

Development of a Sanitation Education Program in Communities Near the Ganges River

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Abstract

The purpose of writing this work is to describe the Development of a Sanitation Education Program in Communities Near the Ganges River. We propose an ABCD (Asset-Based Community Development)-based sanitation education program for communities around the Ganges River, India, involving participatory data collection techniques and training in healthy sanitation practices. This program involves community members, support teams, local governments and NGOs to achieve cleanliness and sustainability goals. The result of this work is that In communities around the Ganges River that have long struggled with complex sanitation problems, they have developed an ambitious Sanitation Education Program. This program is supported by field data and relevant theory, with a focus on developing a Sanitation Education Module that is comprehensive and easy to understand. They also recognize the importance of training local teaching staff and mentoring the community to actively participate in the program. This approach reflects the theories of community building, transformational leadership, and behavior change. Lastly, the integration of sanitation education in formal and informal education systems ensures the program's sustainability and positive influence on future generations.

Keywords



Development Program, Ganges River Communities, Sanitation Education

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INTRODUCTION

Water is a vital element that is irreplaceable in human life (Folgado-Fernández et al., 2018; Mocek-Płóćiniak & Skowrońska, 2021). As a source of life, water has a central role in maintaining health, providing nutrition, and facilitating various biological and physical processes. Humans need water for drinking, bathing, cooking and maintaining personal hygiene. Apart from that, water is also important in agriculture for the growth of plants which are our food source. Globally, water plays a role in transporting and regulating temperature on the planet, maintaining the balance of ecosystems, and enabling various human activities, from industry to

transportation. The sustainability of life on Earth depends greatly on the care and wise management of water resources, so awareness of the importance of water and its protection is a shared responsibility for the future of humans and our planet.

When water conditions become dirty, the impact is very serious and disturbing in various aspects of human life. At an individual level, polluted water can cause various diseases such as diarrhea, cholera and respiratory infections, which threaten health and life. Apart from that, polluted water also threatens the continuity of food resources, because agriculture and fisheries that depend on clean water will be disrupted. Additionally, poor water conditions can hinder access to clean water for drinking and hygiene purposes, reducing quality of life and educational opportunities. Moreover, water pollution contributes to environmental degradation, damages freshwater and marine ecosystems, and threatens biodiversity. Thus, the impacts of dirty water stretch far and affect health, the economy and the environment, requiring serious attention and joint efforts to prevent and overcome this problem.

The Ganges River, also known as the Ganges River, is one of the most sacred and revered rivers in India (Muduli et al., 2021). Located in the Indian subcontinent, the Ganges River has deep significance in Hinduism and Indian culture, where it is considered the spring of life that provides holy water for religious rituals and purification. The river also flows through several major Indian cities, including Varanasi and Haridwar, which are major destinations for millions of pilgrims every year. However, even though it is considered a holy river, the Ganga also faces serious pollution problems that threaten the sustainability of the river's ecosystem and the health of the people who depend on it. Therefore, the Ganges River is a symbol of spiritual power, history and environmental challenges that need to be taken seriously to maintain its sustainability and significance for Indian society and the world.

The current condition of the Ganges River is very worrying. Although considered one of the holiest rivers in India, the Ganges has experienced very serious levels of pollution. Industrial waste, household waste and unmanaged rubbish disposal have damaged the water quality. Ganga water contains high levels of pollution, threatening the health of people who use this water for drinking, bathing and religious rituals. Apart from that, pollution also has a negative impact on river ecosystems, including reduced fish populations and loss of biodiversity. Even though there have been improvement efforts and government initiatives to clean the Ganges, the condition of this river still requires serious attention and cross-sector

collaboration in order to recover and maintain its sustainability as one of the most valuable natural assets in India.

Jody Kretzmann and John McKnight (1993) categorize the classic types of assets as consisting of individual assets, local associations, environmental institutions or institutions, physical assets, experience, and the local economy. Gifts of Individuals, identifies the strengths possessed by individuals in encouraging technical abilities, intelligence, leadership, as well as the ability to create and innovate. Citizen's Associations, identify the strength of assets that come from networks, beliefs, norms or values, as well as formal and informal groups in society. Local Institutions, Natural and Physical Support, identifies the strength of assets originating from local village institutions, natural resources and basic infrastructure and other facilities (Mattali & Indratno, 2022). The development approach emphasized by Alinsky prioritizes "Human Power" as the power to use human energy, the human spirit, and the ability to realize it for others (Pardede & Suryanto, 2020). According to Goleman, emotional intelligence is a person's ability to manage their emotional life with intelligence (to manage our emotional life with intelligence); maintaining emotional harmony and its expression (the appropriateness of emotion and its expression) through the skills of self-awareness, self-control, self-motivation, empathy and social skills (Arieska et al., 2018).

Previous work, namely R. Srinivas et al 2019, shows that the results of this research include several important points. First, this research identifies the need for sustainable watershed planning and management as a prerequisite for a country's socioeconomic and cultural development. Second, this research presents a new decision-making approach for restoring large rivers around the world, taking into account the complex threats and challenges they face. Third, this study evaluates the programs that have been implemented by the government to restore river basins, identifies their successes and limitations, and proposes modifications and new strategic policies to achieve integrated and sustainable river basin development. This study uses the case of the Ganges River in India as an example to demonstrate the proposed decision-making approach (Srinivas et al., 2020). The purpose of writing this work is to describe the Development of a Sanitation Education Program in Communities Near the Ganges River.

METHODS

The Ganges has sacred significance in Indian culture and religion, but also faces serious challenges regarding pollution and sanitation. To address this problem and

help communities near the Ganges River, we propose a sanitation education program that focuses on the ABCD (Asset-Based Community Development) method (Harrison et al., 2019; Kumar, 2017; McKnight & Russell, 2018). This program will involve data collection techniques, mentoring techniques, and various parties involved. The ABCD method is an approach that focuses on the assets and potential that exist in the community. We will encourage communities to identify their own resources and potential in addressing sanitation issues. This approach empowers them to become agents of change in efforts to improve sanitation. Data collection will be carried out using a participatory approach, involving members of the Ganges River community. Techniques to be used include:

- 1 Structured Interview. Our team will conduct interviews with community members to understand the sanitation issues they face and gain insight into current practices.
- 2 Survey and Mapping. We will conduct surveys in communities to identify areas most affected by river pollution. Mapping will help us understand the distribution of the problem.
- 3 Focus Group Discussion. We will hold focus group discussions with the community to hear their views on sanitation and find solutions together.

After collecting data, the next step is to provide assistance in implementing the sanitation program. This will include:

1. Training. We will provide training for community members on healthy and environmentally friendly sanitation practices, including waste management and waste processing.
2. Skills Development. We will help communities develop the technical skills needed to build good sanitation facilities, such as septic tanks.
3. Monitoring and Evaluation. Our team will carry out regular monitoring to ensure proper implementation. We will also evaluate the impact of the program on sanitation and community health.

This project will involve various parties, including:

1. Community Members. They are the main subject of the program and will play an active role in problem identification, planning and implementation.
2. Support Team. The team consists of sanitation experts, social workers, and educators who will guide communities in their efforts.
3. Local Government. Collaboration with local governments will be necessary to provide the necessary resources and permits.

4. Non-Governmental Organizations (NGOs). NGOs can provide financial and logistical support and help in finding sustainable solutions.

FINDINGS AND DISCUSSION

Findings

The Ganges River, or what is often referred to as Ganges, is a very sacred location located in India (Bhutiani et al., 2016; Kumar, 2017). This river is not just a piece of water that flows through the Indian continent, but is also a spiritual entity that has deep meaning for millions of people around the world, especially in the Hindu religious tradition (Haberman, 2023; Sen, 2019). The Ganges River is considered one of the holiest rivers in Hinduism, where Hindus believe that its water has purifying powers and can wash away sins. Apart from that, along the banks of this river there are many cities and holy places which are pilgrimage destinations for people who want to perform religious rituals and purify themselves. Daily life around the Ganges River is also closely linked to religious traditions, with ceremonies and festivals held on its banks throughout the year.

The Ganges River also plays an important role in Indian history and culture, and is a source of livelihood for many people living around it. Therefore, not only as a religious site, but also as a symbol of life and prosperity, the Ganges plays a very important role in the life of Indian society. In its rich spiritual, cultural and historical context, the Ganges River can be considered one of the most sacred locations in the world, attracting interest and reverence from all walks of life and religions throughout the world.

To successfully develop a sanitation education program in the community closest to the Ganges River, various ongoing assistance efforts are needed. Assistance efforts are:

- 1 Development of Sanitation Education Module. Create comprehensive and easy to understand sanitation education modules for use in training and outreach to the community. This module should cover various aspects of sanitation, from the correct use of toilets to the management of liquid and solid waste.
- 2 Teaching Staff Training. Train local teaching staff, such as teachers, community volunteers, or health workers, to become effective facilitators in teaching sanitation education. They should have adequate knowledge of sanitation issues and good communication skills.
- 3 Community Assistance. Form an accompanying team that will work directly with the community. This team must have a deep understanding of sanitation issues and be able to interact positively with local communities. They can

provide guidance, answer questions, and provide technical support when needed.

- 4 Promotion Through Social Media and Campaigns. Using social media and campaigns to promote important sanitation messages to the wider community. This can include creating educational videos, posters and online awareness campaigns.
- 5 Organizing Training Sessions and Workshops. Hold regular training sessions and workshops to update community knowledge and skills in sanitation. This is also an opportunity to understand problems that may arise and find solutions together.
- 6 Data Collection and Evaluation. Carry out continuous monitoring and evaluation of program developments. This involves collecting data related to behavior change, participation levels, and impacts on the environment and public health.
- 7 Partnership with Related Organizations. Collaborate with local organizations, regional governments, health institutions and NGOs who have experience in sanitation to support the program. This may include procuring additional funding, human resources, or sanitation infrastructure.
- 8 Role Model Development. Identify role models in communities who openly support and implement good sanitation practices. This can influence the community positively and serve as an example to others.
- 9 Participatory Monitoring and Evaluation. Involving the community in the program monitoring and evaluation process. This gives them a sense of ownership of the program and allows them to provide important input.
- 10 Educational Continuity. Integrate sanitation education into formal and informal education systems in communities, so that sanitation messages continue to be taught and understood by the next generation.

Effective mentoring efforts will help maintain the sustainability of the sanitation education program and ensure that behavioral change towards better sanitation practices can be realized in the nearby Ganges River communities. With good cooperation between various parties and a holistic approach, this program has a great chance of success.

Discussion

On the banks of the beautiful Ganges River lies a community that has long struggled with complex sanitation issues. To overcome this challenge, they decided to develop an ambitious Sanitation Education Program. However, they realize that

this effort requires continuous and holistic assistance. This is where field data and relevant theories come in to help design an effective approach.

One of the first steps in program development was the development of a Sanitation Education Module. Field data highlights the importance of comprehensive and easy-to-understand modules. They want this module to be a tool that inspires pride in the use of local products, in line with Mahatma Gandhi's teachings about the growth of local communities. This module is expected to provide the necessary knowledge and skills to the community.

However, knowledge alone is not enough. The community is also aware of the need to train local teaching staff so that they become effective facilitators in teaching sanitation education. This idea is very relevant to the thinking of Mahatma Jyotirao Phule, a social reformer who advocated universal education and the empowerment of disadvantaged groups. Training of teaching staff will open up access to sanitation knowledge that was previously limited.

Community Mentoring is also a key element in this program. Field data highlights the importance of a support team that can interact positively with the community. The concept of community development theory, which encourages active community participation in the program development process, is very relevant here. The accompanying team acts as a change agent that allows the community to have an active role in planning and implementing the program.

To promote important sanitation messages, communities use social media and campaigns. This approach reflects the concept of transformational leadership, where the program leader or assistant plays a role in inspiring the community to adopt better sanitation behavior through motivating campaigns. Training sessions and workshops are held periodically to update community knowledge and skills in sanitation. In these sessions, the concept of emotional intelligence plays an important role. Program facilitators need to have high emotional skills to build strong relationships with communities and motivate them to adopt better sanitation behavior. Continuous monitoring and evaluation is carried out on program developments. This is in accordance with the concept of behavior change theory, which helps in understanding the factors that influence people's sanitation behavior and designing effective evaluation strategies.

Partnerships with Related Organizations are also an important element in this program. Field data emphasizes collaboration with various parties, which is in line with the concept of "classic assets." This includes leveraging the strengths of individuals, local associations, environmental institutions, physical assets,

experience, and the local economy to support sanitation programs. The development of role models in the community, as found in field data, can be understood as part of the concept of transformational leadership. The program leader or assistant acts as a model who inspires the community to adopt better sanitation behavior.

A participatory monitoring and evaluation approach that involves the community is in line with community development theory which emphasizes active community participation in decision making and program implementation. Finally, to ensure continuity, sanitation education is integrated into formal and informal education systems in the community. This reflects the importance of having high emotional intelligence to motivate the next generation to adopt better sanitation practices.

By combining field data with these theories, the sanitation education program in the nearby communities of the Ganges River becomes a comprehensive and effective approach. Program facilitators understand that a holistic approach based on these theories will help them achieve positive behavioral changes in community sanitation and create sustainable change.

CONCLUSION

In the development of the Sanitation Education Program in the nearby community of Ganges River, the integration of field data with relevant theories has helped design a comprehensive approach. The Sanitation Education Module developed reflects Mahatma Gandhi's teachings about the growth of local communities and provides the necessary knowledge and skills. Training local educators, in line with Mahatma Jyotirao Phule's thinking, opens up access to previously limited sanitation knowledge. Community assistance, which is based on community development theory, allows the community to play an active role in program planning and implementation. The use of social media and campaigns, in line with the concept of transformational leadership, was used to promote important sanitation messages. Regular training sessions and workshops, with an emphasis on emotional intelligence, help update people's knowledge and skills in sanitation. Continuous monitoring and evaluation, in line with behavior change theory, helps in understanding the factors that influence sanitation behavior. Partnerships with related organizations strengthen the program through additional support. The development of role models within the community, in line with the concept of transformational leadership, inspires communities to adopt better sanitation behavior. The participatory monitoring and evaluation approach, which involves the community in the process, reflects community development theory which

emphasizes active community participation. Finally, the integration of sanitation education into formal and informal education systems secures the continuity of the sanitation message.

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