Participatory Irrigation Management (PIM) Field Orientation Module

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Concept Note

The Field Orientation Module on Participatory Irrigation Management (PIM) can be a crucial component of the Nitividhana Programme, specifically tailored for the environment domain. This module is designed with a multifaceted rationale deeply rooted in Nitividhana's principles and the pressing water governance needs in India and globally. It aligns with Nitividhana's core philosophy by integrating Eastern and Western political philosophies, as PIM represents a blend of traditional Indian water management practices with modern governance structures. The module challenges participants to think holistically and precisely about what PIM demands – a comprehensive understanding of water resources, community dynamics, governance structures, and environmental concerns.

One of the key strengths of this module is its ability to bridge theory and practice. While Nitividhana provides a solid theoretical foundation in public policy and governance, this module offers hands-on experience in policy implementation. The field visit to Waghad Dam allows participants to witness the real-world application of policy concepts. This is particularly relevant given that water scarcity and management are critical issues in India and globally, and PIM offers a sustainable approach to these challenges.

The module also showcases Indian Knowledge Systems by exploring traditional water management practices like the Tanka and Johad systems. This approach resonates with Nitividhana's emphasis on leveraging indigenous wisdom for modern governance. Furthermore, PIM is an excellent example of decentralised governance and community participation, key themes in contemporary public policy discourse. The module allows participants to understand the dynamics of empowering local communities in resource management.

An interdisciplinary approach is central to this module, as water management intersects with various domains, including agriculture, rural development, environmental conservation, and public health. This aligns with Nitividhana's focus on interdisciplinary learning. The module also addresses the ethical dimensions of governance, as PIM inherently involves ethical considerations in resource allocation, community rights, and environmental stewardship.

The objectives of this Field Orientation Module are designed to ensure that participants gain comprehensive insights into PIM and effective water governance. These objectives include providing a thorough understanding of PIM concepts and principles, offering practical exposure through the case study of Waghad dam, facilitating stakeholder engagement, encouraging critical analysis of PIM systems, enhancing policy formulation skills, demonstrating interdisciplinary integration, exploring the integration of traditional wisdom

with modern practices, developing ethical reasoning abilities, cultivating reflective practices, and nurturing leadership qualities.

The program is structured to include pre-field visit online sessions and a four-day field orientation. The online sessions cover the foundations of water policy and PIM, providing an overview of water governance in India and introducing the concept of PIM. The field orientation begins with an arrival and orientation day at Sahyadri Farms in Nashik, followed by visits to Waghad Dam, interactions with Water User Associations, exploration of innovative water management practices, and a reflective trek to the source of the Godavari River.

Throughout the program, various pedagogical elements are incorporated to enhance learning. These include Sadhana (meditation and reflective activities), Samvada (dialogue with local governing bodies), Satsang (dialogue with experts), and Svadhyaya (synthesis of learning). These elements provide a holistic learning experience that combines intellectual understanding with personal reflection and practical application.

The program is expected to yield several outcomes, including a deep understanding of PIM systems, appreciation of the integration of traditional knowledge with modern management practices, practical insights into community-led water management, development of critical thinking skills in policy implementation, and network building with experts and practitioners in the field.

In conclusion, this Field Orientation Module on Participatory Irrigation Management Systems offers a unique, immersive learning experience that embodies the principles of Nitividhana. By blending theoretical knowledge with practical exposure, traditional wisdom with modern governance, and individual reflection with community engagement, this module promises to be a transformative experience for participants. It will equip them with the knowledge, skills, and perspective needed to address complex water governance challenges holistically, ethically, and sustainably.

Proposal

1. Introduction

The Participatory Irrigation Management (PIM) Field Orientation Module is proposed as an integral component of the Nitividhana Programme's environment domain. This module is designed to provide participants with a comprehensive understanding of water governance through the lens of PIM. This system embodies the principles of community participation, decentralised management, and sustainable resource utilisation.

2. Rationale

2.1 Alignment with Nitividhana's Core Philosophy

The PIM module exemplifies Nitividhana's commitment to integrating Eastern and Western political philosophies. PIM blends traditional Indian water management practices and modern governance structures. This synthesis allows participants to explore how indigenous knowledge can be effectively combined with contemporary policy frameworks to address current challenges.

The holistic approach inherent in PIM aligns perfectly with Nitividhana's emphasis on comprehensive understanding. Participants will be challenged to consider multiple facets of water governance, including hydrological cycles, community dynamics, institutional structures, and environmental impacts. This multidimensional perspective is crucial for developing effective and sustainable water management policies.

2.2 Bridging Theory and Practice

While Nitividhana provides a solid theoretical foundation in public policy and governance, this module offers a unique opportunity for hands-on experience. The field visits, particularly to Waghad Dam, allow participants to witness the real-world application of policy concepts. This practical exposure is invaluable for future policymakers, providing insights into the challenges and opportunities of implementing theoretical frameworks in complex, real-world situations.

2.3 Addressing Contemporary Challenges

Water scarcity and management are critical issues both in India and globally. This module addresses these pressing concerns by focusing on PIM, a sustainable approach to water management. Participants will learn how community-led initiatives can effectively tackle water scarcity, improve agricultural productivity, and promote environmental sustainability.

This knowledge is crucial for future leaders at the forefront of addressing these global challenges.

2.4 Showcasing Indian Knowledge Systems

The module emphasises traditional water management practices such as the Tanka and Johad systems. This focus aligns with Nitividhana's goal of leveraging indigenous wisdom for modern governance. Participants will explore how these time-tested methods can be integrated with modern technologies and governance structures to create more resilient and sustainable water management systems.

2.5 Promoting Decentralized Governance

PIM serves as an excellent case study in decentralised governance and community participation. These concepts are central to modern public policy discourse, and this module demonstrates their implementation. Participants will observe firsthand how empowering local communities in resource management can lead to more effective and sustainable outcomes.

2.6 Interdisciplinary Approach

Water management intersects with various domains, including agriculture, rural development, environmental conservation, and public health. This module provides a platform for interdisciplinary learning, allowing participants to understand the complex interrelationships between these fields. This holistic perspective is essential for developing comprehensive and effective water governance policies.

2.7 Ethical Dimensions of Governance

PIM inherently involves ethical considerations in resource allocation, community rights, and environmental stewardship. This module will challenge participants to grapple with these ethical dilemmas, fostering critical thinking and moral reasoning skills crucial for effective and just governance.

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3. Objectives

3.1 Conceptual Understanding

- Provide a thorough understanding of PIM concepts, principles, and implementation strategies.
- Contextualize PIM within India's broader water policy and governance framework.
- Explore the historical evolution of irrigation systems in India and the emergence of PIM.

3.2 Practical Exposure

- Offer first-hand experience of PIM implementation through the case study of Waghad Dam and its associated Water User Associations.
- Enable participants to observe and analyse water distribution systems from the dam to the farm level.
- Provide opportunities to witness innovative water management practices in action.

3.3 Stakeholder Engagement

- Facilitate interactions with diverse stakeholders, including farmers, Water User Association members, government officials, and water experts.
- Develop skills in community engagement and participatory decision-making processes.
- Understand the dynamics of multi-stakeholder collaboration in water management.

3.4 Critical Analysis

- Encourage participants to evaluate the strengths and challenges of PIM systems critically.
- Stimulate how PIM can be improved or adapted for different geographical and socio-economic contexts.
- Develop analytical skills to assess the effectiveness of water management policies and practices.

3.5 Policy Formulation Skills

- Enhance participants' ability to formulate effective water management policies by understanding ground realities.
- Develop skills in balancing various interests and constraints in policy implementation.
- Foster an understanding of the policy cycle from formulation to implementation and evaluation.

3.6 Interdisciplinary Integration

- Demonstrate how water management intersects with agriculture, rural development, environmental conservation, and public health.
- Encourage holistic thinking in addressing complex governance challenges.
- Develop skills in synthesising knowledge from multiple disciplines to create comprehensive solutions.

3.7 Traditional Wisdom and Modern Practices

- Explore integrating traditional water management practices with modern technological and governance approaches.
- Appreciate the value of Indian Knowledge Systems in contemporary governance.
- Develop strategies for preserving and adapting traditional practices in modern contexts.

3.8 Ethical Reasoning

- Develop participants' ability to navigate ethical resource allocation and community rights dilemmas.
- Foster a sense of environmental stewardship and sustainable resource management.
- Encourage reflection on the ethical implications of water governance decisions.

3.9 Reflective Practice

- Cultivate habits of reflection and continuous learning through structured activities like Sadhana, Samvada, Satsang, and Svadhyaya.
- Encourage participants to connect their field experiences with broader philosophical and policy concepts.
- Develop skills in self-reflection and continuous improvement.

3.10 Leadership Development

- Nurture leadership qualities required for effective water governance.
- Inspire participants to become agents of change in water management and broader environmental governance.
- Develop skills in consensus-building, conflict resolution, and community mobilisation.

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4. Programme Structure

4.1 Pre-Field Visit Online Sessions (2 sessions, 1.5 hours each)

Session 1: Foundations of Water Policy and PIM

- Overview of Water Policy and Governance in India
    - Historical context of water management in India
    - Current water policy framework and challenges
    - Role of different stakeholders in water governance
- Introduction to Participatory Irrigation Management (PIM)
    - Definition and core principles of PIM
    - Global context and evolution of PIM
    - Benefits and challenges of implementing PIM
- Historical context: Traditional water management practices in India
    - Overview of systems like Tanka, Johad, and Ahar-Pyne
    - Relevance of traditional systems in modern water management

Session 2: PIM in Practice

- Evolution of irrigation systems in India
    - Transition from traditional to modern irrigation systems
    - Challenges in large-scale irrigation projects
    - Need for community participation in irrigation management
- Concept and principles of PIM

    - Institutional Structure of Water User Associations
    - Rights and responsibilities of stakeholders in PIM
    - Process of implementing PIM in an irrigation system
- Case study introduction: Waghad Dam and Water User Associations
    - Background of the Waghad Dam Project
    - Formation and structure of Waghad Project Level Water Users' Association
    - Achievements and challenges in implementing PIM at Waghad

4.2 Field Orientation Schedule (4 Days)

Day 0: Arrival and Orientation
Venue: Sahyadri Farms, Mohadi, Nashik
Activities:
- Icebreaking sessions to foster group cohesion
- Introduction to the field visit objectives and expected outcomes
- Sadhana: Grounding meditation to centre participants and set intentions for the program

Day 1: Waghad Dam and Water Resources
Morning: Visit to Waghad Dam
- Technical briefing on dam structure and operation
- Discussion on water allocation and distribution mechanisms
- Satsang: Dialogue with water resource experts on challenges and innovations in dam management

Afternoon: Water Resources Department office
- Presentation on water policy implementation at the local level
- Interactive session with officials on the role of government in PIM
- Discussion on coordination between government agencies and Water User Associations

Evening:
- Samvada: Reflective dialogue at the local temple on the cultural significance of water
- Svadhyaya: Personal reflection and journaling on the day's learnings and observations

Day 2: Water User Associations (WUAs)
Morning: Visit farms in the mid-canal region
- Interaction with farmers on their experiences with PIM
- Observation of irrigation practices and water distribution methods
- Discussion on the impact of PIM on agricultural productivity and water use efficiency

Afternoon: Visit to tail-end farms
- Discussion on water distribution challenges faced by tail-end farmers
- Observation of measures taken to ensure equitable water distribution
- Meeting at Waghad Project Level Water Users' Association (WPLWUA)
  - Presentation on the structure and functioning of WPLWUA

- Discussion on conflict resolution mechanisms within WUAs

Evening:
- Satsang: Dialogue with Shahaji Bapu Somavashi, founder of WPLWUA
  - Insights into the journey of establishing and managing a successful WUA
  - Discussion on leadership challenges in community-based water management
- Sadhana: Group meditation on river, reflecting on the interconnectedness of water systems

Day 3: Innovation in Water Management
Morning: Visit to innovative WUAs
- Case studies of successful water management practices
- Discussion on technologies and methods for improving water use efficiency
- Interaction with farmers who have implemented innovative practices

Afternoon: Sahyadri Farms Tour
- Exploration of modern agricultural practices and their water efficiency
- Discussion on the role of farmer-producer organisations in promoting sustainable water use
- Presentation on market linkages and their impact on water management decisions

Evening: Travel to Trimbakeshwar
- Samvada: Discussion on the spiritual significance of water in Indian tradition
- Reflection on the connection between cultural values and water conservation

Day 4: Source of Godavari and Reflections
Morning: Trek to Brahmagiri (Origin of Godavari)
- Sadhana: Meditation at the river source, contemplating the journey of water
- Discussion on the ecological importance of river sources and their conservation

Afternoon: Reflective Session
- Satsang: Dialogue with Shilpa Dahake on anthropological perspectives of water and cultural flow of Godavari
- Group discussions on learnings and their application to participants' local contexts
- Svadhyaya: Synthesis of experiences and formulation of action plans

Evening: Closing Ceremony
- Presentations by participants on their key takeaways and proposed applications
- Feedback session on the module and suggestions for improvement
- Closing remarks and distribution of certificates

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5. Pedagogical Elements

5.1 Sadhana (Meditation / Reflective Activities)

- Daily morning and evening meditation sessions to cultivate mindfulness and self-awareness
- Mindfulness walks along water bodies to foster a deep connection with water resources.
- Contemplative exercises on personal water usage to encourage responsible consumption

5.2 Samvada (Dialogue with Local Governing Body)

- Structured discussions with farmers, government officers, and local elected members on traditional water conservation methods
- Exploration of the spiritual and cultural significance of rivers in Indian tradition
- Debates on the role of local governance in water management

5.3 Satsang (Dialogue with Experts)

Interactive sessions with:

- ➔ Girish Patil (Water Policy expert): Insights into the evolution of water policy in India
- ➔ Shilpa Dahake (Anthropologist and waterscape expert): Cultural dimensions of water management
- ➔ Manoj and Devyani Govindwar (Community engagement experts): Strategies for effective community mobilization
- ➔ Vilas Shinde (Founder, Sahyadri Farms): Integration of water management with agricultural business models

5.4 Svadhyaya (Synthesis of Learning)

- Daily journaling and reflection exercises to consolidate learnings
- Group discussions on connecting field observations with Nitividhana principles
- Final presentation preparation on PIM implementation strategies, encouraging creative problem-solving

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6. Logistics

6.1 Accommodation

- Sahyadri Farms Campus
  - VIP rooms (₹2500 per day)
  - Semi VIP (AC) 4 bed rooms (₹2500 per day)
- Trambakeshwar
  - (yet to confirm)

6.2 Food

- ₹400 per person per day (3 meals)
- Emphasis on local, seasonal cuisine to showcase sustainable food practices

6.3 Transportation

- Local travel: 17-seater bus (₹4000 per day)
- Includes transportation for all field visits and local movements

6.4 Additional Costs

- Facilitators' honorarium (to be determined)
- Printing of study materials and participant handbooks

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7. Expected Outcomes

Upon completion of this module, participants are expected to achieve the following outcomes:

1. Deep understanding of PIM systems and their role in water governance

➔ Comprehend the theoretical foundations and practical applications of PIM

➔ Analyze the strengths and limitations of PIM in different contexts

2. Appreciation for the integration of traditional knowledge with modern management practices

➔ Recognize the value of Indigenous water management techniques

➔ Develop strategies for incorporating traditional wisdom into contemporary water policies

3. Practical insights into community-led water management

➔ Understand the dynamics of Water User Associations and their functioning

➔ Identify best practices in community engagement and participatory decision-making

4. Enhanced critical thinking skills in policy implementation

➔ Analyze the challenges in implementing water management policies

➔ Develop problem-solving approaches for overcoming implementation barriers

5. Network building with experts and practitioners in the field

➔ Establish connections with key stakeholders in water management

➔ Create a community of practice for ongoing learning and collaboration

6. Improved ability to formulate and evaluate water management policies

➔ Apply learned concepts to draft sample water management policies

➔ Develop criteria for assessing the effectiveness of water governance strategies

7. Enhanced leadership and communication skills

➔ Practice facilitation and conflict resolution techniques in water management scenarios

➔ Improve ability to articulate complex water issues to diverse stakeholders

8. Increased awareness of the ethical dimensions of water governance

- ➔ Recognize ethical dilemmas in water resource allocation and management
- ➔ Develop frameworks for making ethical decisions in water governance

9. Improved interdisciplinary thinking

- ➔ Synthesize knowledge from various fields to address water management challenges
- ➔ Recognize the interconnections between water, agriculture, health, and economic development

10. Personal growth and reflective practice

- ➔ Cultivate a deeper connection with water resources and environmental stewardship

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8. Conclusion

The Participatory Irrigation Management Field Orientation Module offers a unique, immersive learning experience that embodies the principles of Nitividhana. By blending theoretical knowledge with practical exposure, traditional wisdom with modern governance, and individual reflection with community engagement, this module promises to be a transformative experience for participants.

This comprehensive program will equip future leaders with the knowledge, skills, and perspective needed to address complex water governance challenges holistically, ethically, and sustainably. The module's focus on PIM provides a concrete example of decentralised governance and community participation, key themes in contemporary public policy discourse.

By implementing this module, the Nitividhana Programme will enhance its environment domain and contribute significantly to the development of well-rounded, thoughtful, and skilled individuals capable of leading positive change in water management and broader environmental governance.

This module will be a valuable addition to the Nitividhana curriculum, providing participants with invaluable insights and practical skills that will serve them well in their future roles as policymakers, administrators, and change agents in water governance.