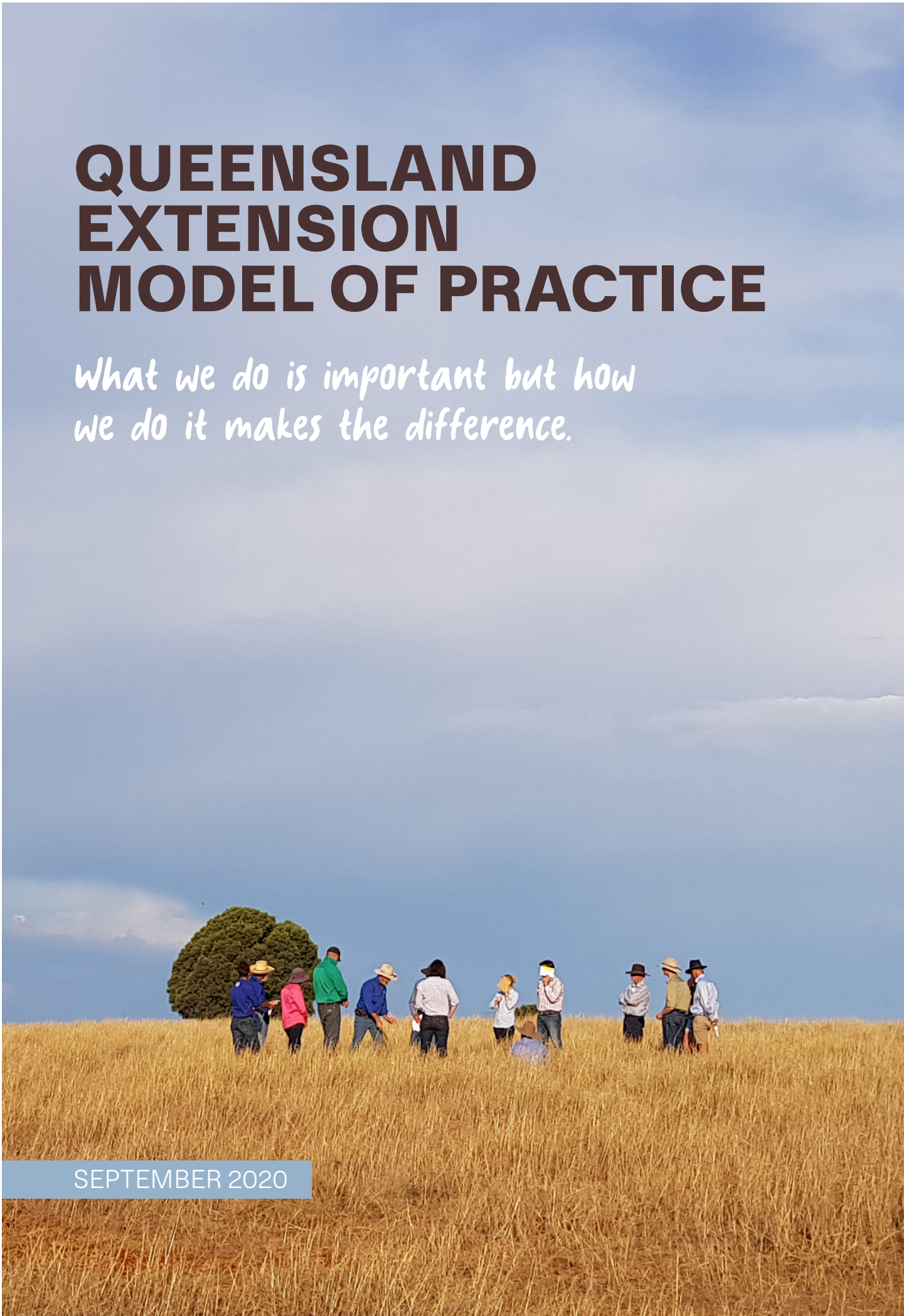


QUEENSLAND EXTENSION MODEL OF PRACTICE

*What we do is important but how
we do it makes the difference.*

SEPTEMBER 2020



For the relationships we have built and are yet to build, we are humbled and grateful.

We thank and acknowledge each person with whom we work and partner each day, especially those who farm and whom agriculture has chosen.

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CONTENTS

Glossary	iv		
INTRODUCTION	1	IMPLEMENTATION OF THE MODEL	28
A MODEL OF PRACTICE	3	Implementation prerequisites	28
Rationale	3	TRAINING AND DEVELOPMENT STRATEGY	31
Purpose	3	Outcome	31
ELEMENTS OF THE EXTENSION MODEL OF PRACTICE (EMOP)	5	Objectives	31
Farmer-centred Practice	5	REFERENCES	35
Core practice elements: What we do is important	7	List of tables	
Relational Practice	8	Table 1: Farmer-centred Practice	7
Change Practice	10	Table 2: Relational Practice Themes	9
Technical Knowledge Practice	12	Table 3: Change Practice Themes	11
ENABLERS	14	Table 4: Technical Knowledge Practice Themes	13
Skills and Qualities	14	Table 5: Skills and Qualities	15
Personal Perspectives	16	Table 6: Self-awareness, Assumptions and Expectations	16
Expertise	17	Table 7: Expertise	18
DRIVERS: PRODUCTIVITY, PROFITABILITY AND SUSTAINABILITY	19	Table 8: Productivity, Profitability and Sustainability	20
EXTERNAL CONTEXT: POLICY, RESEARCH AND SYSTEMS	21	Table 9: External context: Policy, Research and Systems	22
THE IMPLEMENTATION PROCESS: HOW WE DO IT	23	Table 10: Proposed Training program	32
The implementation process	24	List of Figures	
IMPLICATIONS OF THE MODEL FOR POLICY AND PRACTICE	26	Figure 1: The Extension Model of Practice (EMoP)	4
Recommendations	27	Figure 2: Farmer-centred Practice	5
		Figure 3: Core Practice Elements	7
		Figure 4: Enablers	14
		Figure 5: Drivers	19
		Figure 6: External context	21
		Figure 7: The change process	23

Glossary

Change **Change** is an act or process towards a new state. Change is both a *process* and an *outcome* of the collaboration between extension officers and farmers.

Extension **Extension** is the process of enabling change in individuals, communities and industries involved in the primary industry sector and with natural resource management (SELN, 2006).

Extension practice **Extension practice** is the *way* and *how* the relationship between extension staff and a farmer is built in order to achieve a result or an outcome i.e. a practice change.

Extension practice data **Extension practice data** is the information or evidence collected in structured conversations (206) and a survey (90 responses) with extension officers between 2019–2020, and additional data collected from six co–design workshops with extension officers (88) and three conversations with farmers (60) and extension leaders.

Farmer **Farmer** refers to anyone (individual, family or business) involved in primary production including growers, producers, land managers, graziers, horticulturalists, fishers, aquaculturists and resource managers.

Model A **model** is a guide or framework to assist in the decision–making or implementation of a practice change or process.

Relationship A **relationship** is a trusting and respectful partnership between individuals where both parties feel listened to and heard, where personal needs and priorities are understood and valued. In the context of this document it seeks to build capacity for, and to facilitate change.

INTRODUCTION

Extension is the process of enabling change in individuals, communities and industries involved in the primary industry sector and with natural resource management (SELN, 2006). It involves extension officers working with farmers to encourage and support voluntary change to improve production, profitability, environmental, and/or social outcomes, and includes increasing awareness, understanding, skills, motivation, and pathways to change (Coutts, 2017). Extension officers have a critical role in establishing effective relationships to enhance and improve farming practices. Their approach to this work currently exists across a continuum ranging from a 'top down' persuasive approach to the adoption of an innovation/farm practice, to a 'bottom-up' or facilitative approach informed by farming and personal goals (Coutts, 2017; Williams, 2020).

Currently, there is no defined model for extension practice in Queensland. Findings presented by the Great Barrier Reef Water Science Taskforce provide a picture of a **fragmented extension system** with high turnover in government funded programs and a lack of some expertise and capacity in key areas (Coutts, 2017).

In mid-2019, the Queensland Government Reef Water Quality Program funded a project to co-design a shared, cross-industry extension model of practice to address this gap. The model focuses on the foundational **relationship** between extension officers and farmers essential for enabling extension practice to meet Queensland's current 'change challenge'.

Extension practice plays a key role in this 'change challenge'. Questions raised by the sector include:

- What are the barriers to changing or adopting new farming practices? Why do some farmers adopt new practices while others do not?
- Why do some extension officers have better, more effective relationships and achieve more with the farmers they work with?
- To what extent is success dependent on the communication style and the skills/abilities of the extension officer?
- Why do some farmers maintain their engagement in activities while others are disengaged or hard-to-reach?
- What training do early career extension officers receive to assist them to build effective relationships with farmers? Who provides this training?
- How does the policy and structural environment affect the relationship between extension officers and farmers, and the achievement of mutual outcomes?

Extension officers currently straddle the world of science, environmental/social consciousness, sociology, social work and project delivery – an interesting and challenging interface – without any formal roadmap or guide for how to do their work. In other helping sectors, officers use models that provide a consistent process or roadmap with evidence-informed guidance on how to approach and undertake their work (Williams, 2020).

The Extension Model of Practice (EMoP) has been informed by data obtained from structured conversations (206) and a survey (90 responses) with extension officers between 2019–2020, and additional data collected from six co-design workshops with extension officers (88) and three conversations with farmers (60) and extension leaders.

The model provides the agricultural and environmental sectors with a lens with which to discuss, acknowledge and value the **'practice'** of extension, and the interventions developed to facilitate desired change (Williams, 2020).



About this document

This document outlines the role and components of the EMoP and provides guidance on what is required to embed the model into the Queensland agricultural sector including:

- recommendations for its application
- implementation prerequisites
- a proposed training and development strategy.

It is important to note that this document marks the completion of the initial co-design process with extension officers and farmers, and the beginning of the EMoP development – not the end point. This model will evolve, be refined and further developed through its application and the learning and/or reflective practice gathered from farmers, extension officers and the organisations that support extension work.

A MODEL OF PRACTICE

Rationale

If we develop a trusting respectful relationship with farmers, where farmers feel listened to and heard, then we will identify and understand their values, needs and personal and productivity priorities.

If we identify and understand farmers' values, needs, priorities and goals, then we can support them to develop strategies to address these needs and priorities, and support them to implement these strategies using our extension technical knowledge and the farmers' technical knowledge.

If we support farmers in a way that is collaborative and addresses their priority needs, then we will improve outcomes for farmers (productivity, profitability and sustainability) and outcomes for environmental sustainability including water quality.

The rationale is based on the information shared by extension officers and farmers in the structured conversations, surveys and workshops (2019–2020) and relational practice evidence as described by Day and colleagues (2015), and Moore and Myers (2020).

Purpose

The Extension Model of Practice (EMoP) is a decision-making or service-delivery framework to guide the work of extension officers with individual farmers, groups of farmers, other extension staff and their organisations (see Figure 1). It is designed to support extension officers to be intentional in their work, and have greater clarity about what they are trying to achieve and the factors and context likely to influence outcomes. The model is applicable at a number of levels. It can be used by the extension team when working with individual farmers, with groups of farmers or with each other.

The model does not address the context of an individual farm or land use problem or issue, or the supporting information (data collection, project monitoring, evaluation and reporting) that may be required by different industries or agencies. The model focuses on how extension officers engage with and support farmers and the contextual factors that influence the change process.



Figure 1: The Extension Model of Practice (EMoP)



ELEMENTS OF THE EXTENSION MODEL OF PRACTICE (EMOP)

Farmer-centred Practice

Farmer-centred practice is at the heart of the EMoP. This is because the model takes a human-centred design approach to problem solving in extension practice. It recognises the needs and experience of the farmer as critical for identifying challenges and solutions. Farmer-centred practice is a way of thinking and working which views farmers and extension officers as equal partners in extension activities. It acknowledges farmers as the experts on their farms and in their lives. It requires extension officers to treat each farmer as an individual and focus on their strengths as a way of achieving their unique goals and outcomes.

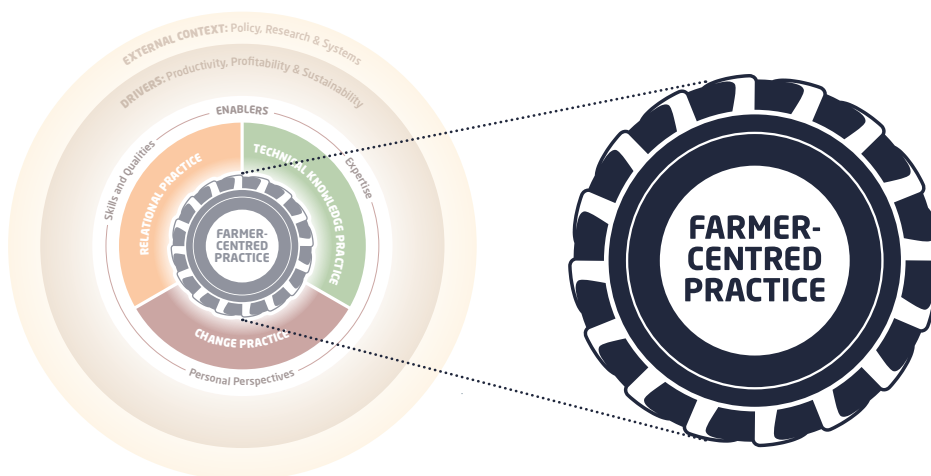


Figure 2: Farmer-centred Practice



Farmer-centre practice requires extension officers to:

- **Engage authentically with farmers.** Always seek to engage with farmers in an authentically respectful and responsive way.
- **Maintain a collaborative partnership.** Always engage farmers as full partners in all discussions and decisions.
- **Strengthen farmers' capacities.** Always look for and acknowledge the strengths, knowledge and skills of farmers and seek to build on these.
- **Respond to farmers' priorities.** Always attend to the issues that are most important to farmers and seek to help them.
- **Obtain feedback from farmers.** Seek feedback from farmers at every opportunity – rather than making assumptions – to ensure a farmer-centred approach is being practiced.
- **Engage in reflective practice.** Take a deeper dive into the strengths and challenges of extension practice with support from others. Reflective practice creates opportunities for learning and change.

The evidence

The extension practice data highlighted the importance of farmer-centred practice underpinning every interaction with farmers and supporting their decision making and change efforts (see Table 1).

TABLE 1: FARMER-CENTRED PRACTICE

Farmer-centred practice	Evidence
	<p><i>"Farmer i.e. the person is central to how we work"</i></p> <p><i>"Work where farmer is at"</i></p> <p><i>"Understand drivers, goals – personal and production"</i></p> <p><i>"Meet need and have positive impact, outcomes"</i></p> <p><i>"Unique, individual, customisation"</i></p>

Core practice elements: What we do is important

The Extension Model of Practice identifies three core practice elements of equal importance:

- 1. Relational Practice**
- 2. Change Practice**
- 3. Technical Knowledge Practice** (see Figure 3).

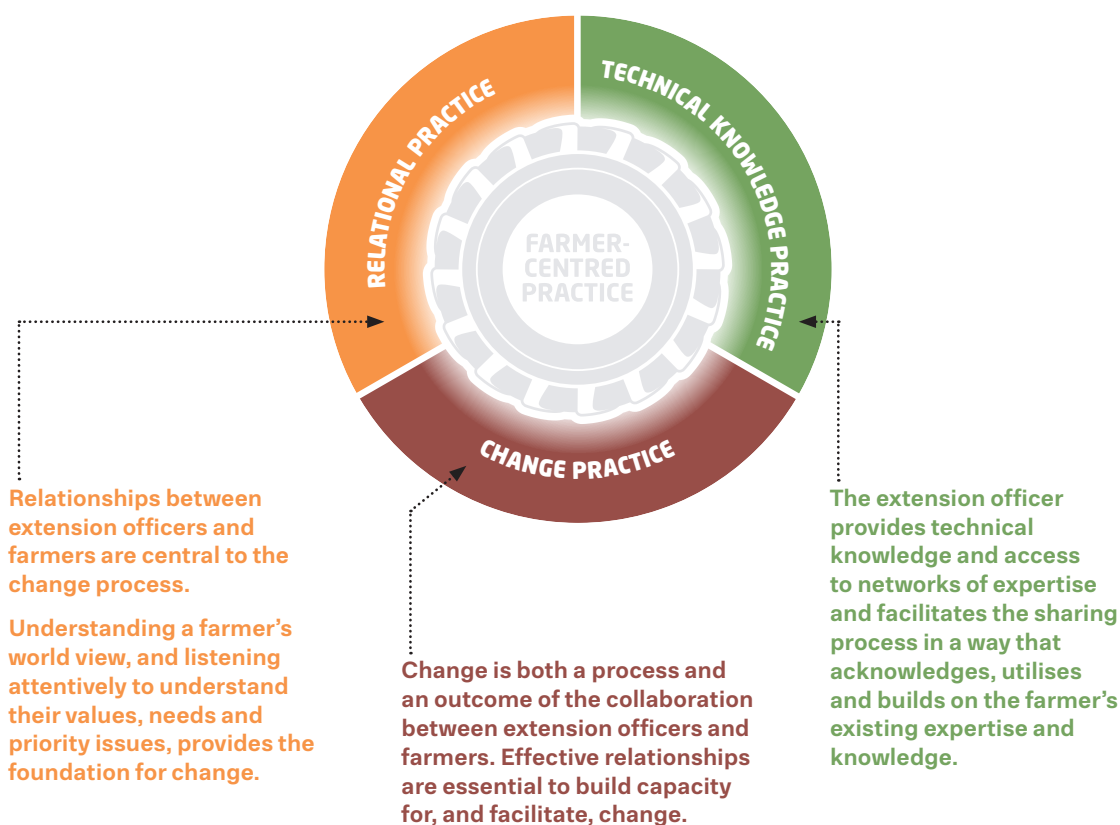


Figure 3: Core Practice Elements



Relational Practice

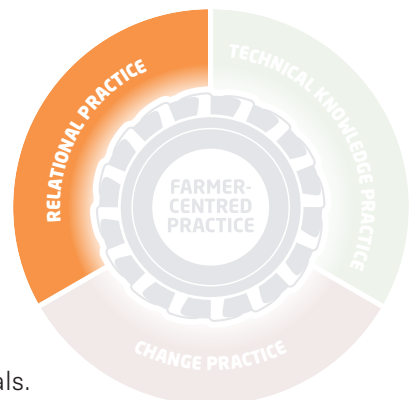
Relationships between extension officers and farmers, while valuable in their own right, are also a means for change, so relational practice is at the core of the change process. The aim of relational practice is to develop rapport and understand the needs, goals and priorities of the farmer. It requires understanding a farmer's world view: demonstrating attentive listening to understand their values, needs and most important personal and productivity goals. This provides the foundation for change.

Extension officers should be:

- **supportive:** encourage, sustain, care, enthuse
- **connected:** hit it off, get along
- **facilitative:** make possible, make easy, make happen
- **purposeful:** have some bearing on, inspire change
- **influential:** be focused, determined and persistent.

(Davis, Ellis, & Harris, 2015).

It is important to be mindful that if an extension officer's role is primarily *supportive* and *connected* then the relationship may have lost its purpose and be simply a friendship. Similarly, if their role is primarily *influential* then the relationship is one of dispensing advice, and if the role is always just *facilitative*, the relationship is one of dependence.





The evidence

The extension practice data highlighted three key relational practice themes: building and sustaining relationships; characteristics of relationships; and communication and engagement (see Table 2).

TABLE 2: RELATIONAL PRACTICE THEMES

Relational Practice Themes	Evidence
Building and sustaining relationships	<p><i>“Building rapport”</i></p> <p><i>“Journey – walk/ learn alongside”</i></p> <p><i>“Making a difference”</i></p>
Characteristics of relationships	<p><i>“Two-way”</i></p> <p><i>“Shared power”</i></p> <p><i>“Willingness and commitment”</i></p> <p><i>“Mutual action learning, reflection”</i></p>
Communication and engagement	<p><i>“Effective communication and collaboration”</i></p> <p><i>“Relationship and people skills associated with effective communication”</i></p> <p><i>“Listening and being curious”</i></p>



Change Practice

When time is invested in building relationships by listening to, and understanding what farmers want to work on, we create an environment where change is possible. Relationships are *essential* for facilitating change and building capacity for change. Obstacles to effective relationships and change can occur if extension officers are inclined to ‘fix’ problems or have a fixed agenda to implement a project or meet targets that fail to address a farmer’s priorities or goals.

Change is both a *process* and an *outcome* of the collaboration between extension officers and farmers. Both are important and necessary considerations that can be monitored and measured as incremental improvements and/or a step change.

The evidence

The extension practice data highlighted six Change Practice themes: problem solving; decision making; practice change; outcomes; research and development; and the skills and qualities of the extension officer (see Table 3).



TABLE 3: CHANGE PRACTICE THEMES

Change Practice Themes	Evidence
Problem solving	<p>“Two-way process through discussion, conversation and collaboration”</p> <p>“Listen to understand problem, goals, opportunities and drivers”</p> <p>“Learning from each other, together and from others”</p>
Decision making	<p>“Extension officer support to make informed decisions”</p> <p>“Value proposition – is information and support of value, credible, trustworthy, practical, affordable?”</p> <p>“Farmers make the final decision”</p>
Practice change	<p>“Support for farmers and help build confidence in the change”</p> <p>“Making a change or improvement in farming practices for financial, production, environmental and personal reasons”</p> <p>“Change takes time. Farmers change at different rates for different reasons”</p>
Outcomes	<p>“Positive impact and intact relationships”</p> <p>“Win-win outcomes”</p> <p>“Ownership and confidence in outcomes”</p> <p>“Long lasting, i.e. sustainable”</p>
Research and development	<p>“Bridge the gap between research and practice”</p> <p>“Linking farmers to useful resources and research”</p> <p>“Identify and support innovative practices”</p>
The skills and qualities of the extension officer	<p>“Scientific and critical thinking”</p> <p>“Desire to help people and make a difference”</p> <p>“Negotiation, persuasion and influencing – working with others for mutually agreeable outcomes”</p> <p>“Problem solving and decision making – working with others to identify, define and solve problems”</p>

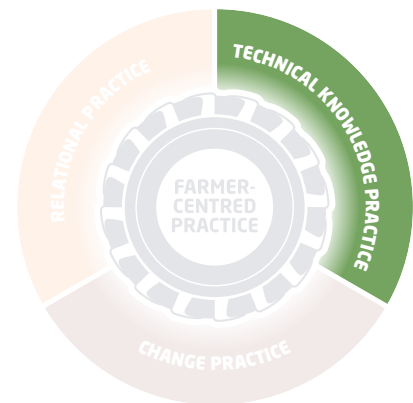




Technical Knowledge Practice

The technical knowledge and skills of the extension officer includes specific knowledge and understanding of:

- industry and agricultural production systems
- current science and research
- evaluation – critical thinking and data analysis
- natural systems and the environment.



Extension officers bring specific skills to the sharing of technical knowledge.

They design interventions that facilitate engagement with farmers, and support organisations and farming communities. Extension officers identify the most suitable intervention for the stakeholder/target group to increase the likelihood of success. They have an ability to adapt, apply and share new technical and other information with farmers in a way that is appropriate for them.

Extension officers employ **extension methods and techniques** such as on-farm demonstrations and trials, group facilitation and other appropriate delivery methods.

Extension officers collaborate with farmers on **project design, implementation and evaluation**. They develop funding programs and submissions, and measure and report practice changes or improvements to farmers, funders and other stakeholders.

Most importantly both farmers and extension officers acknowledge the importance of possessing technical knowledge associated with the farm, farming, the local community and the political context that affects the work they do.



The evidence

The extension practice data highlights five Technical Knowledge Practice themes: technical knowledge and skills, communication and engagement, extension methods and techniques; project design, implementation and evaluation, and complementary knowledge (see Table 4).

TABLE 4: TECHNICAL KNOWLEDGE PRACTICE THEMES

Technical Knowledge Practice Themes	Evidence
Technical knowledge and skills	<p><i>“Technical knowledge of industry and agricultural production systems”</i></p> <p><i>“Scientific and research knowledge and skills”</i></p> <p><i>“Critical thinking”</i></p> <p><i>“Natural Systems and the environment”</i></p> <p><i>“Climate and weather impacts”</i></p> <p><i>“Knowledge and skills of technical resources and tools”</i></p> <p><i>“Industry technical skills”</i></p> <p><i>“Technical expertise and access to it”</i></p>
Communication and engagement	<p><i>“Research evidence – where it is, how to find it, interpretation and translation – being the interface between research and farmers”</i></p> <p><i>“Engagement design – mapping stakeholders and design of the ‘how’”</i></p> <p><i>“Networks, networking & linking”</i></p> <p><i>“Communities of practice; information sharing with peers and among peers (farmers and colleagues)”</i></p>
Extension methods and techniques	<p><i>“On-farm demonstrations and trials”</i></p> <p><i>“Extension approaches – farmer support and help; motivating farmers”</i></p> <p><i>“Delivery Methods (1-1, workshops, peer to peer, groups, shed meetings etc)”</i></p>
Project design, implementation and evaluation	<p><i>“Extension and communication planning and design”</i></p> <p><i>“Project planning and implementation”</i></p> <p><i>“Funding programs and submissions”</i></p> <p><i>“Practice change, measurement, metrics, reporting”</i></p> <p><i>“Short funding cycles to meet targets”</i></p>
Complementary knowledge – people, places and history	<p><i>“People and their interactions in the community”</i></p> <p><i>“Community history”</i></p> <p><i>“Farm history”</i></p> <p><i>“Political environment within community”</i></p>

ENABLERS

The three core practice elements of Relational, Change and Technical Knowledge are supported by three enablers:

- the **skills and qualities** of the extension officer
- the **personal perspectives**, constructs and world views of the extension officer and farmer
- the **expertise** of the extension officer and the farmer (see Figure 4).

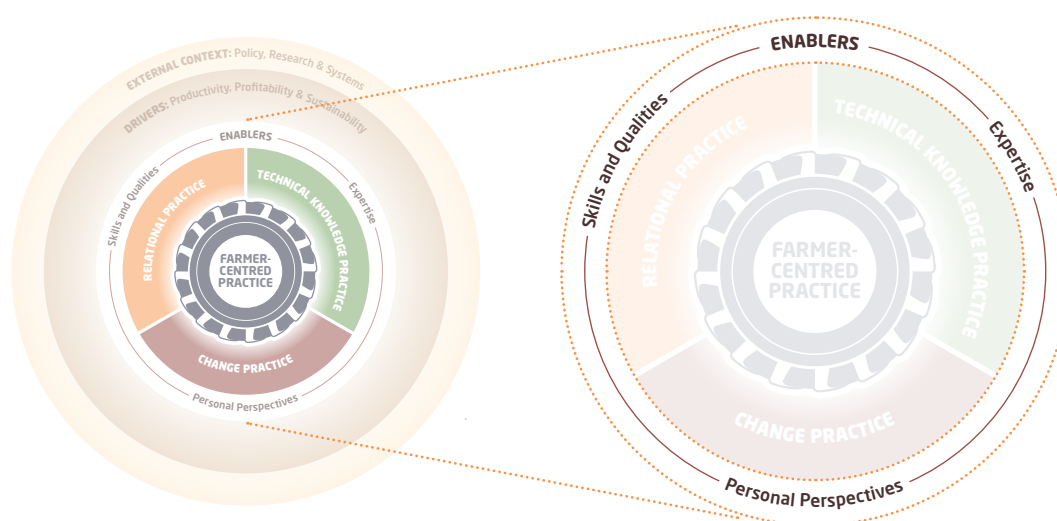


Figure 4: Enablers

Skills and Qualities

The effectiveness of the EMoP is reliant on how the inter-personal qualities and skills of the extension officer are experienced by the farmer. These qualities and skills build rapport and engagement through each of the three core practice elements of extension work: Relational, Change and Technical Knowledge.

What are personal qualities? Personal qualities are the characteristics and disposition of the extension officer; how they come across to others and their attitude within the process of change. These qualities are observed and felt by others. They are thought of as intrinsic to an individual but can be acquired and practiced.

What are interpersonal skills? Interpersonal skills are the behaviours and communication methods the extension officer uses to interact with others.

In practice, it is the effect of these personal qualities and interpersonal skills – how they are demonstrated and how they are experienced by farmers – that is critical, rather than a person's self-perception of their skills and qualities. If they are not experienced by the person you are working with they have little or no effect.

A core set of qualities and interpersonal skills have been identified by farmers and extension officers (see Table 5). These may be unique to, or effective in, each practice element of the EMoP.

TABLE 5: SKILLS AND QUALITIES

Practice Element	Skills and Qualities
<p>Relational</p>	<p>Attentive listening – giving careful attention; concentrating; paying attention to non-verbal cues; responding appropriately; maintaining curiosity.</p>
	<p>Genuineness – being authentic, reliable and honest with farmers; being transparent without defensiveness.</p>
	<p>Clear communication – being clear and specific; summarising what has been heard or understood; choosing words carefully; responding to non-verbal cues.</p>
	<p>Emotional intelligence – having emotional strength to hear and accept farmers’ thoughts and ideas; maintaining perspective while appreciating others’ perspectives; awareness of your own personal feelings and reactions.</p>
	<p>Adaptability – being able to adapt to new information and situations; responding to farmers in a way that suits their style and needs.</p>
	<p>Flexibility – being flexible and able to learn from others.</p>
	<p>Empathy – demonstrating understanding of farmers’ experiences; making sense of what you feel as you listen; imagining the farmers’ thoughts and feelings; and respectfully sharing your thoughts and insights.</p> <p>Respectful – valuing farmers’ expertise and experience; enabling farmers to make positive decisions; keeping confidentiality.</p>
<p>Change</p>	<p>Negotiating – facilitating joint decision making to come to mutual agreement throughout the change process.</p>
	<p>Working together – explicitly discussing what you can reasonably expect of each other; checking in on the agreement and amending where necessary.</p>
	<p>Utilising strengths – an awareness and understanding of the strengths that each bring to the relationship and how these can be best utilised.</p>
	<p>Reserving judgement – being constructive and sensitive in making judgements.</p>
	<p>Vulnerability – having humility; being aware of our own limitations; being realistic about ourselves.</p>
	<p>Warm enthusiasm – encouraging realistic hope; developing confidence and capacity.</p>
<p>Technical Knowledge</p>	<p>Advocacy – communicating (e.g. research, trial results) with farmers and with the public in an accessible way; being there for the farmer’s benefit and communicating to all on their behalf. Extension is for farmer.</p>
	<p>Critical thinking – knowing and/or being able to distinguish effective practice.</p>
	<p>Sharing information – sharing new trends or new ideas from other farms; enabling knowledge exchange.</p>
	<p>Being present – being on farm, seeing something physical happening.</p>
	<p>Responding to individual needs – tailoring advice to an individual farmer’s practice or situation to get best result for individual farmers. “Advice provided that is not utilised is a waste of time.”</p>
	<p>Self-awareness – understanding your limitations and being explicit about what you can or can’t do.</p>



Personal Perspectives

Farmers, extension officers, and their respective organisations each bring their own perspective to any given situation and these unique perspectives influence our thinking processes, our reactions and our responses. In turn, the way we respond to any given situation, event or information influences the perspective of the person we are interacting with.

Our perspectives determine the way we understand our work – our involvement and roles – and influence the way we see ourselves and our feelings and behaviours. Our perspectives influence our willingness and ability to engage and use the help available. They influence our perception of others including their strengths and difficulties. For extension work to be effective, the extension officer/farmer relationship needs to develop a common, shared set of perspectives that provide an accurate and helpful understanding of the farmer’s situation

The evidence

The extension practice data highlighted the role of personal perspectives and the importance of self-awareness and understanding assumptions and expectations (see Table 6).

TABLE 6: SELF-AWARENESS, ASSUMPTIONS AND EXPECTATIONS

Self-awareness	<p><i>“Awareness and understanding of biases and interpretations”</i></p> <p><i>“Awareness and understanding of judgements of self and others”</i></p> <p><i>“Understand own limitations “</i></p>
Assumptions and expectations	<p><i>“Stereotyping, pigeonholing and treating everyone the same not as unique”</i></p> <p><i>“Assumptions get in the way of the truth and hinder effective communication”</i></p> <p><i>“Understanding own and other’s expectations”</i></p>



Expertise

The farmer brings their expertise on their individual farming practices and experience, farm history and community to the extension relationship. The extension officer's expertise comprises their practice or practice knowledge and their learned or acquired knowledge. Through their relationship the extension officer and farmer understand the expertise that they each bring and their limitations. Extension officers facilitate the sharing of expertise in a way that acknowledges, utilises and builds on the farmer's own expertise and knowledge, and matches or brings together each other's strengths and expertise in complementary ways.

The relationship is most effective when farmers and extension officers utilise their complementary expertise to identify priorities, address challenges and support change.

The Evidence

The extension practice data highlights the enabling factors of complementary expertise through farmer-centred practices, building and sustaining relationships, the interpersonal and communication skills of the extension officer, problem solving, and decision making (see Table 7).



TABLE 7: EXPERTISE

Expertise	Evidence
Farmer-centred practice	<p><i>“Understand (farmers) drivers, goals – personal and production”</i></p> <p><i>“Identification of needs and benefits”</i></p> <p><i>“Meet need and have positive impact, outcomes”</i></p> <p><i>“Unique, individual, customisation”</i></p>
Build and sustain relationships	<p><i>“Help links to networks, information/expertise”</i></p> <p><i>“Journey – walk/learn alongside (farmer)”</i></p> <p><i>“Shared power”</i></p> <p><i>“Mutual action learning, reflection”</i></p>
Extension officer’s interpersonal and communication skills	<p><i>“Listening and being curious”</i></p> <p><i>“Honesty and transparency”</i></p> <p><i>“Utilise strengths”</i></p> <p><i>“Adaptability and flexibility”</i></p>
Problem solving	<p><i>“Listen to understand problem, goals, opportunities and drivers”</i></p> <p><i>“Identify and bring impartial information, knowledge, expertise from varied sources (not sales)”</i></p> <p><i>“Learning from each other, together and from others”</i></p>
Decision making	<p><i>“Support to make informed decisions”</i></p> <p><i>“Collaborative”</i></p> <p><i>“Farmers make final decision”</i></p> <p><i>“Need a level of confidence in the outcome”</i></p> <p><i>“Cost, financial implications”</i></p>

DRIVERS: PRODUCTIVITY, PROFITABILITY AND SUSTAINABILITY

Farm productivity, profitability and sustainability in the context of land stewardship were identified as important drivers of change for making decisions about farming practice (see Figure 5).

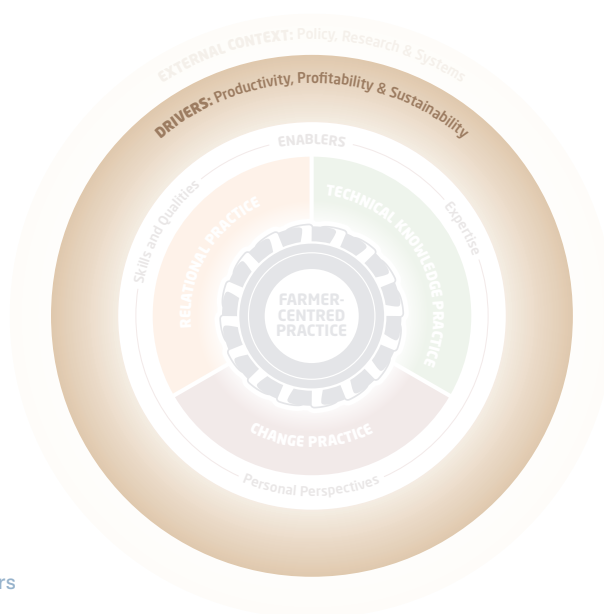


Figure 5: Drivers

The evidence

The extension practice data indicated the importance of this triple bottom line. Participants collectively stated that it was crucial to know and understand these key drivers and their interactions when working towards a change in farming practice as they directly influence decisions and affect behaviour (see Table 8).



TABLE 8: PRODUCTIVITY, PROFITABILITY AND SUSTAINABILITY

Productivity, profitability and sustainability	Evidence
Productivity	<p><i>"If we don't arrest the decline in productivity there is no future"</i></p> <p><i>"Innovation and technological advances"</i></p> <p><i>"Increase productivity and efficiencies"</i></p> <p><i>"Improve farming/agronomic/ grazing practices"</i></p> <p><i>"Enhanced soil health/management, plant/livestock productivity, water quality"</i></p>
Profitability	<p><i>"Improve profitability and economic/financial literacy"</i></p> <p><i>"Business viability"</i></p> <p><i>"Triple bottom line"</i></p> <p><i>"Financial pressures"</i></p> <p><i>"Commodity and input costs"</i></p> <p><i>"Costs of production"</i></p>
Sustainable farming, land stewardship and succession	<p><i>"Sustainable land practices"</i></p> <p><i>"Impacts from negative public perception"</i></p> <p><i>"Empowering and facilitating farmers to be sustainable"</i></p> <p><i>"Increase farmer resilience, pride, satisfaction and confidence"</i></p> <p><i>"Succession and family challenges"</i></p> <p><i>"Farmer wellbeing and age"</i></p>

EXTERNAL CONTEXT: POLICY, RESEARCH AND SYSTEMS

The EMoP illustrates the influence of the external context on extension practice and outcomes (see Figure 6). External factors including policy, research and development initiatives, the wider social, political and economic climate, and sector systems and structures, will influence the change process.



Figure 6: External context

The evidence

The extension practice data highlighted the six external factors that influence extension practice: industry sector factors; systems; governance, organisations and workplaces; funding and resources; policy and politics; and stakeholders and interactions (see Table 9).

TABLE 9: EXTERNAL CONTEXT: POLICY, RESEARCH AND SYSTEMS

External Context	Evidence
Industry sector	<p><i>“Networks and networking”</i></p> <p><i>“Cooperation, collaboration and alliances”</i></p> <p><i>“Continuity and role/job satisfaction”</i></p>
Systems	<p><i>“Policy and decision makers”</i></p> <p><i>“The interactions and links between farmers and different environments”</i></p> <p><i>“Knowledge of natural systems and production systems”</i></p> <p><i>“Education and training system”</i></p> <p><i>“Interaction with the research system is a crucial role for us”</i></p>
Governance/organisations and workplaces	<p><i>“Extension officers and farmers having a voice to government – advocacy”</i></p> <p><i>“Organisational structures, culture and targets”</i></p> <p><i>“Image of government in field”</i></p> <p><i>“Compliance – how it is approached implemented”</i></p> <p><i>“Risk management”</i></p>
Funding and resources	<p><i>“Time to do extension/build relationships”</i></p> <p><i>“Continuity is important to us” (farmer and extension officer)</i></p> <p><i>“Expectation of funders – targets and timeframes”</i></p> <p><i>“Securing funds, competition or funds”</i></p> <p><i>“Short funding cycles to meet targets”</i></p> <p><i>“Proof of impact and measuring practice change”</i></p> <p><i>“Value proposition – value for time spent”</i></p> <p><i>“Understanding of crop cycles and meeting targets/ achieving outcomes”</i></p>
Policy and politics	<p><i>“Policy and decision-making processes”</i></p> <p><i>“Agri politics and industry advocacy”</i></p> <p><i>“Legislation/regulatory environment”</i></p> <p><i>“Urban/green environmental focus”</i></p> <p><i>“Media”</i></p>
Stakeholders and interactions	<p><i>“Interactions are dynamic and evolve over time”</i></p> <p><i>“Extension officer and farmer relationships are deep, complex and trusted”</i></p> <p><i>“There are barriers and limitations on interaction with policy/decision makers and funders”</i></p> <p><i>“Formal and informal networks are important”</i></p> <p><i>“Industry politics”</i></p> <p><i>“Influencers and drivers”</i></p>

THE IMPLEMENTATION PROCESS: HOW WE DO IT

The EMoP implementation process is depicted in a six-step cycle (see Figure 7). The steps elaborate on the core element of Change Practice and retain a focus on farmer-centred practice.

The process builds (or sustains) farmer engagement and understanding of their values, goals and priorities. The **order is important**: it is essential to establish a collaborative partnership with farmers and an understanding of their preferred priorities and outcomes before identifying strategies for addressing farm challenges or concerns.

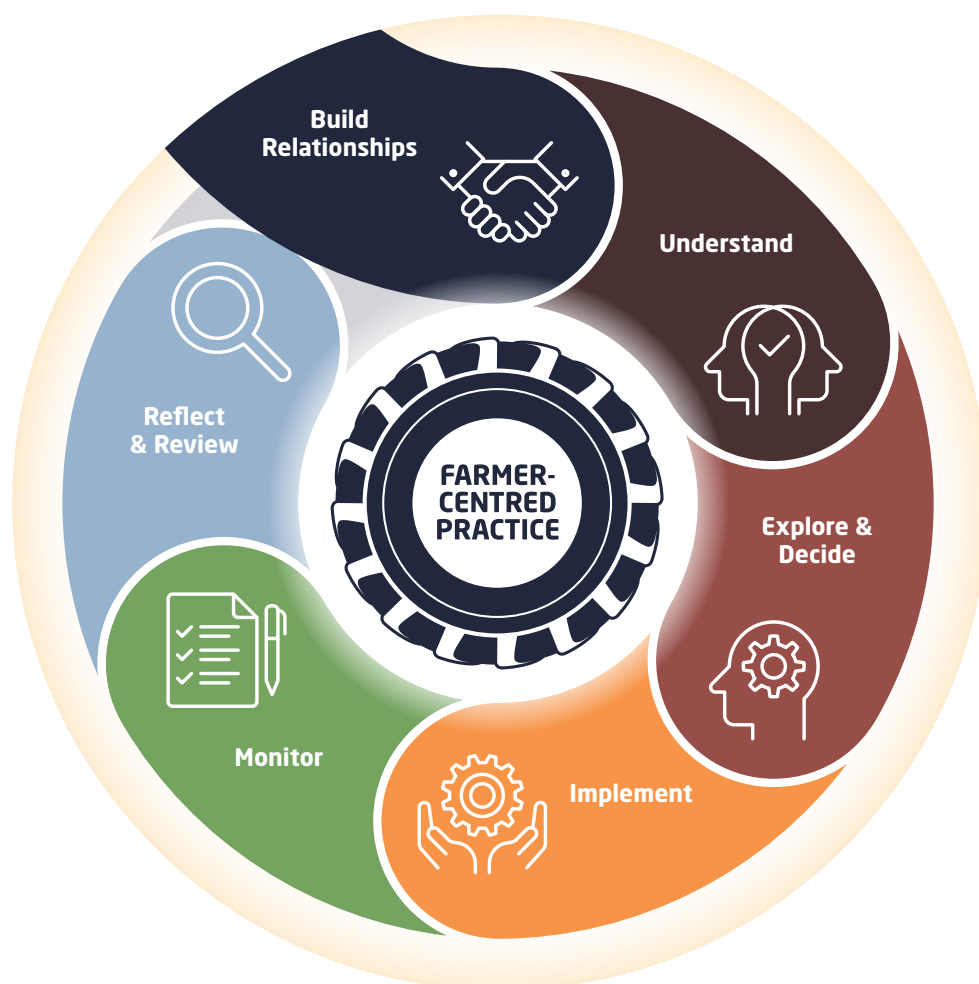


Figure 7: The change process



The implementation process

STEP 1.



Build relationships

Establish the foundation for a collaborative relationship. Begin to get to know the farmer (or group of farmers) and their context, or continue to sustain an existing relationship. Be welcoming and inclusive, engage with farmers and seek to understand them and their context.

STEP 2.



Understand

Work with farmers to understand their wants and needs, and identify their concerns and priorities. Explore the culture, identity, values and circumstances of the farmer (or group of farmers) and learn about the issues most important to them.

STEP 3.



Explore and decide

Consider how best to address concerns. Find out what strategies the farmer (or group) are already aware of or using, and share with them information about other effective strategies. Help them to decide what action (if any) they want to take.

STEP 4.



Implement

Support the farmer (or group) as they undertake their chosen plan. Provide support for change and help them to identify and measure changes or improvements.

STEP 5.



Monitor

Monitor and evaluate with the farmer (or group) whether the chosen strategy or plan has had the desired effect. If not, revisit earlier steps in the sequence.

STEP 6.



Reflect and review

Routinely review the priorities and outcomes for the farmer (or group), and reflect on what they have achieved.

Although the process is presented as a series of sequential steps, this is only a guide. Step 1 (*Build relationships*) and Step 2 (*Understand*) are foundational steps and may need some time to achieve. They are foundational because the following steps will not be effective if these two steps are not in place as the priorities of both the farmer and the extension officer need to overlap in order to move forward. This approach will lay the foundation for future work if priorities do not overlap at this point in time.

Steps 3–6 can be described as action learning. In practice, these steps flow into one another. Progress through these steps is not always sequential: there will sometimes be a need to circle back and repeat some earlier steps as part of a process of refocusing.

There is no time limit and it is not a process to rush. It is most important to engage with the farmer and establish a true collaborative relationship. Subsequently, the early steps in the process may need to be taken more slowly, particularly with those who are unfamiliar in dealing with extension services and professionals. It is important at all stages not to move on to the next step before the farmer is ready.

The process should allow for constant check-in and changes. We cannot assume that the strategies will always work in the ways we think, so we need to be ready to make adjustments. This flexibility is a strength rather than a weakness, as the process of constant adjustments makes it more likely that the extension interventions will be manageable for the farmer and ultimately effective.



IMPLICATIONS OF THE MODEL FOR POLICY AND PRACTICE

Findings presented by the Great Barrier Reef Water Science Taskforce provide a picture of a **fragmented extension system**, with a high turnover in government funded programs and a lack of some expertise and capacity in key areas (Coutts, 2017). In addition, in the 2019 Program Evaluation Report on the Reef Alliance: Growing a Great Barrier Reef project (RAP), Coutts highlighted that estimating what is achievable with an extension-focused approach is at best an educated guess.

Some of the challenges and simmering tensions with respect to extension practice and the system and structures that rely on this work have been well documented and evidenced in the development of the EMoP including:

- **Limitations on progress:** For the reef catchments, the Reef Quality report card publicly tracks progress towards meeting water quality targets. It indicates that uptake and adoption of practice change by farmers has been relatively slow however the regulators and funders recognise that extension officers are key to facilitating on-farm practice changes to ensure improved water quality outcomes are achieved.
- **External factors:** The introduction of vegetation management and reef regulations and the on-farm resource impacts of mining and gas exploration have resulted in a surge in advocacy around the 'right to farm', the non-sharing of data, protection of prime agricultural land and food security. This policy and structural environment has impacted on the relationship between extension practitioners and farmers and the outcomes achieved.
- **Effectiveness of the current extension model:** On-farm adoption of research and innovation in agriculture has been mixed, with questions raised about the effectiveness of the traditional extension model and associated funding.
- **Extension expertise and continuity:** Currently, many extension officers are funded by short-term projects and therefore more transient with less job security and less time to develop trusting relationships and to measure and/or monitor the impact of extension interventions. Specialised training and development in extension is limited. The recruitment and retention of expertise in agriculture is also a current sector challenge. Agricultural colleges are closed and universities may need to restructure to address employability and sector gaps. These impacts on early career extension practitioners are significant and affect their ability to build effective relationships with farmers to achieve targets/outcomes in limited timeframes to deliver their often short-term funded project work. Who will provide this extension/ innovation training?

The EMoP seeks to improve practice by establishing a promising, evidence-informed model for extension practice that aims to:

- recognise and support the important role of extension officers
- provide a realistic and relevant mechanism for identifying and responding to challenges, and tracking progress towards improved outcomes
- increase the capacity and expertise of extension officers
- improve the adoption of practice change
- build on the strengths of farmers and extension officers for stronger relationships to support change
- facilitate the on-farm adoption of research and innovation
- provide a framework to support monitoring, evaluation and reflection.



Recommendations

The field of extension practice in Queensland would be strengthened by the broad adoption of the Extension Model of Practice. All existing and new extension practice stakeholders (practitioners and their host organisations) should be involved and resourced to access training and ongoing support to embed the model into their daily work to advance practice change.

To support the effective implementation of the EMoP we recommend:

- 1. Obtaining recognition from government, research and funding bodies, educational institutions and employing or extension 'host' organisations of the validity of this extension model for practice just as other technical/scientific and best practice models are recognised.**
The EMoP will guide practice when working in partnership with farmers/land managers, valuing their technical knowledge and expertise, goals and priorities with equal importance. This model also will guide quality extension practice and enable monitoring and measurement of performance and how this directly relates to facilitating adoption and practice change in relationship with the farmer.
- 2. Recognising the importance of effective relational, change and technical knowledge practices in future funding models.**
- 3. Widespread application the EMoP to ensure consistent, quality and collaborative extension efforts that achieve desired outcomes from farming through to funding agencies.**
- 4. Using the EMoP to measure and evaluate extension efforts against rates of adoption and practice change (i.e. outcomes).**
- 5. Linking the EMoP with the Skills Framework for Education and Training developed by Coutts (2017) to underpin and streamline training and development plans and associated investment.**
- 6. Using the model to assist with sector recruitment, selection and retention of extension practitioners in the sector.**
- 7. Funding and implementing the EMoP Training and Development Plan to streamline future extension training and professional development to build and strengthen capacity.**
- 8. Acknowledging in project planning and contract management processes that the 'how' of extension practice is equally as important as the 'what' or the technical content of the extension intervention.**

IMPLEMENTATION OF THE MODEL

Implementation prerequisites

The successful implementation of the EMoP across or within extension practice in QLD is reliant on the endorsement and support of relevant stakeholders. Five implementation prerequisites will underpin the successful implementation of the model:

- leadership
- a shared understanding
- contextualisation
- support and training
- monitoring and review.

Leadership

“How do we bring key stakeholders on board with this model so they do not limit its potential or create barriers... but enable it instead? We want and need to have a strong relationship with policy, decision makers and funding bodies as there is a disconnect. There is a need to value extension and its role in change and adoption”.

Supporting practice change can be a very difficult process. Sustained change in practice requires continued focus, support and commitment from stakeholders at all levels. Professionals can be supported to recognise opportunities for change in their practice, but without focused attention and support, they can experience ‘practice drift’ back to default practices (Regehr & Myopoulos, 2008). An existing example of sustained focus and commitment to change across disciplines and services is the Tasmanian Child and Family Centres project (2009). The development of this state-wide project was characterised by government and non-government commitment, mentorship by international change leaders in the field, sustained funding for the ‘change’ component of the process, and a broad ongoing focus on engagement that enabled the critical contribution of stakeholder groups that previously had not been listened to or heard. On reflection the timing was right to enable a sustained focus on change, and the outcome for many components of the process were exemplary.

It has been understood in the human services sector for some time that while new knowledge, skills and expertise can be transmitted through various forms of teaching, to sustain and embed new learning in professional practice requires more sophisticated strategies (Harris, Wood & Day, 2010; Perini, 2018).

Previous approaches to the dissemination of training across workforces have commonly reflected a ‘train and hope’ approach – where the significant investment made in the delivery of training is followed by hope that the training will then be applied in practitioners’ practice. In reality, professionals can be inspired through training to accept new learning and recognise the potential for personal practice change, however, to avoid ‘practice drift’ (Regehr & Myopoulos, 2008), the adult learner must also be supported in a variety of ways to keep new learning alive and applied. Successful implementation of the Extension Model of Practice requires those involved in the extension service system to collectively embrace and embed the model in all extension related activities and practices.

Shared understanding

Successful implementation requires organisations that employ extension officers and the funding bodies of extension officers to fully understand the EMoP. This means farmers and those involved in governance, policy development, human resource management, staff management and supervision will need to be supported to explore and reflect on the EMoP.

Whilst the dissemination of literature might be considered the most accessible form of information exchange to support this step, it must be understood that the most effective strategy for supporting key stakeholders to share an understanding about what they are committing to will be through the provision of clear concise literature, followed by facilitated discussions/workshops (preferably within organisational teams not across organisations). This will help enable exposure to the detail that lies within and behind the EMoP. Supporting farmers and organisations to explore the EMoP individually may enable a more critical and honest examination of structures and processes that will need adjusting or tweaking to ensure the sustainable implementation of the model.

Contextualisation

The best possible application of EMoP will be achieved through it being applied in relational contexts that understand the rationale for such a model. In the case of farmers, there are obvious reciprocal benefits that should arise from the effective practice of this model by extension officers.

Direct line managers and supervisors of extension officers will benefit from a detailed exploration of the EMoP. Managers and supervisors significantly influence the practice of those professionals for whom they are responsible. In order for the EMoP to be understood, applied and sustained in extension practice, extension officers must experience the approach being modelled at all levels within their organisation. The ideal scenario is that an extension officer sees and experiences the EMoP in their interactions with their managers/supervisors and that the model is actively used in these encounters to reflect on, learn and make sense of issues that inevitably arise in any form of relational practice.

The purposeful use of the EMoP in day-to-day extension practice is one obvious way this might occur. However, the practitioner needs to return to structures and processes in their workplace that both complement and support the continued practice of the model. Other examples might include the manager/extension officer relationship, the way the human resources manager interacts with the extension officer in relation to performance management, and whole of organisation communications from the general manager.

Once extension officers are trained and implementing the model in their practice, their practice will be supported and sustained through seeing the EMoP being modelled by their peers in their day-to-day interactions. Therefore, the extension officers’ confidence in the application of EMoP is strengthened through recognising the model as applicable to relational contexts beyond extension practice with farmers/growers.



Support and training

In order to sustain the EMoP, organisational commitment is required to ensure all extension officers receive appropriate training in the model. The training and development plan outlines a multi-level program to enable extension officers – and those who employ them – to understand and implement EMoP in their work with farmers. This includes a foundational level of EMoP training that extension officers need to complete in order to apply the model in practice. Following the delivery of foundational training in the EMoP, extension officers will require practice opportunities to immerse themselves in and practice the EMoP. As a relational model of extension practice, extension officers therefore need practice experiences that provide opportunities for the application of concepts and principles within the model.

Comprehensive training and support will require a coordinated state-wide extension training and development plan linked to the tertiary/university system and ongoing professional development opportunities to guide recruitment, induction and on-boarding processes.

Monitoring and review

Reflective practice in project evaluation and using action learning principles are common approaches in other relational focused services. They assist professionals to:

- identify opportunities for professional practice improvements or change
- embed changes in professional practice.

Rigorous reflective practice is a form of supervision between two or more people. It should involve guided (facilitated) reflection on current practice approaches, opportunities to hear and consider alternative perspectives, and an exploration of these experiences and perspectives alongside existing theories, research and documented opinions of sector leaders. Such internal and shared reflective practices keep the practitioner alert to the ever-changing contexts we work within, and how practices should evolve in response to these changing contexts, information and understandings.

In professional practice our inclination is to exercise behaviours and skills that are most familiar and appear to have worked in the past. It is not sufficient to train the extension practitioner and hope they understand and implement new concepts, ideas and practices. In any work, when new knowledge or skills are acquired, it often takes time, practice and review to move the new content from 'newly learnt and purposely rehearsed' to 'automatic default practice'.

Organisations both employing extension officers and influencing extension practice must be alert to the structures of support necessary both within organisations and systemically to enable sustained and continuous improvement in the application of the EMoP.

TRAINING AND DEVELOPMENT STRATEGY

The Extension and Education Review (Coutts, 2017) noted a current lack of capacity in some specialty areas of extension practice (i.e. soil conservation, soil health, hydrology, farming systems and mixed farming). This was also exacerbated by the loss of experienced extension personnel in the regions and an inability to replace this expertise in a timely manner to pass on both relational and technical skills to deal with land management practice issues facing farmers. Currently, many remaining experienced practitioners provide ad hoc and opportunistic or 'in the paddock' mentoring which varies widely across locations and agricultural industries.

The sector acknowledges that to address these gaps and challenges will require a concerted effort to engage, involve and coordinate organisations that undertake extension delivery and the organisations/individuals that provide relevant training (Coutts, 2017).

Extension officers primarily possess a variety of science-based undergraduate degrees which incorporate limited extension specific courses. Currently career training and professional development consists of one-off, non-integrated short courses delivered by a variety of external providers with a focus on communication, collaboration and facilitation/group skills with a distinct gap in content relating to building effective relationships (Coutts, 2017; DAF, 2018a).

Endorsement of EMoP training and development by relevant policy and governance stakeholders in the agricultural sector in QLD will be required to realise the value of the practice model. This endorsement must include the allocation of resources to enable broad communication of, and engagement with, the model to support its application across the sector (growers, extension officers, funding and employing bodies).

Outcome

Extension officers, their employers and farmers have an understanding of the EMoP and extension officers are able to implement and sustain the model in professional practice.

Objectives

A four-tiered training strategy will communicate EMoP to the broader sector and key stakeholders, and build the competency necessary for extension officers to implement the EMoP in their practice with farmers (see Table 10). The training and development strategy will:

- design and deliver a suite of information sessions and workshops that enable broad engagement with and support for EMoP
- provide information for relevant stakeholder groups
- enable extension officers to understand the elements of the EMOP and begin to implement the model in their practice
- build understanding of the elements of the EMoP and support its integration into the broader service system, structures, policy, funding bodies and employing organisations
- review and evaluate the effectiveness of the strategy.

TABLE 10: PROPOSED TRAINING PROGRAM

Training programs and content	Audience
<p>LEVEL 1 – information sharing and creating awareness Design, promote and deliver a one-hour overview of the EMoP (in person or online).</p> <p>Content areas</p> <ul style="list-style-type: none"> • Overview of the project and conditions that led to the EMoP • What occurred in the co-design process? • The data – what we learnt • What is a model? Why have a model of practice? • A relational focus in a technical field. • Exploring the evolving model – its components and what lies behind them / what do they comprise? • Conditions necessary for its effective application • What is currently happening? • Next steps 	<p>Government, funders, philanthropy, other external bodies.</p> <p>Potentially also used as introductory information for farmers, extension officers and their employers.</p>
<p>LEVEL 2 – Building sectoral understanding and commitment for EMoP Design and deliver a half-day workshop (in person or online) that helps employers of extension officers understand the EMoP and the conditions necessary to support its application and sustainability in extension practice.</p> <p>Content areas</p> <ul style="list-style-type: none"> • Overview of the project and conditions that led to the EMoP • What occurred in the co-design process? • The data – what we learnt • What is a model? Why have a model of practice? • A relational focus in a technical field • Exploring the evolving model – its components and what lies behind them / what do they comprise? • Conditions necessary for extension officers to competently apply EMoP • Risk and protective factors for EMoP within our organisation • Next steps for successful implementation 	<p>Those involved in management within organisations that employ extension officers.</p>



Training programs and content	Audience
<p>LEVEL 3 – Creating a ready employment environment to support application of EMoP</p> <p>Design and deliver a two-day workshop for those involved in the direct management of extension officers that enables them to support the application of EMoP to enhance practice.</p> <p>Content areas</p> <p>DAY ONE</p> <ul style="list-style-type: none"> • Introductions • Overview and objectives • Working together agreement • What is a model? Why have a model of practice? • A relational focus in a technical field. • Exploring the evolving model – its components and what lies behind them / what do they comprise? • Conditions necessary for Extension Officers to competently apply EMoP <p>DAY TWO</p> <ul style="list-style-type: none"> • Review • Reflection on practice • Guiding/facilitating reflective practices in line management • The functions of guided reflection – norm, form, restore • Using EMoP as a shared vehicle for reflective practice • Practice tasks of guided reflection • Next steps for successful implementation of EMoP for my extension staff • Review 	<p>Direct line managers and supervisors of extension officers. This could occur with participants from a variety of organisations.</p>

Training programs and content	Audience
<p>LEVEL 4 – Extension Officers are trained in the EMoP</p> <p>Design and deliver a three/four-day foundation course that enables extension officers to confidently apply the EMoP in their extension practice.</p> <p>Content areas</p> <p>DAY ONE</p> <ul style="list-style-type: none"> • Introductions • Overview and objectives • Working together agreement • What is a model? Why have a model of practice? • EMoP – What are the key messages conveyed in this model? • The steps involved in helping/facilitating change • Practice task – Listening with a view to understanding • The implications of our own perspectives and biases • Practice task – listening/exploring/identifying biases • Review <p>DAY TWO</p> <ul style="list-style-type: none"> • Review • Skills and qualities of the effective extension officer and farmer • Characteristics of an effective EO/farmer relationship • Practice Task – Exploring with empathy/understanding/alert to biases • Helping others consider alternative perspectives helping people change • Practice task – Helping others loosen unhelpful views or perspectives • Review <p>DAYS THREE and FOUR</p> <ul style="list-style-type: none"> • Review • Reflection on practice – the reflective practitioner • Modelling reflective behaviours • Using EMoP as a shared vehicle for reflective practice in extension practice • Practice tasks of guided reflection • Conditions necessary for my effective use of EMoP • Next steps for successful implementation of EMoP in my work with farmers and with my peers and managers • Review 	<p>Extension officers either within one organisation or across a geographical location.</p>
<p>LEVEL 5 – QLD based facilitators are able to deliver levels three and four</p> <p>Design and deliver a ‘train the trainer’ course to enable leading practitioners to competently facilitate EMoP training for managers and extension officers. Training levels three and four are dependent on this being achieved.</p> <p>Content areas</p> <ul style="list-style-type: none"> • Attend and complete the level four foundation course • Two-day small group facilitation workshop focusing on a partnership approach to facilitation – modelling the model 	<p>Service providers and extension officer champions.</p>

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