



TRANSFORMATIVE CROSS-SECTORAL EXTENSION SERVICES DIALOGUE



**KIRSTENBOSCH
NATIONAL BOTANICAL GARDEN,
CAPE TOWN**

2 & 3 March 2020

Synthesis Report

This workshop and report were funded by the SA-EU Dialogue Facility.

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The support of Sanlam for WWF South Africa's work on Water Source Partnerships enabled WWF SA to play a central role in this dialogue process. WWF SA, in collaboration with the JSE funded the valuable background analysis undertaken by Richard de Satgé.

Workshop process and system diagrams: Jai Clifford-Holmes with input from the co-authors

Photography: For full photography credits see page 110.

Design/layout: Mientjie Becker

Citation of this report: Gelderblom & Oetlé et al, 2020: *Transformative Cross-Sectoral Extension Services Dialogue*.



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CAPE	Cape Action Plan for People and Environment
COVID-19	2019 Novel Coronavirus Disease
CSA	Conservation South Africa
DALRRD	Department of Agriculture, Land Reform and Rural Development
DEA	Department of Environmental Affairs
DEFF	Department of Environmental Affairs, Forestry and Fisheries, South Africa
DOA	Department of Agriculture: Western Cape
DUCT	Duzi uMngeni Conservation Trust
DWS	Department of Water and Sanitation
EU	European Union
EWT	Endangered Wildlife Trust
FAO	World Food and Agriculture Organisation
GEF-5	Global Environmental Facility – 5th Replenishment Strategy
GEF-7	Global Environmental Facility – 7th Replenishment Strategy
GIS	Geographical Information Systems
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
KZN	KwaZulu-Natal
M&E	Monitoring and Evaluation
MEC	Member of Executive Council
PES	Payment for Ecosystem Services
PMERL	Participatory Monitoring, Evaluation, Reflection and Learning
RU	Rhodes University
NRM	Natural Resource Management Programmes, EP, DEFF, South Africa
SA	South Africa
SANBI	South African National Biodiversity Institute
SASAE	South African Society of Agricultural Extension
SDG	Sustainable Development Goals
SKEP	Succulent Karoo Programme
STEP	Subtropical Thicket Ecosystem Project
UCP	uMzimvubu Catchment Partnership
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
UNFAO	United Nations Food and Agricultural Organisation
WFA	Wilderness Foundation Africa
WWF SA	World Wide Fund for Nature – South Africa



EXECUTIVE SUMMARY

EXTENSION IS CRUCIAL TO THE CUSTODIANSHIP OF VALUABLE NATURAL RESOURCES IN SOUTH AFRICA

As part of a project funded by the SA-EU Dialogue Facility, the Department of Environment, Forestry and Fisheries (DEFF) and key partners WWF and SANBI convened a 'community of practice' dialogue at Kirstenbosch to identify opportunities for collaboration and address challenges. In early March 2020, a diverse group representing agricultural, forestry, water, land reform and environmental sectors joined together to learn from one another and to co-create a transformative way forward for extension in the country. The 105 attendees included natural resource management practitioners, corporates, researchers, non-governmental organisation (NGO) practitioners, government officials, international agency workers and a number of farmers and land users. For most this was the last large gathering they attended prior to the onset of the COVID-19 pandemic lockdown in South Africa.

Invitees were consciously drawn from a wide range of backgrounds and regions to provide a novel mixture of expertise and experience. Participants were encouraged to interact with people from outside their usual professional environment, to share insights, encouragement and ideas. Different types of engagement were employed to maximise interaction and participation amongst the delegates, and to enable different forms of learning: feedback on background research presented during the

opening was gathered during plenary sessions; nine short talks stimulated World Café discussions; radio style interviews showcased five case studies; an expert panel explored key issues in different sectors and the whole meeting had an extended opportunity to interact during a networking session in the course of a social finger supper. In response to a call for more pragmatic action, an open space session on the second day was held to foster collaboration between individuals, groups and across the whole workshop.

A systems approach was applied to surface tensions, trade-offs and assumptions in tackling the complexities inherent in agricultural and environmental extension. This framing helped participants to understand each other's perspectives in order to start developing/identifying agreed priorities as a foundation for collaboration. Detailed descriptions of these inter-actions and their outcomes of constitute the body of this report.

It was agreed that, across all sectors, the objective of extension is to support practical local changes towards more sustainable land and resource management. In addition to the planned workshop outcomes, the following themes were identified by the facilitators as reflecting common learning that emerged through discussions and case studies.

- **Successful engagements are characterised by relationships, trust, responsiveness and shared values.** A mutually respectful relationship lies at the heart of all successful extension interactions as the extension worker seeks first to understand local contexts and needs in order to support inclusivity, equality and equity. Strong interpersonal skills, together with technical knowledge allows for responsiveness to the extension needs of all land-users. Extended engagement is required to build the trust needed for change.





- **Land-users and their communities value the convening power of extension which helps them access additional resources for agreed priorities.** This is experienced by bringing together different groups to implement a coordinated response to an issue and can be a powerful lever to access additional funding and technical support as collective bodies can raise concerns on behalf of stakeholders.
 - **Adaptive solutions require innovation and connection and are often driven by champions who inspire people to work together.** Local champions find opportunities in change and adapt to things they cannot control which can open new doorways. This requires an experimental approach and accepting that short term failure is part of learning. It is best to work with members of local communities and researchers to gain a deeper understanding of local conditions, and to co-design solutions responding in an integrated way. This requires the ability to convene and apply new technologies in addition to traditional technical skills. The establishment of lateral connections within communities can support the transfer of knowledge, helping to address the widening intergenerational gap and can also help strengthen extension. The flows of information and sharing of knowledge should always be multi-directional.
 - **Institutional, social, resource and capacity constraints must be recognised and addressed.** A legacy of injustice and weak governance has resulted in a deeply unequal environment. Lack of accountability and integration, frequent restructuring and short funding cycles create antipathy and confusion (e.g. exacerbating disinterest from youth). Capacity constraints hamper implementation as inexperienced staff struggle to meet local needs. Few opportunities or incentives exist to address these skills gaps. Even where technical skills are available these are sometimes not valued by communities who are anticipating financial support. It takes insight, empathy and patience to create an appreciation for the knowledge contribution that extension makes. Communication and local power dynamics can be challenging and carefully brokered local agreements can be derailed by people coming in from outside.
- People are hungry for action and integrated interventions have been identified.** The plenary wrap-up session identified priority actions and identified those willing to take responsibility for taking them forward. However, further engagement is required as clear mandates had not been established by all participating institutions before the workshop and time constraints meant that detailed action plans were not developed. It is recognised that this is the future work of the community of practice, the working group and identified champions. Participants articulated a particularly urgent need to respond to the current extension crises in an integrated way that helps build a more sustainable future. The workshop coordinators will reconvene the working group as a platform to take the proposals forward.



EXECUTIVE SUMMARY

Three main groups of actions were identified:

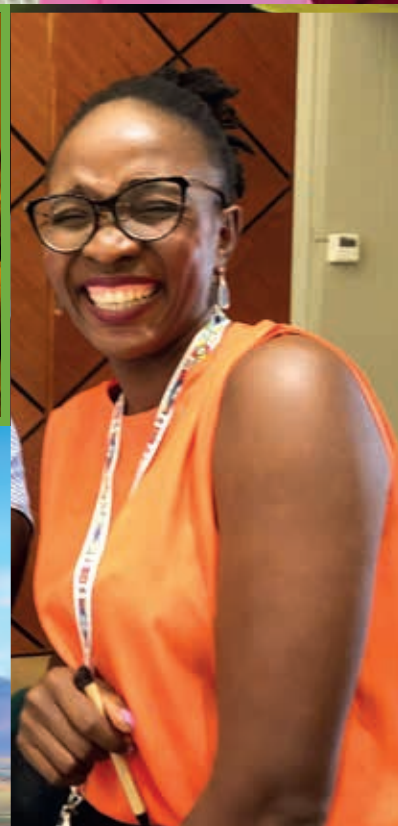
- Maintaining and growing a community of practice by circulating the workshop outcomes, convening interest groups and engaging with professional bodies and local platforms;
- Mobilising coordinated action by convening a working group to take the workshop resolution forward to engage with national strategy process and international funding opportunities; while supporting long-term engagement in priority areas which strengthens local communities of practice and supports the establishment of motivated champions to achieve common goals.
- Building capacity through more integrated approaches to training including learning exchanges, intergenerational capacity transfer, establishment of opportunities for ongoing accreditation, addressing cross sectoral themes such as climate change which require an integrated response and lastly using participatory monitoring to improve management and implementation.

The proposed actions detail how to initiate engagement with government and develop mechanisms to feed information up; Leverage innovative approaches initiated by NGOs; harness the enormous potential of private sector engagement; build on existing platforms and planning frameworks; mobilize an integrated response through agreed plans which can be used to align budgets and other resources and improve implementation through adaptive management.

This workshop, made an important contribution towards the development of a cross-sectoral South African extension community of practice providing a useful platform to form new connections within and across the sectors that are foundational to extension in South Africa. Shared insights and identified areas for potential collaboration, if brought to fruition, would serve the needs of scores of land-users whose lives and livelihoods are intricately connected to the natural resource base of which they are the custodians.



DAY 1



1. SETTING THE SCENE

EXTENSION SERVICES FULFIL A VITAL ROLE IN FACILITATING THE ON-GOING CARE OF SOUTH AFRICA'S NATURAL RESOURCES. THESE SERVICES SUPPORT THE DAY-TO-DAY MANAGEMENT OF AGROECOSYSTEMS BY A DIVERSE COHORT OF LAND-USERS: FARMERS OF ALL TYPES, AGRI-BUSINESSES, CONSERVATIONISTS, LANDOWNERS AND OTHERS.

In September 2019 the then Department of Environmental Affairs (DEA) Natural Resource Management (NRM) Programmes convened a national dialogue focused on land degradation and ecosystem rehabilitation, funded by the SA-EU Dialogue Facility. In the course of this Knowledge Symposium participants shared their insights, explored decision support tools and sought to mobilise resources to address land degradation and ecosystem rehabilitation. In preparation for the UN Decade on Ecosystem Restoration, the delegates considered how best to conserve our country's magnificent natural heritage whilst also ensuring the well-being of our people.

The practitioners, researchers, planners and policy developers who engaged in the dialogue recognised the need for effective extension support to land and ecosystems managers to enable enhanced land rehabilitation and management. The shortcomings of the current approaches in South Africa were discussed, and a clear need was expressed for action.

In response, the Department of Environment, Forestry and Fisheries (DEFF) (formerly DEA) convened an informal reference group comprised of key interested

partners who had driven the discussion at the Knowledge Symposium, including the Worldwide Fund for Nature (WWF SA), DEFF NRM and Forestry, Rhodes University (RU), Department of Agriculture (DOA): Western Cape (LandCare), CapeNature and the Biodiversity Stewardship Programme at the South African National Biodiversity Institute (SANBI). This group helped to collaboratively design the approach and content for the workshop, and commissioned a status quo report and Executive Summary (attached as Annexure A) that explored the legacy, current state and future of agricultural extension in South Africa.

The report highlighted the persistent institutional and disciplinary divides between agricultural extension and initiatives promoting conservation and sustainable utilisation of natural resources. It examined how the functions of government departments and the activities of civil society actors in these overlapping spheres remained largely disconnected from each other.

The review identified an urgent need to transition to 21st-century climate smart, context specific extension, rooted in sustainable production systems, natural and water resource conservation and management. This called for fresh approaches to extension that are place based, which crosscut disciplinary fields and that require a new transdisciplinary skill set. The report argued that in order to progress we will need to dismantle entrenched institutional cultures, narrowly premised on mandate protection, and develop 'learn as you go', "polycentric approaches encouraging experimental efforts at multiple levels"¹ underpinned by shared protocols for data collection, enabling agile learning and redirection.

¹ Ostrom, E. (2009). A polycentric approach for coping with climate change. *World Bank Policy Research Working Paper No. WPS 5095*. New York, World Bank.



This process culminated in the convening of the dialogue that is the subject of this report. The two-day process was designed to engage all participants in ways that would enable them to effectively share not only their knowledge and insights, but also to engage with one another in the common cause of improving the conceptualisation and delivery of extension services to those who manage South Africa's natural resources. The design and facilitation team comprised Noel Oettlé (facilitator), Sarah Polonsky (DEFF), Caroline Gelderblom (WWF SA), Rhoda Malgas (Stellenbosch University), Rodney February (WWF SA), Jai Clifford-Holmes (Institute of Water Research Rhodes University) and Natasha Wilson (SANBI), with support from Francis Steyn and Rudolph Röscher (DOA: Western Cape (LandCare)).

The dialogue was designed to convene a South African extension 'community of practice', share knowledge about the current state of extension, draw on the knowledge, insights and creativity of participants and finally to co-create a pathway towards improving extension provision in the country. The process was designed to maximise interaction and participation amongst the delegates, and to enable different forms of learning.

In order to anchor the process in current realities, a thorough review of the status of extension services in South Africa was presented near the start of the event and provided insights into challenges and opportunities. It included an assessment of current capacities in terms of the quantity and quality of extension support in different sectors and regions, an evaluation of alternative institutional and policy frameworks and an exploration of funding opportunities and mechanisms to promote collaboration and institutional support for extension, as well as an appraisal of capacity for training and professional development.

In recognition of the complexity of human and biophysical dimensions that characterise extension services, the team elected to take a systems approach to the task. Systems thinking is a way of thinking, working and approaching the world. It's particularly useful when tackling complex problems (characterised by multiple perspectives of a single problem, with multiple interconnected variables and issues) such as the domains that cross-sectoral extension services work in. A systems perspective helps with conceptualising, designing and managing interventions – through mapping interconnectivity, by making assumptions explicit, trade-offs visible, and looking for leverage points.

Systems thinking is widely applied in agriculture and environmental studies and underpins much of the work of the World Food and Agriculture Organisation (FAO) (e.g., Bitzer et al., 2016). **The objective of applying a systems approach included:**

- Aiming to **make explicit** the **trade-offs** between various options and actions;
- Becoming clearer on **the assumptions** underpinning policies and actions;
- Seeking to **minimise negative unintended consequences** of policies and actions; and
- Helping stakeholders **to see the world through the eyes of others** while mediating between conflicting ideologies, values, and ways of working.

Figure 1 below is the process design reflecting a systems thinking approach to the Dialogue on extension services in South Africa.



DAY 1

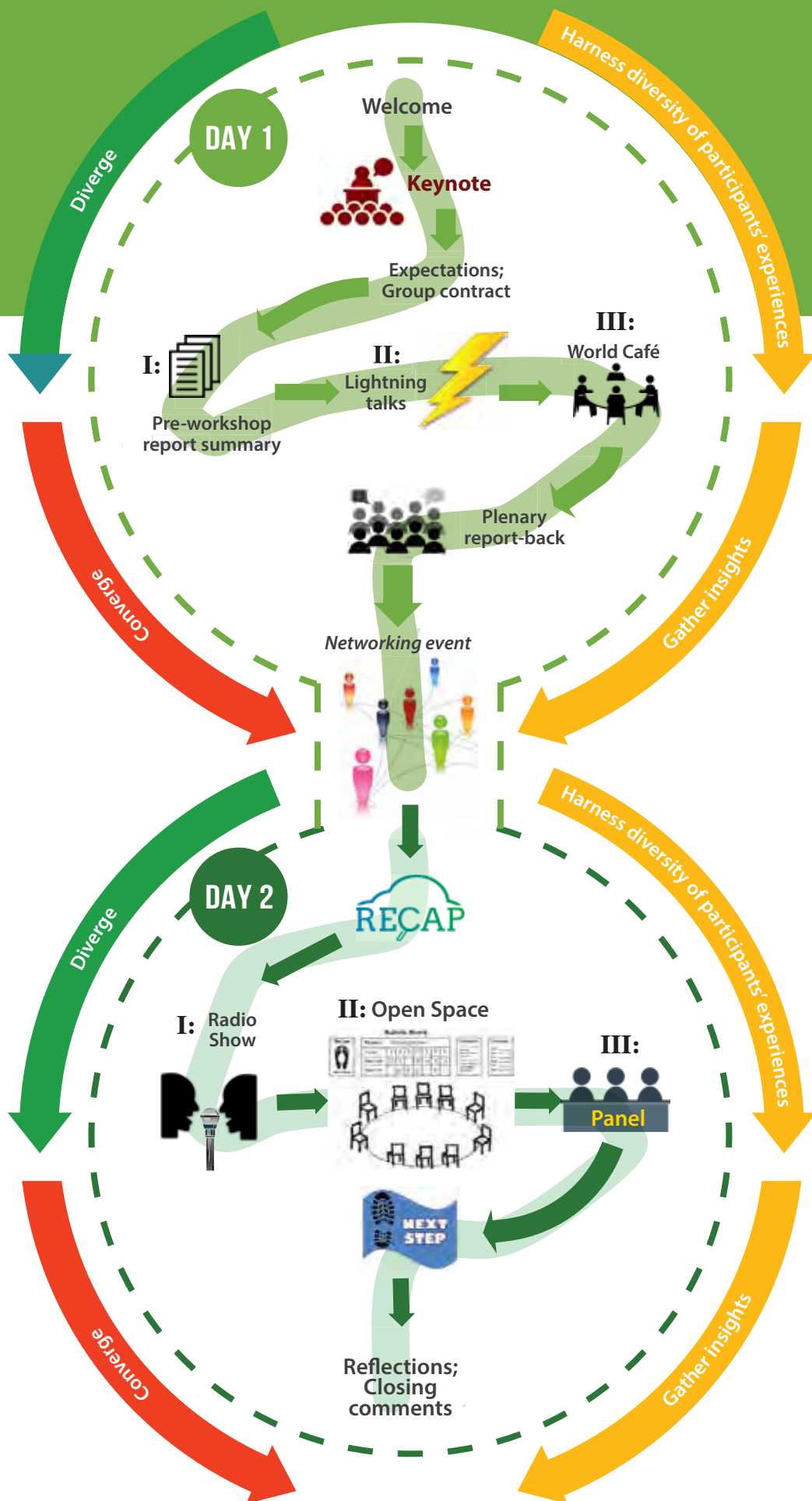


Figure 1: Process design reflecting a systems thinking approach to the Dialogue on extension services in South Africa.

2. OPENING AND KEYNOTE ADDRESSES

Dr Christo Marais (Department of Environment, Forestry and Fisheries (DEFF) Natural Resource Management (NRM) Programmes), opened the Dialogue and welcomed all participants. He also presented the keynote speech on behalf of Dr Bernhardt Rey, Head of Development of the Delegation of the European Union (EU) to South Africa. Dr Rey's speech emphasised the importance of the SA-EU bilateral relationship, which is the only one with an African country and one of only 10 globally renewed in November 2019. The bilateral agreement has its focus on a number of areas, including Science, Technology and Innovation, biodiversity and water resources management.

Professor Paul Hebinck (Wageningen University, the Netherlands) followed with an insightful keynote address about the central role of institutional and individual learning in order to improve practice. In the local context this implies discovering and appreciating local realities and exploring alternative options for improved extension service delivery. Prof Hebinck proposed learning from the interface between policy and practice, and cited successful examples of extension that took on board farmer experiences and reinvented itself through creating new alliances between and amongst resource users, consumers and markets.



Photo 1a & 1b: Dr Christo Marais, Chief Director: Natural Resource Management (NRM) Programmes at the Department of Environment, Forestry and Fisheries (DEFF) & Prof Paul Hebinck (Wageningen University).

3. OBJECTIVES, EXPECTATIONS AND TEAM CONTRACT

Following the formal opening of the dialogue, the objectives were identified. These were to:

- bring together a cross-sectoral community of practice involved in extension services in the country;
- provide opportunities for participants to explore case studies and to learn from each other;
- identify opportunities for collaboration and alignment or integration; and

- co-create a viable way forward for extension services in South Africa that will advance sustainable natural resource management.

Participants shared their expectations for the dialogue, and contributed to a 'team contract' that reflected their common undertakings in terms of how they would interact with one another. This participatory development of the team contract formed the basis for interactions between individuals and across institutions throughout the workshop.





4. KEY ELEMENTS OF TRANSFORMATIVE EXTENSION SERVICES FOR ALL SECTORS

In three presentations that followed, researchers and practitioners shared their perspectives on extension services. Between them, and in line with one of the main objectives, they offered an integrative view of the status quo of extension services across the agricultural and environmental sectors.

4.1 Caroline Gelderblom (WWF SA): Developing a common understanding to move forward together

In order to conserve natural resources, effective collaboration is essential. Current environmental and social changes make sustainable land management ever more challenging. Climate change, land reform, state capture, limited resources, policy paralysis and institutional instability have significant and compounding impacts on agricultural and environmental governance. In the context of achieving the Sustainable Development Goals (SDGs), there are inherent tensions requiring trade-offs which if not explicitly addressed create risks of maladaptation, especially in disaster responses. In remote areas there is often limited support available and scant resources need to be used in the most effective way possible. To solve serious problems in extension, we need to develop a common understanding and recognise different perspectives.

4.2 Dr Rick de Satgé: Thinking about Extension: Where we have come from, where we are and where we need to go

Evolving perspectives on extension in South Africa are marked simultaneously by the country's deeply unequal society and its extensive semi-arid landscapes, with only 10.3% of the total land area arable. The exceptional species richness of South African flora and the unique levels of endemism of plants and animals make South Africa a steward of a global biodiversity legacy.

The accelerating impacts of climate change in a country with diminishing agricultural potential, scarce water resources and a growing population, places land and mega-diverse natural resources under mounting pressure. To contain and reverse this, the deep social and economic inequalities at the heart of land access, ownership and production systems must be addressed while critically interrogating unsustainable farming practices, poorly regulated mining, rapid urbanisation and declining capacity for catchment management. Sustainability of farming systems and all forms of land and natural resource use (rural and urban) must be placed at the heart of policy, planning and practice.

Extension has largely been narrowly tied to the provision of technical advice and support services for agricultural producers. Agricultural extension and natural resource management remain largely delinked and extension is not readily associated with natural resource management, although they have featured to some degree in soil conservation, LandCare, participatory forest management programmes and biodiversity stewardship.

A strong culture of mandate protection deepens institutional fragmentation and locks actors into specified roles, functions and responsibilities. South Africa's history of land dispossession, forced removals, and 'betterment planning' created impacts that still have a deep and persistent imprint on the South African social and economic fabric. Enforced planning, environmental exclusion, stock culling and land use controls have created a deep antipathy towards the regulation of land use and natural resources. Whereas natural resource management has historically been rooted in protection and exclusion, agricultural extension services have in contrast been closely tied to the spread of the modernisation paradigm based on improved seeds and breeds, chemical inputs and mechanisation.

4. KEY ELEMENTS OF TRANSFORMATIVE EXTENSION SERVICES FOR ALL SECTORS

The institutional challenges that stand in the way of effective extension delivery include multiple actors, high levels of uncertainty and many interlocking and interdependent drivers. The Extension Recovery Plan boosted the number of agricultural extension practitioners in the state sector, from 2210 in 2006/7 to 3031 in 2015/16 - an overall increase of 37%. However, this allocation is unevenly distributed and still falls far short of the recommended staffing levels. Moreover reviews indicate that efficacy and impact are sometimes still problems even where capacity has been increased. Data on extension capacity in water, forestry, fisheries and diverse natural resource management and biodiversity stewardship settings have proved difficult to aggregate and quantify.

A key question is whether the focus on integrating existing extension is appropriate? A new national conversation about sustainable farming and natural resource management systems to grow adaptive capacity in the face of climate change is needed. The report of the Presidential Advisory Panel has noted that “this requires urgent reskilling of our agricultural extension services in climate-smart agriculture, agroecology and conservation agriculture”. We require a fundamental shift of vision as well as a more integrated and joined-up approach. The approach and mechanisms for enabling this require much more thought, and work grounded in transdisciplinary local innovation labs and field trials.

Effective implementation of extension services rests on assumptions about the existence of a capable state. More attention must be paid to a diagnosis of the now deeply embedded processes of patronage and capture. These have hollowed out much of the state’s capacities, creating purposeful dysfunction to propagate the “grey spaces” which enable wasteful, fraudulent and misdirected public expenditure. At the same time there is a need to actively contest

the rapid corporatisation of knowledge and its power to influence future trajectories. These conditions must be changed if we are to achieve the desired outcomes.

4.3 Mark Botha: Conservation Extension Services: What are we doing here?

Extension in the environmental sector is focused on resource protection which is fundamentally different to the agricultural emphasis on production. Historically in the conservation sector there was an emphasis on enforcement of regulations which often requires onerous and fairly non-functional inspections servicing a “hegemony of permits”. The importance of environmental education received increasing recognition within conservation agencies.

The emergence of biodiversity stewardship acknowledges the need to work with landowners and land users. It is supported by a goal directed approach with clear targets and a nationally consistent legal framework. Within conservation institutions extension has often been the first casualty when budget cuts drive restructuring despite the fact that it has been demonstrated to be very cost effective. It was suggested that there needs to be three kinds of extension:

- Resource Management
- Rehabilitation
- Protection

The vision for sustainable resource management is the rehabilitation and protection of environmentally significant areas. This can be better achieved by skilled extension officers. Extension is often seen as an entry level post whilst it should be promoted as a positive late career move for people who have strong technical skills coupled with experience in facilitating negotiated solutions.



Photo 2: Plenary speakers Dr Rick de Satgé, Ms Caroline Gelderblom and Mr Mark Botha offered a cross-sectoral perspective on the history and status quo of extension in South Africa.

4.4 Plenary Discussion

Following the presentations, delegates contributed to the discourse. **Points raised in group discussions were captured in plenary and then responded to by the speakers:**

1. **Re-aligning of the environmental sector is challenging.** Although the conceptual frame-work is presented, how realistic and possible is it to be truly implementing re-alignment? How possible is it to re-configure the environmental sector?
2. **Organising extension services beyond the bureaucratic state:** A bureaucratic form of extension presents challenges like high turn-over and power hierarchies which divert from the real issues at hand. In the Netherlands, farmers and co-operatives managed to negotiate targets that are politically supported whilst retaining the prerogative to find the ways to achieve them. They were given space to experiment, to find the technologies, to create alliances and in a short space of time they had already superseded the objectives. So how can we prevent bureaucratisation and create space to make extension relevant?
3. **Valuing extension workers and their services.** It is important to collectively start acknowledging and recognising the work of extension and advisory services, which can cut across several government departments. We need to do more about strengthening creative integration between departments such as Department of Agriculture, Land Reform and Rural Development (DALRRD) and DEFF. There are three types of extension resource management, rehabilitation extension and broad action extension. Food security is a big worry.
4. **Productivity, but not at the cost of sustainability.** Extension provided by the suppliers of agricultural inputs or commodity organisations tends to focus narrowly on increasing productivity in ways that may work against sustainable land management.

4. KEY ELEMENTS OF TRANSFORMATIVE EXTENSION SERVICES FOR ALL SECTORS

Responses from the speakers:

- Restructuring often doesn't address the problems it is meant to. There is no impediment to achieving these outcomes through better collaboration between national or provincial environmental departments, but alignment of intended outcomes is essential. Current targets are for 90% of Strategic Water Source Areas to be managed to a state of less than 1% invasive species and 40% basal cover. Those targets force us to put people on the ground, no matter what sector or department they come from, to achieve those outcomes. The priority should not be restructuring as much as working differently.
- Bureaucratisation in extension services is problematic. From an extension, conservation and protection point of view, extension is meant to be enabling, not enforcing a particular recipe. Many people are self-organising, finding their solutions and putting them in place. It usually works best when people have resources and are making money off their land. Without these resources the context is quite different.
- The reason there aren't private extension services in the environmental sector is that the outcomes of environmental extension are a public good. Private interests do not put resources into extension services to achieve this because no one individual can benefit, and no-one can monetise the returns from it.
- Mark Botha clarified that he was framing the issues from an environmental sector point of view, and not addressing food security from an agricultural extension perspective. He argued that "we need to get our house in order as an environmental sector". Ecological degradation is a threat to food security not related to access to fertilizers, seeds or tractors. Declining carbon in our topsoil, extended droughts and frequent wildfires expose all land to ecological disasters and we need to jointly work out how to respond.
- Agroecology is potentially very effective in achieving food security, but it does not create significant markets for the companies that are producing agricultural chemicals who often provide a high proportion of extension capacity servicing the commercial sector. Public policy must address this to ensure that the public good aspect is funded from our state coffers.



Photo 3: Noel Oettlé facilitating plenary discussion and engagement.

5. LIGHTNING TALKS AND WORLD CAFÉ

Nine presenters took it in turn to present topics for discussion by participants in a World Café session. Each presenter hosted a table for the discussion, with participants moving around the room to listen and give input on the host's topics.

	Presenter	Organisation	Presentation title
1	Chris Martens	Fynbos Trust	<i>Knowledge exchange and peer learning as a platform for collaboration</i>
2	Greg Martindale	Conservation Outcomes	<i>The importance of partnerships in the wildlife economy – the experiences of Babanango</i>
3	Kerry Purnell	Wilderness Foundation Africa	<i>Valuing extension services in South Africa</i>
4	Hlengiwe Ndlovu	WWF SA	<i>Opportunities and challenges of private sector extension services in forestry</i>
5	Cobus Theron	Endangered Wildlife Trust	<i>Integrating agriculture and conservation objectives in a living working landscape</i>
6	Rosie Stanway	Conservation South Africa	<i>Enabling effective extension services in the context of unmanaged livestock and youth unemployment in South Africa's communal lands</i>
7	Rhoda Malgas	Stellenbosch University	<i>Hungry youth and fallow land</i>
8	Lesley Richardson & Kirsten Retief	Flower Valley Conservation Trust	<i>Taking the ground-up view to structure dialogue</i>
9	Jai Clifford-Holmes	IWR Rhodes University	<i>Applying a Systems Approach to Extension Services</i>

Table 1: Lightning talk presentations that explored challenges, opportunities and successes of extension experiences across South African landscapes.

5. LIGHTNING TALKS AND WORLD CAFÉ

5.1 World Café Reflections

1. Chris Martens, Fynbos Trust: Knowledge exchange and peer learning as a platform for collaboration

Peer learning and knowledge exchange are not new in extension. These processes have worked well through collaboration with relevant provincial and local role-players. Mentoring and all formal forms of extension training were previously primarily focused on technical management of natural resources. While recognising that the need to identify sectoral skills gaps and technical skills still exists, the emphasis has now shifted to building communication, negotiation and facilitation skills.

Our approach offers a safe learning environment which fosters trust, camaraderie, the building of

networks which offers a fertile environment for integration, planning and implementation in the landscape. There are other good examples (such as the Upper Breede Collaborative Extension Group) that can be learned from, where trust and credibility have been built.

Cross-sectoral peer learning, experiential learning and knowledge exchange programmes supplemented by individual mentoring and coaching can support strategically integrated and sound extension implementation.

There was support for the idea of developing a local one-stop shop to pool sectoral resources. Policy directives should drive an approach that is EPIC – Experimental, Participatory, Image-driven and Connected. The enthusiasm of the groups was noted in tackling the challenge – “the hunger for resolving this has grown”.

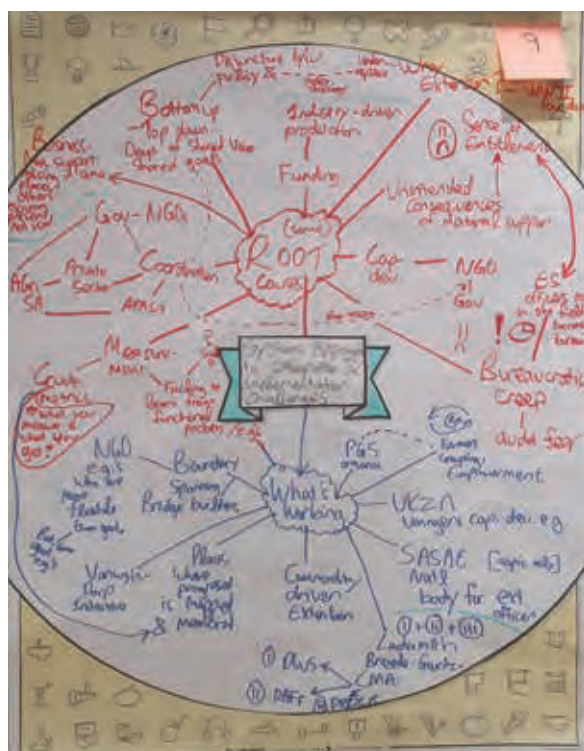
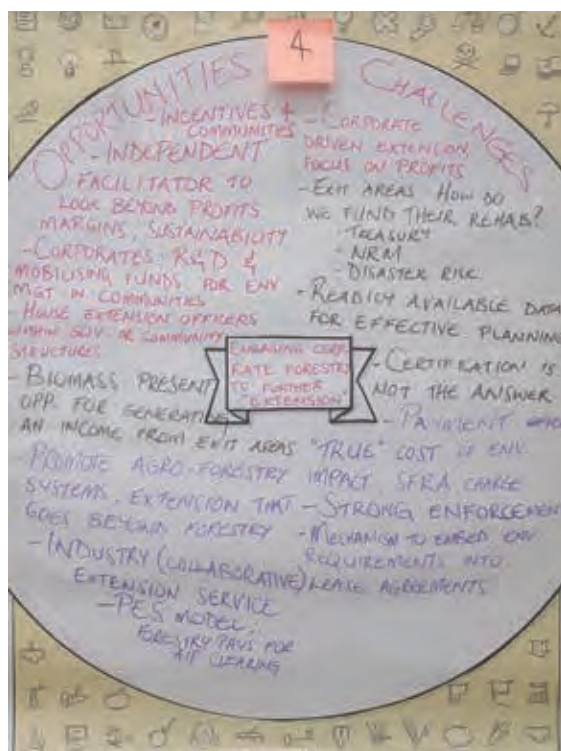



Photo 4: Discussion boards reflecting Word Cafe presentations and thinking.



2. Greg Martindale, *Conservation Outcomes: The importance of partnerships in the wildlife economy – the experiences of Babanango*

Partnerships are central to successful projects in a community context. Sound community governance structures with the ability to enter legal agreements, and partnerships with government and the private sector were identified as key. The Babanango case study for the Umfolozi Biodiversity Economy Node was explored as one of the anchor projects for the wildlife economy, which has had success in securing funding and creating employment opportunities. Challenges to overcome were: funding timeframes and lags that can result in stakeholder disillusionment with a project.

Challenges arise when there is mistrust or competition around mandates. The current funding cycles for projects are also problematic and don't take into account the dynamic reality of the world. These initiatives need to have a more process-oriented approach rather than being so project focussed and time-bound. NGOs can play an important role as relationship managers and facilitators, bridging gaps by building private sector partnerships, and breaking down silos between government departments. In this way NGOs can act as the glue between components which helps to make interventions successful over time. In the agricultural sector industry partners enable the involvement of NGOs, whereas in the conservation and wildlife economy space there seems to be more mistrust by government of the involvement of NGOs.

3. Kerry Purnell, *Wilderness Foundation Africa: Valuing extension services in South Africa*

The most valuable incentive to encourage landowners to practice conservation in South Africa is extension. But is extension valued enough? Ideally, extension services should be where our most experienced landscape conservation staff, who have been in conservation and agriculture their whole lives and have reached the pinnacle of their careers, spend time in the field returning their knowledge. Newly qualified, inexperienced people aren't being sufficiently trained and mentored, and this impacts trust and relationship building. The discussion explored the need for formal extension training in South Africa, where a conscious creation of career paths for extension staff in all spheres could be built, that is fundable, desirable and valued.

There is a need for combination of specialist and generalist extension providers. Pairing of experienced senior people with those with less experience is also necessary. Extension can also bring insights as to how people are behaving in a landscape and the decisions they are making. The budget cuts in the state and in the NGO sector have resulted in a huge reduction in extension capacity, while the economic value of extension has not been sufficiently explored. There is scope for collective budgets and collective extension services to be provided, with a more qualitative measuring of the impacts, rather than the current quantitative approaches. Which value chains can pay for their own extension, so that they can get accreditation for sustainable natural resource management? The objective is that people become willing to pay for the extension services to help manage resources more effectively. For example, how much is water "worth" (what is its' value)? For extension to be valued there is a need for a knowledge sharing vehicle – which will help the value become visible to different users.

5. LIGHTNING TALKS AND WORLD CAFÉ

4. Hlengiwe Ndlovu, WWF SA: *Opportunities and challenges of private sector extension services in forestry*

Forestry, from both the corporate and smallholder perspective, can play a central role in providing meaningful and sustainable livelihoods for rural communities and should not be underestimated. There are significant environmental, economic and social challenges facing forestry, from the spread of alien invasive species, the increasing frequency of forest fires, declining global timber markets, and mounting pressure for job creation and rural development. Where there are challenges there are also opportunities, and the discussion explored opportunities around innovative approaches to addressing key impact factors. This included unlocking economic resources in the sector across the value chain as well as developing alternative value chains as the industry grows (such as biomass for energy and bio-refinery technologies). Questions were raised about how to bring together corporates through extension services to use forestry as a vehicle for development, especially in marginalised rural communities.

Looking at extension in its entirety identified some opportunities and challenges, particularly the profit driven focus of corporate driven extension, where each corporate runs its own extension service, that can come at an environmental cost. There is a need for an independent facilitator to look beyond profit margins. Currently industry is not paying the full environmental costs – the value of water is not sufficiently reflected in the streamflow reduction charge. A focus on forestry exit areas highlighted funding and disaster risk challenges and opportunities and a need for innovation to unlock resources. The need for research and readily available data for effective planning and management was highlighted. There is also a tension between enforcement and extension, and in community areas there is an important role for extension officers who can work in agro-forestry as bridge-builders, and who can span the boundaries between forestry and other practices. How we facilitate these mechanisms still needs to be explored.



Photo 5a & 5b: Dialogue participants give input on host's presentation during the World Café session.



5. Cobus Theron, *Endangered Wildlife Trust: Integrating agriculture and conservation objectives in a living, working landscape*

The Global Environment Fund (GEF) 5 sustainable land management project in the Greater Karoo is using a champion farmer approach that looks at peer-to-peer learning, training, sharing and incentivising farmers to come up with novel sustainable management projects that can be promoted for others to learn from. Farmers prefer to learn from each other rather than from extension officers or trainers. Bottom-up approaches seem to work better with extension services, with extension officers encouraging their managers to effect changes. There are real on-the-ground barriers that need to be overcome, including institutional, social, resource and capacity challenges. Given that things can't continue as they are, the discussion explored whether it is time for a completely new model or new reality where NGO and government resources are aligned to make a real difference.

What would ideal extension look like? We still need to define this. There is often a disconnect and disparity between what national departments intend through their policies and what is happening on the ground – there is very little interaction between national and provincial government in practice. It is critical that we are not going into communities and telling them what to do: we need to rather look at what communities need and respond to that, so that there is co-design and that the needs of the users are met, which is currently not really happening. Extension can help to make people aware of other useful practices, which can help to improve farmer skills and equip them to help themselves.

6. Rosie Stanway, *Conservation South Africa: Enabling effective extension services in the context of unmanaged livestock and youth unemployment in South Africa's communal lands*

In Matatiele in the foothills of the Drakensberg Mountains in the Eastern Cape, there is a network of partners that have developed an approach to enable effective extension services. They do this in a context of unmanaged livestock and youth unemployment, using existing job creation programmes, especially focused on youth development, to enhance extension services in the area. There are benefits around place-based conservation, keeping young people in their areas and giving back to their communities instead of them migrating to cities. The approach includes a range of elements including job creation, community governance, and providing the needed extension services. The discussion identified opportunities and challenges, and explored whether the approach could be applied or replicated more widely in other landscapes in South Africa's rural areas, and whether there is existing training that could be tapped into to enhance the impacts of the programmes.

Extension means different things to different people. It is a professional field which might risk dilution, so there are opportunities for incentivising further training. A key risk to trust building, continuity and building expertise is the rate of turnover. There are a wide range of opportunities for deep or broad career pathing, from veterinary work to herding to forestry. There needs to be some defining of government's role in this context. Measuring success is also complex. Is it the number of young people retained, the number of formal jobs created or how those jobs are valued by the communities or the impact they have on the sustainability of land management? This helps to build the business case, as does strengthening research collaborations.

5. LIGHTNING TALKS AND WORLD CAFÉ

7. Rhoda Malgas, Stellenbosch University: *Hungry youth and fallow land*

Towns in the Western Cape such as Mamre, Genadendal and elsewhere in the Overberg are commonly associated with agrarian communities and agriculture. However, agriculture is failing to provide livelihoods to local land-users, and this occurs while parcels of land lie fallow. In spite of targeted approaches that focus on the youth there is a decline in interest in agriculture amongst youth – arising from their separation from knowledge about agriculture due to an inter-generational gap. The discussion explored how to reactivate us of these areas of fallow land, through the cultivation of indigenous fynbos plant species like rooibos, honeybush and buchu. Questions were raised: what are the extension needs of these communities, and youth, in particular? How can transitions into inter-generational agriculture, including the gaps in training and innovation, be addressed?

It is important to understand what is driving the generational gap and the loss of ecological and agricultural knowledge that is being experienced in other African countries too. There are strong perceptions associated with agricultural work, linked to historical poverty and enslavement which contribute to youth not seeing opportunities in farming. Confusion as to how to access land, with dysfunctional institutions and finance bans for using communal land as collateral for accessing finance also does not aid this. There are extension training deficits, with an historical focus on conventional primary production. Universities are also not generating research about fynbos and indigenous crop opportunities and agronomy. There is a need for linkages to product development, markets and sales. Companies' social responsibility expenditure could be leveraged to support this. It was also felt that it is best to work with what is in the landscape, identifying what is working, rather than top heavy approaches. There are opportunities for extension to play a significant role in the context of land restitution and rural youth development.

Photo 6: Dialogue participants in discussion during the World Cafe session.





8. Lesley Richardson & Kirsten Retief, *Flower Valley Conservation Trust: Taking the ground-up view to structure dialogue*

Flower Valley and the Agulhas Biodiversity Initiative have been working with land-users communities and different institutional arrangements, and their sustainable harvesting programme and land-user incentive approaches have been very useful. Some of the most important lessons have been around communication and the flow of information in more than one direction. They chose to explore these questions: How do we go about the “not-so-soft skills” and capture these? How do institutions build the skills to communicate effectively? How does this relate to what extension is? What are the differences between training, coaching and mentorship? It’s not a matter of one size fits all. Rather, it is about finding appropriate ways to engage with communities and other parties; building consensus between different, disparate partners; mediating between beliefs, and understanding the past, present and future. It requires a shared vision that is sustainable (with reference to Blignaut and Aronson, 2008).

Issues around trust take many dimensions. The individuals themselves are central as the key enabler and “leading thinker driving change in the landscape”. They need to bring empathy with insight and values that are aligned to those they are working with – being willing to listen and learn in order to understand the situation. NGOs can help to create integration points, as it takes time to build relationships and for extension to be effective. This is often at a disjuncture with funding cycles which are typically short term. There is a need for longer terms processes, with leadership training and ongoing monitoring and evaluation for continuous improvement built in, as well as a focus on qualitative rather than quantitative measures for impact.

9. Jai Clifford-Holmes, *Institute of Water Research Rhodes University: Applying a Systems Approach to Extension Services*

A systems approach to difficult problems is particularly relevant when trying to simultaneously achieve multiple goals. In extension, these include, equitable land distribution, resource protection, and agricultural production. The discussion explored some of the root causes and common challenges with integration and implementation at the cross-sectoral, which inhibit change for improved extension services.

Root causes include the bureaucratic load faced by extension service officers; the lack of clarity of mandates, roles and responsibilities; the lack of coordination between public, private, and NGO partners, and the limited time that extension officers actually spend in the field. These factors are interrelated and tied to issues of capacity development and sector-wide funding, with multiple feedbacks across and between the sectors. Pockets of successful extension service implementation do exist. Some examples include the Vanwyksdorp Initiative; the Participatory Guarantee System for organic farming; capacity development in the uMngeni catchment with the University of KwaZulu-Natal and partners; and inter-governmental participation in the Breede-Gouritz Catchment Management Agency. Successful cases typically feature boundary-spanning individuals or organisations who build bridges between stakeholders and issues and who coordinate to minimise duplication and optimally use available resources. These cases offer opportunities to reflect on what has worked and why.

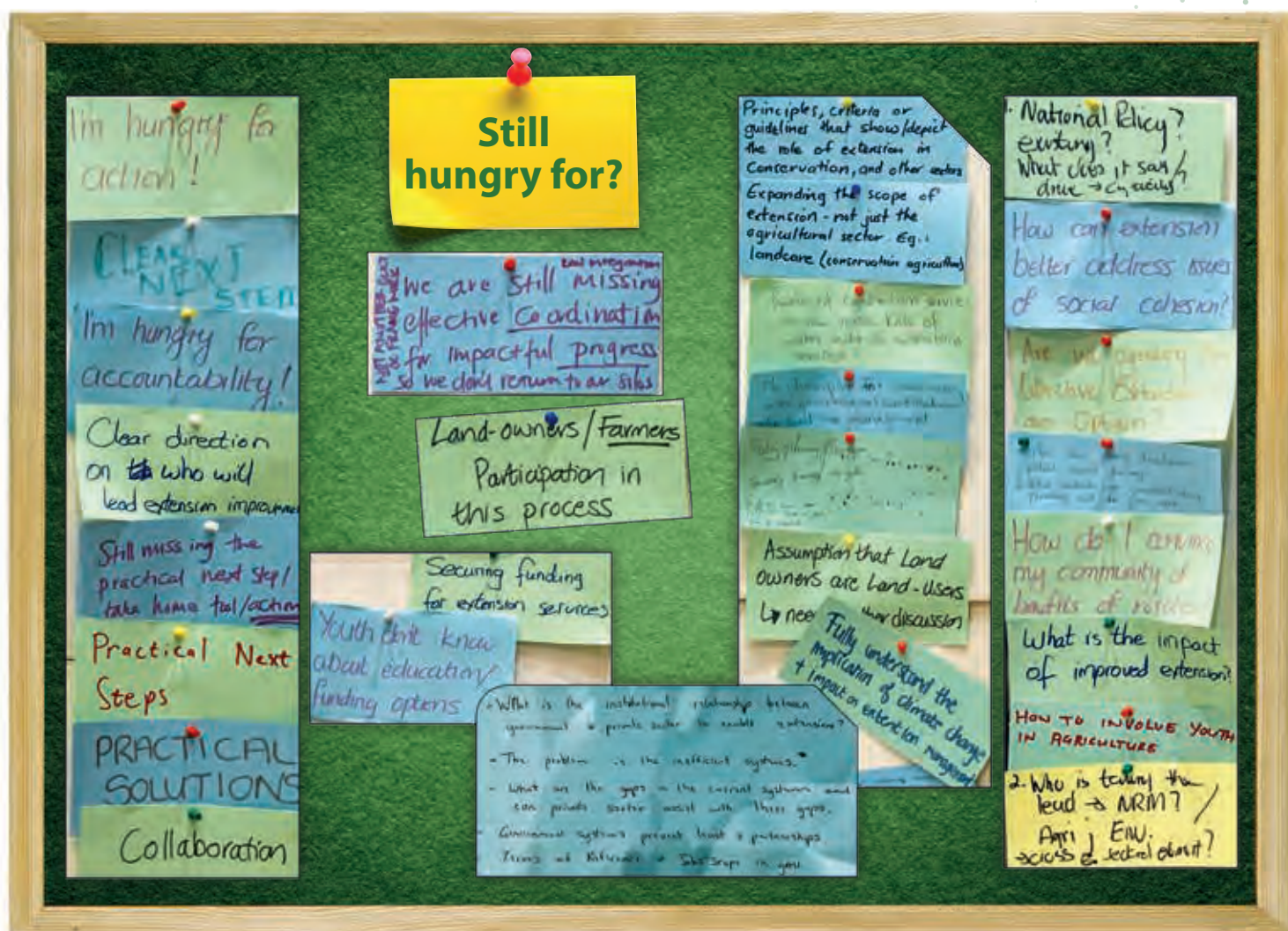
5. LIGHTNING TALKS AND WORLD CAFÉ

5.2 Still hungry for?

Following intensive discussions, time was made for reflection on inputs so far. The session marked the end of Day 1, and lead into a networking event in the

early evening (Figure 1). Participants generated cards reflecting elements of the discourse that they wanted to explore in more depth the following day.

Photo 7: Cards expressing what participants were “still hungry for”, following intensive discussions throughout the day.



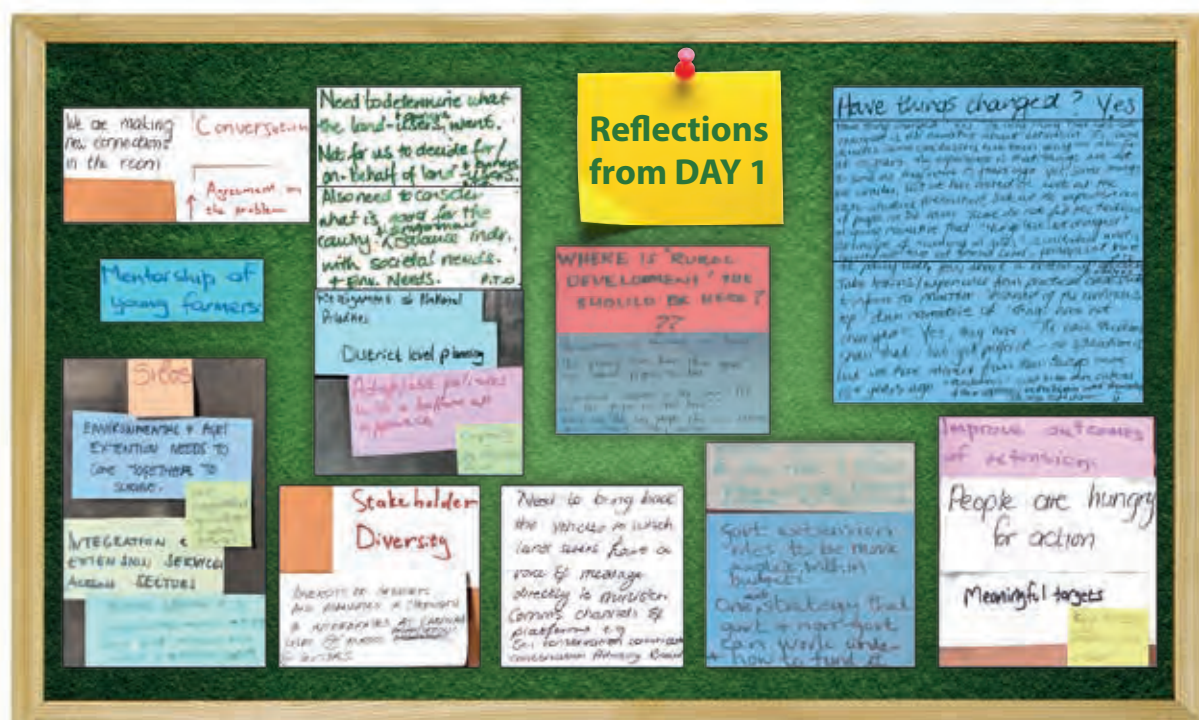


6. OPENING OF DAY 2 AND RECAP OF DAY 1 OF THE DIALOGUE

In the opening session of the second day of the Dialogue, participants shared their reflections:

- There is an overwhelming need for communication between sectors.
- There is a need for a platform or vehicle to manage this. In the old days, there was an advisory committee that you talked to and it went up the line to ministers.
- Environment and agriculture are in silos and separate, yet in the context of climate change and other challenges they must be brought together.
- There needs to be effective, measurable co-ordination to achieve goals.
- The issues are complex. What are key success factors, as one size doesn't fit for all?
- We are missing key resources to allocate where needed.
- There is a need for realignment of planning priorities at district level rather than national to have meaningful targets.
- There may be conflicts between what some perceive as being good for the country and the people and what the people actually want. We can't force the top-down approach.
- We are able to define solutions for problems that are known, but many are not yet known.
- We need to give clear guidelines about roles of government and NGOs to make it clear what is expected and agree on how to fulfil the roles.
- Policies are by definition top-down but need to be informed by what is on the ground.
- Nothing seems to change and we seem to keep coming back to more dialogue. This meeting reflects a lack of policymakers and decision-makers, who do not typically attend meetings of this nature and thus do not know what is happening.
- Many new connections have been made in the room.

Photo 8: Some of the thoughts expressed by dialogue participants that helped form the recap from day 1.



7. “RADIO SHOW” INTERVIEWS OF CASE STUDIES

Partners in extension from different parts of the country explored their relationships through a live interview format. Noel Oettlé and Siyabonga Myeza were the “radio hosts”, interviewing the partners to bring to life the context, qualities and textures of the on-going activities described in case studies that had been prepared in advance of the Dialogue.

	Extension partners	Organisations/initiatives
1	Rudolph Röscher & Johann Fourie	LandCare Area-Wide Planning - Rooiberg Conservancy
2	Bridget Munyantore, Zuko Fekisi & Vuyolwethu (Vuyo) Nozawa	uMzimvubu Catchment Partnerships - Landscapes for Livelihoods
3	Ryno Pienaar & Steven Versfeld	Water stewardship through extension - Upper Breede River
4	Goodenough Mdunge & Celaphiwe (Cela) Gcumisa	Small Scale Sugar Cane Growers - Gcumisa, KwaZulu-Natal
5	Justin Gird & Pieter Kruger	Farming towards a restorative economy - Baviaanskloof Hartland

Table 2: Extension partners and affiliated organisations/initiatives in the “Radio Show” session.



7. “RADIO SHOW” INTERVIEWS OF CASE STUDIES

1. **Rudolf Röscher** (DOA: Western Cape) and **Johann Fourie** (Rooiberg Breederivier Conservancy): *LandCare Area-Wide Planning in the Rooiberg near Robertson*

Johan and Rudolph have collaborated through Area Wide Planning processes and the facilitation of Class Action applications in the Rooiberg region. The resulting coordination has halved the costs of complying with regulations and improved the outcomes for both farmers and conservation.

Johan appreciates Rudolf’s ability to convene the people in the area, acknowledging different agendas/mandates while keeping everyone working towards a common goal. He also values his ability to shorten the decision-making cycle – bringing government closer to the ground.

Rudolf emphasised that he was only able to play this role because of his deep experience in the area. His long term engagement over decades has enabled him to build trust and to really understand the local environment with the help of local farmers such as Johan. This takes time and it means that there needs to be a career path which enables people to stay in an environment, become part of the community and add value.

‘We need to be more explicit in terms of the role of extension in implementing government strategies and about the importance of planning at district rather than national levels. Government needs to be listening to information such as this, which is coming from the ground’

~ Comment from the floor.

2. **Bridget Munyantore, Zuko Fekisi** (Environmental and Rural Solutions) and **Vuyolwethu (Vuyo) Nozawa** (stock owner/herder and ecoranger): *uMzimvubu Catchment Partnerships: Landscapes for Livelihoods*

Bridget explained that the first step in successful extension was building trust. To prevent unnecessary community tensions, they had to be careful to inform the traditional leaders and counsellors. Facilitation plays a vital role in all the interventions –

‘We don’t tell people how to resolve their problems - we work through collaborative partnerships developing solutions together. We need to check what the communities’ needs are because we recognise that we have our own agenda of conservation. As a result of our work with the communities in this area springs are functioning much better because alien clearing has increased water availability. Separating the use of people and livestock has also improved water quality. EcoRangers make sure cleared areas are maintained and control animals so grass can recover. ’

~ Bridget

Vuyo, who farms in the Matatiele area, explained that he and many from the community really appreciated the mobile auctions which help to get livestock to market – the whole community, even the old people can be involved as they don’t have to travel far. Clearing has also reduced stock theft and made space for livestock.

‘The grass is coming back so we know the livestock will have food – we are very happy because we had no stock die this winter because they had enough to eat.’

~ Vuyo

A key challenge identified by Zuko was that although they have built a good understanding of the need to manage fire and rotational grazing with the permanent community, when people come back from the city over the holiday season there are problems as some of them do not apply the solutions that have been agreed with other members of the community.



Photo 9a & 9b: Noel Oettlé hosting “radio show” interviews with Rudolph Röscher and Johann Fourie, and with Bridget Munyantore, Zuko Fekisi & Vuyolwethu (Vuyo) Nozawa

7. “RADIO SHOW” INTERVIEWS OF CASE STUDIES

3. Ryno Pienaar (Wolseley Water Users Association) and Steven Versfeld (Achtertuin Farm): Water stewardship through extension in the Upper Breede River

Steven has been independently clearing invasive alien plants on the Titus River on his family farm in the Ceres Valley for many years because he and his father both recognised that they had the potential to have an enormous long-term effect on their water supply.

‘You don’t inherit a farm from your parents, you inherit it from your children’. The biggest challenge is that many fellow farmers feel that the investment is pointless because the current impact is small, the costs are high, and the rate of return is too slow from a commercial perspective.’

~ Steven

Steven was therefore really pleased when Ryno was appointed by WWF and LandCare to coordinate and motivate for alien clearing and rehabilitation all along the Titus and Breede Rivers upstream of the Brandvlei Dam with additional support from Woolworths. Ryno indicated that his role is to ensure that the quality of the work done by the contractors is good and then to ensure that they do the necessary follow-up by persistently reminding them when it is due and getting them into a culture of budgeting for it. He commented that:

‘some farmers answer my calls with a sigh’. ~ Ryno

Ryno emphasised that all farmers benefiting from this programme must contribute some of their own money as this increases the likelihood that they will maintain their own investment in the areas cleared. He expressed his appreciation for Steven’s role in motivating fellow farmers, including investing more of his time with those who still need persuasion.

Often, they have managed to get people fully on board once they have agreed to do a small initial area and are able to see the improvement on their own land. The clearing of the wetlands in particular has resulted in increased dry season flow of the river, which had been absent when it was heavily invaded. Where farmers remain resistant the government can use directives, but this approach is only used as a last resort.



Photo 10a & 10b: Noel Oettlé hosting “radio show” interviews with Ryno Pienaar and Steven Versfeld, and with Justin Gird and Pieter Kruger

4. Goodenough Mdunge (KZN Department of Agriculture and Rural Development) and Celaphiwe (Cela) Gcumisa (Sugar Cane Grower): Small Scale Sugar Cane Growers in Gcumisa, KwaZulu-Natal

Goodenough has been working in extension for 20 years. When he visits Celaphiwe and the other sugar cane farmers he comes armed with information on all aspects of sugar cane management, from selecting the correct variety for local conditions, to pest control and harvesting. He believes that most important is that farmers should “bank on the soil”. When he wants to showcase his work, he always takes people to visit Celaphiwe, who applies all the best practice principles on his farm. The interviewer, Siya, asked how he got the traditional leaders on board? Goodenough explained that they came up with the idea of planting some of the Nkosi ²s land with sugar cane and now he is participating in the programme and is supportive of their interventions.

Celaphiwe has been an independent small-scale sugar cane farmer for 12 years. He explained that he really appreciates the in-depth information that Goodenough shares when he visits him in Gcumisa, which is about 50 km east of Pietermaritzburg. He also invites Goodenough to come and join him when he is slaughtering an animal for a celebration. He feels that it is important that young people are brought in as there are not many young people in sugar farming.

From Goodenough’s perspective, most of the challenges are out of the control of the extension officer and farmer – they are external drivers such as the sugar tax and the sugar price. He often finds that famers expect extension

² Nkosi is a name of respect given a chief or someone in authority in the Nguni languages (e.g. isi-Xhosa, isi-Zulu)

7. “RADIO SHOW” INTERVIEWS OF CASE STUDIES

If you don't come with something many say you are not an extension officer. They don't always understand that the role is about knowledge and transfer of technology.

~ Goodenough



Photo 11: Siyabonga Myeza interviews Goodenough Mdunge and Celaphiwe Gcumisa on his “radio show”



5. Justin Gird (*Living Lands*) and Pieter Kruger (*Mainsail Trading*): Farming towards a restorative economy in the Baviaanskloof Hartland

Pieter Kruger has been farming in the Baviaanskloof for over 42 years. Over this time, he has learnt that 'you need to adapt to the things you cannot control, whether they are droughts, floods or changes in government policies'. When the Baviaanskloof Wilderness area was created in 2002 it comprised 250 000 ha surrounding 45 000 ha of farmland.

'As a farmer you could see this as a problem or an opportunity. There was a lot of predation of livestock and there was also discussion of expropriation of land. This inspired us as a community of farmers to look at how we could adapt and look at more sustainable options. We also learned from the students, one of which was Justin.'

~ Pieter Kruger

Justin emphasised the importance of Pieter's patience in sharing his understanding of the landscape with him when he started off in the Baviaanskloof as a student in 2004. He went on to share that on his first day of work with Living Lands in they were introducing the Theory U, which is used to support change management and leadership – 'for me it all seemed a bit soft and I sat at the back of the room with the more sceptical farmers, but Pieter was of course in the front with all the officials'. The fundamental principle is coming in with an open heart and open mind. 'You think that you know everything after studying, but really you will have to start again and understand the real situation and what the local people have experienced putting off some of that arrogance and ego. As you learn the landowners will learn with you and then you get to a transition to deeper learning and eventually get to an 'a-ha' moment – an understanding of the underlying issues and then you can identify potential solutions together. What is important is to understand the power of action – it does not have to be huge change and can comprise small cumulative actions. The prototype does not initially have to work: the whole point is that you fiddle with it and learn from failures as much as from success'.

Justin emphasised that the outcome of their long-term engagement and living in the landscape is that

'we have the courage to confront each other, knowing that no matter what is said none of us will walk away, as happened in the past. The landowners can share frustrations and anger knowing that I will not pack up and leave'.

~ Justin Gird

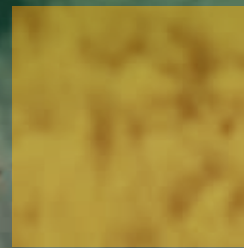
Pieter agreed that in the Baviaanskloof they experiment and develop the knowledge to improve their activities.

8. OPEN SPACE SESSION

The Open Space session provided opportunities for exploring collaboration and debating the way forward towards more effective extension provision. Themes for discussion at the various tables were generated in plenary in response to the question “what are the burning questions that you would like to explore?”, and each table was hosted by one or two facilitators.

1	Climate change as a sectoral game changer for NRM extension	Rick de Satgé & Christo Marais
2	Identifying processes and enablers (P-MERL)	Kyra Lunderstedt & Mahlogonolo Sekhukhune
3	Municipal Integrated Development Plans	Matome Mahasha & Christel Liebenberg
4	Area-wide planning of Western Cape (alliances)	Francis Steyn & Paul Hebinck
5	Extension services with an inter-generational gap in mind	Rhoda Malgas & Bridget Munyantore
6	Platform for Extension Officers and communities to connect	Lehman Lindeque & Pieter Kruger
7	National strategy and framework to integrate extension services (developed from bottom up)	Lesley Richardson & Rudolph Röscher
8	Training for capacity development	Bonnie Schoeman
9	Less talk and more action: progress report in 12 months' time	Ayanda Cele
10	Programmes requiring extension focusing on rehabilitation and NRM	Garth Mortimer & Kevin McCann
11	Developing a Community of Practice to support alternative mechanisms for place-based coordination	Caroline Gelderblom & Rhoda Malgas
12	Integrating cross-sectoral extension officers in a transformative way	Shela Patrickson & David Gardner

Table 3: Open Space discussion session topics and small group facilitators.



8. OPEN SPACE SESSION

Open Space 1: Climate change as a sectoral game changer for NRM extension (Rick de Satgé & Christo Marais)

- What are the implications of climate change on extension services?
- We must conceptualise extension design and functions against a backdrop of rapid climate change. This can be visualised through the rice and the chess board analogy where one grain of rice is placed on the first square of the board and doubled for each successive square. This graphically highlights the complexity associated with exponential growth and the impacts of concatenating problems which quickly spiral out of control. Issues rapidly multiply and with every square there are twice as many things to deal with, more interconnections, and more uncertainties. The key to managing climate risk will be to develop a collective understanding of these interconnections and find ways to address and arrest these processes before they overwhelm our capabilities.
- Implications include extension services being involved in training people across sectors to see how climate change will impact on their sectors and other interconnected sectors.
- When thinking about municipal Integrated Development Plans (IDPs), as an example, what does climate change mean for all the different factors or elements in an IDP? What will this municipality look like in 10, 15, 30 and 50 years' time?
- Question: what would a re-designed programme look like to train extension service officials with the knowledge and skills that are required in the 21st century?

Open Space 2: Identifying processes and enablers (P-MERL) (Kyra Lunderstedt & Mahlogonolo Sekhukhune)

- What are the processes and enablers for a more suitable form of monitoring and evaluation (M&E) for extension services, e.g. Participatory, Monitoring, Evaluation, Reporting, and Learning (P-MERL)?
- There are multiple knowledge systems and opportunities for integration.
- When prototyping, how are you learning from the prototyping that you are doing and the actual impacts on the ground, based on the community needs?

Open Space 3: Municipal Integrated Development Plans (Mathome Mahasha & Christel Liebenberg)

- Identified problem:
 - Integrated Development Plans (IDPs) are a key integrative planning process at the local municipal level.
 - Many IDPs are (a) outdated; (b) built using generic templates from other municipalities; and (c) out-sourced to consultancies with inadequate public participation processes.
- The challenge:
 - How do we influence how IDPs are compiled and implemented?
 - How do we hold local government to account?
 - How do we hold IDP implementers to account?
 - How can we begin to mainstream critical extension services into IDPs?
- Response – use IDPs to mobilise capacity



Open Space 4: Area-wide planning of Western Cape (alliances) (Francis Steyn & Paul Hebinck)

- There is a requirement to build alliances:
- Requirement to identify who should be part of the alliance, asking:
 - What are the resources?
 - What are the problems and what are the opportunities?
- Goal of building consensus around the understanding of given problems.
- The challenge:
 - How do you build an alliance within a context of unequal power relations?
 - What do you do about free-loaders and illegal users?
 - How can the alliances have 'teeth' (e.g. enforcement capability)?
- In the end, in order to keep the process moving forward, there needs to be some action.



Photo 12a & 12b: Open Space discussions in progress



8. OPEN SPACE SESSION

Open Space 5: Extension services with an intergenerational gap in mind (Rhoda Malgas & Bridget Munyantore)

- Key questions:
 - Youth are leaving rural areas: Why?
 - For those youth who stay in rural areas, why do they stay and how can extension services help them be more productive?
 - More specifically, how can extension be targeted at the youth?
- Land can be a space for 'soft systems' and creativity and not just for hard numbers and details;
- Ideas:
 - Can extension services offer youth opportunities for inspiration and encouragement?
 - Aim to have youth and elders together in the same workshops.
 - Can extension services help facilitate emancipation? This in order to address the challenge of extension services not seeming to be able to help with poverty alleviation.

Open Space 6: Platform for Extension Officers and communities to connect (Lehman Lindeque & Pieter Kruger)

- Make use of existing structures throughout the value chain
- Holistic development model, coordinating money and investment
- Effective use of technology (from knowledge management systems, to cellphones, apps etc.)
- If we want to change, then we'll need to change the accountability structures (the illustrative example was used of the Western Cape MEC of Agriculture's 'Open Door' policy every 1st Thursday of the month)

Open Space 7: National strategy and framework to integrate extension services (developed from bottom up) (Lesley Richardson & Rudolph Röscher)

- Draw from working examples;
- Long-term funding is required to sustain the strategy;
- Working examples of integration (e.g. some of the Breede River cases discussed in the workshop) could be used to inform Terms of Reference for integrating extension officers and their work across sectors;
- Further ideas:
 - Use collective targets to set up the strategy;
 - Use existing bodies, like the SA Society of Agricultural Extension (SASAE);
 - Use pilot studies.

Open Space 8: Training for capacity development (Bonnie Schoeman)

- The problem:
 - an extension officer is expected to be a 'jack of all trades';
 - Ongoing training throughout extension officers' careers is not standardised or structured;
 - There is a lack of professional accreditation or incentive system (like the continuing professional education point system in engineering and medicine);
- Ideally, training should be linked to performance, it should be structured, and start with foundational building blocks and support ongoing learning;
- In cases where extension officers move to different biomes from where they have worked, or cross into sectors where they have not worked, there should be an induction and mentoring process to support the changes.

Open Space 9: Less talk and more action (Ayanda Cele)

- Requirement for short, medium, and long-term goals with champions for each goal
- Feedbacks are important in order to record lessons learned
- More emphasis should be placed on:
 - District-level model of implementation; and
 - Knowledge Management Systems.

Open Space 10: Programmes requiring extension focusing on rehabilitation and NRM (Garth Mortimer & Kevin McCann)

- Requirement to re-align DEA and DEFF;
- Distinguishing between resource management, protection, rehabilitation and restoration;

- Need clearly defined geographical areas with associated targets, which could be focused on:
 - Strategic Water Source Areas
 - Biodiversity Stewardship Programmes
 - Forestry Exit Areas
- The group used an example of Biodiversity Stewardship Programme in the Western Cape:
 - The programme started with some successes;
 - Unintended consequences of these successes meant the demand for extension support increased beyond the available stewardship capacity (or becoming a victim of one's own success);
 - The challenge is keeping up with building stewardship capacity, in order to maintain existing work and to secure buy-in from increasingly broad stakeholder groups.

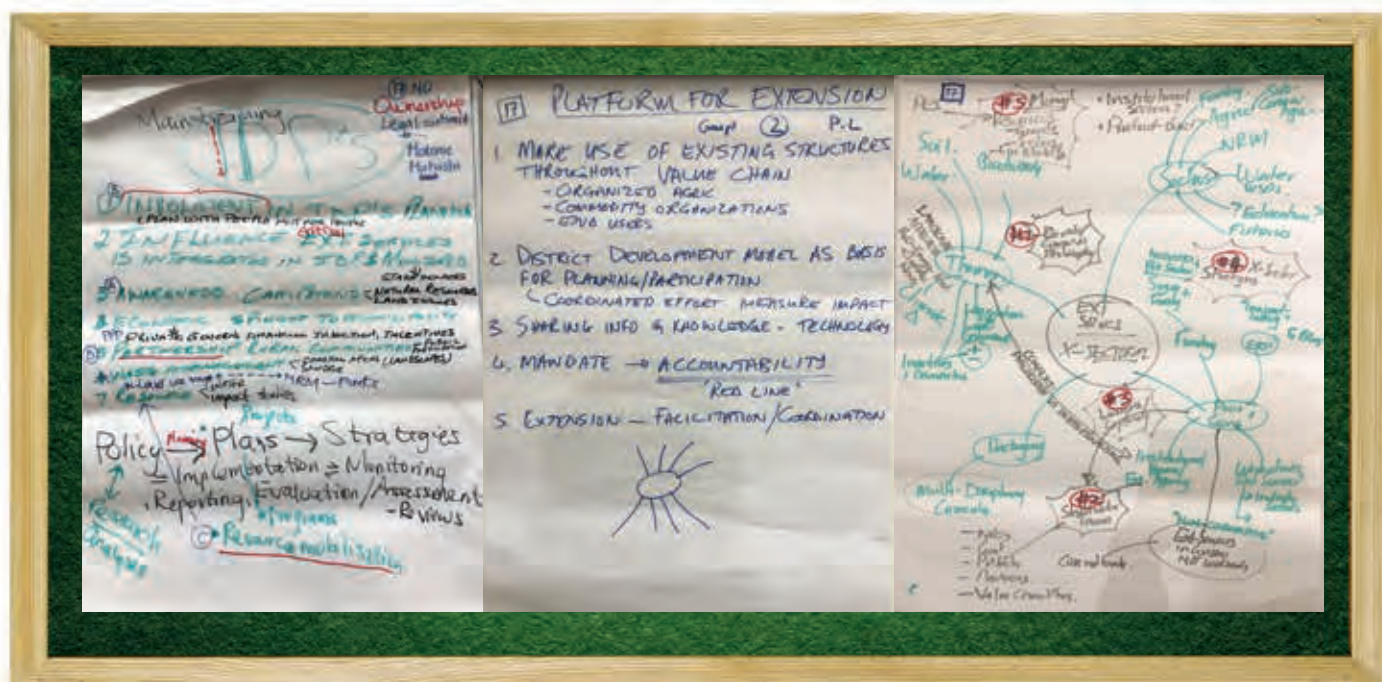


Photo 13a, b& c: Open Space discussion boards reflecting ideas generated

8. OPEN SPACE SESSION

Open Space 11: Developing a Community of Practice (CoP) to support alternative mechanisms for place-based coordination (Caroline Gelderblom & Rhoda Malgas)

- Question: how to coordinate extension across sectors around a particular space in the landscape?
- Examples of where things are working:
 - Western Cape: Upper Breede Collaborative Extension Group (UBCEG);
 - KZN: Duzi uMngeni Conservation Trust (DUCT); and
 - Eastern Cape: uMzimvubu Catchment Partnership (UCP).
- Why are things working in each of these cases? Commonalities include:
 - Champions;
 - Long-term prioritisation and not expecting short-term gains.
- These cases still have difficulties with securing long-term funding, including from government, that is suitable for the projects.
- Other ideas:
 - Facilitating learning exchanges;
 - Drawing together case studies, which are being written up, and looking for lessons from these cases.

Open Space 12: Integrating cross-sectoral extension officers in a transformative way (Shela Patrickson & David Gardner)

- Part of the difficulty with cross-sectoral extension is that there is not a common philosophy;
- One idea is to focus on themes that are cross-sectoral rather than the sectors themselves, e.g. sustainable land management; the water-energy-food nexus; climate change.
- Five steps were posited by the group:
 - Step 1: develop a common philosophy;
 - Step 2: develop common drive and find a way to institutionalise this;
 - Step 3: capturing lessons learned and utilising lessons;
 - Step 4: Start developing a cross-sectoral set of strategies: what would a common curriculum for extension training look like if it was to support cross-sectoral activities?
 - Step 5: secure financing (e.g. connecting into the bio-economy; applying for international climate funds; seeking payment for ecosystem services (PES) opportunities).

Photo 14: Feedback of Open Space discussions to plenary



9. PANEL DISCUSSION

Panellists shared their perspectives on how they and their organisations envisaged taking forward the challenge of providing improved extension services:

Ayanda Cele (WWF SA) addressed the role that agricultural colleges should play in providing appropriate training and facilitation for prospective extension professionals.

Kerry Purnell (Wilderness Foundation) explained how the small extension team in the Wilderness Foundation successfully enabled faster and smarter ways of working and meeting targets. She proposed that more coordination of extension should take place at the district level.

Hlengiwe Ndlovu (WWF SA) spoke of WWF's work in Water-Source Areas, explaining how partnerships provide opportunities to integrate and coordinate extension in the context of water, agriculture and biodiversity stewardship.

Rhoda Malgas (Stellenbosch University) spoke of how the agri-science teaching programmes at the University provided opportunities to take the mes-

sage from the workshop to students and to inspire lectures and research questions. Post-graduate MSc students should learn extension skills, gaining experience and learning on the job.

Steven Nel (Industrial Development Corporation) explained that IDC grants create opportunities development and employment across a spectrum of communities whilst addressing the environmental impact of projects.

Ndileka Mohapi (Department of Water and Sanitation) addressed the question of making extension services interesting for the youth, so as to instil the responsibility for natural resource management at a younger age.

Christo Marais (DEFF) noted that the workshop had revealed new options for implementing extension programmes, focused on achieving the desired outcomes at three levels: environmental monitors to lead from within their communities, natural resource management practitioners to facilitate training and older people with vast experience they can bring to guide this sector and to provide mentorship.

Photo 15: Panel discussion participants sharing their views




10. ACTIONS AND NEXT STEPS

Immediately prior to the closure of the workshop, participants debated and agreed to the following actions:

Table 4: Actions discussed and agreed upon by the participants attending the Dialogue

	Actions	Person/ Organisation	When?
1	Workshop Report: to be distributed to all participants and others who were not able to attend	Facilitation Team	31 March 2020
2	Resolution from workshop: to be signed by all attendees and presented to the relevant ministers promoting collaboration between relevant departments through collective interventions.	Option of workshop participants signing (Francis Steyn, Sarah Polonsky, Jai Clifford-Holmes, Lesley Richardson, Noel Oettlé)	
3	Working Group/ Champions: to be established to support this work	DEFF to convene? Alternatively SANBI (Natasha Wilson & Nancy Job), WWF SA re SWSA Partnership (Caroline Gelderblom)	By June 2020
4	Convening around topics: Focussed discussions on specific identified themes, that are prioritised and clustered to allow for the overlaps	DEFF (Sarah Polonsky) with SANBI	September 2020
5	Email check-in re impact of the workshop in one year: A co-ordinated and facilitated communication where everyone would re-connect in one year to check in with each other to see how things were being done, what progress had been made and what impact and difference the workshop and sharing lessons had made.	All participants	1 March 2021
6	South African Society for Agricultural Extension (SASAE), Council for National Agricultural Bodies, and South African Council for Natural Scientific Professions, as well as representatives from industry and industry bodies to be invited to future interactions: as they have extensive experience in working with, and facilitating, extension programmes. There may be a role to look for cost-cutting lessons, drawing out examples and ways forward from case studies	Convenors (DEFF), assisted by all participants	Future events



7	Actions taken to be raised with the Western Cape SASAE: the society has become popular with extension officers, and they have shared a lot of information and experiences and are becoming more scientific in their approach. It will be useful to explore if there is an opportunity to collaborate.	Samantha Adey (as a SASAE member)	Immediate
8	Present the resolution from the workshop to the SASAE Conference	Francis Steyn (or most senior signatory)	July 2020
9	Stakeholders in the Overberg to look at integration	Western Cape Department of Agriculture	Immediate
10	Knowledge exchanges via SANBI (GEF 7)	SANBI	2021
11	Tsitsa Project to potentially host learning exchange: The project is funded by DEFF and is piloting an approach that supports sustainable livelihoods for local people to avoid and combat erosion, and promote the restoration of grazing lands	Jai Clifford-Holmes & Kyra Lunderstedt	31 March 2021
12	Create and/or share existing databases of different projects to support DEFF and its M&E and reporting on climate issues	DEFF	
13	Proposal/ Concept Note to be developed that can be shared with UNDP/UNEP for potential funding	Facilitators	

The record of the Dialogue workshop proceedings ends at this point.
The material which follows is a result of extended engagement of the facilitators with this material which resulted in the identification of emergent themes and key actions.

11. FACILITATORS' REFLECTIONS

In the process of facilitating the Dialogue workshop and in the preparation and authoring of this report on the proceedings, the facilitation team identified a number of emergent themes which arose repeatedly across the small group discussions, case studies and plenary sessions. References to these workshop activities are indicated in italics.

11.1 Emerging Themes

Successful engagements are characterised by relationships, trust, responsiveness and value:

- **A mutually respectful relationship** lies at the heart of all successful extension interactions, and ideally can mature into profound friendship. Individual empathy and leadership skills need to be considered in recruitment processes in addition to sound technical skills. *(Radio interviews)*
- **The extension worker should first seek to understand** who they are working with and what the dynamics of the community and the landscape are in order to understand what the local needs are. Develop appropriate solutions together, on the basis of the locals' understanding of their situation: don't tell people what to do. *(World Café 5 & 8, Radio Interview 1 & 2)*
- **Extended engagement builds the trust needed for positive change.** This is best done by experienced extension personnel embedded in the community, which implies that there must be sustainable career paths for them. This extends beyond the usual project life cycle, so creative ways of layering finance to provide stability for extension staff within an area are essential. *(Radio interview 1 and 5)*
- **Inclusivity, equity and equality should characterise extension services.** An extension service that reflects the demographic diversity in our country, and that is responsive to the extension needs of women, youth, and differently abled individuals in agriculture and conservation will help to advance a more just, inclusive and equitable sector. *(Open space 5 and 12)*

Land-users and their communities value the convening power of extension which helps them access additional resources for agreed priorities:

- **Convening people and organisations with different mandates to develop a coordinated response** promotes sustainable landscape management. *(Radio interview 1)*
- **Facilitating access to additional funding.** Extension officers are often able to bring in supplementary funding through external funding streams. *(Radio interview 3)*
- **The potential to bring governance closer.** Collective bodies, particularly those with an official mandate, are often able to raise concerns on behalf of stakeholders. *(Radio interview 1)*
- **The ability to share sound technical knowledge.** Systemic shocks and surprises (e.g. climate change, COVID-19 pandemic) increasingly call for developing adaptive capacity and agency as past approaches are no longer optimal. *(Radio interview 4)*

The systems diagram in Figure 2 below summarises the elements of successful interactions between extension officers and resource users/beneficiaries. Figure 3 summarises the importance of strong relationships in extension services, in terms of the drivers of strong relationships and the effects thereof.

A

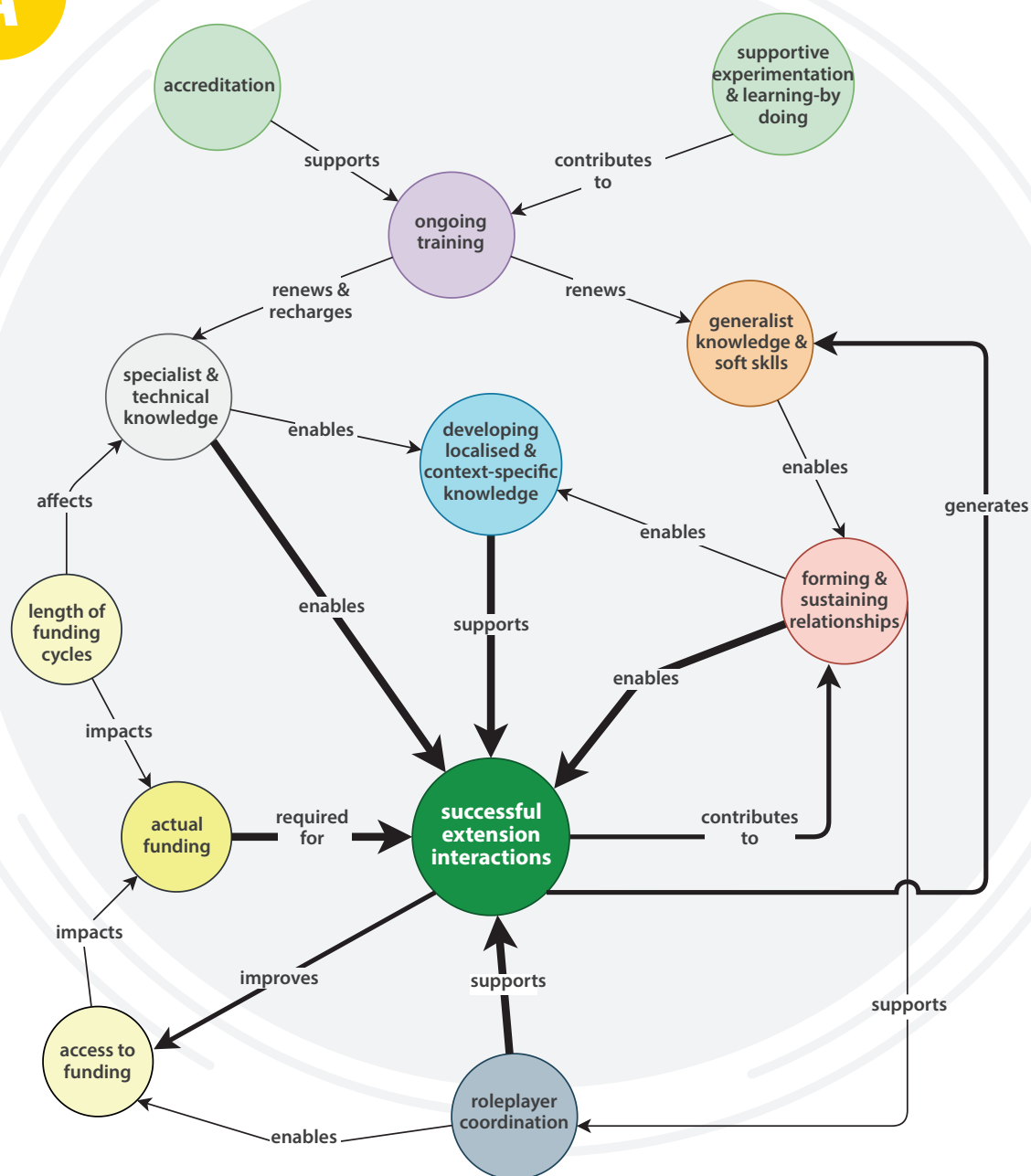


Figure 2: The elements of successful extension (services) interactions between extension officers and beneficiaries/ resource users. The main elements enabling successful extension interactions are connected by the thick black arrows, with feedbacks from successful extension interactions back to other elements shown in arrows of medium thickness. The remaining thin arrows illustrate further interactions between elements.

11. FACILITATORS' REFLECTIONS

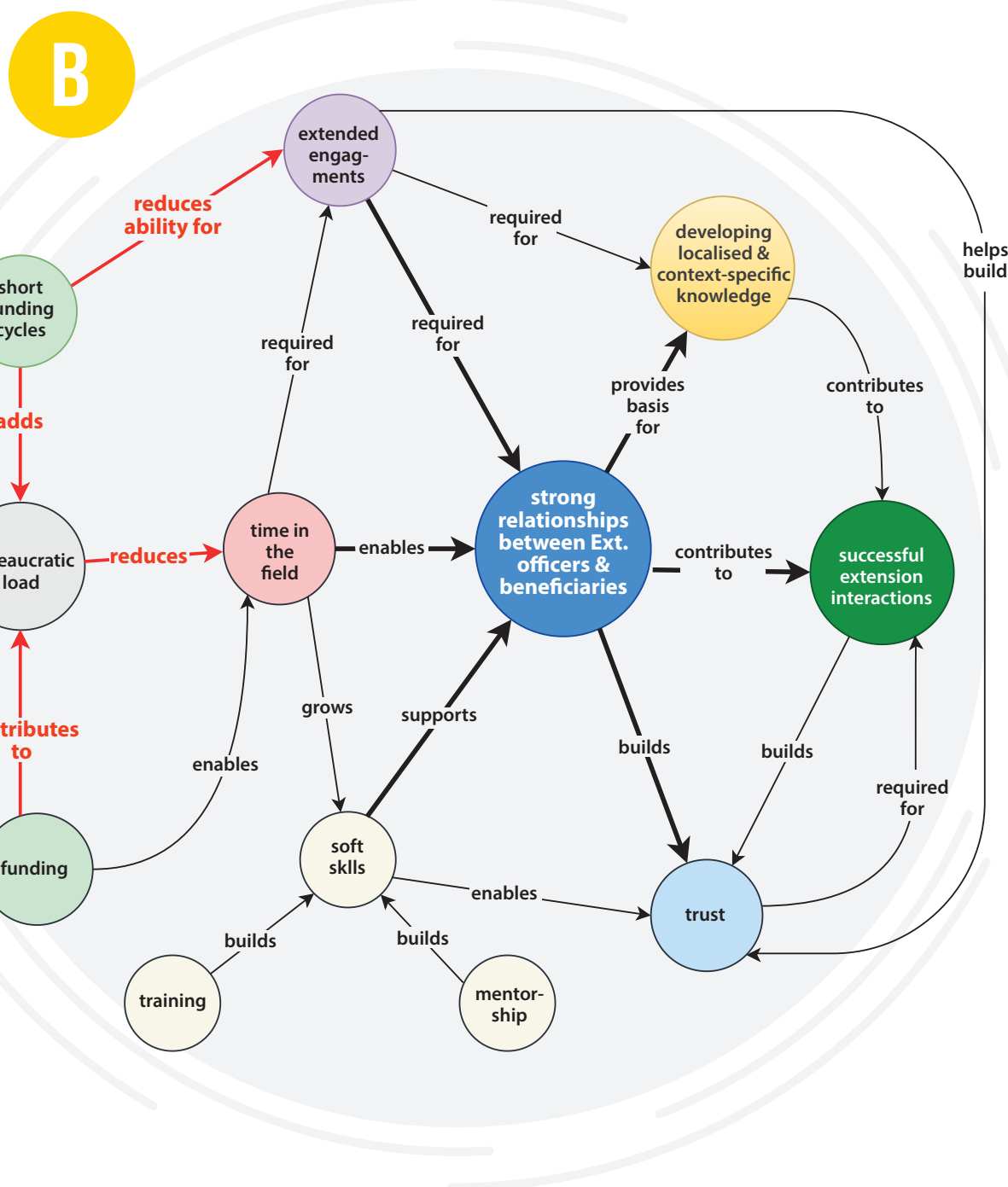



Figure 3: The importance of strong relationships between extension (Ext.) officers and beneficiaries/resource users. Arrow thickness is only to enhance readability. Red arrows show undesirable connections that indirectly reduce or inhibit the development of strong relationships.



There are real on-the-ground barriers and challenges that need to be overcome including institutional, social, resource and capacity constraints (see Figure 4):

- **Weak Governance Structures**

- **A deeply unequal environment**, both socially and physical, has given rise to antipathy between different groups of land users, and towards government and extension. Achieving a just transition to a more equitable and sustainable future for all will require trade-offs and this will meet resistance from some (*Where have we come from?*).
- **Lack of government accountability**. The effects of state capture and government and private sector corruption and mismanagement are pervasive and can affect the credibility of government services among landowners (*Where have we come from?*).
- **Externalities not addressed**. The costs of using or degrading resources such as water and air are not fully paid for by a variety of users, and government is frequently unable to mediate between the public and individual benefit. However, the benefits of extension are a public good, and should be publicly funded.
- **Lack of government integration**. Competing mandates cause confusion of responsibilities between different levels of government – in some areas there are overlapping mandates and in others there are gaps (*World Café 9*). Poor collaboration between and within departments, increases tensions between focus on production vs protection and between enforcement and extension (*World Café 2*). This is exacerbated by high levels of uncertainty as a result of constant

restructuring and high staff turn-over. This negates gains made in trust and collaboration over time (*World Café 3 and 5*).

- **Short project and funding cycles**. Project funding cycles (e.g. up to 3 years) years do not match the time needed for extended engagement and trust-building required for successful extension (*Open space 8, World Café 2*).

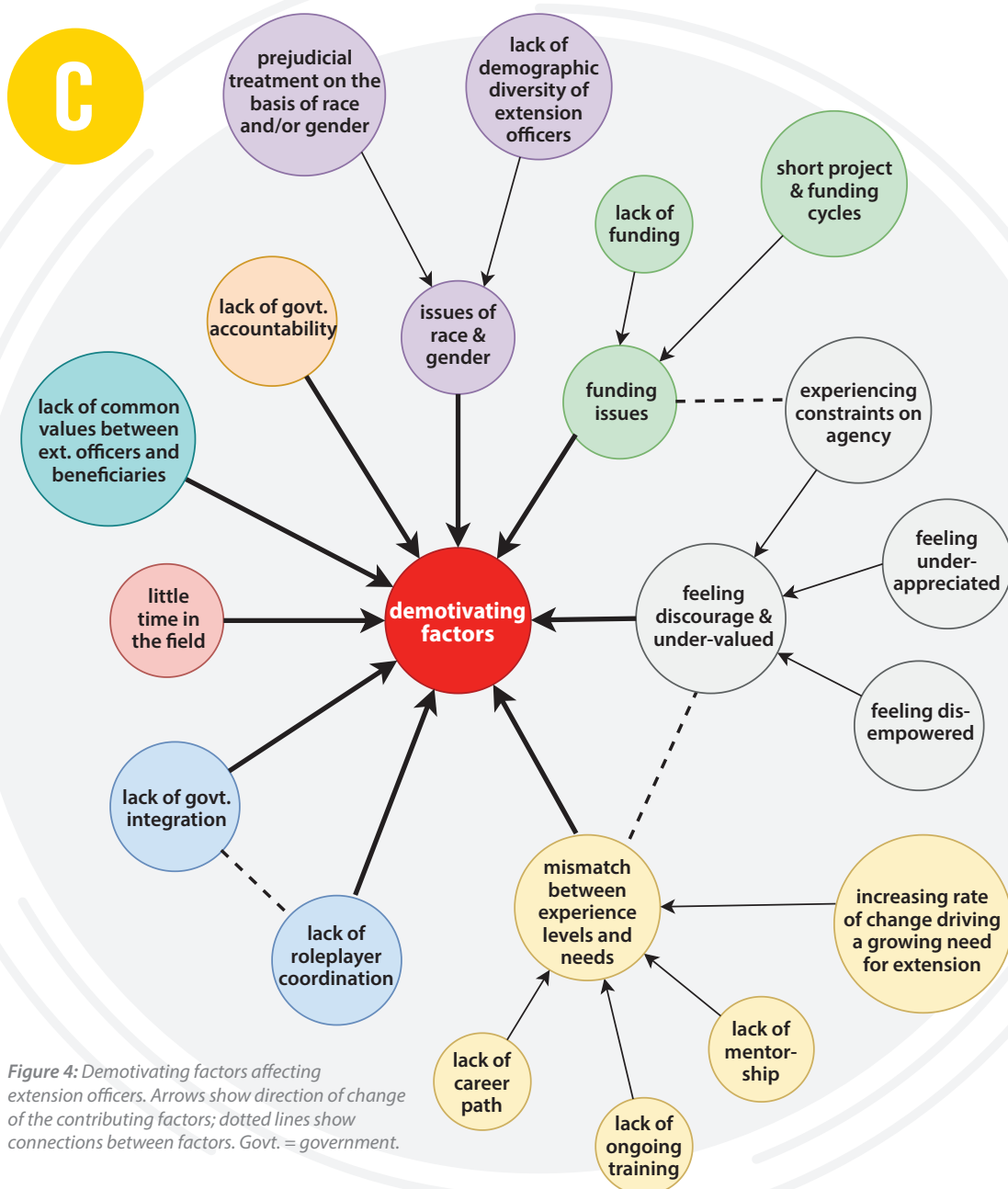
- **Capacity**

- **Inexperienced staff** cannot address need for experienced or specialist input (*World Café 3*).
- **Lack of appropriate professional accreditation**. Technical skills gaps need to be addressed and incentives to upskill need to be put in place. Existing training courses do not adequately integrate agricultural and natural resource management skills. On the job training. How do you avoid professional dilution while still empowering local people and youth (*World Café 1, 3 and 6*)?
- **Intergenerational gap**. Extension services should also be directed at rural youth looking for livelihood opportunities in agriculture. This requires appropriate staffing and mentorship between older and younger extension service providers and between generations within communities (*World Café 6 & 7, Open space 5*).
- **Lateral capacity**. Local land-user knowledge, indigenous knowledge, and knowledge gained by experiential learning may all be harnessed for improved extension services, but require lateral connections between land-user knowledge networks (*World Café 5, Open Space 1*).

11. FACILITATORS' REFLECTIONS

• Communication

- **Expectations that extension should deliver only material benefits** results in other valuable technical inputs being dismissed (*Radio interview 4*).
- **People coming in from outside can derail local agreements** because they don't understand or buy into the rationale and process (*Radio interview 4*).



There is a need to innovate to develop adaptive solutions:

The participants expressed strong concern that we need to move beyond dialog to action and agreed on the importance of strengthening communication between sectors. It was suggested that measurable goals and a collective platform to facilitate collaboration would be helpful. Key lessons learnt during the workshop included:

- **Find opportunity in change and challenge/adapt to things you cannot control.**
 - **Respond in an integrated way to prevent maladaptation.** Climate change and the current Covid- 19 crisis are both examples of global challenges but there are also many local drivers where responses must explicitly address inherent tensions in achieving all SDG goals (*Open space 1*).
 - Don't be afraid to experiment and learn by trial and error. Accept that short term failure is part of learning – NGOs can be good at allowing space for this (*Radio interview 5*).
- **Build appropriate capacity**
 - **Understand your system in order to develop local solutions.** There is no one size fits all solution. Collaborate with research institutions and communities to understand specific local conditions and co-design best response within the context of broader knowledge frameworks (*World Café 5 & 8, Radio interview 2*).
 - **Build appropriate skills.** Training was previously focused on technical skills but recognition of the need to develop the ability to convene, communicate and negotiate is

growing (*World Café 8*). How should these skills be developed - coaching, mentoring, experiential learning and knowledge exchanges (*World Café 5*)? Combine specialist and generalist extension officers as well as pairing of experienced and less experienced staff (*World Café 1, Open Space 8*). **Work with** agricultural colleges to support integrated training.

- **Use technology** e.g. apps such as Cape Farm Mapper and the satellite-based irrigation management tool to support planning and resource management.
- **Mobilize an integrated response**
 - **Develop an agreed plan to align budgets and other resources.** It can be valuable to use a systems approach to look for leverage points and make interconnectivity, trade-offs and assumptions explicit. Identify long term goals (*Radio interview 1*).
 - **Build on and use existing platforms and planning frameworks** to include different role-players – the value of having a one stop shop was recognised. Suggested approaches include: mainstreaming critical extension services into local municipalities through inclusion in IDPs; convening government, civil society and the private sector through Water Source Partnerships; agreeing on an action plan for achieving local priorities through Area Wide Planning; mobilising professional bodies such as the SA Society for Agricultural Extension (*Open space 3 & 4*).
 - **Developing more responsive measures of success which strengthen implementation.** Participatory, Monitoring, Evaluation, Reporting, and Learning (PMERL) may

11. FACILITATORS' REFLECTIONS

be useful. What kind of improvement are we wanting to achieve and why? Greater emphasis on qualitative measures may be helpful. It is essential to measure value if we are to motivate the business case (*World Café 6 & 8, Open space 2*).

- **Recognise and encourage bridge builders/champions** – those who span the boundaries between sectors and between sectors and land-user communities (*World Café 5 & 9, Radio Interview 3 & 4*). They often work in innovative ways and may not fit into conventional institutional structures.
- **Integrate actions if this is practical** – whilst integration may have value, it is not necessary or desirable in all instances.
- **Consciously engage all role-players**
 - **Ensure that the community is actively involved in co-designing solutions.** Do not expect flow of information to be one way – all participants need to develop ownership of solutions (*World Café 5 & 8, Radio interview 2*).
 - **Support engagement of government through** a national strategy which integrates top down and bottom up approaches. There is a need to mobilise at a district level and need to explicitly address the consequences of patronage and capture. Need to also develop mechanisms to feed information upwards - there used to be an advisory committee which would provide line to minister (*Action point 7*).
 - **Leverage innovative approaches initiated by NGOs** and roll them out on a larger scale – they can often form “glue” between private sector and government (*Word Café 2 & 8*).
 - **Harness the private sector contribution.** Forestry is a potential development vehicle in forestry exit areas, use risk mitigation as a motivator, use accreditation as a mechanism to pay for extension in some value chains (*World Café 4*).

These key lessons are summarised in the systems diagram in Figure 5 below, which shows the connections between factors contributing to ‘enhanced extension services’.

D



Figure 5: Factors enabling enhanced extension services.

11. FACILITATORS' REFLECTIONS

11.2 Next Steps and Actions

Maintain and grow the emerging community/communities of practice

- a. Circulate the workshop notes. *(Action 1)*
- b. Convene around topics of common interest. *(Action 4)*
- c. Share outcomes with professional bodies and find opportunities to collaborate.
 - i. Engage with SA Council for Natural Scientific Professionals, Council for National Agricultural Bodies SASAE & industry representatives. *(Action 6)*
 - ii. Share resolution at the South African Society for Agricultural Extension conference and approach WC branch. *(Actions 7 & 8)*
- d. Check -in on the impact of workshop in one year. *(Action 5)*
- e. Create platforms to connect extension and stakeholders: strengthen existing accountability structures, coordinate investment, use technology. *(Open space 6)*

Mobilise coordinated action *(Open space 9)*

- a. Develop resolution from the Workshop to foster collaboration. *(Action 2)*
- b. Engage with national strategy development both top down and bottom up (case studies and pilots) to secure long-term funding. *(Open space 7)*
- c. Reconvene the working group to support coordinated action. *(Action 3)*
- d. Develop UNDP/UNEP concept note for potential funding. *(Action 13)*
- e. Integrate and expand extension in priority areas building local communities of practice with specific goals and champions through long term engagement. *(Open space 11)*
 - i. Assign and support champions to drive short, medium and long-term goals – use feedback to drive less talk more action at district level. *(Open space 9)*
 - ii. Strengthen resource management, protection, rehabilitation – realign DEFF and DWS: in Strategic Water Source Areas, Forestry Exit Areas, Critical Biodiversity Areas. *(Open space 10)*
 - iii. Use Strategic Water Source Areas as a basis for integrative planning using Area Wide Planning. *(Open space 4)*
 - iv. Strengthen integration and mentorship in the Overberg. *(Action 9)*
 - v. Create project database - support DEFF climate change reporting. *(Action 12)*
- f. Mainstream climate change and extension which supports adaptation into IDPs. *(Open space 1 & 3)*

Build capacity through integrative training and monitoring

- a. Facilitate learning exchanges:
 - i. Organise a learning exchange for next year in Tsitsa. (*Action 11*)
 - ii. Support additional learning exchanges through GEF7. (*SANBI – Action 10*)
- b. Identify processes and enablers through participatory monitoring, evaluation, reflection and learning and integrative training. (*Open space 2*)
- c. Foster transformative capacity – focus on cross-sectoral themes, capture lessons from case studies. Develop common philosophy, institutionalise and fund (*Open space 12*).
- d. Recognise climate change as a game changer for all sectors – identify what training is needed for the 21st century extension (*Open space 1*).
- e. Facilitate intergenerational capacity transfer and support emancipation. (*Open space 5*)
- f. Enhance training and performance management–provide ongoing training and accreditation opportunities. (*Open space 8*).





Aliber, M. 2018. Assessing the performance of land reform: . Land Knowledge Base Review Paper. Cape Town: Phuhlisani NPC.

Barendse J, Roux D, Currie B, Wilson N, Fabricius C. A broader view of stewardship to achieve conservation and sustainability goals in South Africa, 2016. S Afr J Sci. 2016;112(5/6), Art. #2015-0359, 15 pages. <http://dx.doi.org/10.17159/sajs.2016/20150359>

Blignaut, J. and Aronson, J., 2008. Getting serious about maintaining biodiversity. Conservation letters, 1(1), pp.12-17.

Cockburn J, Cundill G, Shackleton S, Rouget M., 2018. The meaning and practice of stewardship in South Africa. S Afr J Sci. 2019;115(5/6), Art. #5339, 10 pages. <https://doi.org/10.17159/sajs.2019/5339>

Goodman, M., 1997. Systems Thinking: What, why, when, where and how. Systems Thinker 8(2): 6-7. Bitzer, V., Wongtschowski, M., Hani, M., Blum, M. and Flink, I., 2016. Towards inclusive Pluralistic Service Systems.

Ostrom, E., 2009. A polycentric approach for coping with climate change. World Bank Policy Research Working Paper No. WPS 5095. New York, World Bank.

Sunde, J. 2016. Social relations and dynamics shaping the implementation of the Voluntary Guidelines on Small-scale Fisheries (SSF Guidelines) in South Africa. International Collective in Support of Fishworkers, Chennai, India.

Sweeney, L.B., Sterman, J.D., 2000. Bathtub dynamics: initial results of a systems thinking inventory. System Dynamics Review 16, 249–286. <https://doi.org/10.1002/sdr.198>

Towards national interdisciplinary extension support Rapid status quo review

EXECUTIVE SUMMARY

February 2020

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Rhodes Restoration Research Group

Working paper

24 February 2020



Promoting interdisciplinary extension support

Agriculture, forestry, fisheries, natural resource management, biodiversity stewardship, land restoration and protected area management

The need for improved extension capacity to support better resource management in the country was identified by a multi-sectoral group at the recent Natural Resource Management Knowledge Symposium held in September 2019. This discussion paper in preparation for a multi-stakeholder workshop is seen as a first step towards identifying possible interventions needed to strengthen and integrate extension services in the country in support of sustainable resource management and climate change adaptation.

Ways of seeing South Africa

In order to begin to think about how to improve the integration and alignment of extension and advisory services related to agriculture and natural resource management we need to reflect on the fast-changing context and different ways of seeing our country.

A semi-arid and deeply unequal society

The Special Report on the Impacts of Global Warming by 1.5°C (IPCC, 2018) projects debilitating impacts on climate and ecosystems and their effects on agricultural output, human health, poverty and vulnerability. South Africa is a water scarce, predominantly semi-arid country where arable land and water are both in short supply. Of the total farmland just 10.3% (12.55 million ha) is suitable for crop production, having declined from 13% in recent estimates, primarily due to poor agricultural practices and accelerating climate change. Of this just 22% is categorised as high potential land. Land reform has performed poorly and access to land remains fundamentally skewed. Irrigation land is in short supply and many catchments already cannot meet water demand. Agricultural and other land and natural resource-based livelihoods must be derived from a diminishing base.

A mega-diverse country

The National Biodiversity Assessment (NBA) characterises South Africa as “a mega-diverse country with exceptional species richness and endemism” (DEA, 2018: 2). We are in the top 10 nations globally in terms of richness of plant species. We have the second highest level of plant endemism and the third highest level of marine species endemism. We are home to three out of a total of 35 biodiversity hotspots worldwide – the Succulent Karoo, the Cape Floristic Region and the Maputaland-Pondoland-Albany corridor. However, these natural resources are under mounting threat: The NBA assessed 1021 ecosystem types of which almost half are categorised as threatened.

Overlaying the pictures

When the two pictures above are overlaid the combination of unsustainable farming practices, poorly regulated mining, rapid urbanisation and a declining capacity for catchment management are placing essential and interconnected natural and water resources under mounting pressure.

As the accelerating impacts of climate change are felt across a largely semi-arid country with diminishing agricultural potential, scarce water resources and a growing population, a central focus of policy must be on the long-term sustainability of farming systems and all forms of land and natural resource use in both rural and urban settings. At the same time, the deep social and economic inequalities at the heart of large-scale agriculture, forestry and fisheries systems must be addressed, together with their contributions to climate change, loss of biodiversity and resource depletion.

Solutions require fresh thinking about approaches which can simultaneously promote improved natural resource management, ecosystem health and drive a transition to a more sustainable agriculture.

Thinking about extension

Extension remains an elusive and contested concept. It is often narrowly tied to the provision of technical advice and support services for agricultural producers. Although extension is not readily associated with natural resource management, it has featured to some degree in soil conservation, land care, participatory forest management programmes and biodiversity stewardship. Efforts to deepen and promote dedicated goal-orientated extension in the conservation sector have not been effectively successful, and the extension function is understaffed and vulnerable to restructuring and budget cuts. Agricultural extension, natural resource management and conservation remain largely delinked.

Specialists from different disciplines see the landscape through different lenses. To date attempts to jointly define and address shared challenges remain fragmented and ineffective. State and civil society services and support for natural resource users and farmers continue to be managed from silos that remain largely disconnected from each other.

The design of agricultural extension services has been closely tied to the spread of the modernisation paradigm based on improved seeds, chemical inputs and mechanisation. Overall, we have yet to see agricultural extension which prioritises sustainable agriculture. There is urgent need to transition to 21st-century climate smart systems of extension, rooted in a more integrated and holistic approach to natural and water resource management. Extension that is landscape based and crosscuts disciplinary fields requires a transdisciplinary skill set. Extension that combines agriculture with natural resource management will require foresight to identify potential impacts of climate change in different settings.

The environment sector requires dedicated extension to pursue multiple objectives. These include promoting improved protection and management of priority ecosystems and ecological infrastructure; growing and auditing new livelihoods from the biodiversity economy³; and extending the reach and effectiveness of ecological rehabilitation. Sometimes the required support is technical (such as how to access benefits from programmes or fiscal incentives for doing the right thing), but often it is more motivational and regulatory (such as audit performance of required undertakings or rehabilitation outcomes). There is an interesting dynamic between extension focussed mainly on protection, with that on rehabilitation, and that on resource management and livelihood maintenance. The emphasis on each of these three extension facets will depend on the particular socio-ecological system and the broader public good being promoted (e.g. the protection of strategic water resource areas).

Interdisciplinary extension must consider several crosscutting themes while taking into account social impacts of land dispossession and the need for thorough land reform. It will need to recognise that land is valued for much more than its productive capabilities or ecosystem services. Access to land remains a foundation for African identity that links the living and the dead through shared spaces of belonging and meaning. People's relationships to the land and environment are woven tightly through the contested and gendered politics of land access and conservation in the region.

³ In this framing, the biodiversity economy comprises wildlife, ecotourism, benefits from bioprospecting, and the nascent ecosystem services economy.

At the same time, the land question also remains irreducibly ecological in character. In a largely semi-arid country with limited agricultural potential, scarce water resources and a growing population, a central focus of policy must be the long-term equity of access and sustainability of all forms of land and natural resource use in both rural and urban settings. This requires that we see the big picture and develop a shared value and skill set to develop practical linkages between activities in different settings and spaces. In this regard, systems thinking could provide a useful tool to shape strategy development for the improved integration of extension domains.

Understanding where we have come from

Fundamental to any type of strategy development is understanding the impact of land dispossession on the South African social and economic fabric. Forced removals of millions of people including those resettled within the former homelands because of betterment planning and the structuring of the migrant labour system have had profound impacts on intergenerational poverty and vulnerability. These remain largely unaddressed to the present day. Enforced planning, environmental exclusion, stock culling and land use controls have created a deep antipathy towards regulation of land use and natural resources.

Over the years, we have seen a complex evolution of policy, laws, institutions and programmes. The table below represents a highly simplified rendering of a much more complex policy journey across the different domains.

Agriculture, forestry and fisheries	Land and land reform	Natural resources
1970: The subdivision of Agricultural Land Act	The Land Acts restricting Africans to 13% of the land	Exclusionary, command and control resource management paradigm
1983: The Conservation of Agricultural Resources Act	Forced removals and the establishment of homelands	1998: National Environmental Management Act
Agricultural deregulation	The decline of land-based livelihoods	1999: World Heritage Convention Act
Post 1994: Integration of homelands and development of nine provincial departments	The restitution, redistribution and tenure reform programmes into Section 25 of the Constitution	2004: NEMA Biodiversity Act
1995: White paper on Agriculture	1997 White Paper on South African Land policy	2005: NEMA Air Quality Act
1998: National Water Act, National Forests Act,		
Participatory forest management		
Marine Living Resources Act	Transfer of 8.4 million ha between 1994 and March 2018	2003: NEMA Protected Areas Act
2000 - 2005: Development of criteria, indicators and standards for sustainable forest management	Failure to provide effective post transfer support contributes to asset stripping and much land being underutilised	2018: National Climate Change Bill
2001: Strategic plan for South African Agriculture	A shift from transferring land in ownership to state leasehold of land acquired through land reform	
2005: Norms and standards for Agricultural Extension		
2008: Extension recovery plan		

2012: The integrated growth and development plan for agriculture, forestry and fisheries		
2012: Strategic plan for smallholder support		
2013 – 2016 Development of Extension Policy for Agriculture, Forestry and Fisheries		
2017: Motlanthe High Level Panel		
2018: Draft policy on comprehensive producer support		
2019: Presidential Advisory Panel on Agriculture and Land		

Concealed in this table is the enormous amount of innovative work that has been done within the agriculture, forestry, fisheries and biodiversity management sectors to promote sustainable livelihoods, agricultural production and natural resource management systems.

Unfortunately, much of this work remains scattered, fragmented and only accessible from within departmental and disciplinary silos. Much research and strategy development commissioned by government over the past 25 years has been lost or is publicly unavailable. So many processes initiated by government and by NGOs are insufficiently indexed to what has been tried before and remain disconnected from analysis of prior lessons of success and failure. In many instances, systemic weaknesses with respect to the process of monitoring, evaluation and learning may mean that such lessons have not been captured to inform future planning and programme design. Effective curation and sharing of knowledge assets must be central to any future strategy development.

Where are we now?

Extension and support services

The Extension Recovery Plan boosted the number of extension practitioners in the state sector, from 2210 in 2006/7 to 3031 in 2015/16 - an overall increase of 37%. However, this allocation is unevenly distributed with key provinces like Eastern Cape, Limpopo and Mpumalanga falling far short of the recommended staffing levels.

In a critical review of the extension service and land reform performance Aliber (2018) noted that the nine provincial departments spend R4 billion a year on extension, which reaches just 11% of combined smallholder and subsistence households. Extension services are widely regarded as poorly structured and ineffective. One billion is spent on the failed Fetsa Tlala programme characterised as “trying to superimpose the norms of large-scale commercial farming in the former homeland context, rather than attempting to help small-scale farmers build on what they are already doing” (Aliber 2018).

DAFF’s own assessment in 2018 was that:

National extension and advisory services in the country is (sic) plagued with a number of structural and counterproductive challenges that limit the efficiency and effectiveness of efforts and investments in the development of smallholder producers in particular. The poor linkage still remains one of the major challenges within agriculture, forestry and fisheries sectors in South Africa where research, extension and producers are at best disintegrated.

Data on extension capacity in forestry, fisheries and diverse natural resource management and biodiversity stewardship settings have proved difficult to aggregate and quantify. However, anecdotal evidence suggests that they are also characterised by fragmentation. Although agricultural extension is nationally supported through various conditional grant frameworks for provincial implementation, this is entirely absent from the environment sector. This leaves environment-focused extension staff vulnerable to shifting departmental priorities and declining provincial resources.

The biodiversity stewardship programme presents a more coherent approach to conservation extension with five different types of stewardship agreements available and upwards of 450 000 ha managed in terms of these arrangements. Landowners can receive both rates exclusions and tax breaks to incentivise uptake of these agreements indexed to different levels of protection and management responsibility for these areas. There is no parallel extension to underpin the objectives of the Natural Resource Management programmes, the biodiversity economy or the pursuit of ecosystem based adaptation.

Fisheries

There is clearly a need for extension and advisory services in the inland water fisheries (community and recreational sub-sectors), and given the highly patchy nature of inland water bodies, training of extension operatives would need to equip them with a wide range of context specific skills. It would be prudent to incorporate such needs into the planning and development of a small-scale freshwater fisheries policy. This process could adapt the participatory model used to produce the SSF Guidelines for South Africa's marine sub-sector (Sunde, 2016).

DEFF currently has more than 30 extension officers working mainly with small-scale fisheries communities along the South African coastline and they engage with net, line fisheries and communities operating fish traps. However, most of these extension officers are based in the Western Cape as it was originally established for supporting the commercial fisheries and there is not sufficient support for the majority of small-scale fishers situated along the east coast of South Africa. ORI also has some outreach programmes (community and recreational) and WWF has a long term project working with fishing communities in the Kogelberg Biosphere. Abalobi has also recently expanded its work with coastal fishing communities in the Western Cape and Northern Cape to improve their income derived from their catches.

There is no cohesive national programme for extension in estuaries.

Natural Resource Management

Stewardship in SA includes conservancies, biodiversity stewardship programmes, biosphere reserves, landscape and seascape initiatives, market-linked schemes, ecosystem services, and education and awareness initiatives (Barendse et al. 2016). Cockburn (2018) adds bioregional initiatives (like CAPE, STEP, and SKEP), catchment management institutions, and LandCare.

Although the Biodiversity Stewardship tool is a dominant force in the stewardship arena, there is a growing number of integrated social-ecological projects (e.g. Reslim-O, and the Tsitsa Project). The transdisciplinarity team structures of these landscape level interventions has allowed the fostering of a culture of collaboration, acting as hubs in the landscape or bridges to build trust across sectors Cockburn (2018).

The Biodiversity Stewardship Programme is driven largely at the provincial level through conservation agencies (CapeNature, Eastern Cape Parks and Tourism Agency etc). In some cases, the exceptional work that has been done in recent years has been largely undone when budget cuts precipitate the loss of the vast majority of the extension capacity in a province. In other provinces, the currency for success has been the number of hectares signed up for stewardship per annum. This drive has not been met with the required capacity, human resources and finances to honour these agreements in terms of technical support. This creates disappointment and negativity in the sector.

An unintended by-product of the increase in stewardship capacity in the NGO and civil society sectors is the partial or complete abandonment of management accountability (Barendse et al. 2016). The lack of capacity in the states' provision of extension services has resulted in the private sector largely filling this role, especially in the intensive agricultural and pastoral sectors.

Overall, however we confront a "mess" of institutional challenges with multiple actors, high levels of uncertainty and many interlocking and interdependent factors.

Where do we need to be?

Given the severity of the threats posed by climate change, structural poverty and inequality coupled with unsustainable farming systems, struggling land reform and natural resource management interventions we follow Ostrom's argument that "simply waiting for resolution of these issues" at a national level, "without trying out policies at multiple scales" because they lack a national scale, "is not a reasonable stance".

Ostrom's "polycentric approach" to finding solutions to climate change can help shape where we need to be. She provides an alternative to those who argue that institutional reengineering is the primary means to engage with the 'institutional mess'. Ostrom points out that research on institutions related to environmental issues "has repeatedly shown that creative, effective and efficient policies ... have been implemented at all scales [and that] reliance on a single "solution" may be more of a problem than a solution" (Ostrom, 2009: 27)

This suggests that rather than developing elaborate models for a perfectly integrated extension system we need to identify a range of 'learn as you go' local area, public private partnerships which bring together relevant actors for mutual benefit derived from investing in "innovation systems and improved connections between research, training and knowledge access".

Research models need to combine scientific and local knowledge involving systemic collaboration between producers and resource users, researchers, extension and natural resource management specialists in designated areas, matching an agreed set of criteria to ensure inclusivity.

Perhaps most importantly, to avoid the failures of the past, and provide for coherence and professionalism, we need a mechanism to ensure national fiscal support of extension for environmental priorities. This would entail a conditional grant or similar model to underwrite or match provincial investment in extension services for protecting strategic water resources, threatened ecosystems, and meeting targets committed to under international agreements. These extension staff could also align with LandCare and other programme staff to develop local plans for ecological rehabilitation and to promote biodiversity based livelihoods and adaptation.

Territorial place-based approaches to extension design and delivery

Given current budget and mounting resource constraints, such interventions will need to be conceptualised on a modest scale with maximum impacts leveraged through effective targeting and relationship building. This could articulate with the Khawuleza District Development Model which is being piloted in two districts and which seeks to overcome "lack of coherence in planning and implementation".

While there are concerns about the blueprint planning overtones associated with this model of "one plan for each district space to guide and direct strategic investment and projects", global planning trends are laying renewed emphasis on territorial planning. It is anticipated the areas selected will be those where work is already being undertaken; where a knowledge base has been developed and where there is potential to break down institutional and disciplinary silos.

Areas will need to combine land reform initiatives and smallholder farmer support together with water and natural resource management and stewardship issues.

What needs to change to get there?

The application of systems thinking, both the philosophy and the tools, has the potential to unlock a powerful framework for understanding and conceptualising interdisciplinary problems involving many stakeholders who are all embedded in a dynamic social-ecological system (Goodman 1997; Sweeney and Stermen 2000).

This can help assess how extension differs between and within disciplines, and the patterns of change in the practice and management of extension work through time. It can help identify the changes that can be made to improve and refine interactions under the umbrella of a broader extension programme.

At the same time there needs to be investment in the broad creation of a green skill set combining core knowledge areas, relational skills and transformational competencies.

In some cases, there is an expressed need from the learners (extension courses) to become transdisciplinary (straddling pure and social sciences) but especially at undergraduate level curriculum timetable clashes reinforce silos and channelled thinking (Karen Esler, pers comm). Some advocacy work is needed to convince the DHET to allow for transdisciplinarity within formal courses and possible finance internships that rotate between the agricultural and conservation sectors.

Good examples of extension working well are typically found where there is solid collaboration and communication between state, private sector and research institutes. A good example comes from the sugar industry in the form of SASRI – South African Sugarcane Research Institute.

There is a growing appreciation that encouraging transdisciplinary research in stewardship by definition has enabled deep and meaningful engagement with practitioner partners and therefore researchers have a key role to play in transdisciplinary research (Cockburn 2018). In the fields of stewardship and extension, it is perhaps key to appreciate the importance of these relational knowledge and competencies in the future training programmes.

Overcoming the culture of mandate protection

Achieving high-level integration is already difficult, but is sometimes glibly conceptualised as if the lower levels of organisation will automatically make this happen. This frequently fails at mid- or lower management levels due to the deeply embedded historic culture of mandate protection. This is further exacerbated by state and non-state performance management systems that frequently do not recognise and reward collaboration or excellence. When individuals are assessed, and their career pathways are determined by how effectively they fulfil narrowly defined key performance indicators, this can create active disincentives for collaborative work, with the result that silos are reinforced. Systemic change can be significantly advanced through reorientation of human resource management systems to actively value and recognise new collaborative work skills.

Conclusion

Given the context detailed in this report it is questionable whether the focus of the current initiative on *integrating* extension is appropriate. Perhaps more important is the urgent need to drive a new national conversation about aligning agricultural and natural resource management extension priorities to develop adaptive capacity in the face of climate change. As the report of the Presidential Advisory Panel has identified “this requires urgent reskilling of our agricultural extension services in climate smart agriculture, agro ecology and conservation agriculture”.

There is no doubt that there are strong arguments for the promotion of a more integrated and joined up approach to the provision of extension and advisory services across different settings and domains. However, the mechanisms for achieving this require much more thought and work. Grand schemes which chart institutional relationships and map functions and responsibilities of the actors, often lose sight of the complex relations and dynamics at the heart of the state.

New institutional models also frequently ignore processes of human resource management performance review systems within government and other organisations. Where people are expected to collaborate processes that encourage collaboration and the practical strengthening of interdepartmental relations must be built into job descriptions, key performance indicators and processes of performance review. This requires state-wide attention if change is to be enabled to take place.

However, all this rests on assumptions about the existence of a capable state, and in this respect, this rapid scan has paid insufficient attention to a diagnosis of the now deeply embedded processes of patronage and capture. These have hollowed out much of the state creating purposeful dysfunction to propagate the grey spaces, which enable fraud and wasteful and misdirected public expenditure.

While there are many challenges to be overcome, even a cursory analysis of the rapidly changing context and the unmistakable impacts of climate change suggests that there has never been a better time to make a call for the alignment of effort in the service of a common vision.

PROGRAMME

PROGRAMME DAY 1	
TIME	ITEM
09:30 – 10:00	Registration
10:00 – 10:15	Opening & welcome: <ul style="list-style-type: none"> Christo Marais (Department of Environmental Affairs and Forestry) Representative of the Delegation of the European Union to South Africa
10:15 – 10:30	Keynote address: Professor Paul Hebinck
10:30 – 10:45	Objectives and programme for the workshop
10:45 – 11:15	Introductions
11:15 – 11:45	Expectations and team contract
11:45 – 12:15	Key elements of transformative extension services for all sectors <ul style="list-style-type: none"> Caroline Gelderblom (WWF SA) Richard de Satgé (Phuhlisani NPO) Mark Botha (Conservation Strategy Tactics & Insight)
12:15 – 12:45	Plenary discussion
12:45 – 13:45	LUNCH
13:45 – 14:30	Lightning talks: <ol style="list-style-type: none"> Knowledge exchange and peer learning as a platform for collaboration: Chris Martens (Fynbos Trust) The importance of partnerships in the wildlife economy – the experience of Babanango: Greg Martindale (Conservation Outcomes) Valuing Extension services in South Africa: Kerry Purnell (WFA): Engaging corporates in the forestry sector: Hlengiwe Ndlovu (WWF SA) Integrating agriculture and conservation objectives in a living working landscape: Cobus Theron (EWT) Enabling effective extension services in the context of unmanaged livestock and youth unemployment in SA's communal lands: Rosanne Stanway (CSA) Hungry youth and fallow land: Rhoda Malgas (Stellenbosch University) Taking the ground-up view to structure dialogue: Lesley Richardson (Flower Valley Conservation Trust) Applying a Systemic Approach to Extension Services: Jai Clifford-Holmes (IWR-Rhodes University)
14:30 – 16:00	World Cafe
16:00 – 16:30	TEA BREAK
16:30 – 17:00	Report back and reflections
17:00 – 17:30	Still hungry for?
17:30 – 18:15	Networking session
18:15 – 19:00	Light supper
PROGRAMME DAY 2	
TIME	ITEM
08:30 – 09:00	Registration
09:00 – 09:30	Opening and recap of Day 1
09:30 – 11:00	“Radio show” interviews of case studies: <ol style="list-style-type: none"> Water stewardship through extension in the Upper Breede River: Ryno Pienaar & Steven Versfeld Small Scale Sugarcane Growers in Gcumisa, KwaZulu-Natal: Goodenough Mdunge & Celaphiwe Gcumisa Farming towards a restorative economy in the Baviaanskloof Hartland: Justin Gird & Pieter Kruger LandCare Area-Wide Planning in the Rooiberg Conservancy: Rudolph Röscher & Johann Fourie uMzimvubu Catchment Partnerships: Landscapes for Livelihoods: Bridget Munyantore, Zuko Fekisi & Vuyolwethu Nomzaza Area-Wide Planning in the Koupe, Karoo: Phyllis Pienaar & Christie Mocke
11:00 – 11:30	TEA/ COFFEE
11:30 – 12:30	Open space: opportunities for collaboration and the way forward
12:30 – 13:00	Report back
13:00 – 14:00	LUNCH BREAK
14:00 – 15:00	Panel discussion on sectoral perspectives
15:00 – 15:30	Actions and next steps
15:30 – 15:45	Reflections on the workshop
15:45 – 16:00	Closure by Christo Marais (DEFF)

LIST OF DIALOGUE PARTICIPANTS

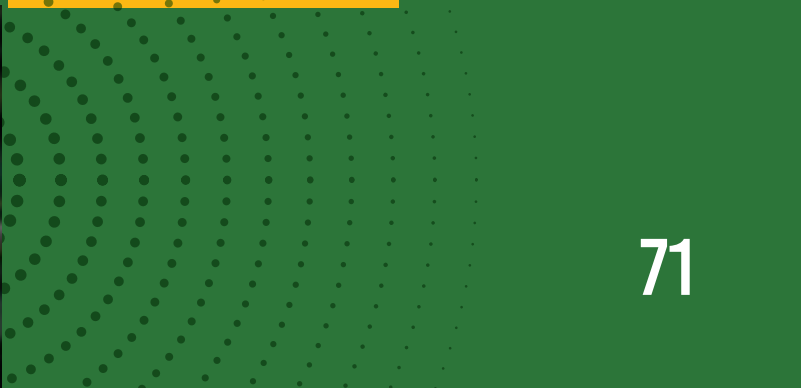
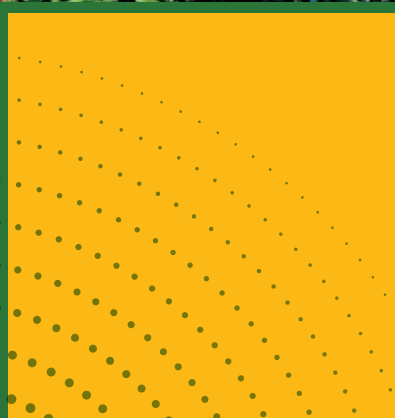
ATTENDANCE: CROSS-SECTORAL TRANSFORMATIVE EXTENSION SERVICES WORKSHOP				
DATE: 2 – 3 MARCH 2020: CAPE TOWN				
No	Title	Name	SURNAME	Organisation
1	Dr	Samantha	Adey	Department Agriculture Western Cape
2	Mr	Umesh	Bahadur	DEFF
3	Mr	Garth	Barnes	DEFF
4	Ms	Renira	Boodhraj	DEFF
5	Mr	Gareth	Boothway	WWF SA
6	Mr	Mark	Botha	Conservation Strategy Tactics & Insight
7	Mr	Michael	Braack	DEFF
8	Mr	Ryan	Brudvig	DEFF
9	Mr	Ayanda	Cele	WWF SA
10	Ms	Koena	Cholo	DEFF
11	Ms	Jeanette	Clarke	FORESTS AND PEOPLE
12	Dr	Jai	Clifford-Holmes	IWR Rhodes University
13	Mr	Jan	Coetzee	WWF SA
14	Dr	Richard	de Satgé	Phuhlisani NPC
15	Mrs	Cathy	Dippnall	Eish Expressions
16	Mr	Pienaar	du Plessis	Living Lands
17	Mr	Albertus	Dyason	Department Agriculture Western Cape
18	Ms	Vianca	Erasmus	Department Agriculture Western Cape
19	Prof	Karen	Esler	Stellenbosch University
20	Dr	Nicola	Favretto	University of Leeds
21	Mr	Rodney	February	WWF SA
22	Mr	Zuko	Fekisi	Environmental and Rural Solutions
23	Mrs	Natalie	Feltman	DEFF
24	Mr	Johann	Fourie	Rooiberg Breederivier Conservancy
25	Mrs	Shelly	Fuller	WWF SA
26	Mr	David	Gardner	Clear 2 Grow
27	Mr	Celaphiwe Innocent	Gcumisa	Farmer
28	Ms	Caroline	Gelderblom	WWF SA
29	Mr	William	Gillespie	South African Sugarcane Research Institute
30	Mr	Justin	Gird	Living Lands
31	Mr	Manie	Grobler	Department Agriculture Western Cape
32	Prof	Paul	Hebinck	Wageningen University
33	Ms	Nancy	Job	SANBI
34	Mr	Frankquit	Jooste	UWC
35	Mr	Barney	Kgope	DEFF
36	Mr	Tondani	Kone	DEFF
37	Mr	Pieter	Kruger	Mainsail Trading
38	Mr	Clyde	Lamberts	Department Agriculture Western Cape
39	Mr	Graham	Lewis	CapeNature
40	Mrs	Christel	Liebenberg	Bottelary Hills Renosterveld Conservancy
41	Ms	Nomphelo	Limetyeni	DEFF

ATTENDANCE: CROSS-SECTORAL TRANSFORMATIVE EXTENSION SERVICES WORKSHOP**DATE: 2 – 3 MARCH 2020: CAPE TOWN**

No	Title	Name	SURNAME	Organisation
42	Mr	Lehman	Lindeque	UNDP
43	Mr	Vusi	Lubisi	DEFF
44	Mr	Tozamile	Lukhalo	DALRRD
45	Mr	Kyra	Lunderstedt	UNDP
46	Ms	Rhoda	Malgas	Stellenbosch University
47	Mr	Ntsieni	Manngo	DEFF
48	Ms	Mahatse	Mapheto	WWF
49	Dr	Christo	Marais	DEFF
50	Mr	Chris	Martens	Fynbos Trust
51	Mr	Greg	Martindale	Conservation Outcomes
52	Ms	Tshegohatso	Matlhoahela	Department Agriculture Western Cape
53	Mr	Mahasha	Matome	Department of Water & Sanitation
54	Ms	Hlengiwe	Mbatha	DEFF
55	Mr	Kevin	McCann	Conservation Outcomes
56	Mr	Goodenough Msawenkosi	Mdunge	KZN Department Agriculture and Rural Development
57	Mr	Christie	Mocke	KOUP IV AWP and SMA
58	Ms	Ndileka	Mohapi	Department of Water & Sanitation
59	Mr	Garth	Mortimer	CapeNature
60	Mr	David	Motsepe	DEFF
61	Ms	Alinah	Mthembu	DEFF
62	Ms	Bridget Mugisha	Munyantore	Environmental and Rural Solutions
63	Dr	Constansia	Musvoto	CSIR
64	Dr	Jean-Marc	Mwenge Kahinda	CSIR
65	Mr	Siya	Myela	Environmental Monitoring Group
66	Ms	Petro	Naude	Sernick Group
67	Ms	Hlengiwe	Ndlovu	WWF SA
68	Mr	Stephen	Nel	Industrial Development Corporation
69	Dr	Jeanne	Nel	Wageningen University
70	Mrs	Jules	Newton	Avovision
71	Mrs	Cecilia	Njenga	UNEP
72	Mr	Vuyolwethu Vincent	Nomzaza	Mzongwana Livestock Association
73	Mr	Onkemetse	Nteta	WWF SA
74	Mr	Ayanda	Oboe	Department Agriculture Western Cape
75	Mr	Noel	Oettlé	Facilitator
76	Ms	Shela	Patrickson	WWF SA
77	Mrs	Phyllis	Pienaar	Department Agriculture Western Cape
78	Mr	Ryno	Pienaar	Wolseley Water Users Association
79	Ms	Dikeledi	Pitso	Department Agriculture Western Cape
80	Ms	Sarah	Polonsky	DEFF
81	Ms	Kerry	Purnell	Wilderness Foundation Africa

LIST OF DIALOGUE PARTICIPANTS

ATTENDANCE: CROSS-SECTORAL TRANSFORMATIVE EXTENSION SERVICES WORKSHOP				
DATE: 2 – 3 MARCH 2020: CAPE TOWN				
No	Title	Name	SURNAME	Organisation
82	Mr	Mmbengeni	Ramatsea	LEDET
83	Ms	Lesley	Richardson	Flower Valley Conservation Trust
84	Mr	Rudolph	Röscher	Department Agriculture Western Cape
85	Ms	Awelani	Sadiki	DEFF
86	Ms	Bonnie	Schumann	Endangered Wildlife Trust
87	Ms	Mahlogonolo	Sekhukhune	DEFF
88	Dr	Ayanda	Sigwela	Sigwela and Associates
89	Mr	Mkhulu	Silandela	WWF SA
90	Mr	Zane	Silinda	GIZ
91	Ms	Rosanne	Stanway	Conservation South Africa
92	Mr	Francis	Steyn	Department Agriculture Western Cape
93	Mr	Philip	Swart	Department Agriculture Western Cape
94	Mr	Cobus	Theron	Endangered Wildlife Trust
95	Mr	Xola	Tsobo	DEFF
96	Ms	Marie-Tinka	Uys	Kruger 2 Canyons Biosphere Region NPC
97	Mr	Jakobus	Vaas	DEFF
98	Dr	Jurie	van Niekerk	Dialogue Facility, PMU
99	Mr	Jacques	van Rensburg	WWF SA
100	Mr	Charl Louis	Van Rooyen	Department Agriculture Western Cape
101	Mr	Steven	Versfeld	Achtertuint Farm
102	Ms	Kirsten	Watson	Flower Valley Conservation Trust
103	Mr	Andrew	Whitley	Wildlands
104	Ms	Natasha	Wilson	SANBI



PRESENTATIONS: PROFESSOR PAUL HEBINCK

Rural Development dynamics 'from below' and policy: frictions at the interface

Transformative Cross-Sectoral Extension Services Dialogue

Old Mutual Conference Centre, Kirstenbosch National Botanical Garden

2 & 3 March 2020

Paul Hebinck



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Rural Development

Some theory and experiecnes with extention in Africa



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Rural Development (1)

- Exposure to rural development processes
- 35+ years of fieldwork in villages and fields in
 - West Kenya: Luoland
 - Zimbabwe: Fast Track areas; Nyamaropa
 - Central Eastern Cape: Tyumi river basin
 - Northern Namibia: Kunene, Zambesi
 - Little work in The Netherlands



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Rural Development (2)

- Rural development captures material and non-material elements
 - Bio based resources
 - Infrastructure: roads, markets
 - People and their ways of making a living
 - Use of resources, employment, culture, history,
 - Institutional frames (land tenure, policy, restrictions)



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PRESENTATIONS: PROFESSOR PAUL HEBINCK

Rural Development (3)

- The manifestations of rural development is shaped by
 - how these elements interact and mutual transform each other
- The mode of interacting and transformation is – in turn – shaped by
 - The nature of government interventions
 - tenure, technologies, markets,..
 - The state of science, R&D
 - Technology, experiments, use device
 - What people do with their resources, their experiences, responses to interventions
 - Global – local interactions



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Rural Development (4)

- Multiple outcomes accross sites/regions/countries
 - Food security/sovereignty
 - Employment generation and opportunities
 - Environmental changes: soil degradation/regeneration, gene stock reduction/enlargement,
 - Reliance of endogenous and/or exogenous resources, or a mixture
 - Forms of cooperation/collabration
 - Migrations
 - Poverty and wealth
 -



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Rural development West Kenya

- Tendency to rely on local maize varieties/land races
 - Agronomically, culturally and nutritionally preferred
 - Localised exchange of seed, labour, food,...
- This despite 50 years of efforts of local and global seed companies, the state, agro-dealers, extension service, projects+programmes to promote modern hybrids
- Extension messages do not come across



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Rural Development Eastern Cape

- De-agrarianisation trend: land deactivated
 - fallow land, migration
- Re-agrarianisation: land reactivated
 - Perhaps small in scale
 - Left unnoticed but significant for debate and policy
- Land reactivation occurs relatively autonomous from government policies
- Fetsa Tlala, Siyakhula, Massive Food do not resonate in villages
 - Policies unknown in the villages



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PRESENTATIONS: PROFESSOR PAUL HEBINCK

The Netherlands

- The famous 'OVO' triangle:
 - research, extension, education / 'Wageningen model'
 - Spurred the modernisation of agriculture/use of natural resources
 - Created huge problems: environmental. socio-economic
 - Agrarian crisis
- Peasant – modern agriculture: co-exist
 - Create different answers to the crisis; nested in various markets, socio-technical networks, farmer associations,
- Extension service privatised
 - Replaced by study clubs, internet, social media,
 - Strengthening local, fitting solutions



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Problematising Extension

- 1. Extension does not connect with what is happening
 - top-down
- 2. Extension has evolved into a disciplining institution
 - Normative in orientation
- 3. Extension service is crippled due to lack of resources
 - Limited spatial reach
- 4. Extension service is bureaucratic
 - Promotion driven; fringe benefits



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How to proceed, the way forward

- **Learn** from what happens at the interface between policy and practices from below
 - Learnign: implies: appreciating, discovering what happens locally, exploring alternative options,
 - Extension in Holland took on board farmer experiences
 - Becoming superflous but reinvented through
- **Create new alliances** between and amongst resource users, consumers, markets,

questions

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PRESENTATIONS: CAROLINE GELDERBLOM



Why we need collaboration

☐ **Environmental and social changes make sustainable land management more challenging**

- climate & land reform
- state capture, limited resources, policy paralysis, institutional instability

☐ **Landscape is integrated** – limited capacity in remote areas

☐ **SDGs – inherent tensions** require trade-offs

☐ **Maladaptation** esp disaster response



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Community of Practice

- ☐ ***Learn from other sectors and regions, lightning talks and case studies***
- ☐ ***Develop local platforms***
 - ***Water Source Area Partnerships***
(agriculture, conservation, land reform, NRM, within community, government and private sectors)



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Solving wicked problems

- ☐ ***Need to develop common understanding - different perspectives***
- ☐ ***Underlying drivers***
- ☐ ***We each contribute a piece of the puzzle***



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4

PRESENTATIONS: CAROLINE GELDERBLOM



Working Group

- ☐ ***Evolved from EU funded NRM restoration workshop - Sept 2019***
 - *NRM, WWF, SANBI, Agriculture, DEA, CapeNature, DAFF*
- ☐ ***Organised this workshop***
- ☐ ***Commissioned rapid review to support informed debate***



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5



Status Quo Review

- ☐ ***Rick de Satgé***
 - *Focus on Agriculture & Land Reform*
- ☐ ***Mike Powell and Katherine Smart***
 - *Rehabilitation & training*
- ☐ ***Mark Botha***
 - *Review – conservation & environmental management*



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6



Objectives

- ☐ *Develop a community of practice*
- ☐ *Understand where we are*
- ☐ *Agree where we need to go*
- ☐ *Identify bridge builders /drivers*



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PRESENTATIONS: DR RICK DE SATGÉ

THINKING ABOUT EXTENSION

Where we have come from, where we are and where we need to go
Dr Rick de Satgé: Phuhlisani NPC

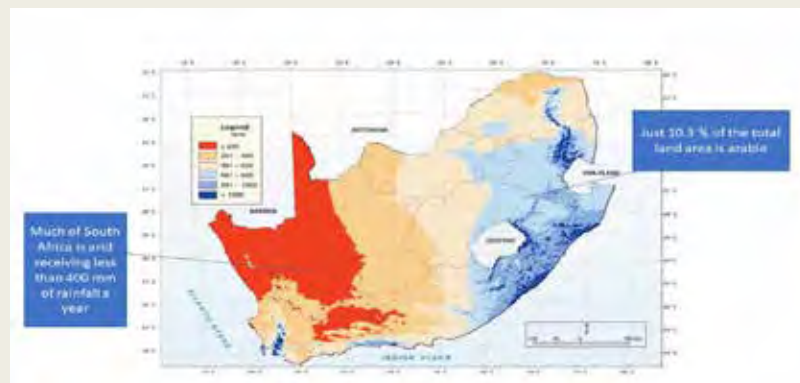
Transformative Cross-Sectoral Extension Services Dialogue
2- 3 March 2020

Overview

- Ways of seeing South Africa
- Perspectives on 'extension'
- How this has changed over time
- Reflections on the current context
- Where we need to be
- What needs to change to get there?

Ways of seeing South Africa

1 Deeply unequal semi- arid



Ways of seeing South Africa # 2 Mega diverse



- Global Top 10: Plant species richness
- Global Top 3 for highest plant and marine species endemism

Overlaying the two pictures

- We see how accelerating impacts of climate change in a largely semi-arid country with diminishing agricultural potential, scarce water resources and a growing population places land and mega-diverse natural resources under mounting pressure.
- If we are to contain and reverse this we will need to:
 - Address the deep social and economic inequalities at the heart of land access, ownership and production systems.
 - Critically interrogate unsustainable farming practices, poorly regulated mining, rapid urbanisation, declining capacity for catchment management... (++)
 - Place sustainability of farming systems and all forms of land and natural resource use (rural and urban) at the heart of policy, planning and practice.

Thinking about 'extension' #1

- So how does extension fit in this picture?
 - Extension remains an elusive and contested concept.
 - Extension has often been narrowly tied to the provision of technical advice and support services for agricultural producers.
- Agricultural extension and natural resource management remain largely delinked.
 - Extension is not readily associated with natural resource management,
 - But it has featured to some degree in soil conservation, land care, participatory forest management programmes and biodiversity stewardship.
- A strong culture of **mandate protection** deepens institutional fragmentation and locks actors into specified roles, functions and responsibilities

PRESENTATIONS: DR RICK DE SATGÉ

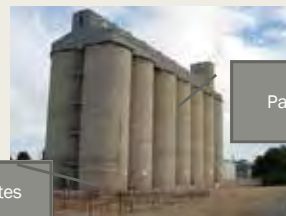


Thinking about extension #1

- Specialists from different disciplines see the landscape through different lenses.
- We seek to manage an indivisible landscape from institutional silos, each operating in terms of different paradigms and mandates



In practice the silos are spatially and institutionally dispersed



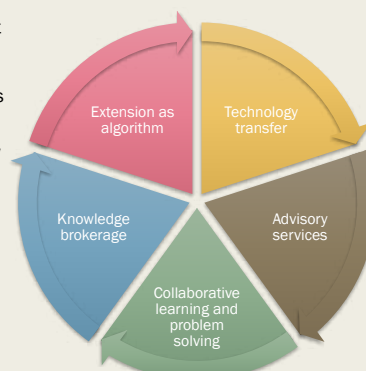
Mandates

Paradigms

Changing extension paradigms

Digital transfer of (expert corporate) knowledge based on machine learning – extension bots
Who owns the data? What rules are written into the algorithm? What data rises to the top? How does this influence user behaviour?

Extension worker as transdisciplinary knowledge broker



Learning laboratories, farmer field schools, shared action research and learning agenda, IKS, communities of practice

Expert led, top down, package of inputs and services closely linked to modernisation/ 'fortress conservation' paradigm

Farmers and other resource users seen as clients who identify issue/problem and request advice

In practice these paradigms co-exist – not a linear progression

Where we have come from?

- The impacts of land dispossession, forced removals, 'betterment planning' have a deep and persistent imprint on the South African social and economic fabric.
 - *Enforced planning, environmental exclusion, stock culling and land use controls have created a deep antipathy towards regulation of land use and natural resources.*
- Natural resource management historically rooted in protection and exclusion
- Agricultural extension services have been closely tied to the spread of the modernisation paradigm based on improved seeds and breeds, chemical inputs and mechanisation.
 - *Deeply resilient mode*

Land and land reform	Agriculture, forestry and fisheries	Natural resources
The Land Acts restricting Africans to 13% of the land	Post 1994: Integration of homelands and development of nine provincial departments	1998 National Veld and Forest Fire Act
Forced removals and the establishment of homelands	1995: White paper on Agriculture	1998: National Environmental Management Act
The decline of land-based livelihoods	1998: National Water Act, National Forests Act, Participatory forest management Marine Living Resources Act	1999: World Heritage Convention Act
The restitution, redistribution and tenure reform programmes (to Section 25 of the Constitution 1997 White Paper on South African Land policy)	2000 - 2005: Development of criteria, indicators and standards for sustainable forest management 2001: Strategic plan for South African Agriculture	2004: NEMA Biodiversity Act 2005: NEMA Air Quality Act
Redistribution programme evolution Mandela: Settlement and land acquisition grant Mbeki: LRAD Zuma: PLAS A shift from transferring land in ownership to state leasehold of land acquired through land reform	2005: Norms and standards for Agricultural Extension	2005: NEMA Protected Areas Act
Transfer of 8.4 million ha between 1994 and March 2018 – combined restitution and redistribution	2008: Extension recovery plan 2012: The integrated growth and development plan for agriculture, forestry and fisheries 2012: Strategic plan for smallholder support	2018: National Climate Change Bill
Failure to provide effective post transfer support contributes to asset stripping and much land being underutilised	2013 – 2016 Development of Extension Policy for Agriculture, Forestry and Fisheries 2017: Motlanthe High Level Panel	
	2018: Draft policy on comprehensive producer support 2019: Presidential Advisory Panel on Agriculture and Land	

Where we are now?

- Overall we confront a “mess” of institutional challenges with multiple actors, high levels of uncertainty and many interlocking and interdependent factors.
- The Extension Recovery Plan boosted the number of agricultural extension practitioners in the state sector, from 2210 in 2006/7 – 3031 in 2015/16 – an overall increase of 37%. However, this allocation is unevenly distributed with key provinces like Eastern Cape, Limpopo and Mpumalanga falling far short of the recommended staffing levels.
 - *In a critical review of the extension service and land reform performance Aliber (2018) has noted that the nine provincial departments spend 4 billion rand a year on extension which reaches just 11% of combined smallholder and subsistence households*
- Data on extension capacity in water, forestry, fisheries and diverse natural resource management and biodiversity stewardship settings have proved difficult to aggregate and quantify.
 - *Anecdotal evidence suggests existing services are inadequate and fragmented.*

PRESENTATIONS: DR RICK DE SATGÉ

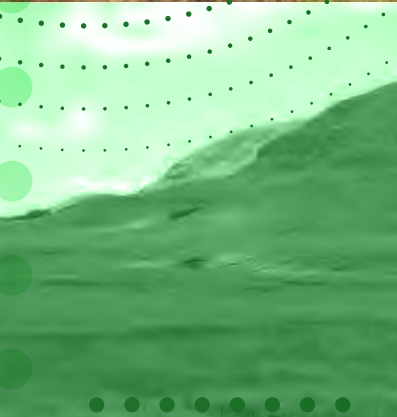
Where we need to be

- Question: Is the focus on *integrating* existing extension appropriate?
- Should we be thinking about how launch a new national conversation about sustainable farming and natural resource management systems to grow adaptive capacity in the face of climate change.
 - *As the report of the Presidential Advisory Panel has identified “this requires urgent reskilling of our agricultural extension services in climate smart agriculture, agro ecology and conservation agriculture”.*
- We require a fundamental shift of vision as well as a more integrated and joined up approach.
 - *The approach and mechanisms for enabling this require much more thought and work grounded in transdisciplinary local innovation labs*

What needs to change to get there?

- Even though contemporary extension approaches are characterised as pluralistic, effective implementation rests on assumptions about the existence of a capable state,
- The rapid scan has paid insufficient attention to a diagnosis of the now deeply embedded processes of patronage and capture.
 - *These have hollowed out much of the state creating purposeful dysfunction to propagate the grey spaces which enable wasteful, fraudulent and misdirected public expenditure.*
- At the same time we will need to actively contest the rapid corporatisation of knowledge and its power to influence future trajectories.

While there are many challenges to be overcome
and powerful forces to contest,
there has never been a better time to make a
call for
the reimagining, refocusing
and alignment of effort
in the service of a common vision.



PRESENTATIONS: MARK BOTHA

Conservation extension

What are we doing here...

mark@ecological.co.za



Environment is different to Agric

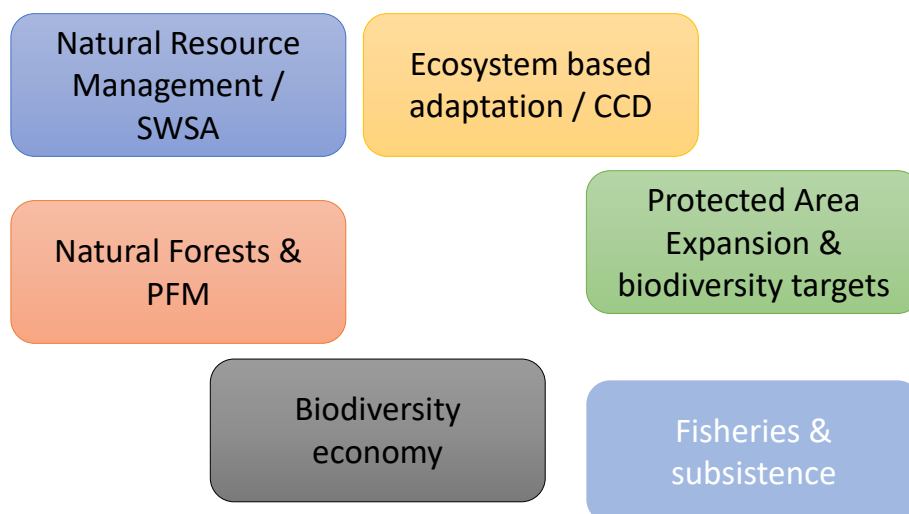
- Production vs Resource Protection
- Outreach not grasped
- Enforcement or Env Edu mindset
- DCO / off-reserve permit management
- Stewardship emerged as goal-directed extension
- Still not grasped – relapse to dreams (Biospheres/conservancies)



Root cause (s)....

- Understanding we need landowners / users help
 - Mandates – extension delinked from key outcomes
 - Laws don't require targets (PA, IAP...), but inspections
 - Hegemony of Permits
 - Enforcement
 - Extension seen as soft skill / entry level post
 - First casualty in restructuring
- ...Cant integrate until fixed

Environment priorities for extension



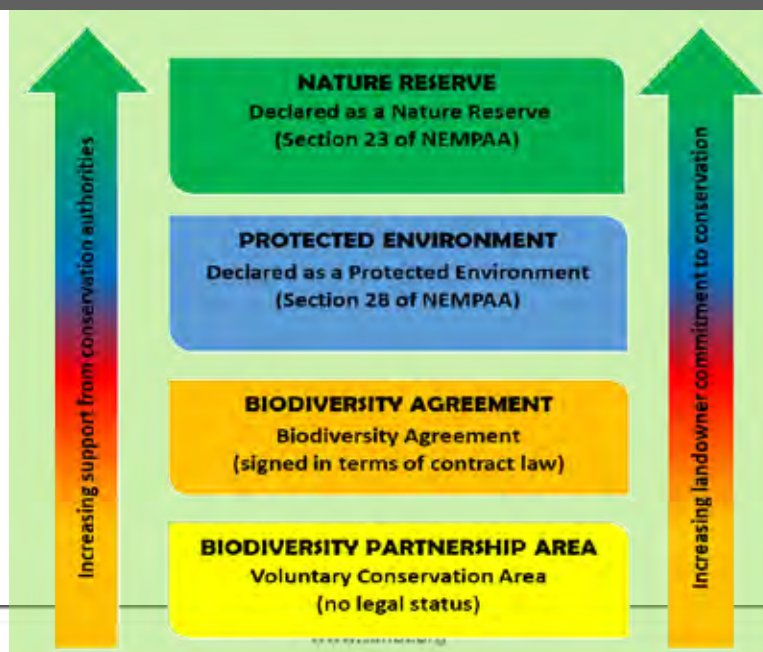
PRESENTATIONS: MARK BOTHA

Goal-directed Biodiversity Extension

- Honest, clear targets
- SMART
- Nothing for mahala
- Management, Rehab or Protection



STEWARDSHIP brought structure, organising ability



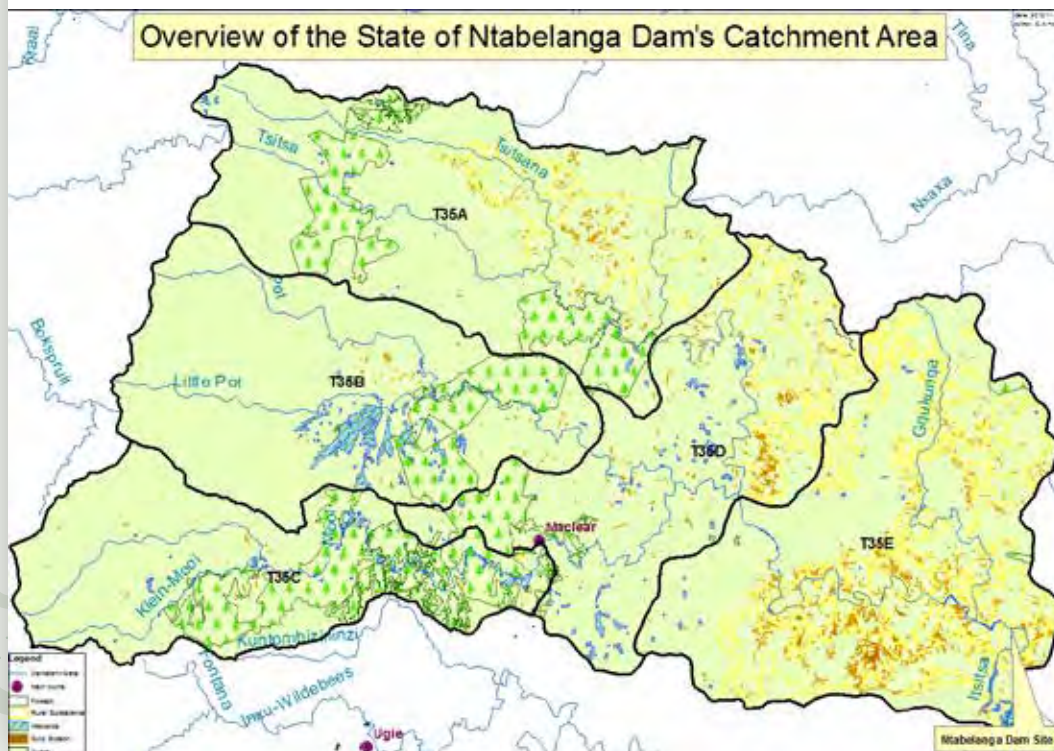
Vision – 3 kinds of extension

1. Resource management

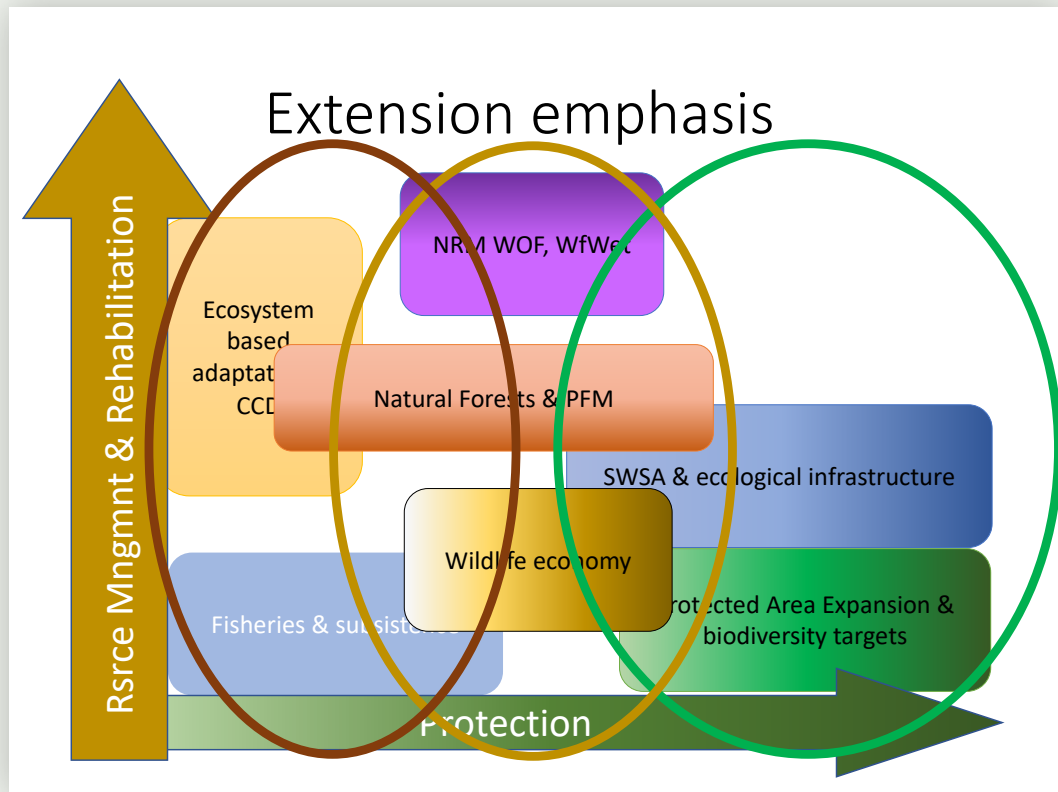
2. Rehabilitation

3. Protection

- National Treasury Funded thru DEA vote (DWS & Disaster & PW)
- Provincial capacity, integration
- Quat/Tertiary Catchment scale planning
- Site- based projects (M&E)
Participatory planning & implementation



PRESENTATIONS: MARK BOTHA



To make it work...

1. Laws → mandates → targets → delivery agrmnts
2. MinMEC outcomes
3. Reflect in CEO/HOD performance agreements
4. Kill culture of APO fudging/minimalism
5. Retool agencies – fit for purpose
6. Extension Job descriptions - outcomes based, linked back to Minister's targets

Extension officer then is...

- Skilled, experienced,
- Balanced: people / technical
- Project management, adaptive, outcomes focus
- Collaborative & participatory
- Late career, remunerated appropriately
- ...integrated by desire, recognition of necessity



LIGHTNING TALKS - BACKGROUND INFORMATION



KNOWLEDGE EXCHANGE AND PEER LEARNING

A PLATFORM FOR COLLABORATIVE AND INTEGRATED EXTENSION.

Knowledge exchange and peer learning is providing a platform for Collaborative and Integrated extension, supporting Landscape Scale Natural Resource Conservation in the Overberg.



Background

The Agulhas Biodiversity Initiative is a landscape initiative launched as a complimentary initiative to C.A.P.E aimed at strengthening systemic, institutional and individual capacities and establishing the know-how needed for conservation in different ecological and socio-economic conditions as needed to attain and sustain positive conservation outcomes. This initiative has evolved over the last 20 years into a conservation hub supporting a number of natural resource management agencies including government departments and conservation NGOs with overlapping and complimentary mandates.

The area, the community and its history

The Overberg is 12,241 square kilometres situated at the southern tip of Africa with a population of 212,800 with 70% being Afrikaans speaking. The region is characterised by rural communities many landowners having been on the farms for numerous generations.

The main land use practices and threats to sustainability

Agriculture and Tourism are significant financial drivers in the region with much of the landscape in the production of cereal crops, some dairy, wine and fruit as well as mixed farming and flower harvesting. Lifestyle farms are on the increase. Much of the Overberg is invaded by invasive alien plants and wildfires (frequency and intensity) are an increasing threat.



Opportunities

The Agulhas Plain constitutes one of the largest extant storehouses of lowland fynbos and Renosterveld habitats in the world. The diversity of habitat types, wetland ecosystems, Red data plant species and local endemics is unmatched in the CFR. The area constitutes one of the best remaining opportunities at site level for conserving the CFR's lowland habitats and related natural resources. A collaborative and integrated extension strategy would significantly expand the conservation resource envelope and enhance the landscape scale conservation outcomes.



Challenges

Agencies traditionally working in this space are becoming increasingly resource inhibited and experience staff turnover in an operational environment mostly based on trust and relationships. This in turn also impacts the suite of technical and interpersonal (so called "soft ") skills of extension teams.



Extension agencies working in the space, their approach and methodology

Agencies working in this space include Provincial dept of Agriculture, CapeNature and to some extent the Overberg District Municipality, Overstrand Municipality, Greater Overberg FPA, some national agencies on a very limited scale and a range of conservation NGOs with overlapping and often complimentary mandates (Grootbos Foundation, Overberg Renosterveld Conservation Trust, Overberg Crane group, Flower Valley Conservation Trust

LIGHTNING TALKS - BACKGROUND INFORMATION

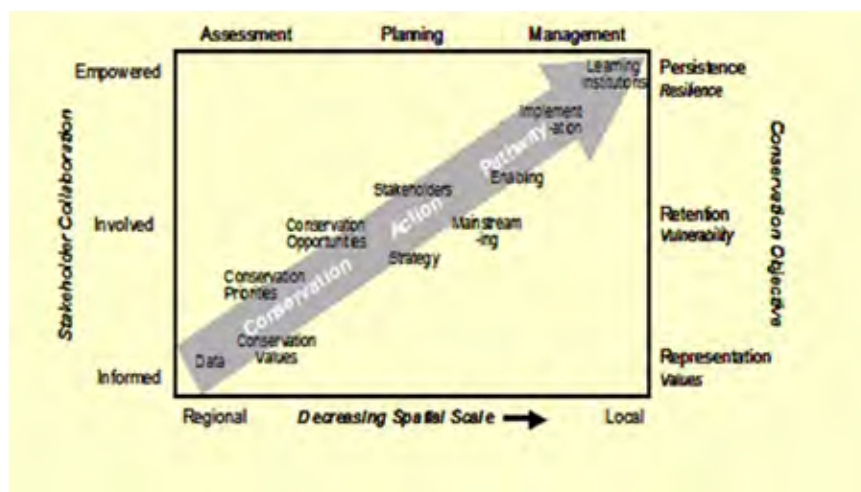
and Fynbos Trust amongst others). These agencies use a traditional extension approach building individual relationships and trust, some with funding support to implement various conservation initiatives, mitigating threats e.g. alien invasive plant control, sustainable harvesting, land care, community based conservation. The ABI platform is used to facilitate collaboration but very little integrated land use planning has occurred to date and has led in some instances to competition for funding and resources.



Peer Learning and Knowledge exchange

Focused peer learning and directed knowledge exchange events supported by some mentoring and coaching and facilitated by a neutral and non-competitive entity has provided some traction for collaboration and integration. The figure below represents a conceptual approach within which peer learning and knowledge exchange creates a neutral and learning environment which catalyses, encourages and supports collaboration. This in turn will to a greater or lesser extent, support the integration of extension effort resulting in empowerment, consistency and supporting the associated components of the conservation action pathway to sustainable implementation.

Extension Continuum



Adapted from Knight, Cowling and Campbell. 2005, Cons Biol



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TRANSFORMATIVE CROSS-SECTORAL EXTENSION SERVICES WORKSHOP

2 - 3 MARCH 2020

KIRSTENBOSCH



Lightning talk: Taking the ground-up view to structure dialogue

During this session we would like to explore the power relationship that is set up in a typical extension situation. Two parties communicating – but to what end?

Talking points:

1. What is communication? There are many definitions, so let's choose one and use it as a working model: *"Communication is the process of passing information and understanding from one person to another." In simple words it is a process of transmitting and sharing ideas, opinions, facts, values etc. from one person to another or one organization to another."*
2. What is extension? Ultimately extension is based on effective communication. With the word "understanding" in our definition, it is clear that there is much more to extension than the mere transfer of information from one party to another.
3. What is the difference between training, coaching and mentorship? These three activities are related but not the same. It's key to understand what one is doing when engaged in extension.
4. Who are the parties involved in this transaction? (From Blignaut and Aronson, 2019): How do we structure a dialogue between disparate parties, that takes into account varying beliefs and understanding of the past, present and future and moves to a shared vision and action plan?

We will take two case studies run by Flower Valley Conservation Trust for the past 15 years to examine these questions: the Sustainable Harvesting Programme and the Land User Incentive Programme funded partially by the DEFF and managed on behalf of the Agulhas Biodiversity Initiative (ABI).

Looking forward to the discussion.

Lesley Richardson and Kirsten Watson
Flower Valley Conservation Trust and ABI

LIGHTNING TALKS - BACKGROUND INFORMATION



CONSERVATION
OUTCOMES

The importance of partnerships: Babanango

BACKGROUND

Many non-state protected areas, particularly those on communal land, are reliant on effective partnerships for their success. The most effective partnerships involve:

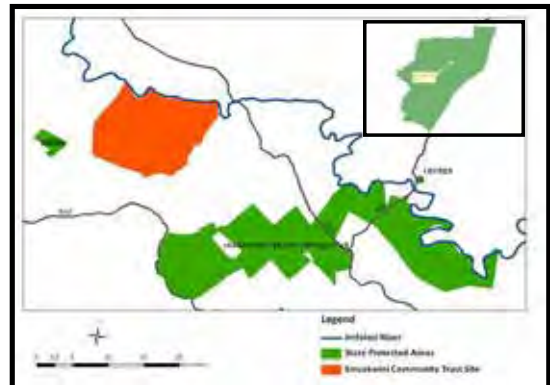
- Communities with sound governance and institutional arrangements, capable of entering into legally binding agreements with partners.
- An NGO that can facilitate and enable relationships between various partners and drive support to the protected area.
- Government partners, with a focus on alignment with existing government programmes.
- Private sector partners, particularly those with a philanthropic intent, who wish to support biodiversity conservation action.

Key government programmes do not effectively promote or enable such partnerships. This requires re-shaping the thinking around several programmes to consider, particularly, the role of NGOs in effective extension support.

BABANANGO GAME RESERVE

Babanango Game Reserve is being developed across an area of approximately 21,000 ha, approximately 13,000 of which ha are owned by the Emcakwini Community Trust (IT718/2007/PMB), which has approximately 200 beneficiaries. The Emcakwini community is formed by a group of people that were removed and displaced by the apartheid government between 1970 and 1989. The first phase of the land claim was settled in 2007, then in 2008 through to 2011.

Engagement with the KZN Biodiversity Stewardship Programme commenced in 2013 when the site was assessed, showing that it qualifies to be declared as a nature reserve. The site contains critically important biodiversity and will make a significant contribution towards provincial and national biodiversity and protected area targets.



Conservation Outcomes was established in May 2015 and began engaging with the site at that time. The focus of the engagement was to assist the community trust in securing funding for the development of the site in an effort to create business opportunities and employment that would provide benefits to the trust's beneficiaries.

SECURING FUNDING FOR THE SITE

Efforts to secure funding for the site were focused on the establishment of a nature reserve on the property that would be capable of supporting Big-5 game and businesses centred on nature-based tourism, hunting and game meat production. Conservation Outcomes began engagements with the Department of Rural Development and Land Reform (DRDLR) and submitted several business

plans, in the correct format, to the department to secure funding for the site. The business plans were focussed on securing and establishing the sites, in terms of infrastructure, institutions and staff, to make the site investor ready. None of these attempts to secure funding were successful. Further efforts were made to secure funding for the site through the following avenues:



- The Natural Resource Management Land-user Incentive (LUI) Scheme: this focused on the clearing of invasive alien species and improved fire management, as well as the re-establishment of a charcoal production business and a small sawmill for the trust.
- The Environmental Programme Infrastructure Projects (EPIP) funding for Wildlife Economy to undertake the initial development of the site, making it investor ready.
- Engagement with potential private sector investors to secure funding to develop the site.

These efforts resulted in the following:

- The approval of R5.5 million for the LUI funding after an initial effort to secure funding in 2015 and then again in 2017. The project has commenced in February 2020 after over five years of attempts to secure the funding.
- The approval of R20 million of R32 million applied for through EPIP. The project has commenced in 2020, two and a half years after the funding submission was made in 2017.
- The establishment of a funding arrangement with a private sector investor from Germany who has also bought additional properties around the trust's land, has already invested approximately R160 million in the site, and has employed approximately 160 of the envisaged 300 people that will be employed in the nature reserve.

LESSONS LEARNT

The attempts to secure funding through government partners and programmes have demonstrated the following:

- Timeframes to secure funding are much too long, which raises the risk of community disillusionment and dissatisfaction.
- Funding mechanisms provided by DRDLR and EPIP Wildlife Economy do not include mechanisms to fund NGO partners, which makes it extremely difficult to secure their vital role in facilitating such projects.

The Emcakwini Community Trust's land falls within the Umfolozi Biodiversity Economy Node, considered a flagship site of the Biodiversity Economy. Despite this, efforts to secure funding for the site have been frustratingly difficult. Without private sector investment into the site, it is likely that it would not have progressed and would have failed. This raises significant questions around the viability of initiatives such as Biodiversity/Wildlife Economy, the LUI Programme and re-capitalisation funding provided by DRDLR for land restitutions sites. It also highlights the essential role of NGO partners in the success of such initiatives, particularly if they are prepared to take a long-term, and quite often unfunded, approach to supporting such sites.

Government programmes related to protected area expansion, biodiversity/wildlife economy and natural resource management need to properly consider the requirements for a successful project and acknowledge the role that NGOs can play in these.

LIGHTNING TALKS - BACKGROUND INFORMATION



Valuing Extension Services in South Africa

Kerry Purnell

We know that extension services are the most valued incentive for landowners in Protected Area Expansion in South Africa.

We also know that it works across sectors in the landscape, and can achieve common goals BUT...

How do we **Value** Extension services in South Africa?

Are they seen as one of the most valuable skill sets that you get from years of experience?

Should extension services be where our most experienced landscape conservation staff reach at the pinnacle of their careers?

Are we training our young Diploma and Degree students in the extension field?

Do we need formal extension training in South Africa?

How do we create career paths for extension staff?

How do we create a funding message that "Extension Services" are a fundable and valuable mechanism for Protected Area expansion and Landscape Conservation in South Africa?

In a multi-stakeholder partnership consisting of government departments, funder NGOs & implementing NGOs, one can overcome obstacles which are difficult to resolve from inside a single institution.

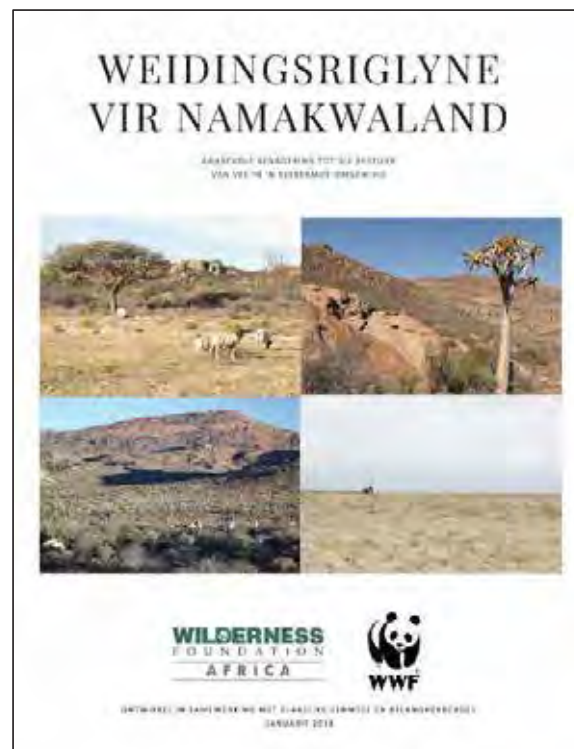


Cross Sectoral Extension

Lessons Learnt in the Northern Cape:

“Ons Boer met die Veld... nie met Skape nie.”

Namaqualand Farmer



Conservation in the Namaqualand region of the Northern Cape can't happen as a stand alone activity, but needs to be part of the Agricultural fabric which sustains the community. Conservation and Sustainable Farming in essence become the same thing. Grazing Guidelines for Namaqualand developed with the farmers have become a tool for sustainable utilisation of the veld in general. In addition to this extension services create a facilitation mechanism for investment into rural landscapes resulting in job creation.



Extension Outcome: Veld Rehabilitation and Job Creation

LIGHTNING TALKS - BACKGROUND INFORMATION

1



Integrating agriculture and conservation objectives in a living working landscape

Extension services provides a vital support system to land users, linking them with the latest agricultural practices, technologies and solutions. This is particularly true for farmers in remote regions, as well as for farmers who do not have access to technology, be it internet or computer literacy.

In addition, there are more and more farmers entering the sector, who do not have formal agricultural training. As such agriculture extension needs to play a pivotal role in ensuring that these land users are fast tracked in terms of sustainable farming practices.

As part of a GEF5 project focussing on Sustainable Land Management (SLM) we carried out needs assessments and a gap analysis survey to identify barriers to implementing SLM at various stakeholder levels.



The capacity, both in numbers of agricultural advisors on the ground, and capacity (training, but also experience) of both agricultural advisors and emerging farmers was identified as a barrier. The EWT as a conservation organisation, works with land users outside protected areas. Habitat loss and degradation threaten agricultural production as much as biodiversity conservation, placing livelihoods in rural areas in jeopardy. Addressing these threats through focussing on sustainable land management (SLM) provides an excellent platform for integrating the conservation and agricultural sectors, thereby strengthening socio-economic and ecological resilience.

As part of the GEF5 Sustainable Land Management project, the EWT Drylands Conservation Programme has collaborated with various stakeholders, including the Department Agriculture: Land Reform and Rural Development and Nature Conservation (DALRRD) in the Northern Cape during the past two years. Training and capacity development were identified as integral for both the agricultural advisors as well as land users during the initial needs assessments. In response to this the EWT, in collaboration with several stakeholders, developed a week-long training course focussing on the principals farming and SLM, followed by intensive targeted training sessions which cover topics such as financial management, Google Earth training (for mapping) etc.



L-R: DALRRD agricultural extension officers participating in the first Integrated Farm Planning and Management (IFP) training course in Loxton. Agricultural officers take the lead during the second IFP in Prieska. Emerging farmers share their knowledge during training the IFP courses.

This course is available to emerging farmers and agricultural advisors. A train-the-trainers approach has yielded positive results with departmental agricultural advisors taking the lead on the second IFP course.

Following training, small grants are made available to participating farmers, assisting them to implement projects directly linked to improving SLM. Our approach is to optimise the limited resources (in both the private and government sector) by aligning objectives where possible. By combining resources, we can actively promote sustainable land management to ensure both agricultural and conservation goals are achieved.

Facilitating the declaration of formally protected areas such as protected environments is also included in this approach. This is a great tool for promoting conservation in a living working landscape, that does not exclude agricultural practices on the landscape, and reaches provincial conservation targets while supporting sustainable land management.

During the World Café we will be developing a matrix that will be used to identify barriers faced by extension officer and then prioritise those barriers that can be addressed or alleviated. We are sure that participants will bring their knowledge and enthusiasm to the table and use this opportunity as a springboard for stimulating ideas.



Capacity development through theoretical as well as practical targeted training days and a knowledge exchange to Kammieskroon by Loxton farmers all form part of the *Karoo Forever* Project approach.

LIGHTNING TALKS - BACKGROUND INFORMATION



UMZIMVUBU CATCHMENT PARTNERSHIP – LANDSCAPES FOR LIVELIHOODS EXTENSION SUPPORT ACTIVITIES IN MATATIELE 2012-2020

South Africa's grasslands constitute some of our most important catchments, with less than 18% of these strategic water source areas under formal protection (NBA 2011). Grasslands contribute an estimated R8000/km² per annum as natural grazing value (NBA 2011), while their value as ecological infrastructure and regulatory service provision is inestimable. Grasslands are under threat from degradation due to alien invasive plants, overgrazing and transformation, compromising their ability to act as effective rainfall and vital water recharge systems. Communities residing in many of these grassland-based rural areas across South Africa face livelihood challenges through lack of economic opportunity. Almost 50% of the national large livestock herd is also found in these communal tenure areas, with only 5% reaching the formal domestic beef market; this provides both an enterprise opportunity and an extension support challenge.

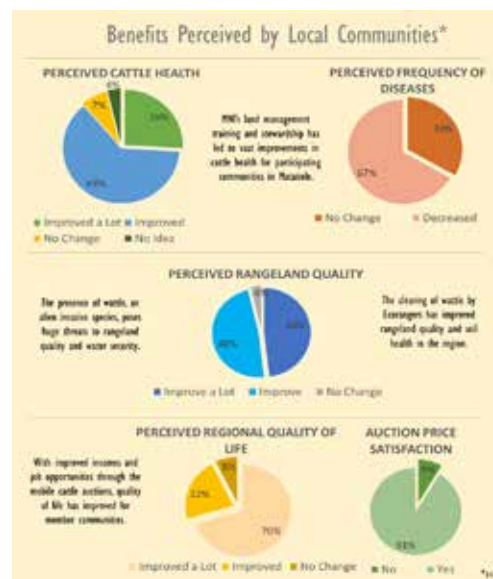
A collaborative approach to restoring communal landscapes and livelihoods through sound rangeland stewardship has been piloted in the Matatiele area of the upper uMzimvubu catchment of the former Transkei. Since 2013, the focus has been on rebuilding good landscape governance, and improving livestock returns. The approach is helping to link communal farmers with equitable markets, through a system of mobile village auctions; access to these sales is linked to compliance with agreed conservation actions between farmers associations and NGO support agents.

Rebuilding good governance strategies is the first step: Traditional leaders are always the point of entry, and grazing / rangeland associations are revived or established. Understanding the drivers of governance breakdown is essential if collaborative landscape management is to be revived, and good relationships of trust are essential between farmers, leadership and support agents (state or NGO).

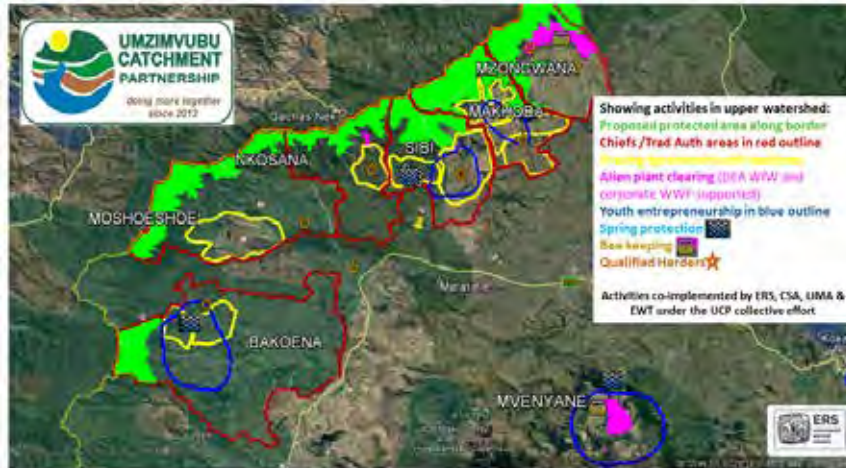
Support for these associations to better manage common grazing resources involves agreements with NGOs, where the latter provide incentives for participating farmers such as securing market access and providing subsidized husbandry support, in exchange for continued supply of livestock off better managed grasslands through the association. Actions include resting, restoration, alien plant clearing and vaccinations, simultaneously promoting healthy well-managed rangelands for production of good livestock.

Monitoring the associations' compliance and resultant grassland recovery forms part of the agreement, with sanctions applied for non-compliance. Sanctions can include penalties imposed internally by local leadership and within the association, or reduced commission benefits at sales for non-compliant individuals identified by associations.

This 'Landscapes and Livelihoods' model has been driven by a civil society alliance (Conservation SA, Environmental & Rural Solutions, LIMA and Meat Naturally Pty) under the Umzimvubu Catchment Partnership or UCP, and has been packaged as the Meat Naturally initiative (MNI), exploring opportunities for enhancing the grass-fed beef market across the wider sub-continent. Reviving traditional resting systems to meet the grazing needs of better managed herds is showing good results for both local households AND for biodiversity and groundwater recharge, through species recovery and improved basal cover respectively.



Other key livelihood issues such as water access and food security are interwoven into the wider landscape approach to augment the core livestock-centred effort. Alongside spring protection and wattle clearing, Bee keeping, biomass value add (charcoal, furniture, fodder, etc) and veg production augment remittances, wages and livestock-based income. This livelihood-driven approach has fostered very strong trusting relationships between support NGOs, Traditional leaders and rural residents, resulting in an initiative to establish a protected area along the upper watershed to secure the mountains providing the source of our ecological infrastructure.



Successful land restoration efforts for **conservation outcomes** have been achieved in other developing countries as a result of improving livelihood security and resilience for **social outcomes**; these are often more successful when the latter is the primary objective. This dual aim can be achieved through unlocking the key constraints facing farmers and support agencies and building social capital to restore the natural capital which underpins livelihood security. A core challenge to boosting social capital is rooted in provision of initial and ongoing support to farmers, as well as compliance monitoring: Dept Agriculture extension services seem not to reach remote areas in the Eastern Cape, while NGOs are generally agile but under-resourced, depending on cycles of donor support.

Youth interns trained as paravets and restoration advisors are already showing how to address this challenge in the Matat area: being locally based, they can provide an effective, accessible network of daily support for farmers within walking / horse / bicycle distance, in the following ways:

- provide awareness on animal health and veld management, enabling better collaborative decision making by association members and leaders
- support grazing plans and compliance with the actions
- facilitate auction preparation and commissions in return for compliance (or non-compliance)
- undertake monitoring / data collection on physical and social aspects
- support disease control through vaccination and dipping
- support restoration work in cleared areas to rebuild rangelands to augment grazing areas

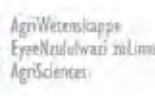
Reimbursement for such extension services should not be wholly dependent on a wage or contract, but can be linked with an innovative task-based and small business approach which is aligned with other projects or extension support in the area:

- Basic stipends can be linked to proof of services supplied (vaccination days, meetings held, monitoring data submitted, etc)
- Paravet services and technical extension can be provided on a commission basis to augment basic stipends
- value-add enterprises using alien plant biomass can generate cashflow during quitter seasons
- Stipends can be managed either through Dept of Agriculture, or through local NGOs who can provide ongoing mentoring and support as well as compliance monitoring

By focusing on **improved livelihoods from sound livestock production returns**, we can promote sustainable rangeland restoration and water security, poverty reduction and improved governance in communal landscapes, as an effective rural development strategy. This can be done by building on relationships between state and NGO agents, as well as between traditional and local government and the land users in these vital landscapes. See www.umzimvubu.org/rangeland-restoration/ for more context of the approach.

Compiled by N. McLeod (ERS) on behalf of UCP implementing partners Conservation SA, LIMA, Meat Naturally and Endangered Wildlife Trust (EWT), Feb 2020.

LIGHTNING TALKS - BACKGROUND INFORMATION



Hungry youth on fallow land: a call for transitions from tradition?

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7602

Question: how can “hungry youth on fallow land” benefit from agricultural extension services?

Today, agriculture fails to meet the livelihood needs of households in ACT9 areas and other communal areas across the Western Cape and Eastern Cape provinces of South Africa. Many of them were established as rural mission stations of European churches in the 18th and 19th centuries, or as communal reserves. Currently, the fourth industrial revolution and the green economy are touted as national imperatives to address youth unemployment, food insecurity and poverty. Yet, youth engagement in agriculture in ACT9 Areas is declining, and benefits from the use of natural resources do not accrue to resource-poor households. Youth in Act 9 Communal Areas like Mamre and Genadendal – towns once considered agricultural hubs in the Cape – are now beset with food insecurity. It may be argued that it is a shortage of land that contributes to food insecurity in these areas. However, a pilot study at one of the towns revealed that youth were going hungry despite the fact that land was laying fallow in that community



Photo 1: Honeybush (*Cyclopia* spp.) seedlings at Genadendal in an informal nursery



Photo 2: Students in a learning dialogue with two young land-users at Elim

ACT 9 communal areas bounded within the Cape Floristic Region (CFR) were historically founded through agricultural settlement. Colonial settlers, and later, descendants of Khoi and San first nations peoples, and other people groups participated to various degrees in rural economies in the CFR.

Ecologically, the Mediterranean-type Fynbos Biome is a low-productivity eco-region. Land-users would have to contend with nutrient-poor soils with limited water-holding capacity, winter rainfall under low light and temperature conditions; and a system prone to fire, especially during hot, dry summers. Despite these challenges, agriculture was seminal to the establishment of historical mission stations in the CFR, and resulted in rural towns that would become economic hubs of activity during the 19th and early 20th centuries. However, once bastions of traditional agricultural practices and ecological integrity, many ACT9 areas in the CFR are now sites of economic depression and food insecurity, with high levels of unemployment amongst able-bodied youth.



Photo 1: Interaction with local land-users at Genadendal

This phenomenon of hungry youth on fallow land in the CFR focuses attention on food security through agricultural production in one of the most biodiversity-rich hotspots in the world.

With regards to extension services, these are questions that arise:

- a) With regard to cultivation of indigenous Fynbos plant species for food and product development – what is the role of agricultural extension?
- b) What are the gaps in training and innovation for extension officers with regard to inter-generational agriculture in the CFR?
- c) If youth in Act9 areas are catalysts for transitions from traditional agriculture, what extension services do they require?

LIGHTNING TALKS - BACKGROUND INFORMATION

Applying a Systemic Approach to Extension Services

Extension services in South Africa operate across the sectors of agriculture, forestry, fisheries, biodiversity conservation and water management. These sectors are complex systems in which the physical and the biological domains interact with the human, socio-economic and commercial domains in many ways. The complexity is characterised by:

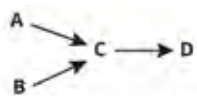
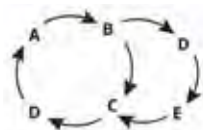
- the large number of stakeholders concerned;
- a high degree of interconnectedness between variables and between stakeholders;
- a wide diversity in the stakeholders' beliefs, motivations, resources and expectations;
- significant knowledge gaps and deep uncertainty about biophysical and socio-economic dynamics; and
- many environmental, economic and social gains and losses being dependent on the successes and failures of extension services.

Systems thinking and modelling encompasses a broad set of **skills, tools, approaches** and **processes** that are well suited to complex, interconnected domains such as those that extension services operate within. The **holistic** nature of a systems perspective encourages

- breaking down the 'silo' mentality, and
- overcoming short-term and short-sighted decision-making,
- while seeking a balance between a high-level (i.e. strategic) and more detailed (i.e. operational) perspective, helping to "see the forest for the trees".

Systems thinking-in-practice involves:

- Aiming to **make explicit** the **trade-offs** between various options and actions;
- Becoming clearer on **the assumptions** underpinning policies and actions;
- Seeking to **minimise negative unintended consequences** of policies and actions;
- Helping problem holders **to see the world through the eyes of others**, mediating between conflicting ideologies, values, and ways of working; and
- Developing ways of **testing policies in a simulation environment** (e.g. through building simulation models and/or using management flight simulators) .

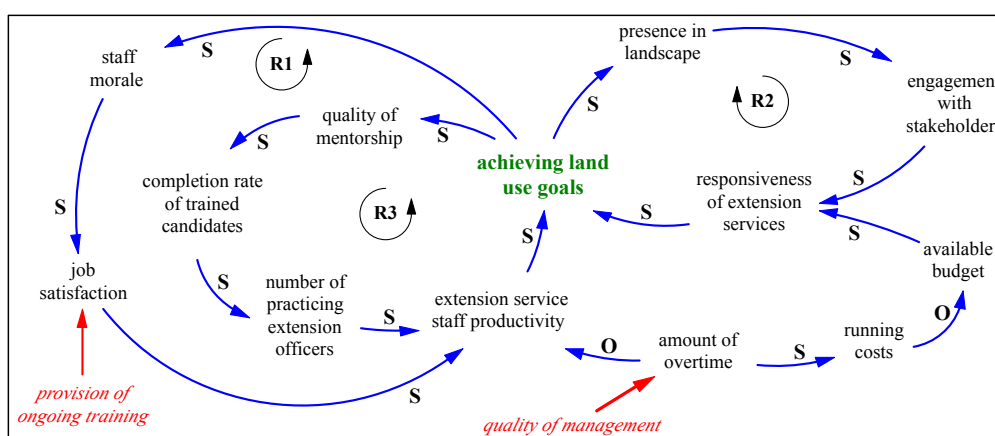
Linear thinking	Systems thinking
Problems can be traced back to root causes via causal chains:	Problems emerge from a system's structure, including the feedback loops:
	
To improve the performance of the whole, we must improve the performance of its parts.	To improve the performance of the whole, we must improve <i>the relationships</i> between the parts.
The goal is to undertake many independent initiatives simultaneously aiming to improve all the parts.	The goal is to identify a few key interdependencies that have the greatest leverage on system-wide performance (i.e. leverage points) and shift them in a sustained way over time.



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Applying a Systemic Approach to Extension Services

Systems diagrams come in many different forms. The diagrammatic convention of causal loop diagrams (CLDs) is used here as an example. In the CLD below, 's' and 'o' are used to qualify the causal relationship between the variables ('s' meaning that a change in the cause results in a change in the effect in the **same** direction; 'o' meaning that a change in the cause results in a change in the effect in the **opposite** direction). *Achieving land use goals* (whether that is sustainable agricultural production or biodiversity conservation) lies at the centre of the CLD. If *extension service staff productivity* increases, then more of the *land use goals* can be met. Achieving these goals drives *staff morale*, which is a key factor in *job satisfaction*, further increasing the productivity of *extension service staff*. This forms the 1st reinforcing (R) feedback loop.



Achieving land use goals also enhances *presence [of staff] in the landscape*, which increases *engagement with stakeholders*, driving *responsiveness of extension services*, which further drives *achieving land use goals*, forming the 2nd reinforcing feedback loop (R2). *Achieving land use goals* also increases the *quality of mentorship*, which increases the *completion rate of trained candidates*, driving up the *number of practicing extension officers*, which further increases the overall *extension service staff productivity* and forms R3. Productivity is negatively affected by the *amount of overtime* that staff take (the more the overtime, the less the productivity). *Overtime* also increases the *running costs*, with increased *running costs* decreasing the *available budget*, and if the *available budget* decreases, then the *responsiveness of extension services* will also decrease. In this way, *overtime* mitigates the positive impact of increased *engagement with stakeholders* (R2) via decreasing the *available budget*. Two leverage points are shown in red, namely the *provision of ongoing training* (impacting *job satisfaction*) and *quality of management* (impacting *overtime*).

At the **Cross-Sectoral Extension Services Workshop** on 2nd – 3rd March 2020, **we will explore the common integration and implementation challenges** across the sectors in which extension services work. A sample process for implementing a systems approach is summarised in the text box, with further info following.

A sample process for implementing a systems approach in a problem context:

1. Build a strong foundation for change by engaging multiple stakeholders to identify an initial vision and picture of current reality.
2. Engage stakeholders to explain their often-competing views of why a chronic, complex problem persists despite people's best efforts to solve it.
3. Integrate the diverse perspectives into a map (AKA a model) that provides a more complete picture of the system and interconnected causes of the problem.
4. Support stakeholders to see how their well-intended efforts to solve the problem often make it worse.
5. Commit to a compelling vision of the future and supportive strategies that can lead to system-wide change.

Further reading: Strohm, D. P., & Zurcher, K. (2012). Acting and Thinking Systemically. *The Systems Thinker*, 23(6), pp. 2–7.

For **further info** and for **details of short courses** on applied systems thinking and on system dynamics modelling, contact Dr Jai Clifford-Holmes on info@jch-phd.com.

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page 87: **NRM Programmes (middle right and bottom) & WWF South Africa**

page 93: **NRM Programmes (middle) & WWF South Africa**

page 111: **NRM Programmes (bottom right) & WWF South Africa**

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About the SA - EU Dialogue Facility

The Dialogue Facility seeks to support the strengthening of policy dialogue the European Union (EU) and South Africa. South Africa and the EU enjoy a reinforced and special relationship following their agreement to a Strategic Partnership in 2006. The Strategic Partnership and its related Action Plan are intended to build on the existing relationship with the intention of strengthening political and economic cooperation. The Strategic Partnership is a significant move by the EU and South Africa beyond mere political dialogue to active cooperation on issues of mutual interest at bilateral, regional, continental and international levels.

The Dialogue Facility will provide support such as technical assistance, logistics (conferences, workshops, seminars, and events), support to study tours, research, mentoring, twinning, etc.

The Dialogue Facility is strategically guided in a partnership between European Union and the government of South Africa. A Programme Management Unit deals with day-to-day administration.

For further information refer to www.dialoguefacility.org



THIS PROJECT IS FINANCED BY THE EUROPEAN UNION

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