



Climate Change Adaptation through Small-Scale
and Protective Infrastructure Interventions in
Coastal Settlements of Cambodia (CCA4CS)

Capacity-Building of Provincial and District Government Officers to Manage, Operate, and Maintain the Infrastructure



JULY 2025
PHNOM PENH, CAMBODIA

BRIEF SUMMARY

Under Output 2.2 of Component 2, the intervention focused on strengthening the capacity of sub-national government officers in Kep and Preah Sihanouk provinces to effectively manage, operate, and maintain small-scale infrastructure developed through the project.

KEY ACHIEVEMENTS

- Conducted a structured two-day training (29–30 May 2025) for 50 sub-national officials (including 10 women) in Kep and Preah Sihanouk.
- Recruited a consultant to identify trainees and conduct a targeted capacity needs assessment (October 2024).
- Designed nine training modules based on identified needs and infrastructure types.
- Covered key topics such as infrastructure operation, maintenance, monitoring, and stakeholder engagement.
- Delivered training using PowerPoint presentations, case studies, and interactive Q&A sessions.
- Achieved diverse participation from key departments including water resources, environment, agriculture, planning, women's affairs, and public works.
- Measured training impact using pre- and post-evaluation assessments.

GOOD PRACTICES

1. Promoting Gender Inclusion as a Project Standard

Gender inclusion was prioritised from the start, with formal instructions sent to local authorities. The project addressed barriers by offering meals during training to help women balance domestic duties, fostering more inclusive participation.

2. Targeted Capacity Building Through Needs Assessment

Training content and format were based on a thorough needs assessment. This ensured the sessions were directly aligned with participant responsibilities, avoiding generic material and boosting relevance and impact.

3. Structured, Modular Training Approach

Using a modular format, complex topics were broken down into clear, focused sessions. This helped participants gradually build knowledge and confidence, particularly in technical areas such as planning and maintenance.

4. Broad Stakeholder Engagement

Involving multiple departments across provincial and district levels fostered stronger collaboration. This inclusive approach deepened ownership, strengthened coordination, and enhanced long-term sustainability of outcomes.

LESSONS LEARNED

1. Gender Participation Remains a Challenge

Despite efforts, women's participation was low due to persistent social norms. In male-dominated sectors, women were often overlooked unless outreach was specific and proactive.

2. Short, Focused, and Flexible Training Is Better

Officials with competing duties prefer concise sessions. Designing short, focused training sessions resulted in improved attendance and engagement, particularly among women and multitasking officials.

3. More Practical Training Is Needed

Mid-term reviews revealed a lack of hands-on learning. Field-based activities, particularly for topics such as solid waste management, were recommended to complement theoretical sessions.

4. Post-Training Support Time Was Limited

Late project implementation limited time for follow-up. Extended monitoring (6–12 months post-training) is needed to ensure officials can effectively support community-level infrastructure.

RECOMMENDATIONS

1. Community-Led Action Planning for Sustainability

Officials should develop infrastructure management plans post-training, including focal points, contact details, maintenance schedules, inspection checkpoints, and reporting protocols. These plans will promote accountability and prevent neglect.

2. Strengthen Capacity Through Mentorship and Budgeting

Regular communication between officials and community focal points should be maintained. Incorporating infrastructure maintenance into formal investment and budget plans will secure long-term functionality and resilience.

PROJECT OVERVIEW

Since August 2021, the United Nations Human Settlements Programme (UN-Habitat) and the National Council for Sustainable Development (NCSD) have been implementing the Climate Change Adaptation through Protective Small-Scale Infrastructure Interventions in Coastal Settlements of Cambodia Project (CCA4CS), with financial support from the Adaptation Fund.

The project aims to strengthen climate resilience and adaptation in Cambodia's most vulnerable coastal settlements through targeted, on-the-ground interventions. By focusing on areas where ecotourism can support long-term sustainability, the initiative enhances communities' capacity to withstand climate-related challenges. The project is structured around three interconnected components to accomplish this in the highly vulnerable settlements in Kep Province and Prey Nob District of Preah Sihanouk Province:

Component 1: Community-scale knowledge and capacity enhanced to sustain the adaptation benefits of the project's investments.

Component 2: Government planning and technical capacity enhanced and knowledge captured and disseminated to sustain and enhance the project's adaptation benefits.

Component 3: Resilience built through investment in small-scale protective and basic service infrastructure and natural assets.

By integrating these components, the project addresses immediate climate risks and lays the foundation for long-term sustainability and resilience in Cambodia's coastal communities.

RATIONALE FOR THE INTERVENTION

Much of the recurring maintenance required for small-scale infrastructure is relatively simple and does not necessitate specialized labour or equipment. However, regular and objective inspections by provincial and district government officers — particularly by those with engineering backgrounds — are essential to ensure continued safety, functionality, and efficiency over time.

In addition to effective management, continuous technical guidance and capacity-building should be integrated into maintenance activities. Local governments, together with line ministries, also play a vital role in ensuring the allocation of sufficient financial resources within community development plans to support ongoing infrastructure upkeep.

BRIEF DESCRIPTION OF THE INTERVENTION

Under **Component 2**, the project focused on building the capacity of provincial and district government officers to effectively manage, operate, and maintain the infrastructure developed through the project sustainably. The intervention targeted 25 government officials, ensuring the inclusion of at least 10 women to strengthen their understanding and competencies related to small-scale infrastructure maintenance. This report captures

the key achievements, practices, lessons learned, and recommendations arising from the intervention.

KEY ACHIEVEMENTS

To meet its objectives, the project undertook several critical activities. A consultant was engaged to identify potential participants and conduct a capacity-building needs assessment by October 2024. These findings informed the design of targeted training materials and delivery approaches.

Training Overview

A two-day training was conducted from 29–30 May 2025, engaging 50 sub-national government officials (10 women, 20 percent) from Kep and Preah Sihanouk provinces. The training covered nine modules aligned with the infrastructure developed under the project.

Participants and Target Institutions:

Officials were drawn from key provincial and district institutions, including:

- Provincial Department of Water Resources and Meteorology (PDOWRAM)
- Provincial Department of Environment (PDOE)
- Provincial Department of Rural Development (PDRD)
- Provincial Department of Agriculture, Forestry and Fisheries (PD AFF)
- Provincial Department of Women Affairs (PDOWA)
- Provincial Department of Public Works and Transport (PDPTW)
- Provincial and District Administrations
- Provincial Department of Land Management, Urban Planning and Construction
- Provincial Fishery Administration
- Provincial Department of Planning
- District Hall
- Fishery Administration

Training Content:

The training addressed the following core topics:

- Introduction to small-scale infrastructure
- Importance and impact of infrastructure
- Technical operation, monitoring, and maintenance
- Stakeholder roles and engagement
- Reporting and coordination mechanisms

Delivery methods included PowerPoint presentations, relevant case studies, and Q&A sessions. The impact of the training was assessed using pre- and post-training evaluations.

GOOD PRACTICES

1. Promoting Gender Inclusion as a Project-Wide Standard

Gender inclusion was treated as a core expectation rather than a suggestion. Recognising the male-dominated nature of infrastructure-related fields, the project proactively addressed social and cultural barriers to

gender equality. Formal letters were issued to sub-national authorities emphasising the importance of women's participation in capacity-building activities.

To further encourage attendance among women, the project provided meals during training sessions. This simple yet effective measure helped address a common challenge faced by women—balancing training attendance with household responsibilities. These efforts contributed to a more inclusive training environment, demonstrating sensitivity to the local social context.

2. Targeted Capacity Building Through Needs Assessment

Recruiting a consultant to identify potential participants and conduct a comprehensive capacity-building needs assessment proved to be a practical approach. This ensured that training content, delivery methods, and materials were closely aligned with the actual needs of government officials. By tailoring the training to specific knowledge gaps and operational realities, the project avoided generic modules and instead delivered highly relevant and impactful learning experiences.

3. Comprehensive and Structured Capacity Building

The training methodology adopted a modular structure, breaking down complex technical topics into accessible, focused sessions. This enabled participants to gradually build their understanding and competencies in areas such as planning, implementation, maintenance, and monitoring of small-scale infrastructure. The structured format also helped enhance the practical applicability of the training, increasing the chances of effective implementation at the local level.

4. Broad Stakeholder Engagement

The training engaged a broad cross-section of officials from diverse provincial and district departments across the Kep and Preah Sihanouk provinces. This inclusive approach strengthened cross-sector collaboration, deepened local ownership, and improved institutional coordination. Engaging stakeholders at multiple levels not only reinforced accountability but also helped ensure that the project's outcomes were widely supported and sustainable over time.

LESSONS LEARNED

1. Gender Participation Remains a Challenge

Despite proactive efforts, female participation in the training remained limited. This reflects a persistent perception that infrastructure-related work is primarily a male responsibility. Such norms often lead to women being overlooked in selection processes, particularly in traditionally male-dominated sectors. Without specific outreach or incentives, women are less likely to participate in technical training programs.

2. Training Should Be Short, Focused, and Flexible

Due to competing priorities, government officials are often unable to commit to lengthy training programs. A

key lesson learned was the importance of designing concise, targeted training sessions that cover essential content efficiently. Shorter, more focused courses improve attendance and engagement—particularly among women and officials with multiple responsibilities—while still achieving learning objectives.

3. Greater Emphasis on Practical, Hands-On Training Needed

While the theoretical training was practical in delivering core concepts, the mid-term evaluation highlighted the need for more hands-on, experiential learning. In response, and in line with recommendations from both the Mid-Term Evaluation and the second Project Management Committee (PMC) meeting, sessions such as those on solid waste management should include practical, field-based components to reinforce learning and promote behaviour change.

4. Allocate Sufficient Time for Post-Training Monitoring and Support

Another important lesson was the need for extended monitoring of sub-national officials following the training. These officials play a crucial role in supporting communities through effective infrastructure management. However, since much of the construction and training occurred in the latter part of the project timeline, there was limited time for follow-up. It is recommended that continuous support, mentoring, and monitoring be extended for at least six months to one-year post-handover to ensure sustainability and impact.

RECOMMENDATIONS

1. Community-Led Action Planning for Infrastructure Sustainability

Following the training, it is strongly recommended that sub-national government officials develop clear, actionable infrastructure management plans. These plans should identify focal persons with contact details, establish monitoring and maintenance schedules, define inspection checkpoints, and set up a robust reporting system. Having a defined action plan in place will reduce the risk of infrastructure neglect or failure, promoting accountability and long-term functionality.

2. Strengthen Local Capacity Through Continuous Mentorship

To support sustainable infrastructure management, sub-national officials should maintain regular communication with community-level focal points. This relationship allows for consistent monitoring, guidance, and capacity reinforcement. It is also crucial to advocate for the inclusion of small-scale infrastructure maintenance in national and sub-national investment and budget plans. Allocating regular funding—whether for routine upkeep or unforeseen damage—will help ensure continued operation, resilience, and sustainability of the infrastructure in the long term.

DOCUMENTATION

Name	Type	Produced Date	Location
Inception Report	Report	August 2024	Link
Define Trainee Group	Report	September 2024	Link
Training need assessment	Report	March 2025	Link
Training Materials	Power Point	April 2025	Link
Training Report	Report	July 2025	Link
Photos	Photos		Link

PHOTOS





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