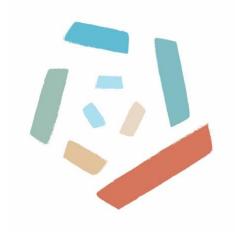
RESEARCH REPORT

October, 2023 TREPA Series 20-2023



Natalia Muñoz Cassolis, Meredith L. Gore and Matt Kammer-Kerwick



TREPA PUBLICATION SERIES

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INTRODUCTION

What is TREPA?

TREPA (Threat Reduction for the Environment, People, and Animals) is a research project that aims to fill knowledge gaps regarding the intersectionality of risks associated with zoonotic diseases of pandemic potential with wildlife trade using a One Health approach. TREPA is a 5-year project that began in September 2022. The TREPA team began collecting environmental and animal data in September 2023, and expects to begin collecting social science data in early 2024.

What was the purpose of the 2023 TREPA Indaba?

In preparation for this research project and for the data collection phase, TREPA designed and implemented an Indaba. Indaba is a Zulu word referring to a gathering where participants can share important information, knowledge, ideas, and discuss current needs or challenges. The essence of an Indaba lies in fostering a space for all participants to share their views. The 2023 TREPA Indaba was foreseen by the research team as a space to inclusively co-design opportunities

for learning about the links between human and animal health and emerging disease detection. Co-design is a powerful mechanism for gathering the knowledge and expertise of a wide range of stakeholders to ensure that TREPA is well-designed and responds to local needs. The Indaba was also conceived as a space to foster experiential learning opportunities, promote networking, and establish new relationships among the participants and the TREPA team.

2023 TREPA Indaba

Indaba Agenda

The agenda for the 2023 TREPA Indaba is available online here.



Image 1. Invitation reminder

Goals Achieved by the 2023 TREPA Indaba

	Explicit Objectives		Implicit Objectives		
	Co-design	Knowledge Sharing	Networking	Team Building	Capacity Building
Purpose	Co-design Increase understanding of local values, worldviews, and needs to ensure the study design is well-suited and reduce the risk of misalignment. Promote empowerment and ownership of TREPA research by diverse stakeholders to improve feasibility and sustainability of results. Build trust among and between participants and the research team.	Share and disseminate existing information knowledge in all formats (e.g., traditional, local, expert, secondary). Enable collaborative learning of knowledge using two-way communication.	Promote a safe space for dialogue, discussions, and relationship-building between people who would not otherwise meet/share spontaneously. Provide a bridge for communication between sectors (e.g., government officials and local communities).	 Team Building Improve understanding of team members' backgrounds, worldviews, expertise, and topics of interest. Enhance communication between team members, facilitate teamwork, increase motivation and sense of belonging, build personal relationships, and boost morale. 	Capacity Building Enhance an individual's or institution's ability to engage in an activity and/or perform certain tasks. Improve the development of skills and competencies.
Contributing Activities	 Provocation sessions. Experiential learning activities. Comprehensive learning activities. Networking sessions. 	 Provocation sessions. Experiential learning activities. Comprehensive learning activities. Shared meals and networking sessions on a college campus 	 Experiential learning activities. Shared meals and networking sessions on a college campus Informal exercise meetups. Shared transportation back and forth to activities. 	 Experiential learning activities. Shared meals and networking sessions on a college campus. Facilitated and nightly debriefing sessions Provocation sessions. End of Indaba team debrief. 	Indaba planning, implementation, trouble shooting and debriefing.

Achieved Goals

- Ensured a diverse audience
 with participants from the local
 communities where the
 research project will be
 conducted, both in South
 Africa and Mozambique,
 government officers from
 South Africa, Mozambique, and
 the United States that have an
 active role in the conservation
 challenges studied by TREPA,
 and scholars, and
 representatives from the
 private sector that are aware
 of the local needs.
- Fostered a safe environment where all participants could voice their opinions.
- Promoted gender equality, justice, and inclusion.
- Generated trust for local communities to express challenging opinions and ask difficult questions.
- TREPA listened to voices
 expressing difficulties faced by
 local communities in their daily
 lives (e.g., need of bush meat

- Participants enhanced knowledge on the One Health approach and understanding of how One Health can contribute to the well-being of local communities.
- Local communities enhanced understanding about anthrax, and emergent and zoonotic diseases.
- Local communities enhanced understanding about the ecosystem services provided by vultures.
- Participants witnessed potential effects of carcass poisoning on vultures.
- Participants enhanced understanding about the rangers' training program at SAWC and the use of dogs for conservation.
- TREPA enhanced understanding about the tensions of using K9 units for conservation and the historical use of dogs in South Africa.

- Facilitated dialogue between local community members from South Africa and Mozambique.
- Contributed to enhancing professional relationships between staff from SANParks and ANAC.
- Enhanced TREPA's relationships with SANParks and ANAC.
- Promoted relationship building between African and non-African decision-makers.
- Enhanced TREPA's relationships with collaborators that work in close contact with local communities.
- Enhanced TREPA's relationship with the laboratories in Mozambique.

- Allowed team members to see, smell, hear, and be immersed in the SAWC campus and understand more about their work.
- Contributed to acknowledge the diversity within the research team. Diversity of backgrounds, worldviews, fields of work, and expertise.
- Contributed to cohesion and improved communication between team members. New communication guidelines agreed upon.
- Enhanced team members' understanding of the scope and purpose of the research project.
- Enhanced understanding of each team member's plans for Y2.
- Promoted the team members' sense of belonging and empowerment.
- Contributed to trust building between team members.
- Enhanced teamwork.

- Successful contribution to the capacity building of SAWC's personnel on planning a large multi-stakeholder, multilanguage, multi-cultural workshop.
- Contributed to the research team's ability to deal with unforeseen circumstances and adapt to them (e.g., elephant collaring).
- Contributed to the research team's ability to be flexible and adapt to participants' needs (e.g., changes in the conventional learning approach).
- Contributed to team members' ability to innovate, work out of their comfort zone and venture in new ways of working (e.g., mass, games, and experiential learning).

to ensure protein intake,	TREPA enhanced interactions
human consumption of	with K9 dogs in a safe space.
roadkill).	TREPA enhanced understanding
 TREPA listened to voices 	about information on poisoning
expressing challenges	and how this may affect
associated to conservation in	livestock and people's lives.
the South African context and	Participants and TREPA team
some clashes from the	members enhanced their
conservation sector with	understanding of traditional
communities' needs and vice	healing.
versa.	TREPA learned about the
Local communities expressed	tensions between some local
their unanswered questions,	communities and SANParks
recommendations for the	from preventing them from
execution of the project, and	harvesting wildlife from KNP.
the expectations for	TREPA learned about some of
engagement by TREPA.	the perceived and assessed
• TREPA listened to voices	deficiencies in existing
expressing awareness about	compensation system for
the importance of human and	human-wildlife conflict.
livestock health to the research	TREPA learned more about the
scope.	way private game reserves
TREPA listened to voices	operate in KNP's western
expressing awareness of the	boundary.
importance of thinking about	TREPA enhanced understanding
poverty alleviation and	of the local politics and
sustainable development for	jurisdictions.
local communities.	

TREPA enhanced understanding		
of the decision-making		
mechanisms in local		
communities (e.g., Makuleke		
CPA).		
Contributed to TREPA's		
understanding of land use (e.g.,		
who the owners of the land are,		
if there is wildlife, if it is open to		
KNP).		
TREPA learned about the		
tensions between local		
communities and elephants for		
crop raiding.		

Activities

1. Comprehensive Learning

Activities focused on comprehensive learning were designed following traditional classroom learning approach. The 2023 TREPA Indaba sought to minimize conventional learning and prioritize experiential learning and knowledge sharing through shared experiences. The Indaba included six comprehensive learning activities consisting of lectures and PowerPoint presentations as follows: (i) Opening talk about experiential learning and the purpose of the 2023 TREPA Indaba, (ii) The genesis of TREPA: History and Future of Learning, (iii) the importance of spatial data and mapping for decision making, (iv) One Health: Linking Vultures, Anthrax, People and Healers, (v) Modeling Systems and Location Science, and (vi) Traditional Medicine and Umuthi.



Image 2. Comprehensive learning lectures

2. Experiential Learning

Experiential learning gives participants a richer, more meaningful understanding of concepts and how they operate in the real world, particularly when participants are part of activities and when they are analyzing, sharing, discussing, and reflecting on their personal reactions. Experiential learning can improve memory for concepts and improve awareness of other

people's experiences. This is because learning through experience is a process of human adaptation, and it is applicable to all arenas of life and operates at all levels of human society, from the individual to the group, to organizations, and society.

The 2023 TREPA Indaba had four experiential learning activities as follows: (i) savannah ecosystem game drives, (ii) K9 dog demonstration and visit to the K9 kennels, (iii) walking tour of the rangers' camp, and (iv) visit to Moholoholo Rehabilitation Center and vulture "restaurant."



Image 3. Experiential Learning. K9 Demonstration and Ranger Camp Visit

3. Provocation Sessions

Extant literature explains how the spaces where experiential learning occurs are important for stimulating inquiry, opening minds, and creating good learning conversations, enabling participants to move from the experience to deep reflection, conceptualization, and action. However, reflection-on-action, or reflection occurring after an event, is more effective than "reflection-in-action," reflection occurring in the moment of the event or in the moment of teaching practice. Following these guidelines, the TREPA team decided to host provocation spaces after an experiential learning activity to discuss (i) the 'What?', (ii) the 'So What?', and (iii) the 'Now What?'.

a. The What? The intention is to draw out as much information as possible from the group to refer back to it later on in the discussion. From this foundation of what happened, the facilitator can guide the discussion forward into a greater understanding of the experience and help draw out the learning from it.

What happened? What took place during that activity? What did you observe?

b. The So What? The intention is to look at details and interpret the data to draw out the significance of the activity in order to gain insight. Moving from the descriptive and observable to the interpretive, the intention is to draw more meaning of what happened, and/or how it happened as well as to "unpack" the more subtle levels of what took place.

How was your communication? What contributed to your team's success? What role did you play in the group during the activity? What questions came to your mind while the activity took place? What were your impressions from this activity?

c. The Now What? The intention is to bridge from recent experience to future experience. In order for what has just taken place to have significance or impact, the

'now what' questions get the participants to think ahead and possibly apply what they have learned. It may also be appropriate for participants to look at what has just taken place on a metaphoric level and draw meaning or insight in that way.

What would you do differently?

What can be done?



Image 4. Provocation Session. Vulture Restaurant

4. Mass Games

TREPA levered on existing literature on mass games. Games are an effective tool to support learning processes. There are games for 'self-analysis' that help participants become more conscious of their thought processes, sensorial perceptions, and values. Games of this type help one to clarify one's implicit assumptions and the ways one approaches other people, their organizations, or their problems. Games for 'self-analysis' help in the process of intention that relies on internal reflection. It touches upon the image we have of ourselves vis-à-vis the outside world.

Additionally, this type of games help the participants learn in the extension stages to help them make transformative changes in the world. Games for 'communication and collaboration' help one to understand and experience invisible mechanisms that take place when one communicates and collaborates. System games aim to show the players the functioning of complex systems. System games enable participants to see, feel, and

'experience' various aspects of system behavior. System games can help one to understand the functioning of leverage points. Leverage points are crucial points in the system because by working at these points one can change the entire system more effectively and efficiently.

The 2023 TREPA Indaba used the 9-dot game at the beginning of the event to provide an example of 'thinking outside the box' and, therefore, set the tone for Indaba as a novel experience for codesign and experiential learning. The goals of the game were to have a lived experience with the following concepts: we tend to think within certain frameworks visible or invisible; thinking about novel solutions requires thought; finding new ways or alternatives can be a trial/error exercise; and it is possible to find new alternatives. The 'Arms Crossed' game was also used to showcase the difficulties in changing behavior.



Image 5. Co-design. Final co-design session by country.

5. Networking Sessions

TREPA conceived having specific conversation openers to spark discussions between participants. For these purposes, during coffee breaks, team members were designated to lead conversations on specific topics such as (i) communication about zoonotic diseases, (ii) human health, and (iii) One Health. Additionally, TREPA fostered a space for community leaders from Mozambique and South Africa to meet and discuss their opinions about the 2023 TREPA Indaba and share their expectations on the project.

6. Debriefings

The TREPA team had nightly debriefings to discuss the daily implementation of the event and take any required measures to maximize invitees' attention and participation. These nightly debriefings allowed the TREPA team to recalibrate activities where needed and share lessons learned on each day.

One adjustment made by the team warrants inclusion here. The debriefing on September 8th included a discussion of the need to provide more time and space for community leaders to gather away from the TREPA team and other Indaba participants to reflect on their experiences and learning. A value of TREPA is codesign, and accordingly, the September 9th schedule was adjusted to allow an hour for community leaders to gather in an adjacent classroom. The TREPA team also reallocated the time scheduled for one of the comprehensive learning sessions on systems and network modeling to allow the community leaders time to share their reflections, summarized below.



Image 6. Co-design. Feedback from local leaders.

Feedback from Community Representatives

- a. Community Summary of the Main Points made during the Comprehensive Learning Sessions:
 - Anthrax is a disease that is from animals and can be transmitted to humans and livestock.

- The aim of TREPA is to identify ways to reduce the transmission, including vaccination and the roles played by vultures.
- b. Resulting and Remaining Questions from Participants
 - The information acquired during the comprehensive learning sessions was key in raising questions such as: are vultures not affected by anthrax when they eat infected animals?
 - What other ways can anthrax be transmitted to animals? For example, what happens if they end up drinking water in rivers after eating the carcass?
 - How can anthrax transmission be reduced?
 - In some communities we get drinking water from rivers, does this mean people and livestock are at risk?
 - What are anthrax symptoms in animals so it can be quickly reported? Whom should it be reported to?
- c. Summary of Community solutions the TREPA team could consider for reducing One Health risks
 - Erection of fences to stop wild animals from coming into contact with livestock.
 - Erection of boreholes for water for the communities as they (livestock, vultures, and people) all currently share boreholes.
 - Vaccination of livestock.
 - Strengthening of law enforcement, more specifically to animals that destroy community crops or livestock (the lack of this capacity results in people taking the law into their own hands).
 - They also highlighted the problem of meat distribution, explaining that when an elephant is culled for raiding a crop the meat is not shared with the community.
 - Compensation for livestock losses.

- d. Summary of Local harvesting of Medicinal Plants and Animals
 - Currently access to this natural resource is restricted.
 - Traditional practitioners should be given a period in which they can harvest so that poaching can be reduced (A legal policy on this matter is desired)
 - They want to keep their traditional medicine, and policy should encompass both western and traditional practices.
 - The resounding theme here is: nothing about us without us.
- e. Community Suggestions for the TREPA team for Future Community Engagement
 - More information about anthrax that can be taken back home and shared with other community members.
 - Further local engagement with different community stakeholders (e.g., traditional leaders, pastors, farmers, healers).
 - Consistent revisiting of participants' feedback.
 - Consistent engagement of community leaders by TREPA team.

At the end of the 2023 TREPA Indaba, the research team stayed at the Southern African Wildlife College for a final debriefing session where a timeline evaluation was undertaken, and the team shared roses and thorns about the Indaba implementation. This debriefing also allowed the team to start strategizing and planning for the execution of Y2 tasks.