Australia Awards

"Addressing Water Scarcity"

Rainwater Harvesting in Kampot Province

- Turn rain into a resource
- Secure water, strengthen communities
- Act now, time is crucial

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Summary

The significance of the study on Rainwater Harvesting in Kampot Province:

- Contribution to understanding RWH as a sustainable intervention in Cambodia.
- Addresses water scarcity in Kampot Province.
- Suggests scalable solutions using RWH technology applicable to other provinces

Contents

1. Introduction

- Water scarcity is a critical global challenge worsened by climate change, population growth, and poor management.
- In Kampot province, despite having abundant water resources, many rural areas experience severe shortages.
- This issue is exacerbated during the dry season when surface water scarcity compels communities to rely on unsustainable groundwater sources.

2. Objectives

1. Assess the feasibility and impact of RWH on water availability.
2. Identify barriers to the adoption of RWH.
3. Develop recommendations and propose actions for addressing water scarcity

Research Questions

1. What is the effectiveness of rainwater harvesting for availability and scarcity reduction in Kampot?

1. What are the key challenges and limitations of rainwater harvesting systems in Kampot?

1. What is the contribution of rainwater harvesting to sustainable management and livelihood support in Kampot?

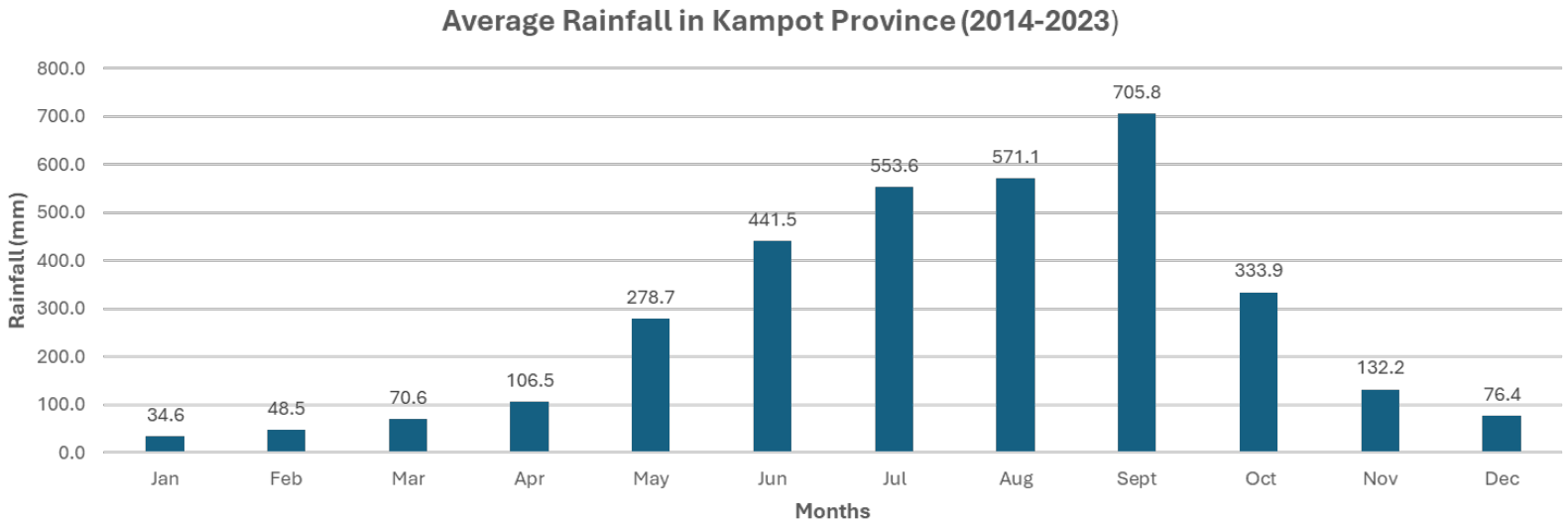
3. Methodology

- Approach
  - Mixed-methods approach: quantitative surveys, and qualitative interviews and Focus Group Discussion.
- Participants
  - Data collected from 117 households in two communes: North Svay Torng and Trapeang Pring.

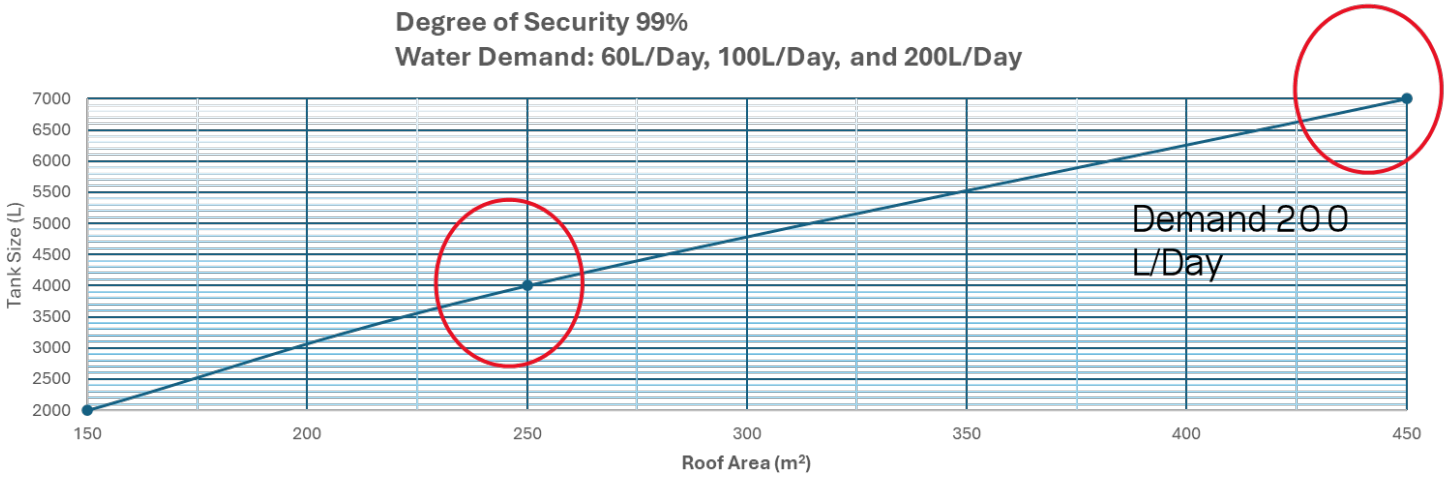
4. Key Findings

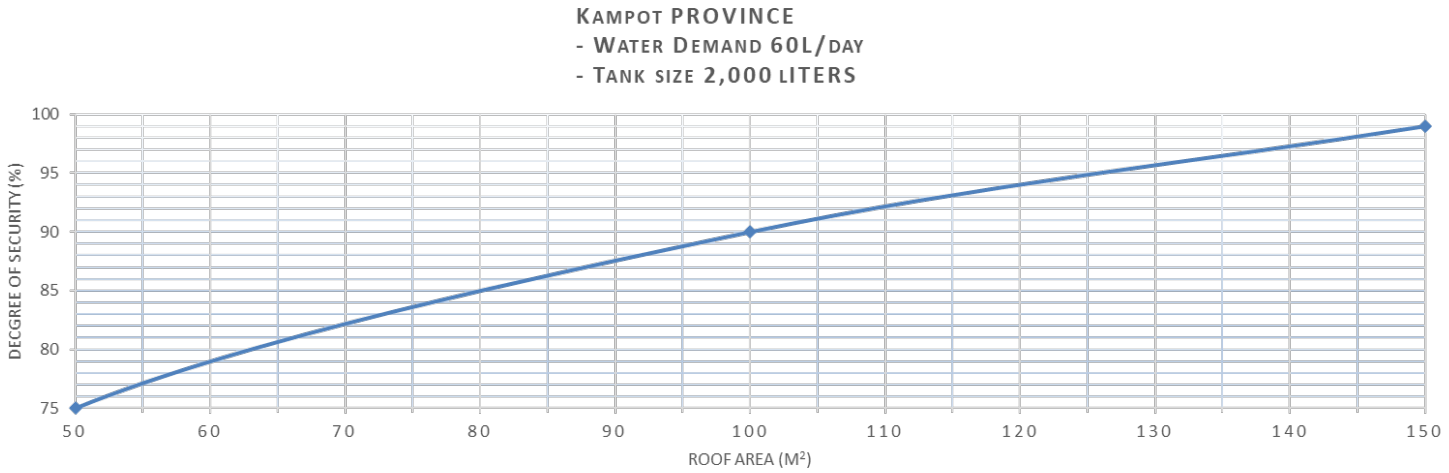
- Contribution
  - RWH supports SDG 6 (Clean Water) and SDG 13 (Climate Adaptation).
- Adoption rates
  - 62% in North Svay Torng and 57% in Trapeang Pring use RWH for domestic purposes: drinking, cooking, and bathing.
- Barriers
  - High installation costs identified as a major barrier for 85% and 88% of respondents.

Rainfall Data Analysis



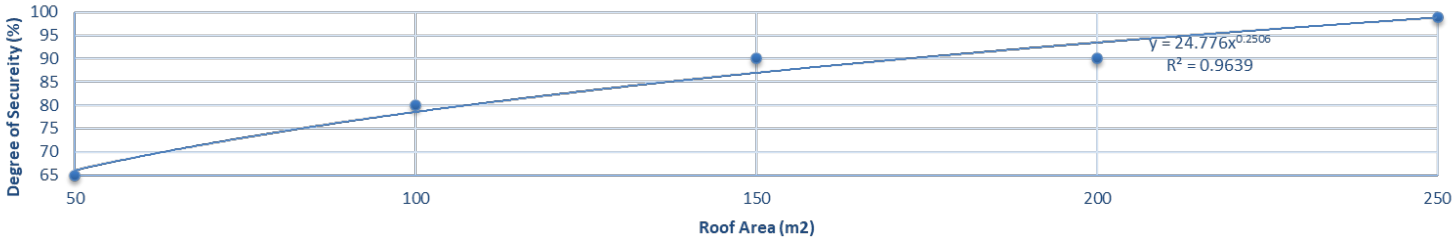
Roof-Runoff and Tank Size Analysis



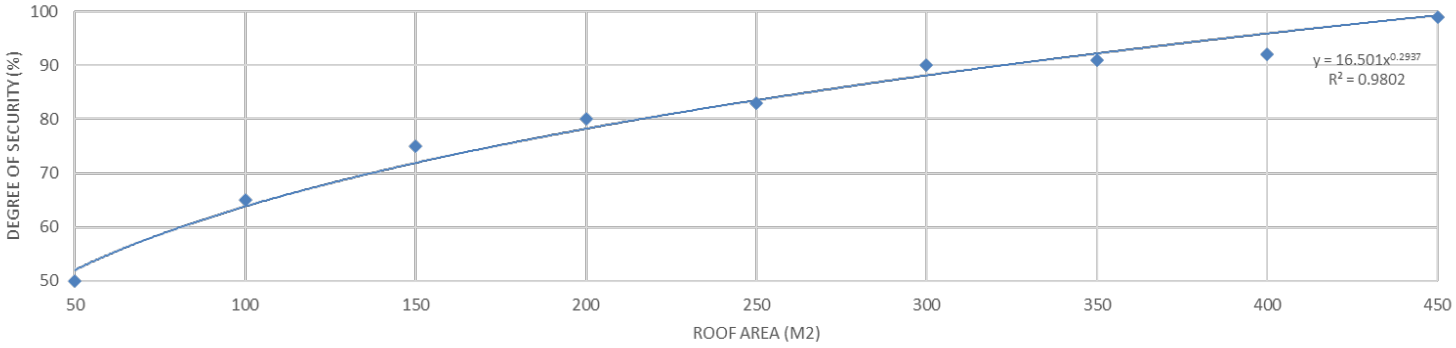


Roof-Runoff and Tank Size Analysis

Kampot Province
- Water Demand: 100L/Day
- Tank Size 4,000 Liters



KAMPOT PROVINCE
- WATER DEMAD 200L/DAY
- TANK SIZE 7,000 LITERS



5. Benefits of Rainwater Harvesting

- Water accessibility
  - Reduces water shortages and reduces burden on women/children.
- Social impacts
  - Contributes to gender equity and community well-being.
  - Reduce domestic burden, particularly for women and children, thereby contributing to gender equity and overall community well-being.

6. Challenges to Adopting of RWH

- Identify barriers
  - High costs, lack of technical knowledge, and insufficient government support.
- Cultural preferences for traditional water sources
  - Traditional reliance on wells and ponds creates resistance to adopting new technologies.

7. Recommendations

- Government support and subsidies for installations
  - Establish financial incentives, such as subsidies or loan for installations.
- Capacity building
  - Develop community training and education programs to enhance technical knowledge regarding RWH.
- Awareness campaigns
  - Integrate RWH into local infrastructure planning.
  - Engage communities through education abou the benefits and success stories of RWH.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Department of Industry, Science, Technology & Innovation

Department of Water Resources and Meteorology

8. Conclusion

- Significance of RWH
  - Rainwater Harvesting enhances water securi and aligns with sustainable development goals.
- Future research needs
  - Need for ongoing research to assess long-term effectiveness of RWH system over time, examining their socioeconomic impacts.


SVAY TORNG HEALTH CENTER


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