SCIONA blog: Trip 20 - 26 July 2020, Epupa and Okanguati

As part of technology exploration and co-design, researchers led by Professor Heike Winschiers-Theophilus travelled to Epupa and Okanguati between the 20th - 26th of July. The primary objective of the trip was to co-design technology with local paracecologist, as well as explore some of the tools developed by the SCIONA researchers. An additional objective, was to gain and formulate an understating of the communal context in Epupa and Okanaguati, primarily with regards knowledge preservation and data collection, both for plants and wildlife.

During this trip several activities were undertaken. Firstly, there was the ethnobotanical walk which was led by the community members (paraecologists). The purpose of this activity was to test out a plant data collection application prototype. The prototype was developed as an exploration tool for a systematic plant data collection technique. The application was used by the community members to test its usability for co-design purposes. Other aspects of the application that were tested included applicability and performance for improvement purposes. As part of the ethnobotanical walk, the community members used some of the data collection tools developed under the SCIONA project to record information about the plants that were spotted during the walk. Thereafter, the community members gave feedback on their experiences using the tools. The feedback will be used to appropriate the tools to fit the local community context.

An additional activity, was participatory mapping, during which community members and SCIONA researchers explored how to best represent their environment on maps. There was a lot of insight pertaining geographical representation gained during this activity. Another activity was the setting up of camera traps, this was done in collaboration with the local community game guards. Who indicated where best the cameras should be placed. During the placement of the camera traps infrastructure assessment was also carried out, whereby the current network communication infrastructure was assessed. The network assessment and analysis was conducted at the community meeting points. The network assessments were conducted using an Open Signal application tool

loaded onto a mobile phone, together with 4G Mobile devices to determine the signal reception coverage and quality of the connection. The overall outcome and evaluation of these network activities was to conclude on the desired suitable location and building for the establishment of the Community Monitoring Digital Hub that is going to host the required information and communication technology infrastructure for the communities

In conclusion, this trip was the first excursion for some of the students, and it allowed them to be exposed to the SCIONA study area, as well as establish relations with the community members. The community members were very accommodative and they shared their knowledge with the researchers. They are open to continuous long-term collaborations as equal partners in research and development.