Zimbabwe Institute of Wildlife Conservation, Spatial Monitoring and Reporting Tool training of trainers Report

February 2025

Background & Introduction

The Spatial Monitoring and Reporting Tool (SMART) training of trainers was conducted at the Zimbabwe Institute of Wildlife Conservation (ZIWC), formerly known as Mushandike, from February 23 to March 1, 2025. The main goal of this training was to equip key personnel with essential skills and knowledge, enabling them to efficiently train and assist field staff in using the SMART system for data collection, monitoring, and report generation. Participants explored the SMART database in depth, gaining comprehensive insights into its functionalities and its pivotal role in advancing conservation efforts across law enforcement, research, and monitoring sectors. The training provided at ZIWC was aimed to position it as the central hub for all future training initiatives, including SMART training, fostering a sustainable framework for ongoing capacity building and skills development within the Zimbabwe Parks and Wildlife Management Authority (ZPWMA).

The Training of Trainers program offered an in-depth curriculum designed to comprehensively address all facets of SMART implementation. The topics covered ranged from data collection, analysis, and report generation to advanced technical aspects, such as system maintenance, troubleshooting, and security protocols. Additionally, the program highlighted the critical role of integrating SMART data into routine management decision-making processes, thus ensuring its maximum contribution to conservation initiatives. By mastering the intricacies of the SMART system, participants were able to derive actionable insights that could enhance decision-making, improve resource allocation, and strengthen conservation outcomes. A total of 31 participants from various ZPWMA regions, excluding facilitators, took part in the training, as documented in Annex 1. This initiative was funded through the UNDP GEF6 project. The sessions were co-facilitated by Mr. Patmore Ngorima (Principal Ecologist) and ZPWMA's focal point for SMART implementation, alongside Mr. Homage Ncube, the Resident Ecologist for Mana Pools National Park, and Mr. Obrien Matare, a Network Administrator based at the Zimbabwe Institute of Wildlife Conservation. Together, they conducted the program's sessions.

Summary of the training

The training was a five-day session, with the participants completing the short exercises on:

1. SMART basic review and understand the use of the SMART tool to support conservation area protection activities.
2. Conservation area (Stations) set-up review and overview of the SMART tool interface.
3. SMART mobile: uploading of a configured model and downloading of patrol data
4. Data analysis: how to run queries, conduct summaries, and generate reports.
5. Patrol planning and adaptive management using SMART to support conservation efforts.

Day 1

The workshop commenced with opening remarks by the Principal of ZIWC, Dr. Matipano, who warmly welcomed the participants and emphasized the significance of the training. He urged them to take the program seriously, noting that they had been entrusted by their respective regions to acquire knowledge they could share upon returning home. This was followed by an opening prayer and participant introductions. Subsequently, Mr. Ngorima delivered a presentation focused on tools and methods to enhance conservation monitoring and evaluation. He provided an overview of the SMART tool, tracing its development and showcasing examples from other African countries and stations where SMART has been successfully adopted. He concluded by highlighting how the tool assists conservation managers in utilizing patrol data more effectively, enabling strategic planning during debriefing meetings and improving patrol management.

The presentation was followed by a hands-on session, during which all participants received a SMART setup. Ahead of the workshop, participants had been instructed via email to bring their

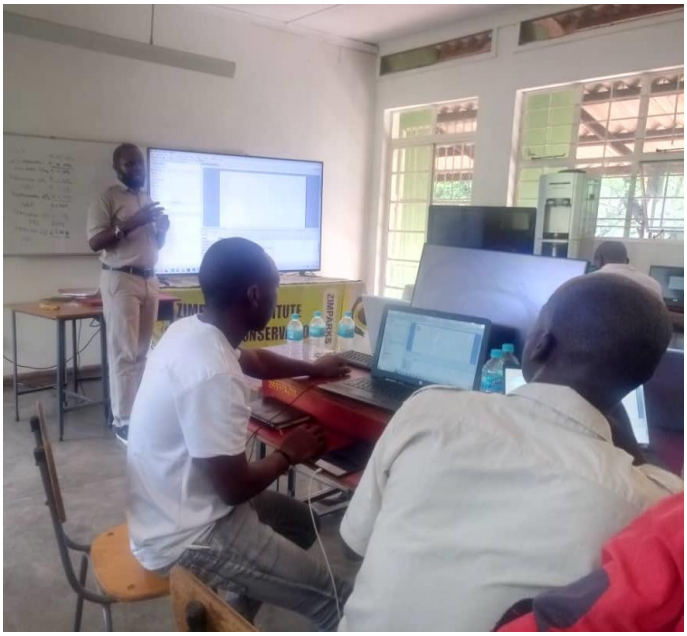
laptops, allowing them to promptly meet this requirement. During the practical session, attendees downloaded and installed the SMART setup before delving into its application. The session was facilitated by Ecologist Mr. Ncube, who guided the participants through the practical exercises.

Day 2

On the second day, proceedings began with a review of the lessons from the previous day. This exercise was essential as it allowed the facilitators to evaluate whether the participants had effectively grasped key concepts during earlier sessions. Additionally, since the participants are expected to step into training roles at their respective stations, this recap served a dual purpose: enhancing their preparedness and fostering a shared learning experience through exchanging insights.

After the recap, a hands-on session followed. This practical segment covered tasks such as adding a new employee to the system and marking an employee as inactive when transfers occur. The session also introduced participants to the process of adding a new station, so that staff from Station A, for instance, could log patrols conducted at Station B by simply selecting it from a predefined list. Once the demonstration concluded, participants were invited to replicate the facilitator's actions step by step and to voice their questions on any points that required clarification. The session proved highly interactive, marked by robust engagement from the participants. It was especially encouraging to witness contributions and questions from individuals who had been more reserved on the first day, showing progress in confidence and comprehension.

Day 3



On the third day, the session began with a review of the previous day's activities to encourage engagement and ensure everyone was actively participating. The main focus of the day revolved around developing a data model for downloading and performing patrol exercises. Consequently, the day's activities were centred on conducting patrols, with participants divided into groups to carry out observations and document their findings.

Day 4

Day four focused on queries, which are essentially a form of analysis. During this session, participants were trained on how to execute various types of queries in SMART, such as observation queries, incident queries, summary queries, and graded queries. Initially, participants found it challenging to keep up. However, with continued practice, they began to build confidence and increasingly suggested different queries to run. The exercise of creating queries proceeded as participants willingly volunteered and took turns showcasing how to execute them. This step was vital as it allowed us to assess their grasp of query generation. Several participants alternated in leading the task, with support provided by their peers when needed. Over time, their confidence grew, and they not only started enjoying the process but also benefited from collaborative learning.

Day 5

Day five commenced with a review of day four, an exercise that had now become a standard morning routine before diving into the day's activities. After this, we proceeded with the primary task for the day: report generation. To generate reports, one must first create and save relevant queries. Accordingly, participants were encouraged to step forward and develop at least five queries, including observation, incident, and summary queries. These queries were then utilized as a basis for generating reports. The session proved to be highly interactive, as the participants had opportunities to pose questions and seek clarification from the facilitators during the demonstration. This activity continued until every data manager felt confident and at ease with the process of report generation. The reports were then integrated with a session on patrol planning and adaptive management using SMART to support conservation efforts.

Outcomes of the workshop

The Training of Trainers workshop held at ZIWC played a crucial role in providing participants with an in-depth comprehension of the SMART tool, while building their technical expertise to perform field patrol data quality assessments. This enabled attendees to carry out fundamental evaluations of the SMART system and acquire actionable knowledge for informed decision-making. It is our hope that the training has empowered participants to effectively apply the SMART system in supporting activities focused on conservation area protection. Additionally, the program helped participants familiarize themselves with the technical functionality of the SMART system, understand the type of data the platform can provide, and identify the distinct responsibilities of different users, such as administrators and rangers, in leveraging the tool. The training is expected to equip participants with robust skills and confidence to facilitate further training sessions, guiding others on how to adopt and utilize the SMART system. By delivering

critical insights and practical skills, the training has laid a strong foundation to bolster the effective use of SMART in conservation initiatives and strategic planning. Some participants have now demonstrated the capability to successfully train their colleagues, and with continued learning opportunities, it is envisioned that all trained participants will be fully equipped to transfer their knowledge and support broader organizational adoption of the SMART tool.

Conclusion and Recommendations

In conclusion, the Training of Trainers workshop at ZIWC has proven to be a pivotal step in enhancing the capacity of participants to effectively utilize the SMART system for conservation efforts. By imparting technical expertise, fostering a deeper understanding of the tool, and empowering attendees to share their knowledge, the program has established a strong foundation for sustained use and organizational integration of the SMART platform. The participants' ability to independently train their colleagues underscores the success of the initiative and its potential to drive impactful conservation outcomes. The following are specific recommendations that were identified during the SMART training of trainers' exercise.

1. To ensure continued progress, it is recommended that follow-up workshops or refresher trainings be organized periodically to reinforce the skills and knowledge acquired during the initial training and address any challenges encountered during implementation.
2. Establish a standardized national framework for SMART implementation, enhancing the quality and consistency of decision-making processes.
3. Formulate comprehensive Standard Operating Procedures (SOPs) to guide the effective implementation of SMART.
4. It is recommended that each station be equipped with some blackview cybertracker and laptops to ensure optimal functionality and efficiency to support SMART operations.

Annex 1: List of participants who attended the Zimbabwe Institute of Wildlife Conservation, Spatial Monitoring and Reporting Tool training of trainers.

Name	Surname	Gender	Designation
Tapan	Phiri	M	Ranger 1
Calisto	Chirimudombo	M	Area Manager
Homage	Ncube	M	Ecologist
Forgive	Mushoshoma	M	Ranger
Earnmore	Nyikavaranda	M	Wildlife Officer
Maxwell	Nyamvura	M	Senior Wildlife Officer
Tonderai	Mugoti	M	Senior Ranger
Patson	Makombe	M	Senior Wildlife Officer
Alec	Makumire	M	Senior Area Manager
James	Gonde	M	Ranger 1
Davis	Chivaura	M	Area Manager
Christopher	Hungwe	M	Ecologist
Martin	Chimwe	M	Senior Area Manager
Jonathan	Chasi	M	Senior Ranger
Augustine	Malunga	M	Senior Ranger
Melinda	Rushinga	F	Area Manager
Ezekiel	Mungoni	F	Senior Ranger
Shepherd	Marumisa	M	Ranger
Tinos	Shone	M	Wildlife Officer
Christian	Dhliwayo	M	ICT Technician
Hilary	Matipano	M	Senior Wildlife Officer
Blessing	Mugaviri	M	Ecologist
July	Mashange	M	Senior Ranger
Grace	Sarukuni	F	Senior Ranger
Flavian	Fundisi	M	Senior Ranger
Taguma	Magura	M	Ranger
Innocent	Mahakata	M	Principal Ecologist
Patmore	Ngorima	M	Principal Ecologist
Thembelani	Mbanga	F	Ecologist
Norman	Munkuli	M	Ecologist
Obrine	Matare	M	ICT Network Administrator
Tendai	Mbedzi	F	ICT Lecturer
Hazel	Ganye	F	Student Attaché
Elisha	Mapako	M	Student Attaché