

Academic-public health-community partnership for prevention and control of intestinal parasites infection in endemic area using One Health approach: a field observation research

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Challenges

- Intestinal parasites are prevalent in low socio-economic tropical regions, especially among immigrant and refugee communities.
- At Thai-Myanmar border, Tha Song Yang district, Tak Province, has one of the highest intestinal parasites prevalence in Thailand.

Objectives

- To utilize One Health approach to explore risk factors of intestinal parasitic infection in endemic area.
- To constitute problem solving for further strategic planning to reduce disease burden.

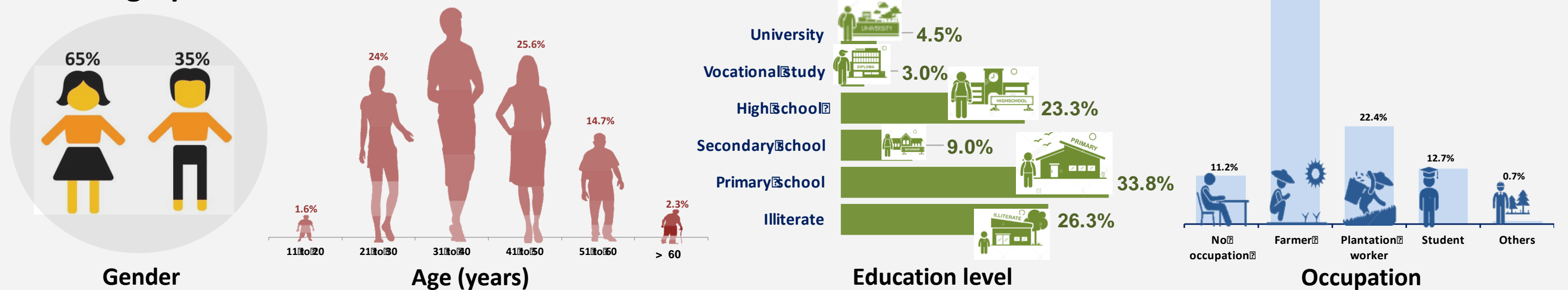
Methodology

- Human stool sample collection
- Domestic animal stool sample collection
- Questionnaires
- Multi-sectorial brain-storming

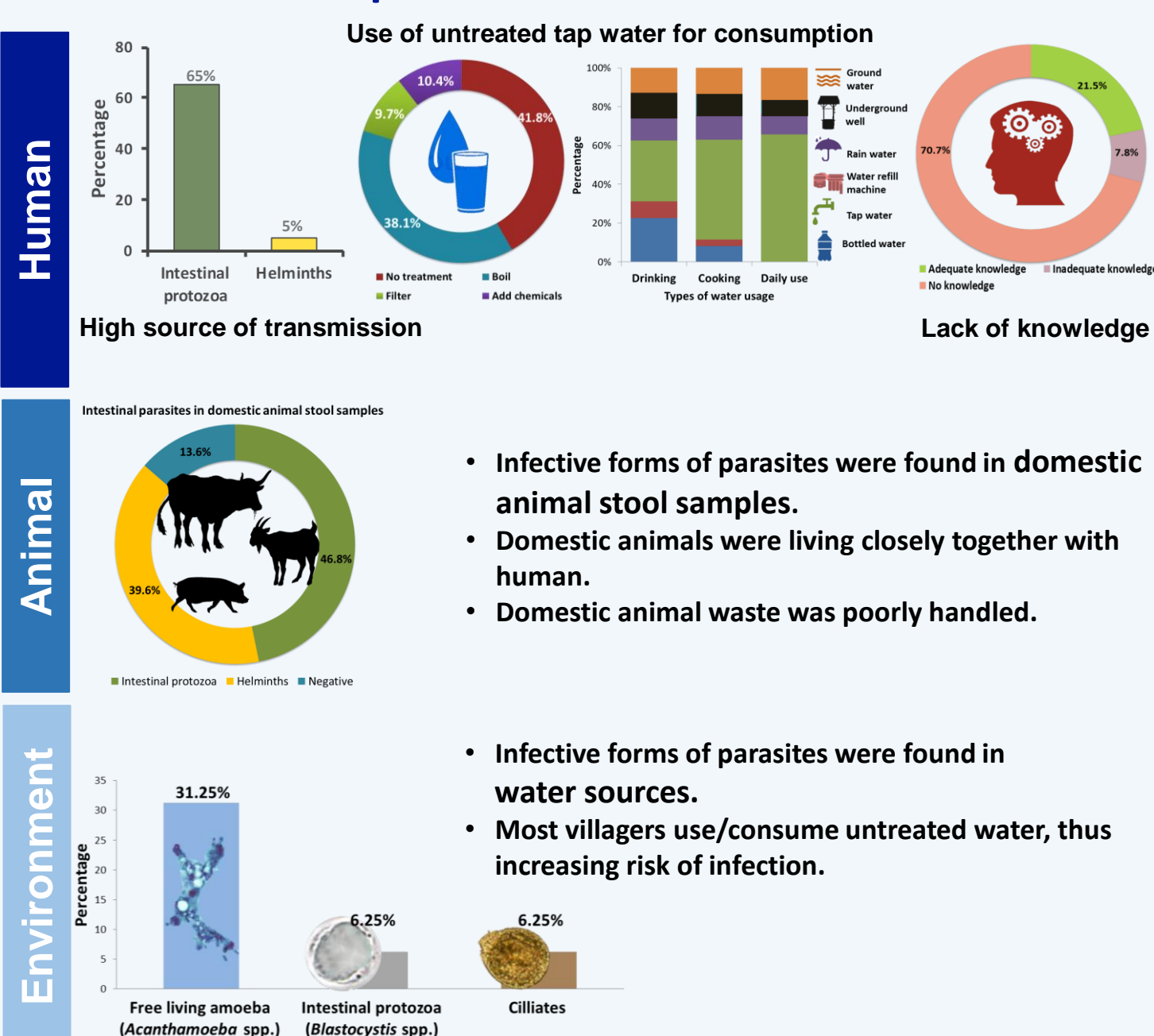


Major Findings

1. Demographic data



2. Risk factors of parasitic infection



3. Problem solving strategies

- Organize training for health volunteers for active case finding and reporting by community participation.
 - Organize training for laboratory technicians to accurately diagnose intestinal parasites by simple microscopic techniques.
 - Facilitating and mediating multi-sectorial discussion and collaboration for target-specific problem solving solutions.
- Multi-Sectorial Collaboration Diagram:**
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graph TD
 Academic[Academic sector] --- Community[Community]
 Academic --- PublicHealth[Public Health sector]
 Community --- PublicHealth

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- Community:**
    - Dissemination of knowledge in prevention and control of food water borne diseases from Health volunteers to villagers/community.
    - Encouraging community participation in active case finding and reporting.
  - Public Health sector:**
    - Active disease surveillance.
    - Coordinating with local authorities to design strategic planning for disease prevention and control.
    - Assisting community in improving water system and domestic animal waste management.

## Highlights and Lesson Learned

- We successfully employed One Health approach to assess risk factors of intestinal parasite infection in endemic area at the Thai-Myanmar border.
- We mediated multi-sectorial collaboration and constituted a policy brief to notify Ministry of Interior and Ministry of Public Health for further strategic planning for reducing disease burden.

### Acknowledgements

This research was funded by USAID and Thai One Health University Network (THOHUN). We would like to thank Faculty of Tropical Medicine, Mahidol University, staffs at provincial public health office, Tak Province, staffs of Tha Song Yang District Hospital, Sub-district and District Administrative Officer at Tha Song Yang, as well as all health volunteers for supporting this project.

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