



## EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

**All the Best**

Section A: Waste Management in India: Challenges & opportunities

3.

India, today, is considered to be one of the emerging economies in the world. In its bid to build on such status and provide a better standard of life for its growing population, India has initiated a number of programmes to boost its economic production and growth. Some examples that instantly come to mind are those of 'Make in India', 'Startup India', 'Innovate in India' and the goal to increase the share of manufacturing in GDP to 25% in the coming few decades. But such growth will pose its own challenges for the country.

One such challenge is that of waste management as waste is a necessary outcome of any production process. The first question that arises for our consideration is: why is waste management necessary? This is because waste poses a threat to health and well-being of the people. From our common

experience, it is safe to say that waste releases unpleasant smells in the air. At times, it may also pollute other resources as well like in the case of 'leachate' release which contaminates the ground water resources of that area. Waste is also a threat to other living beings forming a part of our environment. The incidents of deaths of marine animals due to ingestion of plastic waste is an illustration of the above. But apart from the abovementioned, waste management has economic costs as well. Wastes represent the inefficient usage of our limited resources and if not managed properly, acts as a cause for overexploitation of such resources.

## Challenges to Waste Management in India :

It is, therefore, important to effectively manage wastes in the country. To make an effective strategy, however, it is necessary to identify the challenges that plague this industry currently.

Foremost, the quantity of the waste generated in India is huge and is bound to increase in the near future. As per census 2011, India has a population

of 121 crore, which is increasing still such that India will soon be the most populous country in the world. Huge quantity of waste will be generated by these people in their daily activities (Eg: cooking, cleaning, commuting, etc). Also, with governmental focus on increasing production and urbanization, more waste may get added. Handling such a large amount is a challenging task.

The challenge is compounded further by backward technology that is being employed in the waste management industry currently. A reason for the same is that the industry is majorly informal (almost about 90%) where the workers belong to the lower castes. They lack the skills as well as the financial capital to invest and upgrade their operations. Mostly ragpickers, these workers operate manually which hampers the efficiency of processes of waste management.

Another factor is that of low sensitivity and awareness among people regarding the need for waste management. Everyday instances of littering, dumping wastes on public spaces, etc depict a careless attitude

towards cleanliness and waste reduction. In spite of dust bins labelled as 'recyclable' and 'non-recyclable', very few people pay heed to them. They even fail to segregate the wastes generated at their home into recyclable and non-recyclable categories.

The existing mechanisms to manage wastes are outdated and have reached their limits of operation. Taking the example of urban areas, city wastes were initially dumped at landfill sites outside city premises. But now such landfills have reached towering heights, as seen in Delhi, and are coming nearer to habitation areas due to expansion of cities. One of the biggest challenges in exploring alternate mechanism is of low profitability. To take an example, organic waste can be treated to produce 'manure' which can be used in farming operations. But, the demand for manure has decreased due to increasing dependence on chemical fertilizers because of which waste managers are reluctant to invest in waste-to-manure operations.

opportunities : A promising future in India :

The challenges, however, are not such that can not be addressed. Many opportunities have surfaced in the recent years which can contribute to development of the waste management industry in India.

The foremost of them is the development of new technologies for waste treatment and new avenues for usage of the waste so treated. An example of new technology is that of bioremediation where microbes are used to break down complex substances and reduce the waste toxicity. Incineration, which is based on waste to electricity generation concept, and the usage of fly ash (a waste product of coal industry) in the construction sector in place of sand are some of other pertinent examples. Recent technological development to use wastes like bagasse for biofuel production can also be a game-changing opportunity for waste management industry in India.

This is fuelled by growing worldwide consciousness about resource shortages and the need for sustainable development. (Eg: Sustainable Development Goals). Such awareness provides opportunities and incentives for the waste management industry. The treatment of e-waste to extract rare metals for re-use is one such example. Increased focus on this industry can also help in attracting investments, say from multilateral development banks, at concessional terms and talent in terms of manpower. For India especially, this is an opportunity to formalize its waste industry by upgrading skills, technology and provide employment to the youth in the country.

In acknowledgment of the above, the Indian government has taken initiatives to develop the industry. The industry is now regulated by Waste Management Rules, 2016. The demand for this industry's products is also being incentivized such as mandatory ethanol-blending programme, promotion of organic farming, etc. The government is also providing concessional credit and

tax incentives through schemes like start-up India. Campaigns and awareness have been initiated under the Swachh Bharat Mission. The opportunities so created by such government promotion, can also be effectively used by players in the waste management industry.

In conclusion, India seeks to balance the trajectory of its economic growth with the goal of long-term sustainability. Waste management, which is based on the principles of reduce-reuse-recycle, is an essential component of such sustainability. Its full development has been hindered due to a variety of challenges in India. However, the recent shift towards sustainable development and technological advanced coupled with supportive government framework provides new opportunities in the sector. If exploited rationally, waste management can not only create employment in India but also contribute to a better life for all its citizens.

Section B:

①

Women health & sanitation in Rural India: Issues, challenges & opportunities.

Women empowerment is one of the stated objectives of the Indian government. To achieve the same, focus has also been on increasing the nutritional status of women to enable them to lead a healthy life. Schemes such as Integrated Child - Development Scheme (ICDS) for pregnant and lactating mothers, UJJWALA Yojana to give them access to cleaner fuels and provision of free pre-natal checkups, are examples which come to one's mind here. But to assess the success of such measures, one important factor will be their impact on the rural women.

This is because over 60% of Indian population resides in rural areas and by necessary implication, majority of Indian women also reside there. Further, recent demographic changes due to outward migration of rural men to urban areas for employment, has

Contributed to increasing concentration of women in rural areas. Thus, the status of their health and sanitation holds immense importance in the Indian context.

In the course of this essay, we will discuss three questions surrounding health and sanitation of rural women: What are the current issues? What are the challenges required to be overcome to address these issues? What are the opportunities that will aid us in overcoming such challenges?

## Issues of women health and sanitation in rural India:

The first issue is of the low nutritional levels of rural women. They lack not only the appropriate quantity of food but also the quality is not desirable.

Micronutrients, like iron, are not adequate in the current food basket of a rural woman. This then gets manifested in low values of health indicators such as the Maternal Mortality Rate (MMR) or high level of diseases like anaemia.

The second issue is that of absence of required infrastructure. This may be in the form of physical structures like hospitals, toilets, etc or human capital like doctors. It forces rural women to rely on unorganized sector for their healthcare needs. Often the persons that they consult may lack required knowledge but may also prescribe medication which further degrades their health. An example is proliferation of quacks in rural India. Absence of alternatives also force women to continue with unhealthy sources and practices. The dependence on firewood for cooking, even though the smoke released is harmful, is an example as rural women have little access to clean energy.

The third issue is that social constructs force women into unhealthy conditions. These social constructs are highly prevalent and entrenched in rural communities who value traditions more than their urban counterparts. Early child marriage is an example where the girl is then pushed into early childbirth and household responsibilities, which takes a heavy toll on her health. Similarly, frowning

Upon women using the same toilet as the elders of the house forces women towards open defecation, which agains renders them vulnerable to diseases. These social norms also lead to neglecting women's issues. In a community, where patriarchal system prevails, the nutritional and sanitation needs of a woman are lesser in priority. Thus, women walking long distances for firewood or facing smoke while cooking are considered as them merely doing their duties rather than a problem which needs a solution

## Challenges in the way :

To address these issues, certain hurdles will have to be identified and resolved. One of these is that social norms, as mentioned above, are difficult to change as they are a product of developments over a long time. Sustained campaigns are required and any abrupt changes, if introduced, will be met with either indifference or rejection. This is clear in the attitude of some of the rural women themselves who are either not aware about nutritional requirements or they place the nutrition of the

male members of their family above their own.

Another challenge is that infrastructural expansion in rural areas may not always be economically feasible. If the government takes the responsibility, its fiscal deficit may rise. On the other hand, private players are unwilling to expand into rural areas due to low expectations of profit which is often an outcome of the low incomes of the rural population, especially the rural woman.

The third challenge is related to government schemes. Even though government runs a variety of programmes to improve health and sanitation, their benefits do not reach rural women. This may be a result of leakages of funds, inefficient identification of beneficiaries and ill-motivated workforce (such as ASHA workers). Thus, the true potential of such schemes still needs to be achieved.

Opportunities : Boost to this sector :

In the recent years, however, certain developments have been promising in increasing health and sanitation status of rural women. One of them is increasing awareness <sup>among</sup> ~~about~~ women through their interactions with

NGOs, self-help groups (SHG), etc. Organizations like TANWA have been playing a leading role in voicing the concerns of rural women. Similarly, the political empowerment of rural women through reservation in panchayats have given them a platform to raise health issues and also take corrective action.

Another positive development is that of technological innovations, such as tele-medicine, which address the cost concerns of infrastructural expansion. The government policies have also been supportive of the above-mentioned. Schemes now recognize the legal status of women (LPG connections in the name of the woman) and focus on monitoring and supervision, such as is being done under the Swachh Bharat Mission for toilet construction and usage.

Further, the government focus on increasing economic power of rural women through SHGs, MUDRA, etc will contribute to increase in their incomes which will further enable them to demand health facilities, clean

energy, etc. Alongwith this, the government has been incentivizing rural infrastructure upgradation through schemes like RURBAN mission, smart villages, etc. This will incentivize private players to operate in rural areas and cater to the demands of rural women, including in healthcare and sanitation sectors.

In conclusion, rural women have been at the receiving end of a societal setup in which their health and sanitation needs have been ignored. The general economic backwardness of rural areas has further aggravated the situation. But with sustained governmentalefforts and efforts of the rural women themselves, positive developments have indeed taken place. For the way forward, it is necessary to build on such developments to achieve the goals of healthy lives and nutritional security of our rural women.





























## Women health & Sanitation in Rural India:

Issues, Challenges, Opportunities

Intro: Women movement in India  
 but still huge gaps - MMR, Govt. schemes

long history

L Edu

L diary, etc

Indian government -

Women health → empowerment

Imp factor for But impact to be judged

of the impact on rural women: Why?

- More than 60% pop ⇒ Rural areas
- Demographic changes in rural areas due to outward migration of men.

- Issues:
  - low nutritional levels (Eg: MMR, anaemia)
  - Required infrastructure is absent (Eg: hospitals, female doctors, toilets)
  - Social constructs force women into unhealthy living conditions ⇒ early marriage, early motherhood, usage of <sup>same</sup> toilets as elders
  - Social neglect & vulnerable to exploitation / <sup>ill-effects</sup> (Attacks, long dist travelling for fuelwood/water, dust from unclear fuels)

- Challenges:
  - difficult to change local attitudes - entrenched in women themselves → low awareness → rejection
  - Increasing infra problem: govt. fiscal deficit, priv. sector unwilling - low profit due to lower incomes

- Govt. schemes - ↓ potential achieved: leakages, identification problem, ill-motivated workforce (Anganwadis)

- Opportunities:
  - Women are coming forward to voice their opinions in rural areas: SHGs ⇒ TANWA, Political empowerment
  - Govt focus - RURBAN, PURA, Smart village SBN, increasing women & farmer incomes incentives to private

- Technology - Eg Tele-medicine, decentralized mechanisms, ↓ costs
- Future inc in rural incomes, large pop - attract infra development

ROUGH:

- Waste mgmt in India's introduction: - India, an emerging economy with vast population, demographic dividend <sup>aspirations</sup> ⇒ Need for better standards of life & economic growth (Eg: Manuf - 35%). - E-waste, waste generation.

- Challenges:
- ① Vast amount of waste gen
    - ↳ 1st most pop
    - ↳ inefficient prodn processes & tech.
  - ② ~~vulnerable~~ low awareness/sensitivity among people - waste segregation, reduce usage (consumers promoting wasteful consumption)
  - ③ vulnerability of workers in waste mgmt industry - lower rates, inefficient working, lack the capital to invest
  - ④ low profitability: manure v. fertilizers  
waste-to-energy → incineration costly.
  - ⑤ existing landfills etc reaching their limits - w/i city, hampering urbanization, etc (pollution, leachate)

- Opportunities:
- ① - multiple new tech / avenues opened up.
    - Eg: fly ash (waste from coal industry) → used in construction } Reduce Reuse Recycle
    - Biofuels (bagasse) → Incineration (waste-to-energy), Bioremediation & allied areas (Eg: organic farming)
  - ② - Increased focus on this sector - Resource shortage & env sustainability - recover scarce metals from e-waste - attract talent & innovation in this sector. India - can attract investment & emp generation
  - ③ - Supportive govt. policy: Waste Mgmt Rules, promotion of organic farming, use of fly ash, incentives (Eg: on ethanol prodn)

Call us : 8468022022 Plastic bags ban

Visit us : [www.visionias.in](http://www.visionias.in)

Conclusion: India, growth trajectory - aim to provide better life to its people. But this is only possible when such growth is sus - one way to ensure this is waste management.