

Enhanced extension coordination



Reef Extension Training Needs Analysis: Executive summary

2018

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Executive summary

A Reef Extension Training Needs Analysis (TNA) was undertaken in October 2018 to guide both the range and the form of the training and development activities to build the capacity of extension service providers in the Great Barrier Reef catchments, as part of the Enhanced Extension Coordination program.

The link to an online survey was distributed via email, inviting respondents to complete the 21 qualitative and quantitative questions. The 161 respondents included representatives from the six Reef regions in the following proportions: Burdekin (31%), Burnett Mary (24%), Fitzroy (23%), Mackay Whitsundays (21%), Wet Tropics (16%), Cape York (4%) and other (4%). The respondents included representatives from the six primary industries in the following proportions: grazing (56%), sugarcane (43%), cropping (21%), horticulture (10%), bananas (5%), dairy (4%) and other (8%).

The respondents most frequently worked for natural resource management organisations (40%), followed by state government and industry-based organisations (both at 20%). Just over half (56%) of the respondents identified as being on-ground extension service providers, while others were team leaders (15%), managers (11%) and other roles (18%). Almost a third of the respondents (32%) had between two and five years of experience with delivering extension services and only one-third (34%) had more than 10 years of experience. Only 10% of the respondents spent more than 80% of their time on extension activities, while the remainder of the respondents indicated a fairly even split between the other percentage blocks (0 to 20%, 21 to 40%, 41 to 60%, and 61 to 80%). Just over half (54%) of the respondents identified as female, which aligns with the membership of Australasia–Pacific Extension Network (APEN), where 54% of the current members are female. Almost one-half (48%) of the respondents identified as belonging to the Gen X group, one-third (33%) as Gen Y and just 6% as Gen Z. Over two-thirds (70%) of the respondents indicated they had completed a bachelor's degree, while 11% had completed a Masters and 3% had completed a PhD.

The ten most commonly mentioned challenges experienced by respondents in the delivery of extension services were:

1. Lack of producer engagement
2. Resistant attitude towards change
3. Lack of resources
4. Project relevance and uptake of desired change
5. Lack of funding impacts
6. Over-abundance of information sources
7. Poor access to grower contact details
8. Lack of project continuity
9. Policy and regulatory negative impacts
10. Limited access to growers.

The top ten extension skills needed to achieve greater impact were:

1. Extension and facilitation skills
2. Technical knowledge
3. Meaningful producer engagement
4. Reporting requirements
5. Understanding producer knowledge levels
6. Measuring change

7. Time management
8. Meaningful producer relationships
9. Understanding delivery tools
10. Understanding social media.

The ten most commonly mentioned technical challenges currently experienced in the delivery of extension services to producers, observed across region and industry, were identified as:

1. Access to and use of existing and new technologies
2. Topics and issues related to soil management
3. Training and mentoring
4. Industry specific knowledge
5. Land management
6. Data management
7. Limited access to research
8. Business related skills
9. Economics
10. Extension and facilitation.

The five most commonly mentioned extension approaches, which were noted to be working well and achieving practice change as a result, observed across region and industry, were identified as:

1. One-on-one extension
2. Peer learning
3. Local and continuous communication
4. Relevant and timely information
5. Workshops.

The five most commonly mentioned responses to how extension will look in ten years' time were:

1. Traditional extension approaches to continue
2. Increased use of non-specified technology
3. Increased use of web-based technologies
4. Advanced data management technology
5. Better qualified and accredited extension officers.

Regarding their level of interest in being involved in an extension mentoring scheme, where experienced professionals help guide less experienced ones, overall the level of interest in being a mentor was 5.4 on a ten-point scale, while the interest in being a mentee was 6.5. It should be noted that 27 respondents rated their interest in being mentored at 10.

In relation to their level of interest in receiving qualifications and/or technical elements from the training they attend, the overall interest in receiving a Certificate of attendance/completion was 5.6 on a ten-point scale, a vocational qualification (e.g. Certificate III or IV qualification) was 6.3 and a University qualification (e.g. Graduate Certificate, Graduate Diploma or Masters) was 6.4. It should be noted that 35 respondents rated their interest in a university qualification at 10.

Regarding their level of interest in obtaining professional accreditation in extension, or similar, the overall interest was 6.7 on a ten-point scale. It should be noted that 40 respondents rated their interest in a professional accreditation at 10. The most commonly mentioned responses included to set industry benchmark and credibility, do not see value, and opportunity for further professional development.

In relation to their level of interest in approaches to learn new material, the overall interest in face-to-face approaches was 8.3 on a ten-point scale, live webinars 6.3 and online learning modules 6.0.

Respondents rated extension-related topics by their importance to their work and their current level of proficiency, creating the following priority ranking:

1. Planning extension activities based on industry needs
2. Using trials and demonstrations effectively
3. Enabling peer-to-peer learning of farmers
4. Engaging with farmers not currently engaged
5. Using different monitoring and evaluation approaches
6. Group facilitation and group dynamics
7. Using social marketing to persuade behaviour
8. Using webinars to engage geographically distributed clients.

Respondents rated technical topics by their importance to their work and by their current level of proficiency, creating the following priority ranking:

1. Soil health
2. Business knowledge and skills
3. GIS and data collection
4. Property design and layout
5. Water quality
6. Weed management
7. Precision agriculture
8. Chemical use and application.

When asked to nominate other high priority topics, the five most frequently mentioned items were:

1. Understanding social behaviours and learning
2. Grazing and pasture management
3. Communication and networking skills
4. Business and farm management
5. Customised extension approaches.