

## 1. Evaluation of the EcoFutures Programme: review and consolidation of lessons from pilot project

Project description	Activities & outputs	Skills & equipment	Study areas incl homestays	Dartmouth & local support
<p>EcoFutures is a youth pilot programme aimed at rural youth with limited tertiary education access. It is designed to help them choose career paths in the green economy, through building practical and marketable skills and enabling access to appropriate business networks. In so doing the project supports a more resilient society through nurturing employment and job creation in the green economy.</p> <p>The programme is led by a collaborative partnership under UCPP (CSA and ERS and other local NGOs and CSOs). The implementers would like Dartmouth College students to interview participants of the EcoFuturesProgramme and deliver an Evaluation Report.</p> <p>Current opportunities also exist for taking Ecofutures lessons into the national YES programme (Youth Employment Services) which aims to enable work opportunities for 1 million youth over 3 years.</p>	<ul style="list-style-type: none"> <li>• Dartmouth students review project information and activities (intro to be provided by ERS &amp; CSA, interactive)</li> <li>• Develop an interview tool</li> <li>• Data collection through Individual interviews of Ecofutures participants (all speak English).</li> <li>• Data collection through Individual interview of work placement host organizations / mentors</li> <li>• Synthesis and analysis of data collected</li> </ul> <p><b>OUTPUTS:</b></p> <ul style="list-style-type: none"> <li>• <b>Ecofutures Evaluation Report</b>, indicating what works, what does not work and recommendation for future EcofuturesProgramme design.</li> <li>• <b>Outline of innovative business models</b> – basic steps leading to success for emergingcandidates</li> <li>• <b>Produce 3 page guideline for replicating programme – easy-to-read infogram</b> for promotion of the 'model'</li> </ul>	<ul style="list-style-type: none"> <li>• Questionnaire/interview tool design</li> <li>• Data collection skills</li> <li>• Interviewing skills</li> <li>• Synthesis skills</li> <li>• Analytical skills</li> <li>• Report writing</li> <li>• Infogram design skills</li> </ul> <p>Background/interest in sociology/ education/ psychology is advantageous.</p> <p><b>EQUIPMENT:</b></p> <ul style="list-style-type: none"> <li>• Clipboards (ERS)</li> </ul>	<p><b>RESEARCH AREAS:</b> Matatiele, and see small projects in surrounding area (within 60km) started by participants e.g. charcoal, recycling, if underway</p> <p><b>HOMESTAYS:</b> Colana, with Bongi to understand context of Ecofutures candidates' rural situation and challenges</p>	<p><b>DARTMOUTH LEAD:</b> Michael Cox (Eric Ndlovu)</p> <p><b>LEAD:</b> Tsoa (ERS)</p> <p><b>SUPPORT:</b> Amos Nkonyeni (CSA) Khomotsu (CSA) Bridget (ERS) Nicky (ERS) Yonela (ERS) Thabo (EWT) Bongie (Transkinirha)</p>
<p><b>POSSIBLE ECOFUTURES SUB-THEMES:</b></p> <p><b>A. Developing a practical business plan for wattle fodder as a small business</b></p> <p><b>b. Developing a practical business plan for Small scale Charcoal production</b></p>	<p>Review and stream line draft ideas being developed by Ecofutures candidates</p> <p><b>OUTPUTS:</b></p> <p>Revised practical business plans for two of the candidates to start producing</p>	<p>Some business basics is advantageous</p>	<p>Mango, 35km from Matat</p>	<p>Part of Group 1 Ecofutures Link with David Gardner AVO, support from ERS</p>

## 2. Understanding seed bank dynamics of an invasive alien tree species

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<p><i>Acacia dealbata</i> (aka Silver Wattle) is an invasive alien plant species that has significant impacts on ecosystems and livelihoods in the Eastern Cape. Millions have been spent through Natural Resource Management programmes, sponsored by government and implemented by locally based NGOs and CSOs, to clear stands of these wattle trees. However not enough is known about the seed bank that remains in the soil post clearing and what this might mean for post clearing response of wattle stands, and allocation of resources for longer term control, as well as strategies for follow up control such as grazing plan inclusion.</p> <p>UCPP, with support from CSIR, would like Dartmouth College students to do seed bank sampling to help understand the seed bank dynamics across a range of altitudes, habitats and stands. This will support better knowledge of approaches that should inform more effective control of this invasive alien tree species.</p>	<ul style="list-style-type: none"> <li>Students to engage with situation analysis (provided by ERS and Rhodes/CSIR, interactive, with references to follow up)</li> <li>Finalise methodology with Thoza and David – random sampling across a range of stands, habitats and altitudes</li> <li>Data collection through collecting soil samples (at least 10cm deep) and then extracting and counting seeds.</li> <li>Analysis of seed bank across stands of different ages, altitudinal gradients and habitats</li> <li>Develop questions to guide discussions with clearing teams and supervisors for anecdotal observations of seed bank regrowth</li> </ul> <p><b>OUTPUTS:</b></p> <ul style="list-style-type: none"> <li><b>Brief report of</b> findings with implications for clearing efforts, including follow up control strategies, and recommendations of further research requirements</li> <li><b>Initial Guideline</b> on optimal areas and strategies for clearing to assist our prioritizing of areas for follow up in grazing programme (even if just <i>red flags</i> to show high regrowth-potential zones)</li> </ul>	<ul style="list-style-type: none"> <li>Botanical/ ecological science background</li> <li>Field work (digging and sifting soil)</li> <li>Semi-structured questionnaire</li> <li>Data analysis</li> <li>Report writing</li> <li>Basic GIS (Ash can help)</li> </ul> <p><b>EQUIPMENT:</b></p> <ul style="list-style-type: none"> <li>GPS (Dartmouth)</li> <li>2x Auger (ERS &amp; MNI)</li> <li>2x Shovels (ERS &amp; Benefits SE)</li> <li>3x Counting trays (ERS)</li> <li>4-6 x magnifying glasses (ERS to buy)</li> <li>Tweezers (ERS to buy)</li> <li>Ziplock bags (ERS to buy)</li> <li>Munsell Soil Colour Chart (Michael if possible)</li> <li>Clipboards (ERS)</li> </ul>	<p><b>RESEARCH AREAS</b> Sampling will be done in post clearing and some pre-cleared areas, including: Mzongwana, Motseng Pre-clearing: Makhoba and Sibi Burnt areas: in same sort of area as above...</p> <p><b>HOMESTAYS:</b> Mzongwana village and Malekhalonyane chalet (Mehloding trust)</p>	<p><b>DARTMOUTH LEAD:</b> Clare Doherty</p> <p><b>UCPP LEAD:</b> Thoza Yapi (Rhodes/CSIR)</p> <p><b>SUPPORT:</b> Nicky Bridget Zuko</p>

### 3. Socio-economic impacts of the 'Landscapes and Livelihoods: Meat Naturally Initiative' for women and youth

Project description	Activities & outputs	Skills & equipment	Study areas incl homestays	Dartmouth & local support
<p>"Landscapes and Livelihoods: Meat Naturally – " is a rural development programme working to engage and develop the communal livestock sector and encourage sustainable use of natural resources. The programme aims to improve governance and grazing management through providing appropriate incentives and market solutions (mainly through mobile auctions, vaccinations and training), which ultimately provide communal stock farmers with improved returns as reward for implementation of improved grazing management efforts. A market access service provider, Meat Naturally Pty (MNP) is an established social enterprise providing market access for cattle raised sustainably on improved communal rangelands, as an output of improved land management. Men are traditionally seen as the main cattle owners with older men likely to own more cattle and therefore be the main beneficiaries of the programme. However anecdotal indications are that women and youth are farming and selling cattle, but we are unsure of if and how they are really participating and benefiting. Building on last year's project which summarized key benefits of veld-raised communal beef production, the UCPP would like to get a better understanding of the benefits to traditionally marginalized groups of women and youth.</p>	<ul style="list-style-type: none"> <li>Interactive briefing session on model and perspectives with ERS &amp; MNP</li> <li>Process data on livestock ownership from grazing associations, as well as sales data, to get basic stats</li> <li>Interrogate above data to determine statistics of beneficiary groups, and highlight areas for further interrogation.</li> <li>Panel beat draft ERS survey and undertake test drive surveys with focus group discussions and household level surveys, to understand more about the women and youth who are already involved in this activity. Questions UCPP has include:           <ul style="list-style-type: none"> <li>Are they participating?</li> <li>Can it be improved? How to increase their involvement?</li> <li>What are these groups feelings regarding the aims of the Landscape and Livelihoods: MN Initiative?</li> </ul> </li> </ul> <p><b>RESOURCES:</b></p> <ul style="list-style-type: none"> <li>Data on livestock associations (ownership of livestock)</li> <li>Data on sales since 2014</li> <li>MNP gender survey / female small stock survey</li> <li>Discussion and context time with lead people</li> </ul> <p><b>OUTPUTS:</b></p> <p>Produce some succinct fact sheets / infograms and useful stats, linked to interactive website resources, which UCPP practitioners can use to support efforts in expanding the concept into other landscapes and the policy arena.</p>	<ul style="list-style-type: none"> <li>Questionnaire/interview tool design</li> <li>Data collection skills</li> <li>Interviewing skills</li> <li>Synthesis skills</li> <li>Analytical skills</li> <li>Report writing</li> <li>Infogram &amp; pamphlet design skills to display stats emerging from research</li> </ul> <p>Background or interest in sociology is advantageous</p> <p><b>EQUIPMENT:</b></p> <ul style="list-style-type: none"> <li>Clipboards (ERS)</li> </ul>	<p><b>RESEARCH AREAS:</b> Data processing in Matat from sites.</p> <p>Interviews where grazing programmes are active including: Mzongwana Colana (field sites within 2 hour drive of Matatiele, where grazing associations are active and auctions have been taking place: can add other sites if feasible, including Motseng)</p> <p><b>HOMESTAYS:</b> Colana and Mzongwana where project has been active in different ways</p>	<p><b>DARTMOUTH LEAD:</b> Bianca Fizotti</p> <p><b>UCPP LEAD:</b> Mme Sissie (ERS) Gerbrand Paul Pesh</p> <p><b>SUPPORT:</b> Ash MNP and CSA??</p> <p>Determine based on final sites</p>

#### 4. Is the 'Landscapes for Livelihoods' programme having a positive change on ecosystems and ecosystem services?

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<p>The “Landscapes and Livelihoods: Meat Naturally” programme aims to improve governance and sustainable natural resource use in the landscape. The programme uses ecological science, along with a range of incentives such as mobile auctions, government job creation programs and training, and market interest in sustainable meat to implement communal grazing systems that are intended to result in improved water and food security. But is primary productivity increasing, is there less erosion, are cattle fatter and healthier, has carbon sequestration increased, has the rate of water recharge improved and is indigenous vegetation growing where stands of invasive alien plants have been cleared?</p> <p>The ability of the programme implementers to provide evidence as proof of the concept is important to the ongoing support and sustainability of this work (by local communities involved, as well as private and government funders). The UCPP would like Dartmouth College students to look at the technical elements of what would be required to show a change in ecosystem and livestock health as a result of the Landscapes and Livelihoods efforts. What sort of monitoring should be taking place (where, how regularly, over what time period) to demonstrate benefits, and to whom?</p> <p>The outcomes will help figure out if the UCPP partners are gathering sufficient and appropriate evidence towards showing a change in ecosystem and livestock health as a result of the Landscapes &amp; Livelihoods (L&amp;L) efforts.</p>	<ul style="list-style-type: none"> <li>Understand the theory of change (through review of available documents and interviewing key informants)</li> <li>Determine what would need to be monitored to determine change in which parameters (brainstorm, research and talk with experts)</li> <li>Review which of these parameters are already being monitored (based on reports, discussions with local partners)</li> <li>Undertake field-based citizen science activities to understand toolkit &amp; methodologies (gathering monitoring data &amp; talking with people who do the citizen science in the process).</li> <li>Gather spatial information of where the L&amp;L is working (restoration/implementation areas), monitoring points, &amp; in relation to important areas and beneficiaries.</li> <li>Summarise data being collected in a spreadsheet.</li> <li>Identify gaps and opportunities in M&amp;E</li> </ul> <p><b>OUTPUTS:</b></p> <ul style="list-style-type: none"> <li><b>Propose an ‘ideal’ M&amp;E framework</b> showing gaps that need to be addressed.</li> <li><b>Infogram of theory of change in ecosystem services IF actions are successful</b> e.g. how does water replenishment occur in better groundcover area? How does alien removal decrease water loss?</li> <li><b>Map of monitoring points in relation to L&amp;L areas of work</b></li> </ul>	<ul style="list-style-type: none"> <li>Desktop research</li> <li>Investigative research</li> <li>Unstructured to semi-structured interviews of selected experts and project implementers</li> <li>Report writing</li> <li>GIS skills</li> <li>Infogram design</li> </ul> <p>Experience / interest in framework development</p> <p><b>EQUIPMENT:</b></p> <ul style="list-style-type: none"> <li>Clipboards (ERS)</li> <li>GPS (Dartmouth)</li> <li>Monitoring tools (ERS &amp; EWT)</li> </ul>	<p>Mzongwana Matatiele</p> <p><b>HOMESTAYS:</b> Mzongwana, where EGS monitoring has been done, and Motseng where some work started and did not continue...</p>	<p><b>DARTMOUTH LEAD:</b> Aimee Ginsburg</p> <p><b>UCPP LEAD:</b> Nicky</p> <p><b>SUPPORT:</b> Thabo (EWT) Yonela (ERS), Sbu Mkize (ERS) Gerbrand Nel (MNP) Sissie</p>