

Extension works:

case studies demonstrating
how extension enables change
in rural Australia



Contents

Rising from the ashes	3
Living off the land	6
Still learning new tricks	8
No cheers in quarantine man's lunch	10
Finding the sweet spot	12
A leadership learning curve	14
Cost effective fertiliser decisions	16

The State Extension Leaders Network (SELN) is a gathering of government extension leaders and influencers from each state and territory of Australia.

One of its objectives is to encourage key stakeholders to better understand the role extension can play and utilise it in meeting targets across a range of initiatives, particularly where practice change is the underpinning goal.

These case studies, drawn from recent projects across Australia, provide a glimpse of how modern extension methodologies have been utilised in achieving real outcomes across a very diverse group of projects.



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Rising from the ashes



Grasstree regeneration following the fire

The fires of 11th and 12th January 2005 claimed the lives of nine people, including four children and two volunteer fire fighters on the Eyre Peninsula.

More than 46,000 head of livestock perished in the fires, which also destroyed or severely damaged more than 90 homes, 370 sheds or

commercial buildings, 35 vehicles, 139 farm machines and over 6,000 kilometres of fencing.

The total damage bill amounted to more than \$100 million, with a \$17 million farm gate loss.

When Lower Eyre Peninsula farmer Heather Pope surveyed the scene of devastation following the ‘Black Tuesday’ fires, she could not imagine a way forward for herself and her family.

While the Popes did not lose major structures, they did lose fencing, some livestock, stock feed and major sections of native vegetation.

But for Heather and her family, with the assistance of a strong community and a State and Federal Government funding program, the way forward has not only enabled them to get back on their feet, but has forced decisions that may have been left unmade without the impetus of the fire.

“We were very fortunate to have about 95% of our stock survive, (close to 1,000 head of cattle and 1,900 sheep) so our primary concern was mustering and securing them, then feeding and watering them until we could truck them out for either sale or agistment,” Heather said.

“During those days we acted on automation. Throughout this time there were a vast number of volunteers, businesses, agencies

and organisations that assisted and supported all of the people in the fire foot print.

“Without going into too many details, the fire, although extreme, provided our farming enterprise with an opportunity to evaluate our whole farming enterprise in terms of productivity, structure and capacity of resources and the immediate, medium and long term viability.”

“It has been a long and difficult journey, and will continue in a similar manner for some time,” Heather said. “Personally, it was a struggle, the sleeplessness, stress, the sheer exhaustion each day to cope.”

Heather thanked the joint Australian and State Government funded Lower Eyre Peninsula Bushfire Re-establishment Program (LEPBRP) which was developed soon after January 2005 to assist landholders to recover and re-establish.

The program received \$5.36m over two years. The Commonwealth funds were targeted at grants for landholders with the State funds supporting the facilitation and technical advice and research components.

Rural Solutions SA was contracted to manage and deliver the program, while the Health Department engaged a specialist mental health worker to provide advice on health and well being.

Project impacts

- 83% of landholders attended a strategic planning workshop
- 70% of farm businesses developed a business plan and have undertaken priority works
- 44 small landholders have also undertaken priority works
- Program grants have seen over 2500ha of native vegetation fenced and over 4000ha of land managed through pasture establishment
- A total \$2.53m worth of support was provided to significantly assist in supporting individuals and communities to rebuild their lives and livelihoods, while assisting in protecting valuable natural resources
- For more information contact Helen Lamont at Lamont.Helen@saugov.sa.gov.au or visit www.environment.sa.gov.au/biodiversity/west_bcp/lep_brp.html

“The program provided us with a means to help us achieve the change,” Heather said.

Key elements of the program included:

- strategic planning workshops and technical advice
- business planning grants
- sustainable agriculture and biodiversity enhancement grants
- research on the impacts of fire on soils and biodiversity
- a pest and weed control program.

LEPBRP Director Helen Lamont said a significant response was needed to counter the physical and emotional damage wreaked by the State’s worst bushfire.

“It was just awful,” Helen said. “There has never been a fire of this intensity recorded, covering 83,000 hectares in just one day.”

“This is cropping country that we are talking about following harvest and in the middle of our summer - the conditions were incredibly dry.”

“Without the program, we wouldn’t have had the skills, knowledge or the drive to re-establish the business. The business plan allowed us to identify what we needed to do and to consolidate and implement the re-establishment of our business”

While Helen said given the enormity of the devastation no level of support would have ever been enough, the program was ‘significant and unprecedented’.

“(For large land-holders) the program offered two grants of up to \$10,000 each - one for biodiversity works and the other for sustaining agriculture, plus smaller grants up to \$4,000 for business planning,” Helen said. “Biodiversity grants basically allowed farmers to fence off native vegetation areas.

“You have to remember that many farmers had lost everything – sheds, houses, fences and livestock, so just getting them back up and running was a huge challenge.

“We encouraged farmers not to rush in and re-fence but to think about it. In many cases farmers have changed the areas that were originally fenced.

“Many things have changed as well as fences - (the position of) rainwater tanks, sheds and even houses.

“Small landholders were offered smaller grants of up to \$2,000 to undertake priority biodiversity works.

“Most land owners attended a strategic planning workshop, which also gave technical re-establishment advice as well as health and well being support to manage the stresses as a result of the bushfire.”

The program also required farmers to develop a business plan before they could obtain the larger grants for sustaining agriculture and biodiversity. This was combined with implementation grants of up to \$2.53m to support individuals and



A farmer inspects the wholesale damage to his shed and machinery following the bushfire



The Wanilla township post office manager shows SA Premier Mike Rann the new post office built following its devastation in the blaze - "It will take decades for the Lower Eyre Peninsula community to recover emotionally, physically and financially from this terrible disaster," Mr Rann said.

“It’s been a big help to know these people were there. Suddenly you want some information and you can’t think straight because of the stress of the fire”.

communities to rebuild their lives and livelihoods, while assisting in protecting valuable natural resources.

“Initially all farmers resisted our requirement for them to develop a business plan, but as it happens it was the best thing about the model,” Helen said. “It made them look at their position and make some hard decisions.”

“For example, it led to some early succession planning and movement of older people off the land, making way for their children to take over the farm.”

Farmer Heather Pope agreed the fire had forced decisions that may have been left unmade.

“Under our patriarch rule prior to the fire, we had no long term plans, or if we did, they were in Dad’s head and he certainly did not share them,” Heather said. “So the Business Planning Grants certainly provided us with the opportunity to assess our existing structure and enterprise, and develop a plan for our future. The plan identified we would be better off leasing out our cropping land on a yearly rotational basis and for us to concentrate on what we know best – our sheep and cattle.

“The succession planning exercise resulted in the relinquishing of patriarchal control, to having our daughter return to the farm and take up an apprenticeship to undertake her Certificate III in Agriculture with the view to continuing with the family farm.

“We also utilised the Sustainable Agriculture Grant and the Biodiversity Enhancement Grant to assist with our long term plans. On land that is more suited to stock, we established lucerne pastures to improve grazing capacity, and applied lime to areas of low pH to improve soils for increased productivity. The Biodiversity Enhancement Grant helped us re-establish fences to protect remnant vegetation which provide a link with the Wanilla Conservation Park and neighbouring properties.”

Helen Lamont said she was proud of the contribution the program had made to the recovery effort.

“I would say the area has significantly recovered, but financially and emotionally it’s a long-term process,” she said.

“That is not to say it has not been a major tragedy for many people here – we are talking about people who

knew people who were killed in the fire and of many people who lost their homes, while financially many farmers were also under-insured.

“It’s been a great example of community resilience really. I would say overall the community has become a lot stronger.”

Extension’s contribution

- Being able to synthesise technical / scientific information into a form easily understood by individuals.
- Facilitating early decision making, providing quicker returns.
- Local advice that is best suited to the local conditions.
- Linking individuals with other expertise.
- Independent, objective advice.

Living off the land

With growing water restrictions, recurring pictures of depleted dams and more brown grass than green in the backyard, the drought is never far from people's minds.

But spare a thought for Tasmanian sheep farmers. In Tasmania farming is not so much about making a living as surviving... and that's what generational wool farmer James Walch is trying to do.

James owns and runs a 715 hectare merino sheep farm 'Stewarton', at Epping Forest in the Northern midlands of Tasmania.

Like farmers throughout Australia, James is fighting a battle against the continuing harsh drought; farmers are facing extinction, bankruptcy and the loss of a business which for many has been in their family for decades.

Project impacts

- Producers predicted the long-term financial benefit of the changes they made as more than \$10 000.
- Changes included:
 - » 93% of those making pasture and grazing management changes
 - » 86% of those making soil fertility changes
 - » 83% of those making animal health and internal parasite management changes
- Five educational modules were presented to 317 participants representing approx 100 wool growing businesses
- 30% of producers indicated they have made changes to their weaner management practices
- 80% reported changes in pasture or grazing management
- For more information contact Warren Hunt at Warren.Hunt@dpiw.tas.gov.au or visit www.8x5.com.au

"Tasmania especially is not drought hardy. Farmers down here are not used to the sort of conditions we are suffering at the moment and I'm sure many, like myself, have had to cut down stock numbers to survive.

"On Stewarton, we've slowly had to reduce the number of heads from 5000 to only 3000, and I have been one of the lucky ones," James said.

In an effort to try anything to keep his family history and livelihood from going under, the Stewarton farm was one of the first to sign up for a new project conceived and implemented by the Tasmanian Department of Primary Industries and Water and the Australian Wool Innovation Limited with funding by the Tasmanian Institute of Agricultural Research.

Introducing: the 8x5 Wool Profit Program

The program is an integrated Research, Development & Extension program, gathering the most equipped and knowledgeable minds to conduct on-site research in order to develop and deliver strategies on how best to

deal with the effects of drought.

It works by helping farmers decide if there are better, more efficient and more cost effective ways to do things.

However, when you picture the stereotypical scientist sitting down and telling the manliest of Aussie man how to better do his very blokey job, for some reason fireworks come to mind.

But James said even though some of the recommendations were outside the comfort zone of a lot of the local farmers, everyone was on board and ready to give it a go.

"Some of the locals were a bit apprehensive with a few of the suggestions, like drought lotting, but at this point we can't knock anything.

We all just need to be willing," James said.

Simply put (for all the non-farmers), drought lotting is when stock are confined to small areas (lots) for periods of time to let other areas of the farm rejuvenate.



Majestic: Sheep released to pastures after rain

“Most of us are just happy to survive, but thanks to this project things are starting to look up”

Past practices only allowed for three options: sell the stock off, use supplementary feed or leave the stock in the paddocks to take their chances; options which can have detrimental affects on the environment and severe animal welfare issues.

So, drought lotting has been one of the useful answers and while this one may appear to be an obvious one, it has never been necessary to contemplate in an area that hasn't really ever experienced full drought conditions.

“We had an average 12 month rainfall of 220ml, that's down from last year which was down from the year before and there doesn't appear to be any relief in the near future,” James said.

Warren Hunt from the Department of Primary Industries & Water said even though rainfall has been minimal, all involved with the project are really impressed with how the farms are progressing and the response and the willingness of the farmers involved so far.

“Results have been fantastic. The project has been running for quite a while now and we are satisfied we can move on to the next phase with farmers telling us that the different practices are working for them.

“The next phase involves looking at better techniques for farmers to manage things like animal health, something which all the farmers have expressed an interest in and we are all excited about getting started on,” Warren said.

Not only is the project already making life a little easier for the battlers, but after five years some are expecting decent long-term financial profits.

In a world where many are living on the edge, expecting the worst but hoping for the best, and where there just aren't many happy endings anymore, that has got to make you smile for them.



A team of farmers and researchers gather for an information workshop



Mixed aged ewes in a drought lot on Stewarton farm

Extension's contribution

- Developed a network of integrated activity, involving demonstration sites, industry forums and discussion groups in the delivery of outcomes.
- Involved producers in the planning and delivery of this activity and in the management of the program.
- Adapted and changed the program to meet new challenges and build a pathway to implementation.
- Tackled issues of importance not just appeal.
- Fostered a network of woolgrowers, keeping them informed, involved and in contact.
- Supported adoption by addressing critical issues, sharing experiences (positive and negative), and providing expert advice.
- Facilitated a cooperative approach from many industry supporters.

50 years on the land and still learning new tricks



Project impacts

- The workshop series was delivered to over 60 groups involving more than 1100 landholders
- Landholder understanding of specific soil health improved from 44% to 86% post-workshop
- 88% of users said the projects had given them knowledge and skills to improve soil management on their farm including:
 - » 36% increase in the understanding of the causes of nutrient leaching
 - » 39% increase in the understanding of soil test results
- 87% considered the workshops were a very useful activity
- For more information contact Susan Orgill susan.orgill@dpi.nsw.gov.au or visit www.murrumbidgee.cma.nsw.gov.au/index.php?id=213

NSW southern tablelands' mixed crop and sheep farmer John Hyles abides by the philosophy that it's never too late to learn a new trick.

His latest trick, which he learnt at a NSW DPI 'Healthy Soils for Healthy Landscapes' workshop series, is now paying dividends.

This year alone John expects to save almost \$4,500 on his fertiliser bill after attending the workshop series which showed him he has been trying too hard to fertilise his 600 hectare property at Bungendore, 25 kilometres east of Canberra.

He has conducted soil tests on his property since the 1970s and decided to participate in the workshops to reinforce his knowledge of soils.

"The major benefit I gained was an understanding of the Phosphorous Buffer Index (PBI) which was developed by CSIRO in more recent times," John said. (The index provides a measure of the soil's ability to fix phosphorous.)

"In one lot of soil tests done as part

of the project I found I had three times the phosphorous levels that were required.

"I have been able to cut back on the quantities, which has resulted in significant savings," he said.

"In the old days we used to aim for 40 parts phosphorous, but I now know that our soils can only give up 20 parts, so we were aiming too high.

"Now too, with the price of fertiliser, it's just madness to try to do that."

John said the workshops were great as they taught the farmers how to be independent and make their own calculations.

"If you cannot measure what you have got, how can you know what you are doing?" he asked.

Healthy Soils for Healthy Landscapes Project Officer Susan Orgill said John was just one of approximately 900 farmers who have attended the workshops.

"The project has two aims really – one is to teach farmers how to improve soil management and the other is to collect soil data for healthy

**'Our workshops
give farmers a very good
grounding in how and
when to apply fertilisers.'**

catchments,” Susan said.

“Especially now in times of drought, when there is often little grass, we need to avoid fertiliser entering our dams and the rivers, which is bad for everyone.

“By improving landholders soil test interpreting skills and their understanding of soil processes they can save money and we can improve the environment.

“Often landholders are either over fertilising with no nutrient plan or not taking advantage of the excess feed with nutrient building schedules,” Susan said.

“Initially, before this workshop series began in 2005, we ran a series of workshops on soil acidity.

“Our earlier workshops though revealed other soil health issues existed, such as phosphorous management and soil erosion.

“Our current workshops are designed to train farmers how to manage their own soils and in some cases counteract the historic mismanagement.”

Susan’s manager Brett Upjohn agreed that the important thing the workshops offered farmers was an ability for them to make their own judgements based on their own tests.

“Our aim is to improve the environment by increasing landholder’s understanding of their soils and enabling them to develop targeted nutrient and soil health plans,” Brett said.

“The series offers four half day workshops and during that time they go home with a soil corer and test equipment. We get them to test four paddocks.

“By the 4th workshop they have a soil management plan which looks at their fertiliser status and if it is matching what they need.

“Every farm is different and requires a unique plan.

“Landholders need to be able to interpret their own soil tests. Many

farmers, for example, are able to sample soils for testing themselves but are not confident to interpret the results.

“Our workshops give farmers a very good grounding in how and when to apply fertilisers.

”Some farmers need to reduce their use of fertilisers (like John) while others need to increase their fertiliser use to increase their stocking capacity, while others again just need to know when to use the right fertiliser at the right time,” Brett said.

But the true proof of the program’s success is told by the attitudes of the farmers themselves, including John Hyles, who advised fellow farmers to attend the workshops.

“I can highly recommend the workshops to others - the more information land managers have the better prepared they are,” John said.

The soil workshops are funded by the Australian and NSW Governments through NHT and are managed by the Murrumbidgee CMA in partnership with the Murray and Lachlan CMAs and Environment ACT. NSW DPI has been contracted to deliver them.



“The major objective was to improve understanding and skills relating to soil health and management practices’... scientists and landholders work together to achieve this goal

“I can highly recommend the workshops to others - the more information land managers have the better prepared they are”

Extension’s contribution

- Provided access to information and understanding of soil health and nutrient, directly related to the participants farms and local environment.
- Gave landholders new practical skills in soil testing and interpretation on their own farms and on a broader group of representational paddocks in the catchment.
- Provided reinforcement of concepts and practices through the four workshop structure.
- Guided the development of long term soil management plans for each landholder.
- Allowed informed discussion of local land management issues across a wide landscape by the landholders.
- Developed a soils database from test results as a resource for further understanding of the catchment soil health issues.



The calm before the storm: a beautiful 'non-diseased' grapevine

No cheers in quarantine man's lunch

Ever had one of those days when you wish you could start it all again?

Save a thought for the quarantine man who stumbled upon a pest with the potential to wipe out the country's 4.6 billion wine and table grape industry while lunching with friends in Darwin.

"That's just wrecked my lunch," was reportedly what he said as he sat shocked by what he was looking at, knowing what it meant in terms of its threat to the industry and the enormity of the task needed to control it.

And so began a five year campaign to eliminate Grapevine Leaf Rust (GLR) from the grapevines of Darwin, which along the way meant the removal of most of the backyard vines in Darwin and Palmerston.

NT DPIFM's Grapevine Leaf Rust Eradication Project Manager Graham Schultz said they knew they had to act fast, especially as tests showed all of Australia's grape varieties were susceptible to the disease.

"If it had headed south it would have been a potential disaster for our wine and grape industry, as its control requires the use of fungal sprays which, for one thing, would have been marketing problem for the image of our wine," Graham said.

Further complicating the challenge was the fact most of the vines belonged to members of the local

Greek community, meaning cultural and language barriers posed a potential threat to the project's success.

Members of Darwin's approximately 5000 strong Greek community grew the vines not for their grapes, but for their leaves, which are used in creating 'dolmades', a savoury Greek dish often used as an entrée.

"We knew we had to mount a successful communication strategy," Graham said.

"We tried everything we could think of, including television, radio, news, Greek community radio, Greek language schools, the Greek Church – anyway possible to get our message through.

"We even used some 'high flyers'

in the community to get our message through – our Administrator (the Territories' equivalent to a Governor) at that time was Mr John Anictomatis and he very kindly agreed to help.

"We knew this part of the project was critical, so we worked long and hard with the Greek community and we even employed some young Greek kids to help us overcome the language barrier, they were very good in this role.

Now five years on, Darwin is just about devoid of grape vines and for that matter GLR also. Final inspections and testing in June 2007 was clear so the NT can now apply for "Area Freedom".

"If it (GLR) had headed south it would have been a potential disaster for our wine and grape industry..."

Project impacts

- A total of 39 019 properties were surveyed. 749 grapevines were found, of those 557 were destroyed
- Cooperation from the community ensured the initial and ongoing extension activities were successful
- Extension officers educated current growers on managing the residual vines for disease control
- The program was successful in developing working protocols and guidelines for eradication of exotic pest incursions
- The last positive sample for GLR was found in Darwin in 2006.
- For more information contact Graham Schultz at Graham.Schultz@nt.gov.au or visit www.nt.gov.au/dpifm/Primary_Industry/vinerust/

“Our initial assessment revealed we had about 760 vines growing in Darwin, of which two thirds were initially shown to have the disease, and these were removed.

“Since then we have found more and removed more – there are about 120 of the original vines left.

“Under our Act we could only remove them when they were diseased, although originally I wanted to take the lot. And the wine industry wanted us to take the lot too, but the Greek community would not have stood for that.

“In retrospect though, many Greek community members now say they would have been better off if we could have simply removed all the vines as then we could have replanted much sooner – the recovery phase is now allowing replanting.

Ever the PR man though, Graham has a surprise in store for his newfound friends in the Greek community.

“We have been growing new, clean vines down at Teatree, near Alice



Extension officers survey a heavily infected grape leaf

Springs, which we will give to any people who want to replant once we have passed the date in June this year.

“It’s important in any project like this that you leave the community smiling,” Graham said.

Extension’s contribution

- Extension is the key to the success of any biosecurity measure affecting primary industries. Landholders need to understand the requirements of the program, why it is happening and how it will affect them. As much as possible, this should be carried out face-to-face.
- Extension programs must continue throughout both the response and, just as importantly, the recovery phase after the actual operation has finished.
- It is also important to not forget the wider community. Communication with the community is most effective through higher technical extension methods of emails and media efforts.



Finding the sweet spot



Project impacts

- 1300 participants attended the five Vasse Milk Farmlets open days
- More than 60 percent of dairy farmers found key messages on managing pasture, stocking rate, fertiliser, strategic grain use and fodder conservation useful
- Stocking rate and pasture use on WA dairy farms increased by 20 percent during the life of the project
- Farmer surveys revealed the project was an important tool for giving them the confidence to try different practices
- The rate of improvement in pasture use between 2000 and 2006 is four times the rate observed during the 1900's
- For more information contact John Lucey jlucey@agric.wa.gov.au or visit www.agric.wa.gov.au

After 20 years of dairy farming in Western Australia, Victor Rodwell believes the secret to success is always being open to possibilities, always considering the long term in every context and always searching for that ‘sweet spot’ – the efficient middle, a better way to do things.

Victor’s philosophy could very well be the reasons for his own farm’s growth – since he started he has built his business from 45 cows to an almost 600 strong Holstein herd.

And in keeping with his search for the sweet spot, Victor signed up for the ‘Vasse Milk Farmlets’ project designed by industry organisations and government departments to help farmers find the most environmentally and economically sustainable method for milk production use on their farms.

“Efficiency is probably one of my biggest priorities, whether it’s labour, nutrient feed, or fertilizer, it’s all about trying to get the maximum for what we’re putting in,” Victor said.

It is estimated Australian farmers will use up to \$100 million worth of fertilizer this year. Coupled with the recent deregulation of the Western

Australia milk industry, Victor is open to any suggestion to help him achieve proportionate increases in milk production for his inputs.

“Fertilizer for us is our second biggest bill. We seemed to be forever increasing the percentages that we were using, which were sitting at 400 units or 400 kilos of Nitrogen per year before we started with the project,” Victor said.

Project coordinator John Lucey said the project aimed to give farmers the information they needed to make life a little easier in an industry that is becoming more competitive and global.

“This problem was the one we found most prevalent across all farms. Everyone was trying to get more out of their cows to hedge against the deregulation of the industry by using more fertilizer to feed them, but in the end it was just costing them more and more money and they just weren’t seeing the returns.

“So the project, a \$10 million investment over five years, gathered the best minds in the business to develop strategies the farmers could implement that would save them money, time and stress,” John said.

“Everything has increased – our feed, our cows and our profits. From here on it can only get better”



But it wasn't all about saving money. The environment was a factor that was heavy on the minds and hearts of all the farmers.

“We knew there was a high potential for the fertilizers we used to seep into the waterways but we also needed to survive as a business and that meant using the fertilizers to feed the cattle.

“But as farmers we consider ourselves to be ‘stewards of the land’ and know we have a responsibility to make sure we leave this beautiful country the way we found it. We are grateful to the project for giving us the knowledge to do this,” Victor said.

Since the beginning of the project five years ago, the team of researchers has continued to provide expert support to Western Australian dairy farmers with a current project aimed at reducing nitrogen use – another initiative to save money and the environment.

As for Victor, it's all uphill from here.

“Everything has increased – our feed, our cows and our profits. From here on it can only get better,” he said.

“... As farmers we consider ourselves to be regarded as ‘Steward’s of the land’ and know we have a responsibility to make sure we leave this beautiful country the way we found it. We are grateful to the project just for giving us the knowledge to do this.”

Extension’s contribution

- Working collaboratively with farmers and researchers as an effective multi-disciplinary team to address an industry need for alternative dairy systems post de-regulation.
- Facilitating strong farmer input to the design and operation of the project.
- Establishment and support for two commercial companion farms as learning partnerships to extend the VMF messages and act as co-researchers.

A leadership learning curve



Project impacts

- Over 1200 people have participated in over 40 BRL Foundation Programs
- People who have completed the BRL Program achieve a diverse range of outcomes for themselves, their industry, business, and community as demonstrated in the following examples:
 - » diversification of industry, e.g. from lucerne to herbs
 - » election to local council
 - » linking into overseas markets, eg rambutans, banana harvester, organics
 - » establishment of new businesses based on emerging industries
 - » young people staying in rural areas due to increased confidence and new technology, and an increased awareness of the opportunities that are present in their local area
- For more information contact Rob Nielsen at rob.nielsen@dpi.qld.gov.au or visit www.dpi.qld.gov.au/community

Amidst fears of drought, the rising Australian dollar and cheaper imports Australian farmers also have to deal with the every day dealings of running a business.

The Macquarie Dictionary defines leadership as the guidance by someone equipped to direct and influence those around them.

To the business men and women who run Queensland's rural sector, they are more than aware of the importance of leadership skills in ensuring their business survives and succeeds.

Queensland pineapple grower Gavin Scurr knows all about the difficulties of running a business, often managing between 70 and 100 staff at any one time.

"We have a lot of different people and handle a lot of different

personalities, who react differently to certain situations. It is for the benefit of the business and yourself that you learn how to manage that," Gavin said.

With this in mind, Gavin and many other Queensland producers and business owners signed up for the Building Rural Leaders (BRL) program run by the Queensland

Department of Primary Industries and Fisheries.

The nine month program aims to provide participants with the knowledge and skill to deal with the change affecting rural growers at the business, industry and community levels.

For Gavin it was firstly all about learning how to deal with things at the business level.

"I've done a fair few courses... on how to run a business and personal development... but BRL was

"A lot of people within this community have also done the BRL program and you can see the leadership coming through with these people and the change in things that they are doing that probably wouldn't have happened if it weren't for BRL."

different from all the others,” Gavin said.

“It was the type of open environment where there were other people who were also driving to do better, and you could talk to them about issues and they actually knew what you were talking about. You began to look forward to seeing the people again and learning something different.”

Gavin and his brother Stephen run Pinata, one of Queensland’s largest growers and distributors of fresh pineapples, Australia-wide.

Both Gavin and Stephen have completed the program learning not only how to better develop a team framework with their staff, but also the value of contributing on an industry level.

“A lot of people within this community have also done the BRL program and you can see the leadership coming through them, and the changes in things that they are doing that probably wouldn’t have happened if it wasn’t for BRL,” Gavin said

“The pineapple industry is not very big so it’s beneficial to be able to understand each other and be heading in the same direction.”

These changes have proved to be life changing for a lot of the participants with some diversifying into new and successful crops, developing joint research projects to explore new products and value added services and establishing a new industry to deal with drought conditions.

Gavin commented that the greatest benefit he got out of the program was the confidence to lead and manage his staff.

“There have been dramatic increases in efficiency. We learnt how to effectively build a team, how to get efficiency out of them, and the value of not just doing your own thing,” Gavin said.

“It’s not just for our business, it’s also good for the industry... it’s the team practice that makes a difference.”



“I’ve done a fair few courses... on how to run a business and personal development... but BRL was different to all the others”

Extension’s contribution

- This program was developed so that participants could apply its practical content to their ‘real worlds’.
- It was developed using the principles of adult learning and has a strong emphasis on participant’s use of the Action Learning Cycle.
- By use of the cycle participants apply what they leave learnt to their ‘real worlds’ and gain support to do this from members of their Action Learning Set.
- Participants are selected from a diverse range of backgrounds, also enhancing their learnings.
- The program has a strong emphasis on assisting participants to understand and respond appropriately to ‘chosen’ and ‘unchosen’ changes they experience.

Cost effective fertiliser decisions

Project impacts

- Commenced 1995
- Over 1200 participants
- Over 98% participants believe the program boosted their knowledge and skills in relation to fertiliser decisions
- 70% of participants surveyed believe the program has benefited them financially through increased production and reduced costs
- Complex Activity Budget (CAB) model calculates an average productivity improvement of 4.6%
- Additional environmental benefits
- For more information contact Alex Goudy alex.goudy@dpi.vic.gov.au



The Target 10 Soil and Fertiliser Program is helping Victorian dairy farmers to reduce fertiliser costs, increase profits and reduce the impact on the environment.

Thorough evaluation of this extension program has provided tangible benefits proving the effectiveness of the well-planned and responsive extension.

For over ten years the program has assisted farmers to analyse their fertiliser management strategies. Participating farmers are now giving more consideration to effluent management, seasonal application of P, K and S fertilisers to match production levels and personal targets, reducing nutrient loss to the environment and managing nitrogen

fertilisers to boost growth.

The key to the program is that farmers are given the skills, support and tools necessary to develop a fertiliser plan for their farm. Significant cost savings are reported by farmers who are better able to match fertiliser applications to their farms nutrient requirements. Setting optimal fertility targets, using soil test results and monitoring the fertiliser program are all key areas considered in the fertiliser plan.

A statewide development team designed and deliver the program with extensive consultation throughout the dairy industry. The program includes a three-day theory component, three on-farm group days and a one-to-one consultation. The integration of soil and nutrient management information using these different learning modes is designed to encourage participants to adopt improved management practices.

‘The program helped me to understand my soils and to only use the fertiliser I needed to grow the pasture. I want to make every dollar pay and this program has helped me to do just that.’

The program's delivery team continue to add new content and improve their delivery methods, incorporating the latest research information. "Our aim is to encourage whole farm nutrient management so natural resource management is integrated throughout the program," DPI Dairy Extension Officer Alex Goudy said. "Continuing demand for the program reflects its popularity and relevance for dairy farmers."

Over 1200 participants, made up of farm owners, sharefarmers, trainees and industry representatives have attended the 64 Soils and Fertiliser programs delivered since 1995. Each program has attracted an average of 19 participants.

The program's delivery team work closely with researchers, farmers and fertiliser companies to develop practical and relevant information. The success of the program depends on farmers making more informed, cost-effective fertiliser decisions. To make such decisions participants must have the knowledge and skills to plan fertiliser use, using the principles of capital and maintenance,

and have a good understanding of soil test results.

Telephone surveys showed all participants had a better understanding of nutrient requirements based on capital and maintenance and 78% were able to make better use soil testing.

The program has achieved significant changes in fertiliser management practices on participant's farms. More than three-quarters of participants are now placing more emphasis on using soil test results, setting targets for soil fertility, making maintenance fertiliser calculations and making capital fertiliser calculations. Almost all participants reported using information from the program to develop a fertiliser plan for their farm and 73% had implemented their plans.

"On a follow-up farm visit, one program participant compared the soils tests he had done following a Soils and Fertilisers Program with older soil tests," Alex Goudy said. "He discovered the old soil tests were inaccurate due to an error in sampling procedure and is now tailoring

fertiliser applications to plant needs, saving \$2600 and gaining environmental benefits."

More than 70% of those surveyed said the program had benefited them financially through increased production and reduced costs. Many believed that pasture consumption had increased as a result of the program with some farmers increasing their fertiliser applications to lift soil fertility, others using less fertiliser because one or more nutrients were at target levels and others changing the blend of nutrients in fertilisers to correct a nutrient imbalance in the soil.

The Victorian DPI Economics Branch's dairy CAB model estimates the program has boosted on-farm productivity by 4.6% through cost effective use of fertilisers.

This program has demonstrated the value of working closely with researchers and agribusiness to ensure information is current and standardised across the industry, using market research, incorporating natural resource management and coordinating resources from a variety of investors and collaborators.



Program participants are better utilising soil tests as a key tool for fertiliser planning and management

Extension's contribution

- The program approach targets practice change on-farm.
- Extensive industry consultation in program development and delivery ensures relevance to farmers.
- A group theory component, practical on-farm support from peers and one to one consultation encourages participants to adopt improved, cost effective management practices.
- Thorough evaluation, program review, incorporation of new research results and extension methods ensures continued success of the program.



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Note: These agencies are all members of the State Extension Leaders Network, which provides leadership and strategic direction in the development of State and National extension service delivery.