



**VAJIRAO & REDDY INSTITUTE**

India's Top Potential Training Institute for IAS

+918988885050



+918988886060

www.vajiraoinstitute.com



info@vajiraoinstitute.com

# YOJANA MAGAZINE ANALYSIS

(October 2024)

(Part 3/3)

## TOPICS TO BE COVERED

### PART 1/3

- SWACHH BHARAT MISSION & ITS IMPACT ON RURAL SANITATION
- SPECIAL CAMPAIGN 4.0

### PART 2/3

- GANGA REJUVENATION & WATER CONSERVATION
- GANGA @ VARANASI

### PART 3/3

- SMART GRIDS & RENEWABLE ENERGY: POWERING RURAL SANITATION
- GANDHIJI'S PHILOSOPHY ON SWACHATA THROUGH SELF PRACTICE

#### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



# CHALLENGES OF POWER SUPPLY IN RURAL AREAS

- **Power Supply Issues:** Consistent power supply remains a challenge in rural areas, affecting clean water availability linked to sanitation.
- **Climate Change Impacts:** Expected to worsen water scarcity, increasing the risk of disease transmission without basic hygiene practices.
- **Opportunity for Efficiency:** Integration of smart grids and renewable energy offers solutions for efficient rural sanitation.

## WHAT IS SMART GRID?

- **Definition:** A smart grid is an electric grid enhanced with automation, communication, and IT systems.
- **Key Features:**
  - Monitors and controls power flows in real-time.
  - Integrates consumer and renewable power sources.
  - Reduces transmission and distribution losses.
  - Enhances reliability through peak load management.

### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



## BENEFITS OF SMART GRID

- **Outage Management:** Automated systems for faster service restoration during outages.
- **Real-Time Monitoring:** Continuous tracking of power consumption at the consumer level.
- **Dynamic Pricing:** Encourages off-peak consumption through reduced tariffs.
- **Consumer Awareness:** Tools for tracking electricity usage, promoting energy efficiency.
- **Bidirectional Power Flow:** Facilitates net metering for prosumers.
- **Improved Utility Management:** Better control over distribution networks and asset management.

## MICROGRID

### What is a Microgrid?

- **An integrated energy and communication system consisting of interconnected loads and distributed energy sources.**

#### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **Operation:** Can function independently (**stand-alone**) or alongside a larger grid (**macrogrid**) during emergencies.

### Generation Sources

- **Diverse Sources:** Solar, wind, and microturbines provide reliable power, with the ability to isolate from larger networks.

## THE JAL JEEVAN MISSION

### Mission Overview

- **Objective:** Provide safe drinking water to all rural households through individual tap connections by 2024.
- **Sustainability Measures:** Includes rainwater harvesting, groundwater recharge, and greywater management.

### Community Involvement

**Participation:** Active community involvement is crucial, with a focus on education and prioritizing water issues through the 'Jan Andolan' movement.

## PM SURYAGHAR: MUFT BIJLI YOJANA

### Solar Rooftop Capacity Enhancement

- **Goal:** Increase solar rooftop capacity, empowering households to generate electricity.

#### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **Key Features:**

- **Reliable Power:** Ensures affordable power for rural sanitation.
- **Incentive Structure:** ₹1,000 crore allocated for local bodies to promote residential rooftop solar installations.
- **Stakeholder Collaboration:** Engages various entities to effectively promote solar projects.

## SANITATION & RENEWABLE ENERGY

### Role of Renewable Energy in Sanitation

- **Key Elements:** Maintenance of toilets, proper waste management, and promotion of hygienic practices.
- **Renewable Energy Benefits:** Solar energy can provide reliable power for water pumping and sanitation initiatives.

### Cost Reduction for Gram Panchayats

- **Financial Strain:** Gram Panchayats face challenges in meeting operational costs.
- **Cost Savings:** Solar PV systems can lower electricity costs compared to conventional sources.

**ADDRESS:**

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



## Net Metering System

Functionality: Bidirectional meters track energy consumption, allowing surplus energy to be carried forward.

## ELECTRICITY DEMAND IN RURAL AREAS

### Challenges of Rural Electricity Demand

- **Distribution Issues:** Small and sparse demand leads to costly power distribution networks.
- **Local Solutions:** Installing solar PV systems reduces the need for large distribution networks.

### Microgrids Supporting Rural Communities

- **Reliability:** Smaller microgrids can meet the electricity needs of rural areas, ensuring power for sanitation initiatives.

#### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



# GANDHIJI'S PHILOSOPHY ON SWACHATA THROUGH SELF PRACTICE

## Introduction

Gandhiji believed that **cleanliness** and **sanitation** were essential for **human dignity** and **social progress**. His commitment to these ideas was evident throughout his life and closely tied to his vision for India's **independence** and **social reform**.

## GANDHIJI'S COMMITMENT TO SANITATION & CLEANLINESS

- **Central Philosophy:** Cleanliness and sanitation were key values for Gandhiji. He famously said, "Everyone must be his own **scavenger**," encouraging people to take responsibility for their hygiene.
- **Personal Experience:** His time in **South Africa** and **India** strengthened his beliefs, leading him to declare, "A lavatory must be as clean as a **drawing room**."
- **Social Vision:** Gandhiji's view of India's independence included not just **political freedom** but also social issues, with village sanitation and health being important parts of his **18-point constructive program**.

### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



## CLEANLINESS: A PERSONAL PASSION FOR GANDHIJI

- **Childhood in Porbandar:**

- Gandhiji grew up in Porbandar, where he encountered the practice of **untouchability**. In his home, touching a **Mehtar** (sweeper) made someone “unclean.” He resisted this idea even as a child, questioning his mother about needing to bathe after touching the son of a scavenger, **Uka**.

- **Realization in South Africa:**

- Gandhiji’s commitment to cleanliness grew during his time in South Africa, where he faced **racial prejudice** and saw the poor living conditions of Indian communities. He highlighted the importance of personal hygiene and better sanitary conditions.

- **Promoting Cleanliness in South Africa:**

- He encouraged Indians in South Africa to maintain personal hygiene and keep their surroundings clean, along with promoting **honesty** and learning **English** to improve their social standing.

**ADDRESS:**

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)





- **Hygiene in India: Calcutta Congress Session (1901):**

- At the 1901 Congress session in Calcutta, Gandhiji was shocked by the terrible sanitary conditions at the camp. Some delegates used verandas as latrines without anyone objecting. Despite being a lawyer, he cleaned the mess himself, leading by example even when others refused to help.

## **FIGHTING UNTOUCHABILITY THROUGH SELF PRACTICE**

- **Creation of Bhangi Squads:**

- Years later, under Gandhiji's leadership in the Indian National Congress, he established **Bhangi** (sweeper) squads at Congress camps. Even members of **upper castes** participated in cleaning work, which was groundbreaking. During the **Haripura Congress**, 2,000 volunteers were trained in scavenging tasks.

- **Campaign Against Untouchability:**

- Gandhiji connected his sanitation efforts with fighting untouchability. He believed that untouchables were marginalized because their cleaning work was seen as "impure." In 1915, he welcomed an untouchable family into his **Ashram** in **Kochrab**, Gujarat, despite facing social backlash and opposition from family members, treating the girl from that family as his own daughter.

**ADDRESS:**

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



## ERADICATING MANUAL SCAVENGING & BREAKING SOCIAL BARRIERS

- **Social Change:** Gandhiji aimed to remove the stigma around manual scavenging, emphasizing that society needed to change its mindset: “Why should scavengers be considered untouchable for cleaning filth?” He also questioned norms about using the left hand for cleaning, which was seen as impure.
- **Vinoba Bhave’s Example:** Gandhiji’s close associate, **Vinoba Bhave**, from the upper caste, performed two important duties in the ashram: discussing the **Gita** and cleaning the toilets. Bhave’s actions highlighted the respect for both spiritual work and cleaning, showing the dignity of all labor.

## RECONSTRUCTING SOCIETY THROUGH SWACHATA

- **Village Sanitation as Part of Social Reconstruction:** Gandhiji viewed sanitation as an important part of his **18-point constructive program** aimed at rebuilding society. Among the 18 points, village sanitation and knowledge of health and hygiene were highlighted as essential for reforming Indian society.

### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **Constructive Program:** In his 1945 book, “Constructive Programme: Its Meaning and Place,” Gandhiji outlined a plan for volunteers to work on sanitation and hygiene as part of achieving **Poorna Swaraj** (complete self-rule). He wrote that political freedom should go hand in hand with cleanliness and health.

## GANDHIJI'S LEGACY OF SWACHATA

- **Beyond Hygiene:** Gandhiji's philosophy of cleanliness was about more than just hygiene; it was about social change. He believed that true courage meant taking responsibility for one's surroundings, saying, “It takes as much courage to be a good scavenger as to win a **Victoria Cross**.”
- **Modern Influence:** His legacy continues to inspire today's cleanliness movements, such as the **Swachh Bharat Mission**, reminding everyone of their duty to keep their environment clean.

### ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)