

Implementing partners involved in landscape restoration and livelihood enhancing activities in the uMzimvubu catchment are obliged to show developmental impacts, as well as track their progress and account to donors and stakeholders. UCP partners have strived to develop and share best practice since 2012, and different organizations have developed their own monitoring and evaluation (M&E) protocols, with various degrees of intensity and data collection methods dependent upon their capacity and reporting requirements.

A comparative 'big picture' however has been elusive, whereby partners can share comparable data and contribute towards a broader story of impact and change, as a result of best practice, investment and innovation, contributing to the UCP goal of a **healthy, resilient ecosystem function in the uMzimvubu Catchment providing services and benefiting local and downstream people**. This common goal of the UCP collaborative aligns strongly with many of the global SDG's, some of which are shown on the right.

A collective brainstorm session in Matatiele in February 2019, linked with the 23rd quarterly meeting, produced a draft framework for an agreed M&E approach, with three core themes or focal areas (see below), with **resilience** as a cross cross-cutting theme along with **gender and youth inclusivity**.



Voluntary working groups were established to tackle the three core themes identified in the framework:

- **ECOLOGICAL** (groups for water, veld/rangeland and soil)
- **SOCIO-ECONOMIC**
- **GOVERNANCE**

These groups are developing protocols for monitoring, data collection, capture, storage and sharing which:

- Are relevant to the interventions being undertaken by implementing partners, and which can be collected by and comparable between partners;
- Make use of citizen science approaches using proven rigorous methodologies, with easy data collection on a regular basis with limited resources;
- Help build a database to show trends in response to interventions, and how partners are moving towards the common goal of the Umzimvubu Catchment Partnership.

The veld group (as part of the Ecological theme above), ably led by Dr Heidi Hawkins of CSA, with in-field co-ordination by ERS, LIMA and DEDEAT, have developed a streamlined protocol which complements the rangeland management Conservation Agreements work, where compliance by livestock owners and grazing associations with agreed rotational rest can be monitored, along with range quality recovery in target areas. This aligns with the Meat Naturally approach, where incentives for compliance with agreed grazing management strategies include reduced commissions for compliant sellers. The 'ground truthing' fostered by this protocol also complements MNP's satellite imagery monitoring. The Veld M&E protocol makes use of a citizen science approach, underpinned by rigorous proven tools and methods for tracking composition, basal cover and bio mass.



Figure 1: Chris Jackson of LIMA, and Zuko Fekisi of ERS, recent graduates of the ALUT course, use the Levi-Bridge method to record grass species and basal cover at Mafube in early 2019.

Grass species identification can prove challenging, and so an NQF4 training course by Africa Land Use Training's (ALUT) grass guru, Frits van Outdshoorn, was arranged for local partners, hosted in the Matatiele area to help familiarize with local species. Trainees included a range of local UCP partners involved in rangeland restoration, as well as a few partners from outside the catchment who are interested

in the **Landscapes for Livelihood and Meat Naturally** approach to communal rangeland management: the Tsitsa project, Wild Coast and KZN Bergville are some of the areas where the approach developed by UCP is gaining traction. The training focused on good natural resource management, identification of grass species, grazing management regimes, erosion prevention and monitoring protocols that can be used by both scientists and community members.

Protocols for soil carbon capacity and health, as well as water quality, quantity and replenishment are also being developed for application across the upper catchment, where partners have various support interventions. A key focus will be on tracking recovery of areas after alien invasive clearing, where grassland is being restored in degraded areas: careful tracking of soil moisture and groundwater are being replenished through improved ecological infrastructure is a central feature of UCP's collective goal. The WASH approach (Water for Sanitation and Hygiene) is being fostered by CSA and also involves citizen science monitoring.

Along with the SANBI-DST support for the UCP Research, Development and Innovation (RDI) platform, the partnership's M&E approach is also supported by Dartmouth College from the USA, as part of their ongoing African Foreign Studies Programme (AFSP) which has been ably fostered by Aimee Ginsberg since 2016. UCP hosts 16 Environmental Studies students from Dartmouth every year in a mutually beneficial exchange, where the foreign students assist with long term research projects selected by UCP partners, while gaining hands-on, in-field and village home-stay experience. Dartmouth has also allocated support for the AFSP UCP work by post-doctoral research fellow, Dr Julie Snorek, who has a focus on soil carbon and citizen science methodologies

Right: Students from Dartmouth College learn about veld recovery monitoring with field staff from ERs and CSA.



The group developing the M&E protocol for governance is supported by the new SARCHi (SA Research Chair initiative) UKZN chair, Professor Betty Mubangizi: UKZN is also working with ERS to develop a 'socio-institutional networks mapping tool', and helping to clarify how good governance can meaningfully provide a **clear and functional** framework within which sustainability and desirable livelihood activities are nurtured.



EWT and ERS field staff undertaking miniSASS assessments for stream health



ERS, CSA & Groundtruth colleagues doing veld monitoring at Mzongwana in an area rested by the grazing association as part of a Conservation Agreement



UCP activities and newsflashes are supported by WWF-Nedbank Green Trust and SANBI/DST, as part of a catchment Research Development and Innovation platform.

"Together we can do more"