



# **A National Accreditation and Professional Development Program for Agriculture and Natural Resource Management**

AgCredited™: Advice you can trust

**A report for the Cooperative Venture  
for Capacity Building in Rural Industries**

by Cameron Archer and Darren Bayley

September 2008

RIRDC Publication No 08/135

RIRDC Project No AIA-12A

© 2008 Rural Industries Research and Development Corporation.  
All rights reserved.

ISBN 1 74151 724 9  
ISSN 1440-6845

***A National Accreditation and Professional Development Program for Agriculture and Natural Resource Management***

*Publication No. 008/135*  
Project No. AIA-12A

The information contained in this publication is intended for general use to assist public knowledge and discussion and to help improve the development of sustainable regions. You must not rely on any information contained in this publication without taking specialist advice relevant to your particular circumstances.

While reasonable care has been taken in preparing this publication to ensure that information is true and correct, the Commonwealth of Australia gives no assurance as to the accuracy of any information in this publication.

The Commonwealth of Australia, the Rural Industries Research and Development Corporation (RIRDC), the authors or contributors expressly disclaim, to the maximum extent permitted by law, all responsibility and liability to any person, arising directly or indirectly from any act or omission, or for any consequences of any such act or omission, made in reliance on the contents of this publication, whether or not caused by any negligence on the part of the Commonwealth of Australia, RIRDC, the authors or contributors.

The Commonwealth of Australia does not necessarily endorse the views in this publication.

This publication is copyright. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. However, wide dissemination is encouraged. Requests and inquiries concerning reproduction and rights should be addressed to the RIRDC Publications Manager on phone 02 6271 4165.

**Researcher Contact Details**

Cameron Archer  
Tocal College  
NSW Department Of Primary Industries  
PATERSON NSW 2421

Phone 02 4939 8812  
Fax 02 4939 8919  
Email [cameron.archer@dpi.nsw.gov.au](mailto:cameron.archer@dpi.nsw.gov.au)

In submitting this report, the researcher has agreed to RIRDC publishing this material in its edited form.

**RIRDC Contact Details**

Rural Industries Research and Development Corporation  
Level 2, 15 National Circuit  
BARTON ACT 2600  
PO Box 4776  
KINGSTON ACT 2604

Phone: 02 6271 4100  
Fax: 02 6271 4199  
Email: [rirdc@rirdc.gov.au](mailto:rirdc@rirdc.gov.au).  
Web: <http://www.rirdc.gov.au>

Published electronically in September 2008

# Foreword

There is currently no national certification or accreditation scheme which addresses questions of professional responsibility and competence for professionals working in agriculture and natural resource management.

In response, the Australian Institute of Agricultural Science and Technology with the support of the Cooperative Venture for Capacity Building (CVCB) Program, developed **AgCredited™** – a national pilot accreditation and professional development program.

The AgCredited™ pilot program is based on a set of national units of competency. Candidates are assessed against national core and specialist standards which are part of the Vocational Education and Training framework.

This report evaluates the use of competency based assessment to underpin a national accreditation program and identifies the issues surrounding the assessment of 62 participants that represent a national cross-section of practitioners in both private and public employment.

This project was funded through the Cooperative Venture for Capacity Building in Rural Industries which is made up of the research and development corporations: Australian Wool Innovation; Cotton Research and Development Corporation; Dairy Australia; Grains Research and Development Corporation; Grape and Wine Research and Development Corporation; Horticulture Australia Limited; Land & Water Australia; Meat & Livestock Australia; Murray-Darling Basin Commission; Rural Industries Research and Development Corporation; Sugar Research and Development Corporation; and the Australian Government Department of Agriculture, Fisheries and Forestry.

This report is an addition to RIRDC's diverse range of over 1800 research publications which can be viewed and freely downloaded from our website [www.rirdc.gov.au](http://www.rirdc.gov.au). Information on the CVCB is available online at <http://www.rirdc.gov.au/capacitybuilding/>.

- downloads at [www.rirdc.gov.au/fullreports/index.html](http://www.rirdc.gov.au/fullreports/index.html)
- purchases at [www.rirdc.gov.au/eshop](http://www.rirdc.gov.au/eshop)

**Peter O'Brien**

Managing Director

Rural Industries Research and Development Corporation

# Acknowledgments

The authors would like to acknowledge the assistance of the project steering committee Jim Swain, Mark Pedlar, Mark Evans, Bob Hudson, Cindy-Lee Bright and Peter Peterson. The authors also wish to thank Petra Masters and Claude Gauchat for their input.

## Abbreviations

AAAC – Australian Association of Agricultural Consultants  
IAAST – Australian Institute of Agricultural Science and Technology  
APEN – Australia-Pacific Extension Network  
AQF – Australian Qualifications Framework  
AQTF – Australian Quality Training Framework  
CVCB – Cooperative Venture for Capacity Building  
NAPDP – National Accreditation and Professional Development Program  
NCVER – National Centre for Vocational Education Research  
NRM – Natural Resource Management  
OH&S – Occupational Health & Safety  
RIRDC – Rural Industries Research and Development Corporation  
RTO – Registered Training Organisation  
RCC – Recognition of Current Competence  
VET – Vocational Education and Training

# Contents

**Foreword..... iii**  
**Acknowledgments..... iv**  
**Abbreviations ..... iv**  
**Executive Summary..... vi**  
**Introduction.....1**  
**Objectives.....2**  
**Methodology .....2**  
**Project outcomes and deliverables .....6**  
**Results and evaluation of the pilot..... 19**  
**Discussion of Results..... 26**  
**Conclusion and Recommendations ..... 29**  
**References ..... 30**

# Executive Summary

## What the Report is about

This report describes the development and outcomes of a national accreditation pilot program for professionals working in agriculture, horticulture and natural resource management. This pilot program was developed by the Australian Institute of Agricultural Science and Technology (AIAST) with the support of the Cooperative Venture for Capacity Building Program.

## Who is the report targeted at?

This report has been written for the stakeholders of this pilot project and for those interested in the accreditation and recognition of agricultural, horticultural and natural resource management professionals.

## Background

There is currently no national certification or accreditation scheme which addresses questions of professional responsibility and competence for professionals working in agriculture and natural resource management.

The ever increasing complexity in primary production and natural resource management has significantly increased the demand for specialist inputs from professionals engaged in these sectors. The critical issue today is the quality of these specialist inputs. At present there are no prescribed qualifications, no peer assessment and no requirement for ongoing professional development in most primary industry and environment sectors.

AIAST recognised the need for professionalism to be nurtured, developed and protected by a strong and credible national industry certification scheme.

AIAST, with the support of the Cooperative Venture for Capacity Building Program, developed **AgCredited™** – a national accreditation and development program for professional working in agriculture, horticulture and natural resource management.

AIAST engaged the services of Tocal College, a Registered Training Organisation operated by NSW Department of Primary Industries, to deliver competency based assessment of 62 pilot participants that represent a national cross-section of practitioners in both private and public employment.

## Aims and objectives

The aim of this project was to develop a national competency-based accreditation program for practitioners working in agriculture, horticulture and natural resource management.

The objectives of the project are:

- To establish agreement on the competencies needed by practitioners for sustainable agricultural, horticultural and natural resource management sectors
- To assemble and trial such competencies and assess their performance
- To assess the benefits, processes and costs of a competency-based accreditation process
- To evaluate the issues involved in implementing a competency-based accreditation program nationally
- To develop and evaluate the process for accredited professionals to maintain best practice and accreditation in their respective fields.

## Methods used

An evidence based method was used employing Recognition of Current Competence of individuals against a skills set of eight national competency standards which are recognised under the Australian Qualifications Framework. The pilot was evaluated using a standard survey instrument.

## Results and key findings

The AgCredited™ pilot program identified that:

- Evidence based assessment against national competency standards is suitable for those working as professionals in industry for more than three years
- The individual skills based assessment and recognition process provides the rigor and transparency necessary to maintain a credible industry based accreditation scheme which can be audited against the Australian Quality Training Framework
- Candidates in the pilot program were interested in building on the nominated skills set to take up further units to complete a nationally recognised Diploma in either Agriculture or Conservation and Land Management, even though this came at greater cost. More than half (52 per cent) of the pilot group have been awarded national Diplomas
- The natural resource management candidates preferred to be assessed by workplace interview rather than collect and submit their own evidence to demonstrate competence
- Individual case management and follow up of candidates by experienced education officers was critical in assisting candidates in the pilot to collect and submit appropriate evidence for assessment
- Further refinement of sector specific competencies is required as this program develops.

## Recommendations

- That a nationally integrated and endorsed professional development program that builds professional competence for agriculture, horticulture and NRM professionals be developed, organised and coordinated
- That partnerships with industry and key organisations be formed to coordinate professional development opportunities and shape industry specialisations
- That the accreditation program be further developed for specific industry sectors such as irrigation and dairy in consultation with peak industry bodies
- That the use of experienced education officers and assessors who individually case manage each participant be maintained.
- That further consideration is given to the right mix of sector specific competencies, e.g. NRM, irrigation and dairy
- That the accreditation program embraces both agriculture and NRM sectors and ensures both sectors have a common understanding of the program and perceive it to be of high value.

# Introduction

The National Accreditation and Professional Development Program (NAPDP) for agriculture, natural resources and related sectors began in August 2006. 62 participants were accepted into the pilot program, with the first group representing agriculture and horticulture starting in the first three months of the project. The second group representing the Natural Resource Management (NRM) sector began much later in the project due to negotiations with their single employer – the Australian Government. The delay in the NRM group starting caused the Project Leader to seek an extension of this project to allow for a thorough evaluation of all participants.

This report describes the development of the accreditation platform, the status and profile of participants, and the completion of project objectives. Key findings and recommendations are also made.

## Background

There is currently no national certification or accreditation scheme which addresses questions of professional responsibility and competence for professionals working in agriculture and NRM.

The ever increasing complexity in primary production and natural resource management has significantly increased the demand for specialist inputs from professionals engaged in these sectors. The critical issue today is the quality of these specialist inputs. At present there are no prescribed qualifications, no peer assessment and no requirement for ongoing professional development in most primary industry and environment sectors.

Recent research established the need for accreditation of professional advisors and consultants (Toohey 2002). Broad support for the role of formal education and training in supporting extension officers and industry advisors in their role of improving and building the capacity and capability of industry can be found in the recommendations of a number of studies (Straw *et al.* 1996; Synapse Consulting 1998; Macadam *et al.* 2004). Evidence is also found in the growing activity of relevant professional organisations and industry groups developing certification programs for their sectors.

In 2002 the Australian Association of Agricultural Consultants (AAAC) and the Australia-Pacific Extension Network (APEN) undertook a Rural Industries Research and Development Corporation (RIRDC) funded project to consult with a broad cross section of industry on the issue of a professional accreditation program for consultants and advisors. Following this the Australian Institute of Agricultural Science and Technology (AIAST) and APEN completed a Cooperative Venture for Capacity Building (CVCB) funded study that addressed the demand for a national accreditation scheme. This study was completed in 2003.

Independently AAAC, APEN and AIAST had been examining the needs of its members via the *Metamorphosis* project. High on that list of needs was a credible, widely recognised and rigorous accreditation program.

AIAST recognised and acted on the need for professionalism to be nurtured, developed and protected by a strong and credible national industry certification scheme.

AIAST, with the support of the CVCB, developed **AgCredited™** – a national accreditation and development program for practitioners working in agriculture, horticulture and natural resource management.

AIAST engaged the services of Tocal College, a Registered Training Organisation (RTO) operated by NSW Department of Primary Industries, to deliver competency based assessment of 62 pilot participants that represent a national cross-section of practitioners in both private and public employment.

# Objectives

The aim of this project was to develop a national competency-based accreditation program for practitioners working in agriculture, horticulture and natural resource management.

The objectives of the project are:

- To establish agreement on the competencies needed by practitioners for sustainable agricultural, horticultural and natural resource management sectors
- To assemble and trial such competencies and assess their performance
- To assess the benefits, processes and costs of a competency-based accreditation process
- To evaluate the issues involved in implementing a competency-based accreditation program nationally
- To develop and evaluate the process for accredited professionals to maintain best practice and accreditation in their respective fields.

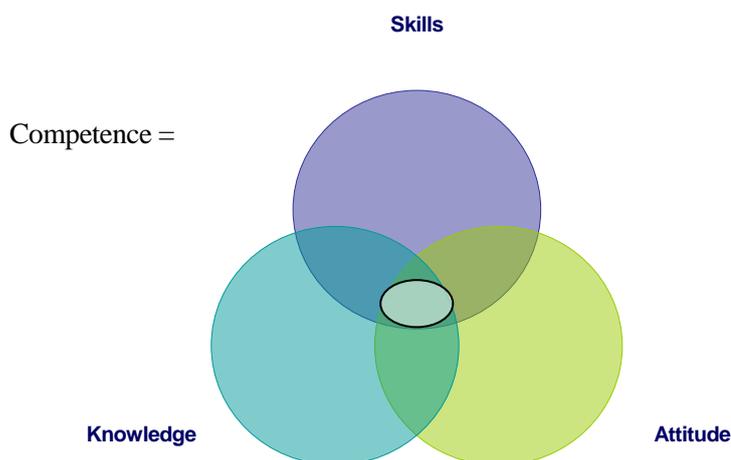
# Methodology

## Pilot accreditation process

An evidence-based method was used employing Recognition of Current Competence (RCC) of individuals against a skills set of eight national competency standards which are recognised under the Australian Qualifications Framework (AQF).

Competence can be defined as the combination of skills, knowledge and attitude required to effectively undertake a vocational or work task (see Figure 1). Competency based approaches can be used to create a platform that promotes innovation and continuous learning for advisory and extension organisations (Liles and Mustian 2004).

**Figure 1: Competence is a combination of skills, knowledge and attitude**



Candidates are required to collect and submit evidence to demonstrate their competency in eight nominated areas underpinned by national competency standards. The assessment process is comprehensive yet

flexible, with candidates being assisted individually on a case management basis by experienced education officers.

The types of evidence which can be used to demonstrate competence include:

- testimonials and references from peers or supervisors
- examples of work (reports, plans, schedules)
- statement of attainment or attendance from training courses
- academic transcripts
- position description for your current or past jobs
- risk management plans
- workplace reports, journals, diaries or calendar of events
- photographic or written demonstration of achievements
- staff evaluations from employers and employees
- memberships held.

Evidence is assessed on the basis of it being valid, sufficient, current and authentic.

This accreditation process is outlined below in Figure 2.

Liles and Mustian (2004) note that an emphasis on actual performance and the core competencies needed to achieve a high level of on-the-job performance provides the greatest return on training investment. Klemp (1999, as cited in Liles and Mustian 2004) emphasises the need to be selective in the number of competencies that make up an educational or development program, arguing that the number of competencies should be ten or fewer.

The pilot program is targeted at professionals with at least three years experience in industry. Accreditation is valid for five years. Reaccreditation will require evidence of ongoing professional development in nominated areas.

The eight units of competency which make up the skills set sit within the Rural Production and Conservation and Land Management Training Packages which are the basis for vocational education and training delivery in Australia for agriculture, horticulture and NRM.

The Vocational Education and Training (VET) sector provides a competency based educational pathway that is complementary to, rather than an alternative to, university qualifications. A recent report from the National Centre for Vocational Education Research (NCVER) showed that students are three times more likely to go from university to VET rather than vice versa and that many students are enrolled in both sectors concurrently (Harris *et al.* 2005).

Wheelahan (2003) identifies a number of enterprise-level benefits from adopting the RCC method, including:

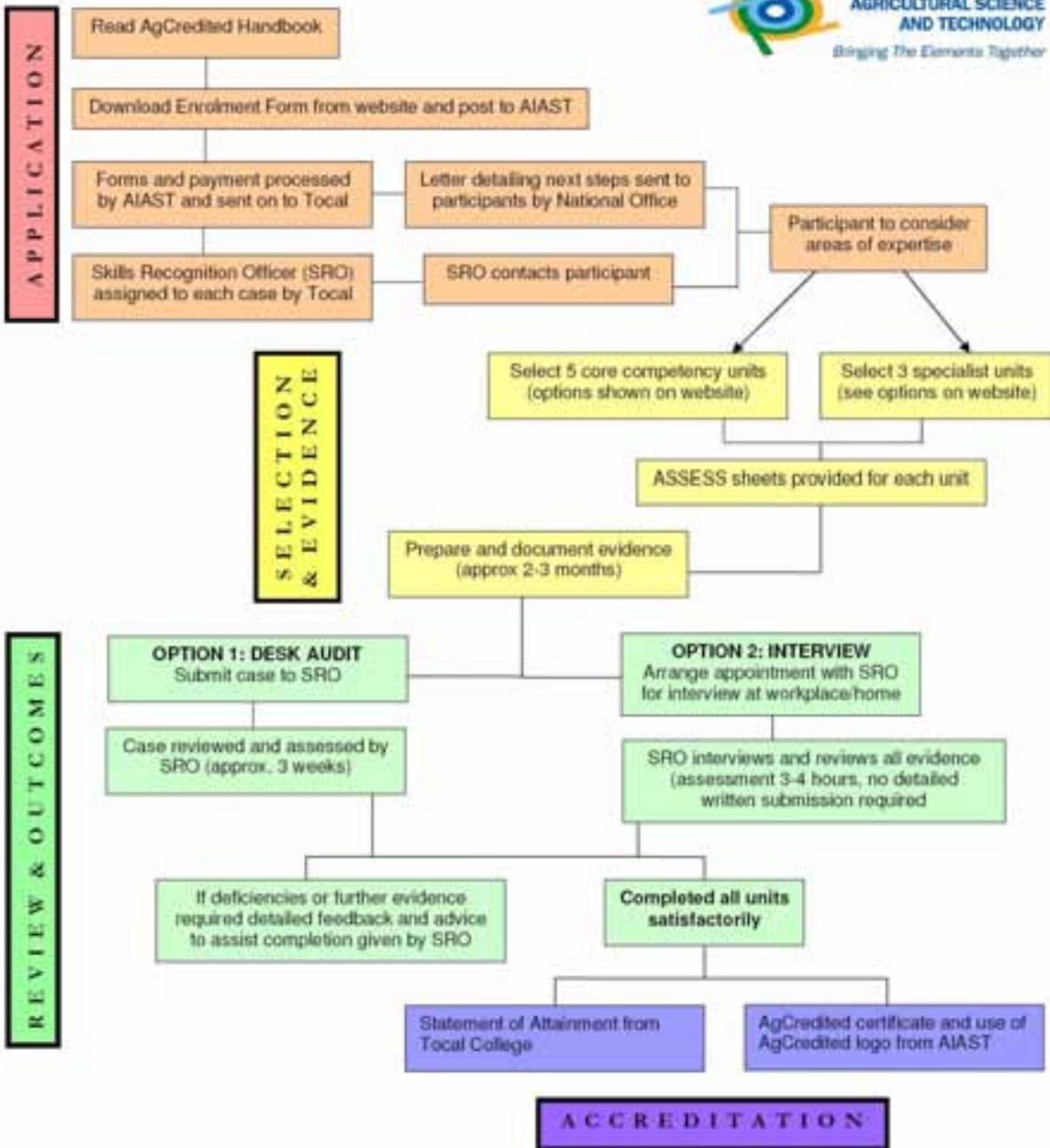
- increased skill levels of existing staff, by giving credentials to the learning they have already undertaken and through identification of tailored learning pathways that provide 'gap training' in areas where individuals are not yet proficient
- development of an enterprise learning culture
- more effective risk management strategies through an increasingly skilled workforce
- increased competitiveness through marketing the skills and expertise of qualified staff.

The pilot accreditation process also included a policy framework addressing fees and assessment period, refunds, appeals regarding assessment, complaints and grievances, privacy and a code of practice for assessors.

Figure 2: The AgCredited™ accreditation process



## How it works



## Evaluation of pilot and future directions

A standard survey instrument was used to evaluate the pilot program and to develop future directions and recommendations. Each participant was asked to complete the survey and was contacted four times to ensure a response. The survey contained two components. For the first component, participants were asked to respond to a series of statements which provided quantitative results around key topical areas. The second component contained open-ended questions to draw out participant reflections on the accreditation program.

The survey response rate was 71 per cent.

A participative workshop was held in Canberra on 20 September 2007 with key industry stakeholders to:

- discuss the rationale and basis of the pilot program
- share the initial feedback and findings of the pilot
- seek the views and recommendations of those present.

Participants included representatives from:

- AAAC
- Adult Learning Australia
- Agri-Food Industry Skills Council
- AIAST
- Croplife Australia
- CVCB
- Dairy Australia
- Departments of Agriculture/Primary Industries for NSW, Western Australia, Queensland and Tasmania
- Meat and Livestock Australia

# Project outcomes and deliverables

The outcomes listed in the project agreement have been met (see Table 1).

**Table 1: Agreed project outcomes and their status**

<b>Agreed project outcomes</b>	<b>Result</b>
1. Endorsement of a national competency-based framework	Achieved
2. Endorsement of a process for implementing the framework	Achieved
3. Endorsement of a framework which has the capacity to adjust to changing government and commercial circumstances	Achieved
4. Endorsement of a framework that is complementary to other national accreditation or quality assurance programs	Achieved
5. Agreement on the core competencies and specialist competencies for advisors and consultants	Achieved
6. Practical evaluation of the assessment process and cost.	Achieved

The deliverables identified in the project agreement have been achieved (see Table 2).

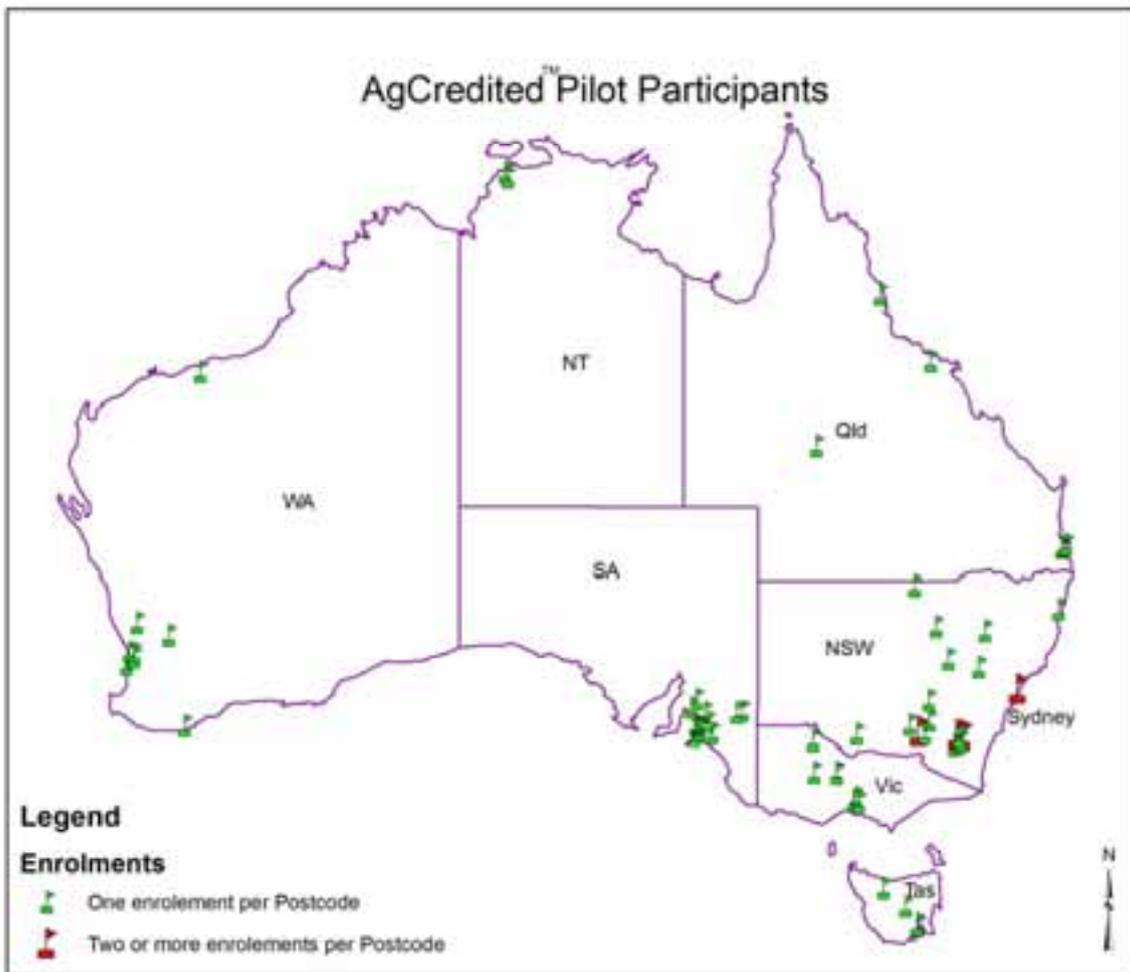
**Table 2: Agreed project deliverables and their status**

<b>Agreed project deliverables</b>	<b>Status</b>
Develop a list of agreed specialist competencies for the broad-acre cropping, wool and production horticulture sectors.	Completed
Pilot program handbook	Completed
Pilot program website	Completed
Completion of assessments for pilot participants	Completed
Final report evaluating the Pilot, the competencies, the accreditation process and cost	Completed

## Participants

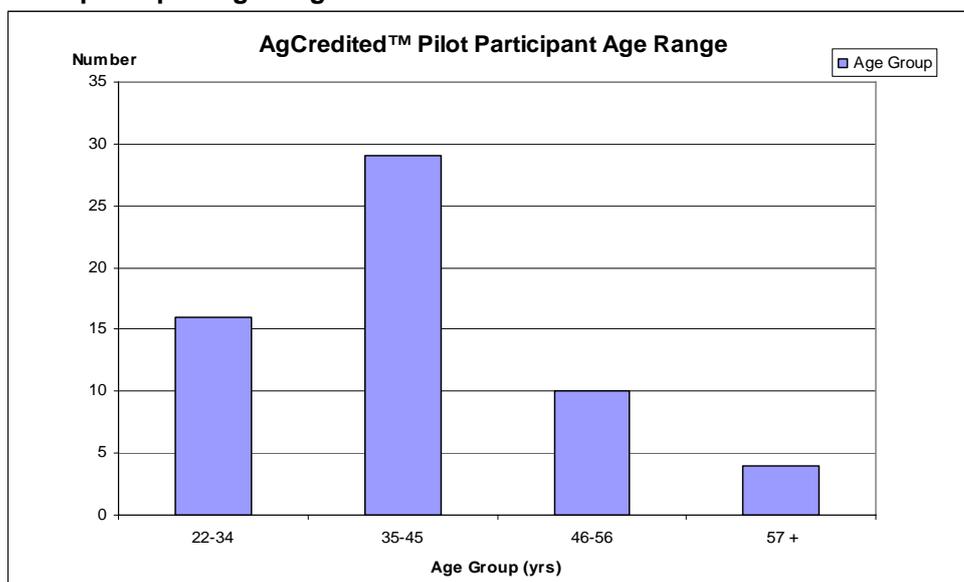
There were 62 participants in the national accreditation pilot program, with all states and territories represented (see Figure 3).

Figure 3: Location of AgCredited™ pilot participants



The pilot program covered the full spectrum of age ranges and career stages, enabling the accreditation system to be tested and validating core competencies for a broad client base (see Figure 4). The average age of the pilot participants working in the agriculture and horticulture sector is 37. For participants working in NRM the average age is 40.

Figure 4: Pilot participant age range



The following employers were represented in the AgCredited™ pilot:

- Ag. Resource Management
- Agripartners
- Australian Government
- Bowen Crop Monitoring Services
- Crop-Rite
- CRT
- Elders
- Growcom
- Imag Consulting
- JJS Glass and Company
- Landmark
- Myplonga Traders
- PB Ag Consulting
- PFC AgServices
- Syngenta.



**Photo 1: First round of interviews of AgCredited™ NRM candidates with assessors**

## Core competencies

Core national standards which underpin professional competence were identified in this project. Pilot participants must select five of these units (see Table 3).

**Table 3: AgCredited™ core competencies**

AgCredited™ Core skill	Unit code	Unit title
Communication	RTC5801A	<i>Provide specialist advice to clients</i>
OH&S	either BSBMGT505A	<i>Ensure a safe workplace</i>
	or RTC5701A	<i>Establish and maintain the enterprise OHS program</i>
Professional risk management	BSBMGT609A	<i>Manage Risk</i>
Sustainable development	either RTE5524A	<i>Develop and implement sustainable land use strategies</i>
	or BSBMGT507A	<i>Manage Environmental Performance</i>
Australian legislation & policy	either PSPLEGN501A	<i>Promote compliance with legislation in the public sector</i>
	or PSPWP1501B	<i>Evaluate workplace legislative compliance</i>

## A list of agreed specialist competencies

This project identified specialist competencies for specialist industry areas seen below in Tables 4-8. The tables are examples only. For more information on specialist competencies visit the AgCredited™ website at [www.agcredited.com.au](http://www.agcredited.com.au)

**Table 4: Broad acre specialist competencies**

<b>BROAD ACRE</b>
<p>RTE5014A    Manage agricultural crop production</p> <p>This competency requires the application of skills and knowledge to develop agricultural crop establishment, maintenance and harvesting plans. It also involves the implementation of strategies to ensure the sustainability of the land and an awareness of resource use, as well as the capacity to introduce specific control measures to deal with infestations.</p>
<p>RTE5922A    Plan production for the whole farm/land-based business</p> <p>This competency standard covers the process of reviewing and confirming the organisations business goals and vision, and its land-use, human resource development and financial plans. It includes the need to balance production and financial decisions with the organisations goals and values. The work described in this unit brings together a range of planning activities at a global level for a business that operates from a small to medium base, which could be a family business.</p>
<p>RTE5516A    Develop a whole farm plan</p> <p>This competency standard covers the process of developing a whole farm plan for a rural enterprise. It requires the ability to determine directions for the business, audit the natural resources of the property, monitor legal requirements impacting on the management of the property, and develop management strategies to address natural resource management issues. Developing a</p>

whole farm plan requires knowledge of SWOT analysis, sustainable land management practices, property planning processes and approaches, land capability, conservation management strategies, legal requirements and risk management.

**RTF4004A Develop a plant nutrition program**

This competency standard covers the process of developing a plant nutrition program in the horticultural or agricultural industry. Planning requires consideration of site factors, plant species requirements, soil and plant tissue analysis, nutrient application procedures, and monitoring OHS hazards and environmental impacts.

**RTE5912A Plan and monitor production processes**

This competency standard includes the need to act in an environmentally aware manner, while at the same time maximising the production capacity of the organisation. It requires the need to analyse and extract information from a broad range of sources, and to comply with a variety of legislative and regulatory requirements. Planning and monitoring production processes requires extensive knowledge in some areas such as sustainable land use principles and practices, and a range of technical and other skills such as planning, and cost benefit analysis.

**RTE5016A Develop production plans for crops**

This competency standard requires the ability to prepare budgets and gross margins, source and interpret relevant benchmark information from consultants or peers, sample soils and plant tissue for testing, manage and monitor crop diaries and associated records, select crop species and variety, determine yield potential for crop, prepare individual paddock plans and a whole farm crop, and review production plan. Developing production plans for crops requires knowledge of determinants of crop yield, market prices, gross margins, cash flow budgets and disease and pest management for relevant crops.

The above are examples only. For more information on specialist competencies visit the AgCredited™ website at [www.agcredited.com.au](http://www.agcredited.com.au)

**Table 5: Sheep and wool specialist competencies**

**SHEEP & WOOL**

**RTE5103A Manage livestock production**

This competency standard covers the process of planning for livestock production, and then managing the implementation of such a plan. It includes the need to act in an environmentally aware manner and to be mindful of the health and welfare of the livestock, while at the same time maximising the production capacity of the farm. It requires the need to analyse and extract information from a broad range of sources, and to comply with a variety of legislative and regulatory requirements.

**RTE5101A Develop and implement a breeding strategy**

This competency standard requires skills and knowledge to select breeding options and resources appropriate to meet the breeding aims of the enterprise. It also requires skills to evaluate the strategy in terms of costs and benefits to the enterprise.

**RTE5104A Develop livestock health and welfare strategies**

This competency standard covers the functions required to design and implement preventative health treatment and programs for livestock. It requires skills and knowledge to assess a range of livestock health problems and devise appropriate strategies for the implementation of both livestock health strategies and contingency plans. It also requires skills to evaluate the strategy in terms of costs and benefits to the enterprise. It requires knowledge of codes of practice with regard to animal welfare and animal health practices.

**RTE5107A Identify and select animals for breeding**

This competency standard requires the determination of selection criteria according to enterprise goals, and accurate identification and selection of animals that conform to the requirements of a breeding strategy.

RTE5106A	Develop production plans for livestock This competency standard requires the ability to determine feasibility of livestock enterprise, identify and define determinants of livestock profitability, establish livestock production targets, prepare production plan, and review production plans to determine input and service requirements.
RTE5002A	Manage integrated crop and pasture production This competency standard requires the application of skills and knowledge to set objectives to maximise pasture and crop resources. It also involves the implementation of strategies to ensure the sustainability of the land and an awareness of resource use, as well as the capacity to introduce specific control measures to deal with infestations.
RTE4813A	Provide information and advice on wool preparation This competency standard includes gathering/collating information, examining it for benefits to the profitability of the operation, and then communicating the advice to the grower in the form and at the time it is required.
RTE5917A	Arrange livestock purchases This competency standard covers the process of arranging livestock purchases. Competency requires the application of knowledge and skills to identify appropriate purchases against enterprise requirements at the best price from reliable sources. Competency also requires the application of skills and knowledge to research and determine best prices, check on health status and condition of livestock, negotiate the purchase and arrange transportation and insurance.
RTE5918A	Arrange marketing of livestock This competency standard requires the application of knowledge and skills to identify appropriate markets and sales opportunities, ensuring that the product meets legislative and industry requirements for fitness for sale, selecting sales outlets and negotiating with brokers, sellers and agents, and arranging transport. Competency also requires the application of skills and knowledge to monitor sales trends and analysing and recording sales data to help improve future profit margins, and monitor the effectiveness of the sales strategy.

The above are examples only. For more information on specialist competencies visit the AgCredited™ website at [www.agcredited.com.au](http://www.agcredited.com.au)

**Table 6: Production horticulture specialist competencies**

<b>PRODUCTION HORTICULTURE</b>	
RTF5001A	Develop a horticulture production plan This competency standard requires consideration of market requirements and site factors, suitable plant species and cultivars, resources and equipment for establishing production sites, planting and maintenance, and preparation of plans, specifications, quotations and associated documents.
RTE5006A	Plan and manage long-term weed pest and/or disease control in crops This competency standard includes the need to provide input to planning processes that may be occurring elsewhere in the organisation, and to determine the scheduling for implementation. It requires the need to monitor and adjust the plan in response to changing situations, and to subsequently evaluate the outcomes of the weed, pest and/or disease control measures taken.
RTF5012A	Manage a controlled growing environment This competency standard includes assessing a controlled growing environment to establish optimum parameters and resources for a chosen crop, preparing a management plan and monitoring outcomes. Management of controlled growing environments requires extensive horticultural knowledge and practical skills, particularly in plant physiology and growth needs, controlled environment systems, monitoring, reporting and forward planning.

<p><b>RTD5402A</b> Develop a strategy for the management of target pests</p> <p>This competency standard covers the process of assessing pest and land management information and developing a strategic plan for the management of the pests. It requires the ability to determine land management/production objectives, estimate costs and advantages for the management units most affected, define the performance criteria for each land management/production objective, select management options for the target pests, and negotiate strategies with relevant stakeholders in the affected area.</p>
<p><b>RTE5015A</b> Manage the harvest of agricultural and horticultural crops</p> <p>This competency standard includes the estimation of the crop yield and value, the planning for resources that will be required, the negotiation of both insurance and equipment supply contracts, as well as planning for any emergencies that may occur. It requires the need to assess crop quality, and to budget and organise for the resources to arrive at the appropriate time and place.</p>
<p><b>RTF5521A</b> Monitor and manage soils/growing medium</p> <p>This competency standard requires the ability to research information, prepare plans for crops/plants, collect soil and/or media samples, perform basic soil tests, interpret results from own or laboratory tests, and record and store information. It requires knowledge of soil types, soil physical properties, soil chemical properties, plant nutrition through soil management, soil conservation strategies and sustainable production techniques, basic soil field tests, soil sampling techniques, interpreting laboratory results, techniques to ameliorate soil properties, and record keeping.</p>
<p><b>RTF5005A</b> Manage plant health</p> <p>This competency standard requires the ability to develop a plant health and management program, implement a plant maintenance program, and prepare a nutrition program. Managing plant health in a horticultural or agricultural enterprise requires knowledge of strategic aspects of managing plant quality, performance and nutrition, management of weed, pest and disease infestations, planning water budgets and irrigation strategies, plant growth processes, and plant growth.</p>

The above are examples only. For more information on specialist competencies visit the AgCredited™ website at [www.agcredited.com.au](http://www.agcredited.com.au)

**Table 7: Specialist NRM competencies**

<p><b>NRM</b></p>
<p><b>RTD5501A</b> Assess applications for legislative compliance</p> <p>This competency standard covers the process of assessing applications for legislative compliance relating to changes in land use and /or management. It requires the ability to assess and collect site evidence and compile final report. It requires knowledge of relevant Federal and State legislation and regulations on vegetation clearance, interpreting aerial photographs, maps and GIS, communicating with stakeholders, agency policies and procedures, and formats for compiling reports.</p>
<p><b>RTD5502A</b> Conduct field research into natural and cultural resources</p> <p>This competency standard covers the process of conducting field research into natural resource and cultural areas for resource management and related purposes. This work is often done prior to, or in conjunction with the development of a resource management plan. It requires the ability to review existing knowledge, identify stakeholders, develop a research approach, conduct field investigations, develop process for involving decision-makers and report on the field investigation.</p>

**RTD5802A Support group and community changes in resource management**  
 This competency standard covers the process of supporting change management processes in a group and community context. It requires the ability to identify changes occurring at group and community levels, identify potential impacts and reactions, and facilitate change management processes. Supporting group and community changes in resource management requires knowledge of change management theories at individual and group level, meeting procedures, local networks and groups, and community viewpoints and cultures.

**RTD5806A Promote group formation and development**  
 This competency standard covers the process of bringing people together to form and strengthen the group, its processes and outcomes. It requires the ability to identify the potential for the group, develop approaches to create and maintain interest, communicate group potential and achievements and attract members and volunteers. Promoting group formation and development requires knowledge of sources of local information, structure and operation of community organisations, group formation processes, public relations principles and principles of negotiation and conflict resolution.

**RTD5509A Evaluate project submissions**  
 This competency standard covers the process of participating in the submission assessment process for government funded community-based programs at regional and State/Territory levels. It requires the ability to review previously planned project outcomes, develop evaluation approaches, organise data collection, analyse data and report on conclusions. Evaluating project submissions requires knowledge of evaluation techniques and reporting methods, concepts of maintaining valid evaluations, identifying and documenting limitations, natural resource management technologies, and data collection methods.

**LGACOM502A Devise and conduct community consultation**  
 This competency standard covers the process of devising and conducting community consultations and reporting on results. It requires the ability to devise consultation strategies, provide briefings, apply codes of conduct and ethical practices and collate and analyse information.

The above are examples only. For more information on specialist competencies visit the AgCredited™ website at [www.agcredited.com.au](http://www.agcredited.com.au)

**Table 8: General elective competencies**

<b>COMMON</b>	
<b>RTC5702A</b>	<b>Develop and manage a chemical use strategy</b> This competency standard covers the process of developing, implementing and managing a chemical use strategy. High level skills include risk analysis, risk control, risk management, use of Integrated Pest Management, Integrated Resistance Management, Animal Health Management and communication are required.
<b>RTE5902A</b>	<b>Develop and review a business plan</b> This competency standard requires the application of knowledge and skills to determine the scope of the business plan, prepare a business plan, determine goals, trial systems, and document, monitor and review the business plan. Competency must also be demonstrated in communicating business plan objectives to relevant parties.

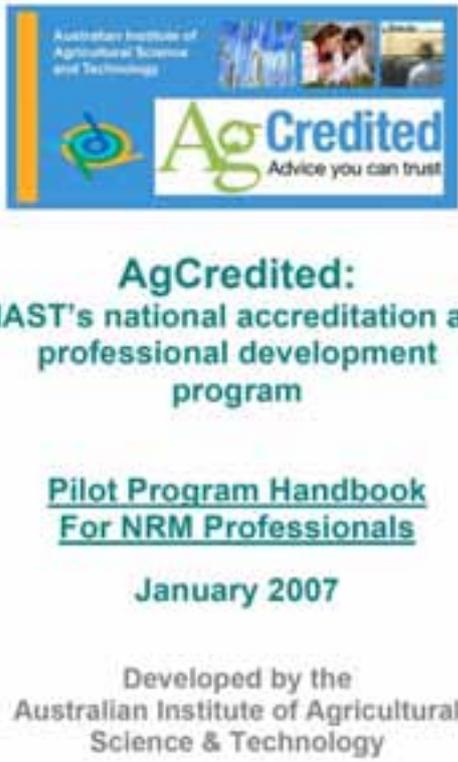
RTE5903A	Plan, implement and review a quality assurance program
This competency standard requires the ability to determine quality assurance objectives for the enterprise, plan the quality assurance program, develop implementation strategies, implement the quality assurance program, and review the quality assurance program. Planning, implementing and reviewing a quality assurance program requires a knowledge of market projections and customer requirements, cost/benefit of quality assurance implementation, system analysis, enterprise culture and values, leadership and administrative skills, human resource induction and performance monitoring practices.	
RTE5525A	Manage trial and /or research material
This competency standard requires the ability to define the purpose of the trial and the scope and extent of the work, oversee management of trial/research materials, collate data, and complete reports. Managing trial and/or research materials requires knowledge of scheduling and programming work within timelines, data collection and reporting, research procedures and best practice techniques, and enterprise work team management guidelines. It will also require specialist knowledge related to the area of research.	
BSBFLM509A	Promote continuous improvement
Frontline management has an active role in managing the continuous improvement process in achieving the organisation's objectives. Their position closely associated with the creation and delivery of products and services, means that they play an important part in influencing the on-going development of the organisation.	
BSBEBUS505A	Implement new technologies for business
This unit covers planning for the introduction of new technologies, implementing new technologies for the business and managing the change process associated with implementation.	
RTD5802A	Support group and community changes in resource management
This competency standard covers the process of supporting change management processes in a group and community context	
RTD5805A	Facilitate development of group goals and projects
This competency standard covers the facilitation role to assist a group to develop its direction and role in terms of goals, action plans and projects, and to prepare submissions for funding on relevant projects. Goals, action plans and projects may range from a small area to a sub-catchment plan.	
BSBFLM507A	Manage quality customer service
Frontline management is involved in ensuring that products and services are delivered and maintained to standards agreed by the organisation and the customer. This will be carried out in the context of the organisation's policies and practices as well as legislation, conventions and codes of practice.	
RTE5920A	Negotiate and monitor contracts/commercial agreements
This competency standard requires the ability to establish agreements with sources external to the enterprise, complete contract documentation, and monitor the performance of contracts.	
PSPPM502A	Manage projects
This unit covers the management of projects which may be reasonably complex in terms of scope, degree of risk, political, cultural and social factors that apply consequences of failure and degree of control of the project.	
RTC5914A	Prepare reports
This competency standard covers the process of preparing comprehensive reports for agricultural, horticultural and/or land management purposes.	

The above are examples only. For more information on specialist competencies visit the AgCredited™ website at [www.agcredited.com.au](http://www.agcredited.com.au)

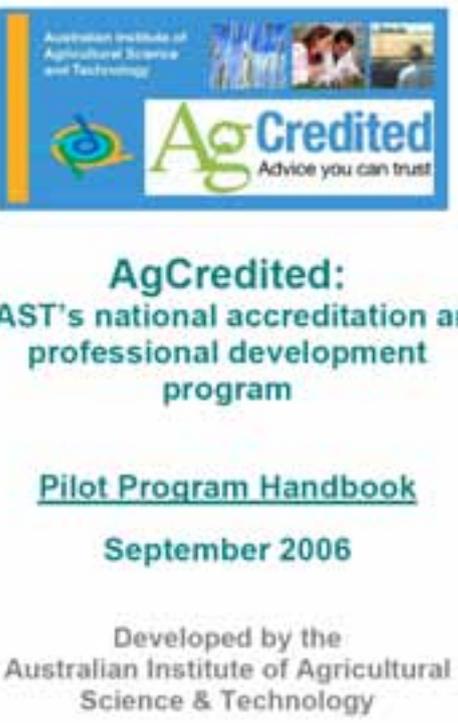
# Pilot program handbook

Two handbooks were developed for the accreditation program (see Figure 5).

Figure 5: Screen grabs of AgCredited™ handbooks

	<p>AgCredited – AIAST's national accreditation and professional development program page 2</p> <h2>Table of Contents</h2> <ul style="list-style-type: none"> <li>Introduction ..... 3</li> <li>Skills Recognition ..... 4</li> <li>Contacts for Skills Recognition ..... 4</li> <li>Steps to Accreditation ..... 5</li> <li>Cost of Accreditation ..... 7</li> <li>What will you receive once you are accredited? ..... 7</li> <li>Structure of the Diploma of Conservation and Land Management ..... 8</li> <li>AgCredited Core Competencies mapped against units of competency ..... 8</li> <li>Specialist Units ..... 10</li> <li>Example ASSESS Sheet ..... 11</li> <li>Sample Statement of Attainment ..... 12</li> <li>Revisor Format ..... 13</li> <li>Code of Practice for Assessors ..... 14</li> <li>Frequently Asked Questions ..... 15</li> <li>Where to from here? ..... 16</li> <li>Application Form ..... 17</li> </ul> <p> Please note this is the AgCredited handbook for <i>NRM Professionals!</i> An AgCredited handbook is also available for agricultural and horticultural professionals. See <a href="http://www.agcredited.com.au">www.agcredited.com.au</a></p>
--	---

<http://www.tocal.com/agcredited/handbook.pdf>

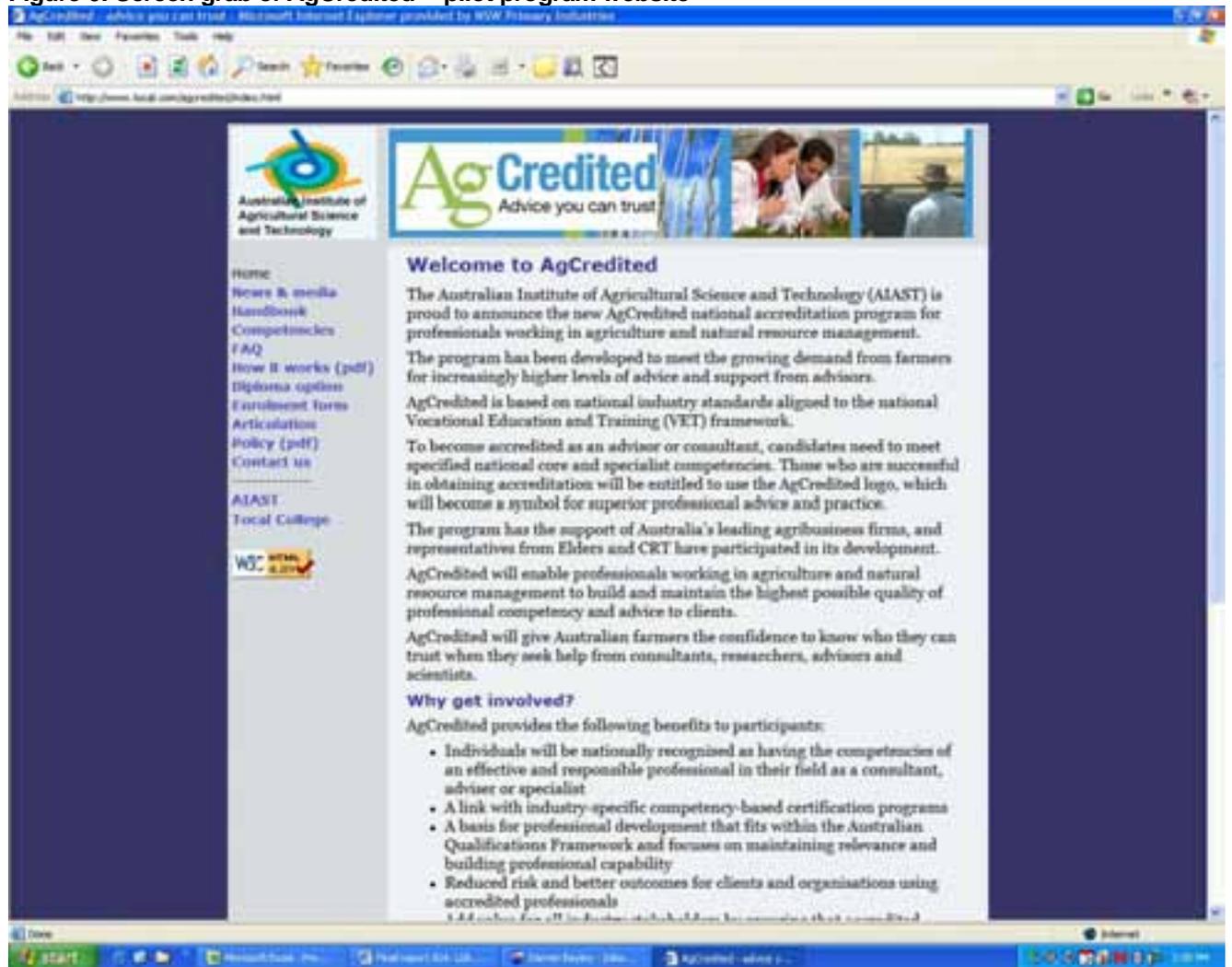
	<p>AgCredited – AIAST's national accreditation and professional development program page</p> <h2>Table of Contents</h2> <ul style="list-style-type: none"> <li>Introduction ..... 3</li> <li>Skills Recognition ..... 4</li> <li>Contacts for Skills Recognition ..... 4</li> <li>Steps to Accreditation ..... 5</li> <li>Cost of Accreditation ..... 7</li> <li>What will you receive once you are accredited? ..... 7</li> <li>Structure of the Diploma of Rural Business Management ..... 8</li> <li>AgCredited Core Competencies mapped against units of competency ..... 9</li> <li>Specialist Units ..... 10</li> <li>BROAD ACRE ..... 10</li> <li>SHEEP &amp; WOOL ..... 11</li> <li>PRODUCTION HORTICULTURE ..... 12</li> <li>COMMON ..... 13</li> <li>Example ASSESS Sheet – Broad Acre ..... 14</li> <li>Example ASSESS Sheet – Sheep and Wool ..... 15</li> <li>Example ASSESS Sheet – Production Horticulture ..... 16</li> <li>Example ASSESS Sheet – Common to all sectors ..... 17</li> <li>Sample Statement of Attainment ..... 18</li> <li>Revisor Format ..... 19</li> <li>Code of Practice for Assessors ..... 20</li> <li>Frequently Asked Questions ..... 21</li> <li>Where to from here? ..... 22</li> <li>Application Form ..... 23</li> </ul>
---	---

<http://www.tocal.com/agcredited/nrmhandbook.pdf>

## Pilot program website

A pilot program website was developed as an information hub for program participants (Figure 6)

Figure 6: Screen grab of AgCredited™ pilot program website



[www.agcredited.com.au](http://www.agcredited.com.au)

## Completion of assessments for pilot participants

The program's overall completion rate was 71 per cent. 52 per cent of the participants elected to undertake assessment in further units of competency in order to also achieve a national Diploma.

At this point 69 per cent of the agriculture and horticulture participants have completed the program and have achieved accreditation status (see Table 9). 38 per cent of this group elected to be assessed against further units of competency to achieve both accreditation status and a national Diploma in Agriculture.

**Table 9: Agriculture and horticulture pilot participant profile and accreditation status**

Participant	Employer	Result
PB	PB Ag Consulting	Completed
GC	Elders	Completed
JS	Syngenta	Completed
JP	Elders	Completed
SM	Syngenta	Completed
ID	Crop-Rite	Completed
GP	Elders	Completed
JS	Elders	Incomplete
DC	Elders	Completed
GP	Elders	Completed
JS	Elders	Completed
SW	Landmark	Incomplete
BP	Elders	Incomplete
DA	Bowen Crop Monitoring Services	Incomplete
MW	Growcom	Completed
WN	Landmark	Incomplete
SH	Myplonga Traders	Completed
GS	Imag Consulting	Completed
MS	Imag Consulting	Completed
RW	Agricultural Resource Management	Completed
CD	Elders	Completed
NC	JJS Glass and Company	Incomplete
AT	JJS Glass and Company	Incomplete
DS	Landmark	Incomplete
JC	Agripartners	Completed
ME	CRT	Completed
PP	PFC AgServices	Incomplete
MP	Elders	Completed
AH	Elders	Completed

At this point 24 of the 33 NRM participants have completed the program and have achieved accreditation status, a 73 per cent completion rate (see Table 10). 64 per cent of this group elected to be assessed against further units of competency to achieve both the accreditation status and a national Diploma in Conservation and Land Management (specialising in Community Coordination and Facilitation).

**Table 2: Natural Resource Management pilot participant profile and accreditation status**

<b>Participant</b>	<b>Employer</b>	<b>Result</b>
RG	Australian Government	Completed
NM	Australian Government	Completed
IB	Australian Government	Completed
NR	Australian Government	Completed
CT	Australian Government	Completed
MG	Australian Government	Completed
MM	Australian Government	Incomplete
GR	Australian Government	Incomplete
MS	Australian Government	Completed
MT	Australian Government	Completed
JB	Australian Government	Incomplete
PW	Australian Government	Completed
MS	Australian Government	Incomplete
AK	Australian Government	Completed
PR	Australian Government	Completed
SH	Australian Government	Completed
ST	Australian Government	Completed
SG	Australian Government	Completed
MC	Australian Government	Completed
RD	Australian Government	Completed
TA	Australian Government	Completed
BH	Australian Government	Completed
RW	Australian Government	Completed
BL	Australian Government	Incomplete
LM	Australian Government	Incomplete
MM	Australian Government	Completed
ND	Australian Government	Incomplete
PF	Australian Government	Incomplete
RB	Australian Government	Completed
KW	Australian Government	Completed
BH	Australian Government	Incomplete
MM	Australian Government	Completed
DP	Australian Government	Completed

# Results and evaluation of the pilot

Each participant of the pilot was asked to complete a standard survey on the program. The survey contained two components. For the first component, participants were asked to respond to a series of statements which provided quantitative results around key topical areas. The second component contained open-ended questions to draw out participant reflections on the strengths and weaknesses of the program and how they might use the newly acquired accreditation status. The qualitative responses provide a depth of explanation that underpins the quantitative data, allowing conclusions to be drawn and improvements made to the AgCredited™ program.

The survey results are reported separately for the two distinct groups who took part in the pilot, the agriculture and horticulture professionals and the natural resource management facilitators who are employed by the Australian Government. This has been done because of the major differences between the two groups, and so as not to dilute their feedback. Further comments on this point are made in the discussion section of this report.

## Survey results from agriculture and horticulture group

The survey results of the agriculture and horticulture group are shown below. 24 out of the 29 agriculture and horticulture participants completed the survey, a response rate of 83 per cent.

**Statement: The AgCredited™ program met my aims and expectations.**

72 per cent of this group responded that the AgCredited™ program met their expectations.

**Statement: The handbook and information provided were clear and helpful.**

84 per cent of this group agreed that the handbook and information provided was helpful in guiding them through the program.

**Statement: I could choose elective units that were relevant to my work role.**

84 per cent of this group agreed with this statement.

**Statement: Collecting evidence to show my skills was straight forward.**

80 per cent of agriculture and horticulture participants agreed with this statement.

**Statement which of the following core units are relevant to your professional role**

Unit topic	Participant responses (maximum 24)
Provide specialist advice	24
Sustainable land use & management of environmental performance	22
Manage risk	19
Occupational Health and Safety	14
Australian legislation and policy	11

**Question: Do you think professional recognition will help your Career?**

64 per cent responded yes and 20 per cent indicated they were unsure,

**Question: Do you consider the price of \$1 300 for initial accreditation to be cheap, fair or expensive?**

52 per cent indicated it was fair and 36 per cent responded it was expensive.

**Question: Would you prefer to complete accreditation by compiling evidence of your skills and experience yourself, or by interview in the workplace?**

48 per cent stated they prefer accreditation by interview, 28 per cent were unsure, 16 per cent indicated they would prefer to compile their own evidence for skills assessment.

**Question: Would you recommend the AgCredited™ program to others?**

76 per cent said yes and 16 per cent replied with a conditional yes if the program is well promoted.

**What were the strong points of the AgCredited™ program?**

The following points are direct responses from agriculture and horticulture candidates:

- *Robust enough to prevent from applying those who aren't appropriately qualified and who don't have the relevant experience*
- *Allows advisors to show that they have a degree of independence from the reseller*
- *Forced me to update my CV and collate my files*
- *Easy to find units relevant to my profession*
- *It made you aware of what you have achieved, as when you have been in the workforce for some time you become focused on the task ahead and forget the credentials you have built up and what you have previously done*
- *That you can get a Diploma that is nationally recognized*
- *Credibility – CPAg can be fudged so provides proof you are working in the field*
- *Use of internet and staff contact was very good*
- *The rigor was good and hope the standard is maintained*
- *Accreditation through a recognized institution*
- *Having to produce evidence to support your knowledge*

**What are the benefits of completing the program?**

The following points are direct responses from agriculture and horticulture candidates.

- *Provided a review of personal and professional development, setting out achievements and mapping a pathway for further study*
- *Sets benchmarks for advisors, providing recognition to those with experience and no qualifications*
- *Demonstrates to potential employers that you are keen and able to improve yourself*
- *It brings great self satisfaction because it is not easy to obtain*
- *It provides us with some credentials which highlight we are professionals in our field*
- *Opportunity to gather testimonials*
- *Redefines trust in your own knowledge and skills base*
- *Evidence of professional development*
- *Gaining accreditation and in my case the Diploma in Rural Business Management which I can use as credits for further study*
- *A thorough review of what you have done and are doing in your career has been undertaken*
- *It requires a number of years of practical experience to achieve the evidence to comply*
- *Being a member of a nationally accredited program that demonstrates that you actually work and have experience in your field*
- *Certification of my knowledge and professionalism at a national level within my field of expertise and being recognized by industry, governing bodies, existing and potential clients*

### **How will you use the AgCredited™ accreditation status in your business/profession?**

The following points are direct responses from agriculture and horticulture candidates:

- *Depends on whether the program takes hold in the industry*
- *Will use the logo on letterheads, business cards, emails and website*
- *To set yourself apart from others in the industry with less knowledge or experience and commitment*
- *Promote our accreditation to existing and new clients to reinforce that we are accredited and understand the business and services we consult to*
- *To differentiate myself from a few competitors and maybe ask my boss for more money*
- *I have a job interview next week and will be happily informing the interviewers that I have gained AgCredited accreditation.*

### **Can you suggest ways we might improve the program?**

The following points are direct responses from agriculture and horticulture candidates:

- *Promote it widely so that it is of value*
- *Forewarn participants of time constraints*
- *Promote to experienced people - too hard without experience behind you*
- *Interview option would be easier because you can set aside time and get instant feedback .on what is needed*
- *Have case studies to assist with choosing evidence*
- *Provide advice on confidentiality concerns*
- *Target ASSESS sheet questions to specific industry groups*
- *Develop a register of accredited advisors*
- *Streamline process, too time consuming*
- *At the moment there is little opportunity to gain extra work or return on investment in the program*
- *Offer workplace interview*
- *Ideally there would be a registration body for all advisors. Not accredited – you don't practice!*
- *Include a day with the assessor in the workplace*
- *By keeping the program being based entirely on the individual and by not being pressured into assessing candidates as a group. This would diminish the objective of the program and what it sets out to achieve, which is the status of the individual.*

## **Survey results from NRM group**

The results of the survey from the NRM group are shown below. 19 out of the 33 NRM participants completed the survey, a response rate of 58 per cent.

### **Statement: The AgCredited™ program met my aims and expectations.**

74 per cent of the NRM group responded that the AgCredited™ program did not meet their expectations.

### **Statement: The handbook and information provided were clear and helpful.**

58 per cent of the NRM group felt that the handbook and information provided was not helpful in guiding them through the program

### **Statement: I could choose elective units that were relevant to my work role.**

63 per cent of the NRM group disagreed with this statement.

### **Statement: Collecting evidence to show my skills was straightforward.**

89 per cent of the group disagreed with this statement.

**Statement which of the following core units are relevant to your professional role**

Unit topic	Participant responses (maximum 19)
Provide specialist advice	17
Australian legislation and policy	16
Manage risk	13
Sustainable land use & management of environmental performance	11
Occupational Health and Safety	9

**Question: Do you think professional recognition will help your Career?**

53 per cent responded yes and 37 per cent indicated they were unsure.

**Question: Do you consider the price of \$1 300 for initial accreditation to be cheap, fair or expensive?**

53 per cent responded it was expensive and 37 per cent indicated it was fair.

**Question: Would you prefer to complete accreditation by compiling evidence of your skills and experience yourself, or by interview in the workplace?**

89 per cent stated they prefer accreditation by interview.

**Question: Would you recommend the AgCredited™ program to others?**

58 per cent said yes.

**What were the strong points of the AgCredited™ program?**

The following points are direct responses from NRM candidates:

- *Recognition of prior learning and accomplishments in the last 15 yrs of work via an accreditation program is very useful*
- *Demonstrates skills that are used as part of my work role but are not articulated by current accreditations*
- *The ability to adapt the process to accommodate the needs of a diverse group of national NRM facilitators and indigenous land management facilitators*
- *The simplicity of the front end of the process. For those not familiar with the RPL assessment process, collecting evidence can be a bit daunting, but it does provide you with a clearer appreciation of what you have achieved, or are currently achieving in the job*
- *Gathering up my skills etc to update CV*
- *The case managers were very adept at recognizing the skill sets I utilize in my work and translating them to address the competencies required for the units.*
- *It would have been significantly more difficult to complete the process without the experience and knowledge of the case workers*
- *Relative ease of gathering information to meet accreditation standard*
- *We needed to have a base level of accreditation for Australian Government facilitators*
- *It was reasonably easy to provide RPL evidence and the case officers were very helpful in assisting me with this process*
- *program for facilitators – did address our themed roles ie delivering government policy*
- *The way that it is done on site with case officers. Even though it means committing a block of time it means that you actually do it which may not be the case if it was done by email*
- *The interview process was essential to my progress, I was able to ask questions, find information promptly and gain clarification*

### **What are the benefits of completing the program?**

The following points are direct responses from NRM candidates:

- *Demonstrates skills that are used as part of my work role but are not articulated by current accreditations*
- *Provides a higher level of professional credibility in an environment that is currently overwhelmed with people offering a diverse range of information and services to 'support and progress' the national NRM approach. It also provides improved credibility with the primary industry stakeholders who would be familiar with the AgCredited terminology in relation to their specific agricultural industry professionals and extension officers.*
- *Going through the process of recognizing and unpacking the skill sets and competencies I am consistently utilizing was really worthwhile in itself. This accreditation recognizes my skill set with a formal national standard*
- *Personal satisfaction*
- *Recognised qualification*
- *Have identified gaps for further professional development.*
- *Bringing together my skills for recognition and demonstrated to me as well as case officer how much I have done and skills I have.*
- *Recognition of both work and previous training and education. Recognition of this by employer.*
- *I now have accreditation recognized by the AG Joint Team*
- *It was useful for me to re-visit some of my earlier work in NRM and to re-focus my attention on some core areas of my present work that needed further development*
- *demonstrate skills and knowledge that normally you couldn't market*
- *It is a 'requirement' of the capacity building team to demonstrate competency in this area*
- *Should be of worth for future employment*

### **How will you use the AgCredited™ accreditation status in your business/profession?**

The following points are direct responses from NRM candidates:

- *Will assist me when applying for my next NRM contract at the end of this year*
- *Unsure at present. I am currently dealing with a regional body in WA and their stakeholders are mainly primary producers involved in NRM.*
- *In my application to gain permanent employment in my current role*
- *It is another formal qualification*
- *It could be a stepping stone for the organization into the future in terms of RTO status*
- *I will use as a symbol to encourage others to keep learning – no matter what stage in your career, learning is an end in itself*
- *Won't use it*
- *Add to my resume, as formalizes evidence of my work experience and abilities*
- *Mostly utilized at diploma level and for subsequent job applications*
- *To support myself, my team and employers as to what I can offer*
- *Not sure yet*
- *During my next recruitment process.*
- *Identifying key competencies and working on those I need further development on.*
- *I have nothing to do with the agriculture sector however this accreditation was required by my employer so it will assist me when I have to apply for my job again in October. I am a Aust government NRM biodiversity facilitator*
- *It was useful for me to re-visit some of my earlier work in NRM and to re-focus my attention on some core areas of my present work that needed further development and also it will be a useful inclusion on my CV*
- *When I go for next job. Sometimes when asked qualifications, good to have as accredited backup*
- *Not sure how relevant it will be given I have a degree. However if I didn't but had similar work experience this would have been good way to gain status*

- *A further qualification for use in future job applications*

### **Can you suggest ways we might improve the program?**

The following points are direct responses from NRM candidates:

- *I felt I could have been more prepared if I had known what the interviewer/case officer was after.*
- *There was some confusion over what subjects I could actually do. A discussion with the case officer prior to the interview may have helped*
- *While the documentation is comprehensive it lacks a certain friendly style which created some issues for the facilitators we put through. I am a visual person so a few more diagrams and images (possibly with the odd cartoon) would have made it a little clearer to me.*
- *The assessment documentation was fine, but I had the benefit of having an interview with an assessor which made the process much easier and clearer ... and I am a trained assessor!*
- *Not sure if it is possible to 'accredit' the work the AG NRM facilitators do as what we do is so variable. However it would be good to be part of a professional development program to further enhance our skills and knowledge in areas of leadership, facilitation, mediation, solution brokering... but also in fields of our NRM expertise (in my case water management)*
- *The program would have been a better 'perceived fit' for me personally if there were more modules/units directly relating to the core competencies and skill sets my role requires. Modules which overtly focus on various aspects of working with people like negotiation, influencing, brokering, situational leadership, change management, conflict resolution/management and facilitation would have strengthened the course from my perspective*
- *Make subject choices more flexible*
- *Program not shaped around our jobs as facilitators. Make more relevant to what we do and what we want to do*
- *Identify training requirements specifically for position we are in and adapt course accordingly*
- *The accreditation seemed frankly, far too easy, and I wasn't convinced I had demonstrated my skills. As my employer paid for the accreditation I have no complaints, but I know if I'd paid the full price myself I would not feel at all satisfied.*
- *The handbook and subsequent information on what units I should be doing changed constantly. It was poorly organized, confused and confusing process. The Diploma offered (chosen by my employer) was in actual fact not a good fit at all to my skills/experience background and it was extremely frustrating to find that Tocal offered a much more suitable Diploma – Environmental Leadership – but I wasn't allowed to attempt this.*
- *A group presentation in more detail at the beginning*
- *Needs fine tuning to be relevant to environmental facilitators – very geared to agriculture*
- *Continued confusion throughout the program – didn't get good clear communication, Process didn't take into consideration the people they were engaging. A lot of miscommunication*
- *I think in terms of the AgCredited Skills choices – they are good. I would like to see consideration given to flexibility of ways to demonstrate skills for the mature age applicants as many entering the workforce will have wider variety of skills from involvements through many other experiences other than straight public service or academic routes. Happy to discuss further if wanted.*
- *More email or phone contact from Tocal as follow up to initial consultation*
- *The dept paid for the pilot program and I did not know there was an annual fee.*
- *While difficult to organize if separated by large distances and initial introductory interview to become familiar and have a better understanding of the process and the information/evidence needs of the course would be useful*
  - *Using skilled interview process, easier to get evidence. A lot of times evidence with previous employer but skilled interviewer would draw it out*
- *Greater clarity around the unit structure and expectations in the way the proformas should be completed and what evidence is required (once I understood the approach I was fine, but that clarity came from a colleague doing the program, not the program itself).*

## **Results from industry stakeholder group workshop held in Canberra**

Participants at this workshop emphasised the need for common standards and benchmarking, getting the competency mix right for each industry sector, and strengthening the governance and marketing of the program.

Participants also addressed the need for stronger industry links with other organisations and peak bodies, especially in the ongoing development and coordination of a professional development program that can be accessed nationally.

The accreditation pilot program was endorsed by those present at the workshop. The perceived benefits of the program listed by participants included:

- Confirms that clients have problem solving ability, reducing the risk of poor advice
- Should assist in avoiding regulations being imposed on advisors/practitioners
- Provides a commercial/competitive advantage
- Establishes national consistent standards
- Ensures practitioners are keeping up-to-date
- Ensures a pathway to further skills development.

# Discussion of Results

## Discussion of evaluation results from agriculture and horticulture participants

A high percentage of the group found that the program met their expectations and was relevant to their work role.

80 per cent of participants found the program handbook and information provided helpful and that collecting evidence was straight forward.

The core competencies were found to be relevant although there were questions around the importance of the unit on Australian legislation and policy.

The majority of participants thought that accreditation would be positive for their career and would recommend the accreditation program to others.

A high completion rate was achieved for this group for the distance delivery mode chosen. This delivery mode places the responsibility on the individual candidate to collect and supply evidence to demonstrate competence. A large number of this group would like accreditation by workplace interview to be an option.

Only half of the group thought the price of initial accreditation was fair, identifying price sensitivity as an issue for this sector. Suggestions for program improvement centre on marketing and promotion efforts by AIAST to industry.

The strengths and benefits of the accreditation program according to this group can be summed up in the following two statements:

*“Provided a review of personal and professional development, setting out achievements and mapping a pathway for further study”.*

*“Certification of my knowledge and professionalism at a national level within my field of expertise and being recognized by industry, governing bodies, existing and potential clients”.*

## Discussion of evaluation results for NRM participants

The quantitative results from the NRM group survey show strong dissatisfaction with the pilot accreditation program, the information provided to candidates, choice of electives and collection of evidence.

However, the responses to the questions about the program strengths and benefits, and use of the accreditation status seem to contradict the strong negative response at the beginning of the survey.

Explanations for this apparent contradiction include:

- The perception that it was employer driven in an environment of short term employment contracts. A number of participants were initially cynical and did not perceive it as being valuable
- The perception that it was designed for agricultural advisors and consultants. This perception was enforced by the title ‘AgCredited’
- The perception that the core competencies and electives were a poor fit with their vocational responsibilities
- The majority of participants had a greater interest in having their facilitation and community capacity building competence recognised rather than the accreditation status
- The ill-defined nature of their position, role and responsibilities in their organisation make it difficult to select task-based competency units.

A further explanation for these results is found in the evolution of the pilot program for this group. In response to initial negative feedback about the program all NRM participants were offered accreditation by interview in their workplace at no personal expense and the opportunity to seek both the accreditation status and a national Diploma in Conservation and Land Management specializing in Community Coordination and facilitation. Both of these changes were widely supported by this group and changed their view of the program from when they first began.

The strengths and benefits of the accreditation program according to this group can be summed up in the following statements:

*“Demonstrates skills that are used as part of my work role but are not articulated by current accreditations”*

*“The ability to adapt the process to accommodate the needs of a diverse group of national NRM facilitators and indigenous land management facilitators”*

*“The case managers were very adept at recognizing the skill sets I utilize in my work and translating them to address the competencies required for the units”.*

*“Provides a higher level of professional credibility in an environment that is currently overwhelmed with people offering a diverse range of information and services to ‘support and progress’ the national NRM approach. It also provides improved credibility with the primary industry stakeholders who would be familiar with the AgCredited terminology in relation to their specific agricultural industry professionals and extension officers”.*

*“Going through the process of recognizing and unpacking the skill sets and competencies I am consistently utilizing was really worthwhile in itself. This accreditation recognizes my skill set with a formal national standard”.*

## **Findings in response to stated objectives**

Objective 1: A competency structure for the accreditation program was agreed to and established.

Objective 2: The core competencies were seen as relevant by agriculture, horticulture and NRM participants with two exceptions. The agriculture and horticulture group questioned the relevance of the unit addressing Australian legislation and policy and the NRM group questioned the relevance of the unit addressing occupational health and safety.

The agriculture and horticulture group were satisfied with the choice of electives, whereas the NRM group would like to see an improved selection of units.

Objective 3: Participants in the program identified a range of benefits as reported above. There is clear evidence of price sensitivity with only 45 per cent of respondents stating the initial accreditation fee of \$1300 to be fair.

Comments on the accreditation process identified that the NRM candidates preferred to be assessed by workplace interview rather than collect and submit their own evidence to demonstrate competence. Individual case management and follow up of candidates by experienced education officers was critical in assisting candidates in the pilot to collect and submit appropriate evidence for assessment.

Objective 4: The AgCredited™ pilot program identified that:

- Evidence based assessment against national competency standards is suitable for those working as professionals in industry for more than three years
- The individual skills based assessment and recognition process provides the rigor and transparency necessary to maintain a credible industry based accreditation scheme which can be audited against the Australian Quality Training Framework (AQTF).

Objective 5: Candidates in the pilot program were interested in building on the nominated skills set to take up further units to complete a nationally recognised Diploma in either Agriculture or Conservation and Land Management, even though this came at greater cost. More than half (52 per cent) of the pilot group have been awarded national Diplomas. Accreditation is valid for a period of five years. Evidence of ongoing professional development will need to be demonstrated for reaccreditation.

Coordination of professional development opportunities is an ongoing task for this accreditation program.

# Conclusion and Recommendations

For an accreditation program to be successful it needs to be:

- rigorous
- transparent
- grounded in vocational competence
- credible and relevant
- and have a common basis and standards.

This pilot has demonstrated that a national accreditation scheme for professionals working in the agriculture, horticulture and natural resource management sectors is achievable using individual competency based assessment underpinned by existing national competency standards. This is a rigorous, transparent and credible approach which addresses questions of professional responsibility and competence for professionals working in industry.

Recommendations:

- That a nationally integrated and endorsed professional development program that builds professional competence for agriculture, horticulture and NRM professionals be developed, organised and coordinated
- That partnerships with industry and key organisations be formed to coordinate professional development opportunities and shape industry specialisations
- That the accreditation program be further developed for specific industry sectors such as irrigation and dairy in consultation with peak industry bodies
- That the use of experienced education officers and assessors who individually case manage each participant be maintained.
- That further consideration is given to the right mix of sector specific competencies, e.g. NRM, irrigation and dairy
- That the accreditation program embraces both agriculture and NRM sectors and ensures both sectors have a common understanding of the program and perceive it to be of high value.

# References

- Harris R, Sumner R and Rainey L (2005) *Student traffic: Two-way movement between vocational education and training and higher education*. National Centre for Vocational Education Research.
- Liles RT and Mustain RD (2004) 'Core competencies: A systems approach for training and organisation development in extension'. *The Journal of Agricultural Education and Extension*, Volume 10, no.2.
- Macadam R, Drinan J, Inall N and McKenzie B (2004) *Growing the capital of rural Australia – the task of capacity building*. RIRDC Publication No. 04/034, Rural Industries Research and Development Corporation, Canberra.
- Straw W, Stubbs A and Mallaney P (1996) *Rural extension training courses: a comparative evaluation*. RIRDC Publication No. 96/25, Rural Industries Research and Development Corporation, Canberra.
- Synapse Consulting (1998) *Farmer education and training: issues for research and development*. RIRDC Project Number SYN-1A, RIRDC Publication No. 98/26, Rural Industries Research and Development Corporation, Canberra.
- Toohy DE (2002) *Towards professional accreditation for advisors and consultants in agriculture, natural resource management and related sectors*. RIRDC Publication No. 02/104, Rural Industries Research and Development Corporation, Canberra.
- Wheelahan L (2003) *RPL: Recognising all aspects of prior learning*. Training and Development in Australia, April 2003.