry of Drinking Water and Sanitation.

Towards Clean and Healthy Villages

Introduction

- Our country lives in villages and only when the villages are developed the holistic and inclusive development of the country is possible. If the villages are not clean then the development of the villages will remain incomplete.
- An initiative that has made marked contribution in changing the quality of life of rural people is the **Swachh Bharat Mission**. The objective is to make human life cleaner, healthier and dignified.
- On October 2, 2014 the sanitation coverage was 38.70% and currently it is 93.90%. Such a huge progress has not been seen anywhere in the world in the field of hygiene and cleanliness.
- Today, inspired by this program, many countries of the world are planning on this pattern to improve their sanitation conditions.

Cleanliness Importance

- **Cleanliness is not only about a life-force but also the cornerstone of human development.** No community and society can be successful till it is clean.
- The goals related to education, health, poverty alleviation, human development etc. cannot be achieved in the absence of cleanliness. Cleanliness also contributes significantly in the economic development of the nation.
- It is our social obligation as the citizens of India to fulfil **Gandhiji's vision of Clean India** in the year 2019 on the occasion of his 150th birth anniversary.

Transforming the Destiny of our Villages

- Swachh Bharat has transformed the face and destiny of the village today. Studies have revealed that in every house of an Open Defecation Free village, about Rs. 50000 are being saved because the family is saving on the expenditure otherwise being incurred on treatment of various diseases.
- The rural families are utilising this savings to acquire new amenities and facilities to provide **better education to the children, and to improve their standard of living**.
- According to the study by the WHO, with the implementation of SBM, every year we have **prevented a large number of children from becoming victims of deadly diseases** in rural areas.

Unique Initiatives

- Women associated with SHGs have made commendable contribution in the cleanliness movement, by investing their savings in cleanliness related works.
- Panchayat representatives have also shown commendable interest in SBM.
- With the aim to take SBM forward, the Rural Development Ministry has taken a number of measures through MGNREGA. This includes awareness promotion among the village panchayats towards cleanliness in the rural areas and encouraging and trainings villagers to take up activities related to livelihood creation.

Managing Waste Water

- Management of waste water is a big challenge for the whole world today. Lack of planning and infrastructure for waste water management leads to unclean life situations.
- **Waste water management in Telangana:** soakage pits are being constructed through MGNREGA at family and community level.
- In Nanded district of Maharashtra MGNREGA funds were utilised for making soakage pits which has helped to get rid of mosquitoes in the villages.

Meeting Challenges

- Considering the diversity of the villages in the country it should be kept in mind that no one model of sanitation can be adopted for all gram panchayats in India.
- We have to focus on developing such measures which are easy to adopt, economical and have minimum technical limitations.
- The villagers of the country must not limit cleanliness to October only and make it an integral part of their daily life, make it a habit and work on regular basis to clean their villages, streets, environment and surroundings, thereby contributing to the prosperity of rural life.

Questions

1. Decentralised sludge management systems are vital to achieve clean water goals of India. Examine.

2. It is said that wastewater remains an untapped resource, especially in India. What are the threats posed by untreated wastewater? What should India do to recycle wastewater and tap this resource effectively? Examine.

3. Consider the following statements:

1. Rural sanitation coverage has more than doubled since the launch of the Swachh Bharat Mission (Gramin)

2. Around 90% of households in rural India that have access to a toilet use it

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: c)

Swachhata: Juggernaut of Change

Introduction

- Four years have passed since and the Swachh Bharat Abhiyan has moved from a vision into a juggernaut of change. While we still haven't summited the task of universal swachhata, there has been an unprecedented improvement across the country.
- Sanitation coverage in India has increased from 38.70% in 2014 to 93.90% in 2018. Over 9 crore toilets have been constructed and more than 4.5 lakh villages have been declared Open Defecation Free (ODF).
- The World Health Organisation recently reported that the SBM will result in averting more than 300,000 deaths between 2014 and October 2019.

Making Cooking Women Friendly

- Exposure to the smoke produced by a firewood/ coal/ cow-dung burning choolha, apart from causing household pollution and deforestation, also adversely affects the health of women and children causing several respiratory disorders. This deprives women an opportunity to earn a livelihood and paralyzing their social equity.
- Since the launch of **Pradhan Mantri Ujjwala Yojana (PMUY)**, more than 5.51 crore LPG connections have been released for women from underprivileged and SC/ST communities in India. A new target of 8 crore LPG connections by 2020 has been set.

Improving Fuel Efficiency

- The increasing consumption of petroleum transport fuels is directly linked with atmospheric pollution. The government has taken several policy measures and interventions to reduce vehicular emissions and improve fuel efficiency.
- India successfully implemented BS IV norms all across the country in April 2017. The government decided to leapfrog from BS IV to BS VI fuel norms directly.
- BS VI standard is less polluting than BS IV, and comparable to global standards such as Euro VI.

Biofuel Policy

- Pertinent to India's challenge of balancing climate change with rapid economic growth, biofuels hold great promise.
- With an objective of addressing both the environmental pollution from burning of agricultural waste and generating additional income for farmers, the government approved the **National Policy on Biofuels** in 2018.
- Plans are afoot to set up 12 **2nd generation bio-refineries** which will be capable of generating bio-ethanol from agricultural residue.
- So far we have achieved 4% ethanol blending in petrol leading to reduction in greenhouse gas emissions and forex savings from fuel imports and our target is to reach 10% ethanol blending in petrol.
- Great potential also lies in the employment of **used cooking oil as a potential feedstock for biodiesel** which will not only augment fuel production, but also prevent diversion of used cooking oil in the food industry.

Swachhata in Tourist Locations

- While the history of India is preserved in the glory of its monuments, we have all seen the garbage left behind by heavy tourist footfall at these iconic places. It is appropriate to spread the message of Swachhata at these locations.

- 10 such iconic places of historical and religious importance were identified and adopted by oil and gas CPSEs for upkeep and maintenance across the country.
- Initiatives such as the fortnightly observance of **Swachhata Pakhwada** and **Swachhata hi Sewa** provide an opportunity to showcase the core message of SNM.
- SBM has now become a '**Jan Andolan**' with massive people's participation and has created a sense of responsibility across society.

“So long as you do not take the broom and the bucket in your hands, you cannot make your towns and cities clean.” – Mahatma Gandhi

Questions

1. Despite the launch of PM Ujjwala Yojana, many poor families have not shifted completely to LPG cooking fuel. Examine.
2. Discuss the importance of biofuels for India? Critically examine whether the national policy on biofuels will help India unlock its biofuel potential?
3. The “SwachhManch” platform under the Swachh Bharat Mission is primarily meant to enable
 - a) Citizens to create, invite and/or participate in volunteering opportunities around neighborhoods.
 - b) Citizen scientists across India to participate in the annual SwachhSurvekshan surveys.
 - c) Any citizen to contribute ideas towards maintaining the ODF status of cities already declared to be so.
 - d) Citizens to share anecdotes about their experience of promoting cleanliness.

Solution: a)

SwachhManch is a web-based platform which aims to bring together every stakeholder contributing to the Swachh Bharat Mission under a common platform. The platform will allow stakeholders to create/invite/participate in volunteering opportunities around neighborhoods.

Sanitation Revolution: Implementation at Scale

Introduction

- Never before was sanitation put at the forefront of the national development agenda. From being a major cause of the world's sanitation crisis, with about 600 million people defecating in the open, about 500 million people now have access to toilets through a sanitation revolution which has taken place over the last 4 years.
- A recent survey under the World Bank support project found that 93% of the households surveyed which had toilets used them, confirming the behaviour change focus of the Swachh Bharat Mission.
- The movement has led to **inclusive development, catering to all sections of the society** – irrespective of age, caste, gender, religion and physical ability.
- The contribution of women is greatest – the mission has afforded them the dignity and security and also guarantees the wellbeing of their families and the community at large.

The Challenge of 4 Ss

- The SBM had to amplify strategy in order to address what we call, the challenge of the 4 Ss.
- **Scale:**
 - To meet the need to change the behaviour of 600 million people, the SBM had to acknowledge the scale it was dealing with and respond with a national Team Swachh Bharat with the calibre to change the behaviour of the individual as well as the community.
- **Speed:**
 - A sense of urgency needed to be created to kick start and roll through the campaign.
- **Stigmas and Myths:**
 - The SBM could not set forth behavioural change without acknowledging the stigmas and myths held for generations by the different communities.
 - Along with addressing these on the ground, at a central level mass media campaigns were launched.
 - The **Darwaza Band campaign** communicated the need to use toilets by each and every member of the household.
 - The film **Toilet ek Prem Katha**, gave a holistic picture of the troubles, obstacles faced by women and the eventual achievement of safe sanitation practices in the community.
- **Sustainability:**
 - SBM also maintained its parallel focus on **sustaining the jan andolan** and the progress being made on the ground.
 - Under **ODF plus**, SBM goes beyond toilets and works towards clean villages by prioritising solid and liquid waste management in ODF villages as well as rural water supply for ODF villages.

Conclusion

- The SBM is setting an example for the rest of the world to move towards improving sanitation for all and achieving the United Nation's SDG 6 in mission mode and ensuring that behaviour change communication in all its forms is the only tool for sustainable change.

Improving cleanliness of Healthcare facilities

Introduction

- In ancient times, surgical procedures were conducted near river banks during morning hours to benefit from clean water and air and Clean surroundings.
- With passage of time our natural resources are getting exhausted because of urbanization and population growth which is adversely impacting human health and the nation's economy.
- According to an estimate, that in 2015 lack of access to sanitation cost loss of around US \$ 222.9 billion to the global economy

Government initiatives:

- For addressing the growing challenges of sanitation and hygiene the Ministry of Health and Family Welfare of Government of India has adopted a multi- pronged strategy and has launched many initiatives for improving hygiene and sanitation holistically.
- MoHFW's **Kayakalp initiative** began in 2015 with the aim of improving infrastructure upkeep, hygiene and sanitation, and infection control practices in central government institutions and public health facilities in all 36 states and UTs.
- Health facilities are assessed and scored on a number of parameters and every year the highest scoring facilities at each level receive recognition through kayakalp awards.
- The kayakalp scheme has resulted in significant improvement in the level of the cleanliness, hygiene and infection control practices at Public Health Care facilities.
- MoHFW is also working to improve sanitation through a convergence of efforts with other Ministries. One such joint initiative between MoHFW and the ministry of drinking water and sanitation is the **Swachh Swasth Sarvatra** that attempts to bring Synergy between the Swachh Bharat Mission (SBM) and kayakalp by enabling and awarding funds to Gram Panchayats where Kayakalp awarded Primary Health Centres (PHCs) and Community Health Centres (CHCs) are located to become open defecation free.

VISHWAS-A new initiative

- In 2017, as a part of its efforts to expand and strengthen sanitation and hygiene interventions, National Health Mission (NHM) has launched a new campaign **VISHWAS-Village based Initiative to Synergise Health, Water, and Sanitation.**
- **Kayakalp Initiative for Health Facilities** -The programme aims at including in public health facilities a culture of regular assessment and Peer review of performance related to hygiene, cleanliness and sanitation.
- The States and UTs are supported extensively in roll out of 'Kayakalp' initiative, as part of National Health Mission (NHM).
- **Impact of Kayakalp Programme**
 - After launch of Kayakalp scheme, there is significant improvement in the level of cleanliness, hygiene and infection control practices at public health facilities.
 - The program has also built a culture of ongoing assessment and peer review of performance to promote hygiene, cleanliness and sanitation.

Swachh Swasth Sarvatra

- Swachh Swasth Sarvatra is a joint initiative of ministry of Health and Family Welfare and ministry of drinking water and sanitation to achieve better health outcomes through improved sanitation and increase awareness on Healthy lifestyles.

- Its objective is to have more Synergy between two complementary programmes- Swachh Bharat Mission (SBM) and kayakalp.
- Three broad objectives of this scheme are:-
 1. Enabling Gram Panchayat where kayakalp awarded PHCs is located to become open defecation free (ODF).
 2. Strengthening community health centre (CHC) in ODF blocks to achieve a high level of cleanliness to meet kayakalp standards through a support of Rs 10 Lakhs under NHM.
 3. Build capacity through training in water, sanitation and hygiene (WASH) to nominees from such CHCs and PHCs.

Swachhata Pakhwada

- Swachhata Pakhwada an initiative of MoHFW conducts sanitation and hygiene campaigns at public health facilities and at the community level every year.

Conclusion

- The diverse intervention undertaken by MoHFW are making a decisive impact at the level of health facilities and they have also built a supporting and enabling environment at the community level for achieving the goals of sanitation and hygiene, behaviour change, well beyond the existing programmes.
- The kayakalp, and Swachh Swasth Sarvatra, have not only improved the cleanliness status of facilities, they have also helped in facilities becoming centres for community awareness on these issues.
- Community platforms of Village Health Sanitation & Nutrition Committee (VHSNC) and Mahila Arogya Samiti (MAS) and the newly launched VISHWAS campaign, are making significant contributions for building collective community efforts for the cause of sanitation and hygiene, in building awareness about their linkages with health outcomes, and in creating sustained behaviour change.
- The wide reach, access and trust of Frontline workers of the health system, and the community based Institutions of VHSNC and MAS, is helping in building the Swachh Bharat and Swasth Bharat that we are all working for.

Questions

1. Cleanliness must move beyond caste. With reference to the Swachh Bharat Abhiyaan, how can social integration aid in national cleanliness and hygiene? Examine.

2. Inefficient waste management has become a norm in most Indian cities. What are the practical measures that can help mobilize citizens to participate in cleanliness drive? Discuss.

- 3. Swachh Swasth Sarvatra is an initiative of**
- a) Ministry of Health and Family Welfare
 - b) Ministry of Drinking Water and Sanitation
 - c) Both a and b
 - d) None

Solution: c)

Swachh Swasth Sarvatra is a joint initiative of ministry of Health and Family Welfare and ministry of drinking water and sanitation.

A Hygienic Environment for Mother and Child

Introduction:

- **“Sanitation in a community is more important than independence. Sanitation is a common spiritual effort in a community like ours and it is a basic human right”.-M.K.GANDHI**
- The above quote by Gandhiji portrays the sense of importance Bapu has bestowed on the need of sanitation for the survival of human race.
- Sanitation is beyond cleanliness. The concept of ‘Sanitation’ is a comprehensive one including effective management of human waste, solid waste, waste water, sewage effluents, industrial wastes and hazardous wastes.
- Lack of sanitation, has vital economic consequences and also serious social consequences.
- Mahatma Gandhi had realized that the then prevalent poor state of sanitation and cleanliness of India needed as much attention as was being devoted towards attainment of Swaraj.
- Along with the struggle for India’s independence, he led a continuous struggle for sanitation, cleanliness, and efficient management of all categories of wastes throughout his public life.

Women and Child Care

- Clean water, basic toilets and good hygiene practices are essential for the survival and development of children.
- For children under five, water and sanitation related diseases are one of the leading causes of death. Every day over 800 children die from preventable diseases caused by poor water, and a lack of sanitation and hygiene.
- **Child care institutions and Anganwadis** are considered as the centres in rural India where mothers and children converse almost every day and thus, these have turned into nodal units to spread awareness of Swachhata and disseminate the message of Sanitation.
- To ensure that Swachhata activities are carried out by each and every citizen of India, ‘Shramdaan’ or contribution of labour is encouraged.
- Shramdaan is an innovative action taken by the Ministry for offering voluntary swachhata activities starting from the level of minister to the anganwadi workers in their homes, surroundings and offices.
- Poverty and malnutrition exacerbate the risk of infants and children to various infectious diseases like diarrhea and pneumonia and heighten the probability of death, particularly among children with low birth weight.
- Demographic and epidemiological studies have documented that poor economic status of household, low female literacy, poor nutritional status of mother, child marriage, large family size, low autonomy of women, and inadequate access to health care services typically lead to disproportionately higher risk for the health status of mothers and their children.
- Studies have also documented large socioeconomic and interstate disparities in the maternal and child health status.
- The practice of open defecation is the main reason as to why India reports highest diarrhea deaths among children below 5 in India.
- Children weakened by frequent diarrhea are more vulnerable to malnutrition, stunting and pneumonia. Malnutrition among children in rural India is a common problem mostly among the disadvantaged sections of the society. The ministry has also initiated POSHAN Abhiyan to reduce the problem of poor nutrition among children.
- Sanitation has direct impact on the health of women and children, leading to infant and female mortality issues.

- Women can be active agents for bringing behavioural change in the society. They play an important role in the socialization process of children.
- They are considered to be the carriers of culture, tradition and history and identified with shaping the behaviour of children.
- Therefore, the Ministry has contributed towards building a safe and hygienic environment to ensure good health for both mothers and children.
- India displays a unique cultural pluralism wherein people of different culture and ideologies co-exist in harmony and peace. There are different myths and legends in every culture, in every part of the Indian society. Most of the norms are either against women or for women.
- Thus, in India, it is a challenge indeed to implement the policy measures in a true sense.

Ending Open Defecation

- **Water, sanitation and hygiene** are the three core issues which are grouped together to represent a growing sector. While each is a separate field of work, each is dependent on the presence of the other. For example, without toilets, water sources become contaminated; without clean water, basic hygiene practices are not possible.
- The country has set a target to become completely ODF at the earliest and this is a challenge that has to be met with all possible means by infrastructure, behaviour change and broader collective activities.
- In order to end open defecation, influential opinion leaders – such as the government, elected representatives, PRIs, Media etc should come together as they can play a key role in achieving the country's target.

Questions

1. It is found that the crisis of sanitation is not just an issue of aesthetics or polite behaviour, but one of life and death for the most vulnerable. Discuss various sociological problems that poor sanitation and open defecation has given rise to in India and systemic measures needed to address the issue of open defecation.

2. Overall, to improve child nutrition it is vitally necessary to improve healthcare services, women's empowerment, social protection and ensure better water supply and sanitation. Elaborate.

3. The Ministry of Housing and Urban Affairs, under the aegis of Swachh Bharat Mission – Urban, recently launched the #LooReview campaign in partnership with

- a) Twitter
- b) Google
- c) Sulabh International
- d) Facebook

Solution: b)

The Ministry of Housing and Urban Affairs, under the aegis of Swachh Bharat Mission – Urban (SBM – U), partnered with Google and launched the Loo Review campaign to encourage all local guides in India to rate and review public toilets on Google Maps.

Sanitation revolution: Cleansing urban India

The Cost of Poor Sanitation

- Sustainable development goals (SDGs) place a significant emphasis on sanitation, cleanliness and hygiene.
- There is significant evidence globally that better sanitation, hygiene and cleanliness helps in effective control of various vector borne diseases, parasite infection and nutritional deficiencies.
- They have been studies linking cleanliness and hygiene with reduction in respiratory disorders, gastrointestinal diseases (especially diarrhea), psychological issues and allergic conditions.
- As per a **UNICEF report (2011)**, almost 90% of child death from diarrheal diseases are directly linked to contaminated water, lack of sanitation or inadequate hygiene.
- Better sanitation, hygiene and waste disposal lead to reduction in occurrences of low birth weight babies, spontaneous abortion and occurrences of birth defects.
- The problem of solid waste management has been compounded due to high population growth rate and population concentration in urban areas.
- As per the **India health report for nutrition security in India (PHFI, 2015)**, the north eastern state of Mizoram has reported a 13 percentage- point decline in stunting (below normal height for the age) and 5 percentage points decline in underweight children (underweight and short) between 2006 and 2014 due to improved access to sanitation.
- Improved sanitation also has significant impact on social and economic development, particularly in developing countries.

The Launch of Swachh Bharat Mission

- Decade ago, Mahatma Gandhi said that '**sanitation is more important than political freedom**'.
- The launch of Swachh Bharat Mission on 2nd October 2014 by the prime minister to address this burgeoning health crisis was a historic moment for India.

Solid waste management - a multi-pronged approach

- It has to be acknowledged that while the ODF objective in India is on the brink of success, addressing the issue of solid waste management poses for Greater challenge.
- In India, an estimated 65 million tons of municipal solid waste is generated annually by around 400 million citizens residing in urban areas.
- We are also losing 1,250 hectares of additional precious land every year to accommodate dumping of un-processed municipal solid waste.
- Therefore, MoHUA has adopted a multi- pronged approach to address the complex issue of scientific waste management in urban areas of India.
- This includes policy and regulatory changes to encourage processing of waste to Value Added products on the one hand, along with mission initiatives such as **swachh survekshan** to inculcate a spirit of healthy competition, and star rating for garbage free cities to ensure long term sustainability.

Swachh Survekshan – a Tool for Mission Monitoring and Governance

- Under the SBM urban, MoHUA has been conducting the **swachh survekshan an annual survey to rank cities on various sanitation and cleanliness parameters**.
- The survey has been successful in enthusing cities with a spirit of healthy competition towards the concept of swachhata.

Star Rating for Garbage Cities

- The ministry has introduced a new innovative initiative for evaluating the garbage free status of cities and awarding the “**garbage free City stars**” to the city.
- The star rating protocol, properly implemented, can prove to be a game changer and revolutionize the way solid waste is managed in India.
- As more and more cities get certified as 'stars' it may well emerge as a key differentiator in the administrative/ political fabric of the country, where 'number of stars' for their city can be one of the parameters for evaluating effectiveness of Administration and elected representatives in achieving swachhata.

Success stories from states and cities:

- Kerala has been leading the way in the decentralized waste management with most of its cities having installed pipe compost and biogas plants at the household level. Alappuzha in Kerala is among the top 5 cities in the world recognized by the United Nations environment programme (UNEP) in its efforts to tackle the problem of solid waste.
- Goa has proven how waste can be an asset through its source segregation into 5 fractions. The city claims 100 percent door to door collection.
- 100 percent of waste in Gangtok is being segregated at sources and being processed.
- Nagpur has introduced an innovative watch which helps the ULB to monitor attendance of sanitary workers through Geo-tagging of their locations during their working hours.
- Aligarh has introduced '**magic Bricks**' made out of dry waste which can be used in construction activities
- Sasvad in Maharashtra uses **innovative colour coding of households** (red, yellow, and green) to denote households that do not segregate their waste, segregate occasionally, and regularly segregate respectively.

Moving towards a 'Janandolan'

- The achievement under the mission has been the way the mission has caught the imagination of citizen- children youth and senior citizens alike.
- In the last 4 years, along with infrastructural and regulatory changes, a parallel **social movement** has been steadily gathering Momentum among citizens.
- Today, we have more than 50 such brand ambassadors who are inspiring citizens to become partners with the government in our collective journey towards swachhata.
- Through other initiatives such as thematic drives with citizen participation, engaging students and self-help groups to be the agents for social behaviour change, engaging swachhagrahis across the country to drive behaviour change, running multimedia community campaigns.
- There is now a growing appreciation among people that sanitation and cleanliness is not the sole responsibility of the government, and that each of us is equally responsible for maintaining cleanliness of our surroundings.

Social and Economic Impacts of Swachh Bharat Mission: A Few Examples

- A recent study by the Indore Municipal Corporation has found that **vector borne diseases have reduced by 70% due to sanitation interventions** under Swachh Bharat mission. The number of patients affected by jaundice, cholera, vomiting, diarrhea, hepatitis and malaria in Indore have reduced.
- As a result, the sale of medicine across Indore has dropped by INR 20 crores, which has contributed in controlling Healthcare related costs in the City.

- State of Chhattisgarh has reported a dramatic reduction in contamination and incidences of diseases such as diarrhea, typhoid etc., in the last 2 years.
- More than 74000 informal workers have been mainstreamed into the waste management chain across cities, thereby providing them with steady livelihoods.
- The **Ambikapur model of Solid Liquid Resource Management** has provided jobs to thousands of self-help groups (SHGs) women members leading to improving their quality of life.
- Social entrepreneurship and innovations are on the rise with citizens and start-ups getting into this sector for converting waste into value added products.

Conclusion

- Today the **concepts of cleanliness and swachhata have come to embody the spirit of empowerment and quality of life.**
- Investments in sanitation and garbage free cities can significantly impact our lives and the larger environment - by providing a better quality of life for all, especially the economically weaker sections, ensuring dignity and safety of women and children, positively impacting health outcomes, providing enhanced livelihood opportunities and greater earning potential for rag pickers and other informal sectors, opening up entrepreneurial opportunities in the waste management sector, and improving tourism potential and resultant foreign exchange inflow, thus positively impacting the GDP of the country and contributing to a cleaner the environment.
- **A swachh environment will lead to a 'Swasth, Swastha, Samarth, and Samriddh' Bharat and pave the way for new India -2022.**

Questions

- 1. Mere construction of toilets to achieve ODF status will not lead to improvement in access to basic sanitation for Indians. Critically Examine.**
- 2. Urban India faces considerable gaps along the full cycle of sanitation. Discuss priorities and strategies that urban India should focus on to make Indian cities clean.**
- 3. A Seven-Star rating system was recently launched by the Ministry of Housing and Urban Affairs. This tool is specifically related to**
 - a) Scientific solid waste management**
 - b) Provisioning of safe piped water**
 - c) Making cities safe for pedestrians**
 - d) Eradication of open defecation**

Solution: a)

The star-rating initiative, developed under the Swachh Bharat Mission-Urban will rate cities on a 7-star rating system based on multiple cleanliness indicators for solid waste management, which will include, for instance, Door-to-door collection, source segregation, sweeping, scientific processing of waste, etc.

Sanitation: A Purification Process

Introduction

- *Everyone must be his own scavenger. If you become your own sweeper, not only will you ensure perfect sanitation for yourself, but you will make your surroundings clean –Mahatma Gandhi (Bapu)*

Gandhiji's idea of Swachh Hindustan

- There is considerably more to Gandhiji's idea of a Swachh Hindustan than building toilets and making it free from Open Defecation Free, although it is the first and very important step.
- Gandhiji wanted to see Hindustan Swachh –clean and cleansed, body and soul.
- Gandhiji felt deeply hurt the way we all treated communities who were condemned to handle filth and human excreta.
- Gandhiji picked up the broomstick-Jhaadoo and involved one and all in cleaning up house, ashram, neighbourhood, street and toilets.
- Jhaadoo was not just symbol of physical cleanliness alone. He established Jhaadoo as Antyodaya. He clearly led and advised on the journey of welfare from Antyodaya to Sarvodaya.
- Cleaning and cleansing were not limited to body and environs only. For Gandhiji, cleansing the soul was the ultimate goal for any human being. For him, building one's character ceaselessly in pursuit of Truth was the goal of life.

Status of Sanitation in the Country

- The situation with respect to construction of toilets has improved significantly in the country.
- Despite the ban on manual scavenging in India, over 300 cases of deaths due to manual scavenging have been reported from across the country in 2017.
- The country should respond to this immediately and rededicate itself to the task of doing away with manual scavenging.
- Total sanitation campaign should be the goal of the state, the society and the citizen.

Turning the Searchlight Inward

- Gandhiji's work for improving sanitation and his campaign for removal of untouchability was also an essential component of Satyagraha with self and society. Satyagraha implied process of self-purification.
- Sanitation and Hygiene were for Him important even for embarking on a spiritual journey.
- Cleaning self and environment, for Gandhiji, was the first step in the act of self-purification.
- The second and most important part of self-purification was giving up age old prejudices against the Dalits who were the silent and suffering sanitation workers in the society.
- Removal of untouchability was both a constructive programme and one of the eleven vows that each satyagrahi had to follow.
- The sanitation and hygiene scene in India still needs substantial reform and improvement. We have not yet fully responded to Gandhiji.
- Swachh Hindustan is still a dream for us and we need to work hard. It is time to turn the searchlight inwards and improve to pay tribute to Gandhiji and feel responsible to self and society.

Questions:

- 1. The misery of sanitation workers need to be put to an end, for the success of swachh Bharat mission. In this regard, analyze the problems faced by sanitation workers and ways to resolve it?**
- 2. Despite the importance of Safai Karamcharis in ensuring Clean India; they live in dire conditions and perish. What are the problems faced by Safai Karmacharis? Discuss the initiatives taken by the government in addressing these problems and evaluate their successes.**

Facts for Prelims

PM receives UNEP Champions of the Earth Award

- The Prime Minister Narendra Modi was awarded the 'UNEP Champions of the Earth' award, the **United Nations' highest environmental honour**.
- The PM has been selected in the leadership category for his pioneering work in championing the International Solar Alliance and for his unprecedented pledge to eliminate all single-use plastic in India by 2022.
- The annual 'Champions of the Earth' prize is awarded to outstanding leaders from government, civil society and the private sector whose actions have had a positive impact on the environment.

Kerala launches the first biogas plant under GOBAR-Dhan

- Kerala has taken the lead by setting up the country's first bio-gas plant under the GOBAR-Dhan scheme.
- GOBAR-Dhan (Galvanizing Organic Bio Agro Resources Dhan) Scheme has been conceptualized with an aim to convert waste into bio energy, gas and compost which would not only benefit the people but also maintain cleanliness in the villages.
- The new plant in Kannur has a capacity of treating 1000 kg of waste per day.
- Bio-gas, the most common form of bio-fuel, is a **clean form of energy** and can be obtained from cattle dung, poultry droppings, crop residue, kitchen waste, etc.
- Gobar-Dhan will **benefit rural people in general and women in particular** as it would improve both health and village cleanliness.
- The initiative will support recovery of biodegradable waste and convert it into a rich resource, while providing economic benefits to farmers and households.

SATAT initiative to promote Compressed Bio-Gas as an Alternative, Green Transport Fuel

- An innovative initiative – SATAT – to set up of Compressed Bio-Gas (CBG) production plants and make it available CBG in the market for use in automotive fuels was launched recently.
- Besides the potential to boost availability of more affordable transport fuels, better use of agricultural residue, cattle dung and municipal solid waste, the CBG plants will provide an additional revenue source to farmers, and 75000 direct jobs opportunities and lakhs of indirect jobs.

River Pollution abatement project in Udhampur in Jammu and Kashmir

- In an effort to pollution abatement in identified stretches of various rivers through **National River Conservation Plan (NRCP)**, the Ministry of Environment, Forest and Climate Change has sanctioned a project for pollution abatement of **rivers Devika and Tawi** in Udhampur, Jammu and Kashmir.