Strategies to Prevent Spillover (STOP Spillover)

Impact Brief

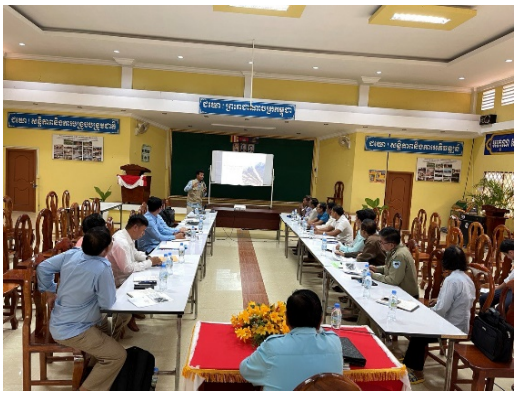
Cambodia

Working with local stakeholders to identify and select bat caves for intervention in Battambang Province

Activity 2.2.2.3: Community-level risk reduction interventions at cave-associated bat guano harvest sites.

INTRODUCTION

Following the Cambodia Bat-Human Interface Risk Assessment in March 2023, STOP Spillover identified priority bat-human interface sites and prioritized new geographic areas in Kampot and Battambang provinces for project activities and interventions. The STOP Spillover Cambodia country team, accompanied by a representative from the Ministry of Health's Center for Diseases Control (CDC) conducted a field visit to Battambang province from October 24 to October 27, 2023 to collect information for site selection in communities where bat guano is harvested from caves.

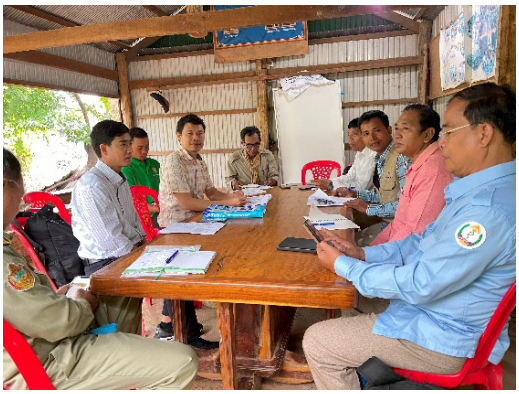


Meeting with concerned government agencies

During the field mission the team met with the Provincial Department of Health (PHD); the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF); the Provincial Department of Environment (PDOE); representatives of health centers; village, commune and district authorities; representatives of Rumsay Sak Community Forestry; unregistered bat guano collection business operators; and Angkar Bareebo, an NGO planning to support local people to establish bat guano farms. The field mission team introduced STOP Spillover to sub-national level stakeholders, discussed the selection of bat cave sites for interventions, explored collaboration opportunities, and identified and recruited One Health Design, Research and Mentoring (OH-DreaM) working group (WG) members.

Trip Outcomes

- Local stakeholders are well informed of STOP Spillover interventions and support and collaboration mobilized.
- Potential communities are identified for relevant activities and interventions.
- Bat species are identified, and potential bat caves selected for interventions.
- OH-DReaM WG established, and members engaged in implementing relevant activities and supporting joint interventions.

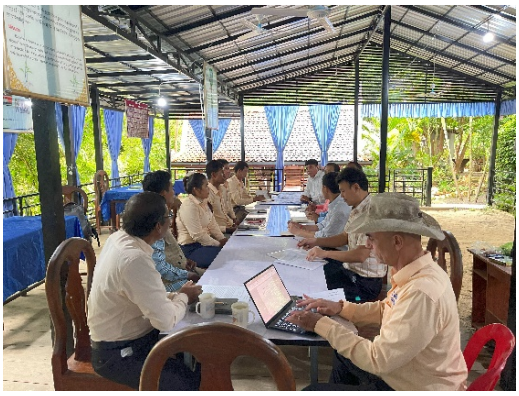


Meeting with representatives of Rumsay Sak Forestry Community

Field Visit Results

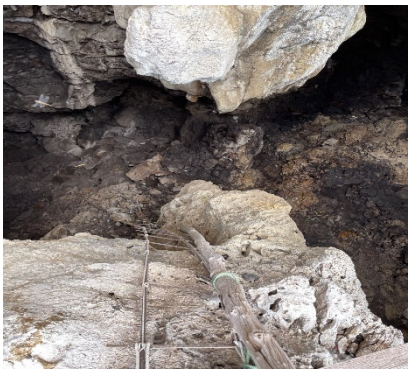
The team:

- Met six representatives of three provincial departments (PDAFF, PDOE, PHD).
- Met five representatives of the district of Banan, the target district where all potential caves are located.
- Met six representatives of three villages and two communes.
- Met three representatives of three health centers.
- Met three representatives of Rumsay Sak and Phnom Sampov communities.
- Met seven members of Angkar Bareebo, an NGO planning to support bat guano farming.
- Visited three mountains (Phnom Rumsay Sak, Phnom Sampov, and Phnom Ta Kream) and one cave.
- Identified five bat species believed to be present at potential project sites, based on information from consultations with local stakeholders: *Pipstrellus javanicus, Rhinolophus shameli, Scotophilus kuhlii, Taphozous melanopogon,* and *Mops plicatus*.

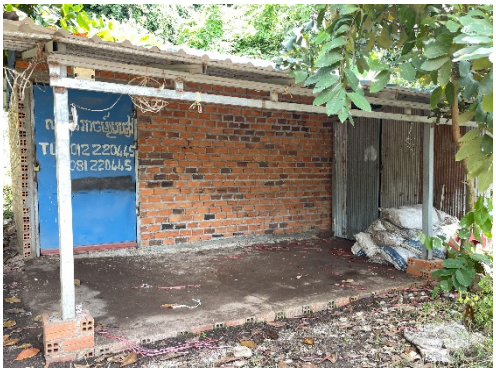


Meeting with Angkar Bareebo's staff

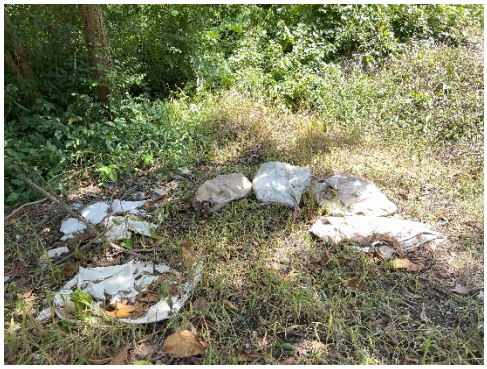
Sub-national level stakeholders welcomed the STOP Spillover team and are ready to provide support to and collaborate with STOP Spillover.



Phnom Sampov's bat cave



Bat guano storage point



Disposal of used bat guano bags

The team learned the following:

- Two forestry communnities are registered with the Forestry Administration. One community, Rumsay Sak Community Forestry, concerns bat guano harvesting at Rumsay Sak bat caves – western and eastern caves. The community comprises about 50 member households; but only about 10 committee members are engaged in bat guano collection. The other forestry community is Sahakkum Prey Kampingpuoy, which is not far from Phnom Sampov, but this community is not involved with bat guano collection.
- Phnom Sampov has two bat caves – eastern and western caves – where bat guano is collected. The caves are managed solely by a family that hires about 10 bat guano workers. The family has managed the caves since 1979. Bat guano workers do not wear any protective gear and work barefoot. The family provides only baby powder to the workers to apply to their bodies to repel insects (fleas, lice, etc.). Some workers take a bath by the guano warehouse; only some of them report using soap. Some do not bathe; but only wash their hands with or without soap. All of them wear the same clothes after work; they change their clothes only at home. The family who runs the bat guano harvesting business is happy and ready to cooperate with the project to ensure biosafety for its workers.
- There are no current projects in Cambodia that work with bat guano harvesters and/or their communities to mitigate the risk of zoonotic virus spillover from bats to humans.
- Hundreds of goats are grazed nearby the mountains with bat caves which could permit cross-species transmission.

- Quarrying activities in small hills nearby Phnom Ta Kream using dynamite have disturbed bat colonies. Now the bat population at Phnom Ta Kream bat caves is reported to be declining significantly. Only 2-3 bat guano harvesters remain working at those caves.

STOP Spillover Cambodia support to Cambodia's GHSA and JEE scores

Year 4 Activities	GHSA priorities	JEE score (2016)
Activity 1.2.6.1 Bat guano farm study (continued from Y3) Activity 2.2.2.2 Coordination and capacity building of sentinel surveillance team	Category 1: Preventing the emergence or release of pathogens with potential for international concern: Zoonotic diseases (1.2) and biosafety (1.4)	Indicator P.5.1 Surveillance of zoonotic diseases (JEE Score 2 for P4.1 surveillance systems in place for priority zoonotic diseases; and JEE Score 2 for P6.2 biosafety training and practices)
Activities 2.2.2.1 and 2.2.2.3: Community level risk reduction interventions	3.5 Risk Communications	Risk Communication and Community Engagement (RCCE), Indicator R5.2: Risk Communication and R5.3 Community Engagement (JEE score 3 for R5.4 Communication engagement with affected communities)

This brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of STOP Spillover implementing partners and do not necessarily reflect the views of USAID or the United States Government.