

Value of PIEF Membership for the Cotton Industry after the initial year

Background

In 2010, CRDC received a PRP from the Primary Industries Education Foundation (PIEF) to consider an investment. Encouraged by Cotton Australia, CRDC invited PIEF to submit a FRP which was considered at CRDC's budget meeting in March 2011. The board did not support the request for CRDC to become a member of PIEF for a 3 year period. Instead, the board placed sufficient funds in the commissioned project budget to cover a possible 12 month investment in PIEF provided a satisfactory cooperative arrangement could be established with Cotton Australia. CRDC discussed the option to establish a 12 month project with PIEF's CEO Ben Stockwin and received an offer to become a PIEF member for 12 months.

CRDC determined to co-invest with Cotton Australia in PIEF. Initially CRDC invested for a 12 month 'pilot' to assist the industry to become a member of PIEF and to work with CA to assess the value of PIEF membership. At the commencement of the arrangement, CA and CRDC outlined the potential value that we saw, and how we planned to use PIEF. A number of proposed outcomes were agreed upon which were to:

1. Highlight, prioritise and plan our involvement in relevant initiatives and events, e.g. through identifying effective education efforts in other industries, effective mechanisms and approaches and potential partnerships that could be developed
2. Identify, develop and promote resources in schools that highlight many key aspects of the cotton industry and demonstrate that there are many exciting careers to be found within it.
3. Work more collaboratively and cost-effectively with other rural industries to showcase agriculture as a sustainable sector with excellent career opportunities.
4. Show that the work of PIEF is having an impact on students as measured by an improved knowledge of primary industries in general and the cotton industry in particular.
5. Provide evidence that interest in and entries into the VET and tertiary courses which support agriculture is increasing over time.
6. Understand the kinds of resources that other industries have developed through their membership with PIEF and how they are being used.
7. Demonstrate that PIEF will provide value for money compared to other options the industry has for investment in the education sector in other words *how the cotton industry can innovatively build upon the access PIEF provides to the National Curriculum?*

Beyond the initial 12 months, provided both parties agree that PIEF is a worthwhile investment, CRDC indicated that it was prepared to consider ongoing co-investment in PIEF with CA.

On the one year anniversary of PIEF membership, Ben Stockwin, met with the Human Capacity Panel when they met to review 2012 PRPs. Their reception of PIEF was markedly different as PIEF can now better explain its role in the education space and has moved from talking about aspirations to delivering outcomes. The Advisory Panel acknowledged that they had turned this concept away last time, with the rationale being that PIEF needed to show that it delivered for cotton. This time, the panel was vocal in its support for PIEF. They saw value in what PIEF are doing with their core funding and recognised the potential in using PIEF to deliver on areas of need in cotton (e.g. commissioning specific projects through future PRPs). They were supportive of PIEF's business model of operating leanly, committing to core objectives and seeking funding for project based work.

After the first year of membership we have revisited the envisaged outcomes in considering the value of PIEF for the cotton industry and consider PIEF to be delivering on the outcomes on the whole and providing a range of unanticipated benefits. This report is structured around the outcomes for the cotton industry agreed prior to undertaking PIEF membership.

Benefits of PIEF membership 1 year on

1. Highlight, prioritise and plan our involvement in relevant initiatives and events, e.g. through identifying effective education efforts in other industries, effective mechanisms and approaches and potential partnerships that could be developed

With the unprecedented access to information enabled by the internet we are more aware of the mass of primary industry (PI) related activities, resources, initiatives and events creating a crowded space riddled with issues of duplication, relevance and quality. The cotton industry hoped to achieve guidance through PIEF membership to avoid duplication, avoid the mistakes made by other industries in the past and receive advice as to how to form effective partnerships.

In February 2011 PIEF completed an audit of educational resources and activities across Australia. Over 250 initiatives were identified in all. This audit has informed CA's education audit of cotton related activities and also helped us to identify activities undertaken by other organisations which support our education objectives and present opportunities for partnership.

PIEF are working to clarify effective mechanisms and approaches for school industry partnerships. They do not look at successful initiatives as being completely generated by industry (an approach that has not served industry well in the past) but as multi-faceted partnership between schools, the local community, government and primary industry organisations.

A good example of this is the Primary Industries Partnerships in Schools project (PIPS). The aim of this project is to develop a toolkit for schools to use who want to set up successful partnerships with primary industries. PIEF are coordinating this project after leveraging financial (project based) support of over 125K from DAFF and NAB.

To create this toolkit, a school with an innovative and successful partnership with agriculture, forestry or the fishing industry from each state and territory attended a forum along with organisations with demonstrable successful partnerships such as NAB, KPMG, the Australian Food and Grocery Council and Woolworths. The aim was to nut out the essential components of a model for school industry partnerships that are robust, sustainable and successful.

At times in the past the cotton industry has driven significant education programs without partners. In the late 1990s, prior to the Discovery Centre, we had the Youth Challenges – a travelling event funding students and teachers to gather for problem solving activities designed to challenge negative perceptions about the cotton industry and create thinking advocates. Though effective, they were costly, not able to be continued without cotton industry support and not provided in a format that could be used by teachers on an ongoing basis. They were superseded by the Cotton Discovery Centre in Darling Harbour which, when the drought dried up the funding, could not be sustained and many activities generated during that time were frozen. Lessons learned from that time are that an education program cannot be entirely industry

driven but must be 'owned' by the school, community, industry and government to ensure its longevity should drought mean that industry education staff and funding must be reduced. Cotton Australia's education plan includes developing a robust community school partnership model. The PIPS project is one example of how PIEF's work will help to identify effective mechanisms and approaches and potential partnerships that could be included in the industry's own model.

Another way the industry has benefitted from membership is through access to other Peak Industry bodies through member forums providing a chance to share what has worked and not worked successfully for them in the past and the chance to work collaboratively.

Going forward PIEF's KPIs for 2012/13 include recommending involvement in upcoming events, ongoing projects and initiatives in order to promote the primary industries. The membership agreement also includes more member forums.

2. Identify, develop and promote resources in schools that highlight many key aspects of the cotton industry and demonstrate that there are many exciting careers to be found within it.

To date PIEF have provided value through the promotion of resources and provision of reliable communication channels. When Cotton Australia recently provided resources for PIEF to upload onto Primezone it was announced via newsletter to 1500 teachers including 180 head teachers and association presidents.

Primzone is a valuable membership benefit offering a one-stop shop for teachers for primary industry resources and the confidence that resources will not be 'lost' in cyberspace. Primezone is being gradually upgraded. It is now searchable by subject area and there are plans to have it searchable by syllabus outcome. This will be of greater benefit. Eventually resources from PrimeZone will appear on 'Scootle' (the site for digital learning objects) and the Australian Curriculum website which will, in all likelihood be the main port of call for resources for all teachers across Australia. Plans are in place to improve the PrimeZone website.

Resource development featured highly on the cotton industries anticipated outcomes of PIEF membership. It is an area where perhaps there is a gap between industry expectations and outcomes in this first year. The expectation that resources be developed through PIEF or at the advice of PIEF was reinforced by the PIEF Strategic Plan 2011-2013 which earmarked resource development scoping for late 2011 and development for 2012-2013. Resource development has been held up, in our view, by the need: to be strategic; to understand the factors for success; to understand what exists currently and what their aims are. It has also been held up by some factors which are out of PIEF's sphere of influence such a national curriculum development timeframes.

Firstly, the PIEF preliminary analysis of the education resources audit demanded caution in regards to resource development. It showed that many Primary Industry education resources were rendered redundant as:

- Most resources were promotional, pushing what the industry wanted students to know rather than what teachers wanted to teach;
- They lacked educator support and thus ended up in the bin or gathering dust on a library shelf;

- They failed to differentiate the different learning stages and year levels of students;
- Teachers had to work hard to find a way to incorporate them into their teaching program;
- Teachers themselves knew very little about each industry and didn't feel confident in the topic;
- They weren't linked to the syllabus;
- They were poorly marketed to teachers (mainly not at all);
- Teachers didn't want them;
- Teachers don't care about the cotton industry, or the dairy industry, or the grains industry. They do care about where food comes from, the environment etc.
- The resources suffered from some industries view of educational resources as a marketing exercise and whereby they seek to maintain their individual brand.

Although these are not reasons to hold back, they do demand that resource development be undertaken carefully to avoid the mistakes of the past.

At the same time forums held over the course of the year such as the NFF roundtables, the Canberra PICSE Roundtable, and research such as the Allen Report highlighted again, what we know – that there are many initiatives already in this space. Rather than reinvent the wheel, PIEF have pushed to aggregate these initiatives to identify who and what they are targeting and where the funds are currently directed with the intention of identifying gaps and duplication. PIEF have been advocating this through the NFF Forums. The way they are proposing to conduct this analysis is by classifying the aims of educational activities into three categories as follows:

Knowledge of food and fibre production (Infants and Primary students)	Career Attraction (High School students)	Transition and training (VET and tertiary students)
Program aimed at teaching how food and fibre is produced	Programs aimed at improving perceptions of agriculture	Programs directed at training, building capacity and retaining the future workforce

They are then looking to assign a cost to each program which will reveal if there is a particular audience that is not being adequately targeted. Ben's view is that programs aimed at how food and fibre is produced are receiving the least attention and that targeting younger students will generate the greatest rewards. The results of this analysis will help us direct our efforts and arm PIEF with the data needed to adequately advise us on how to best use our resources.

PIEF have indicated that they are aiming for the development, publication and marketing of theme structured, stage-based teaching modules from Kindergarten to year 12 through a range of powerful, state-of-the-art learning programs that engage all teachers and classes, providing a stimulating learning program for all students. The Academy of Science's 'Primary Connections' is a model that is being successfully used to attract more students to science by targeting primary school teachers and students. It is a model that PIEF hope to emulate. One of the successful elements of Primary Connections is that it is about educating the teachers as well as providing them with excellent resources. PIEF are looking to develop their own branded resources using the Primary Connections model which has the potential to incorporate cotton themes. This project would have a 2 year timeframe. A project on this scale is not something that the cotton industry would be able to undertake on its own. PIEF have advised that initial significant government and Industry investment needs to be provided in quality whole of industry initiatives and resources as was the case with Primary Connections.

Whilst this project is aspirational, a number of smaller projects have been initiated this year by PIEF. They are working with the Australian Council of Agricultural Societies (ACAS) and members to develop units of work that can be used by teachers prior to a visit to one of the major shows. PIEF are involved in discussions to develop 6-8 week units of work which tap into existing member resources that teachers can use in the lead up to visiting a show. The idea is that these units would be funded by the ACAS and corporate sponsors. To date there is support for the idea. Formal approval will be sought from Presidents and CEOs at the ACAS meeting in November. Funding therefore would not begin until January so this initiative will miss the Royal Easter Show (RES) and will first reach Sydney audiences at the RES 2014.

The Kondinin's Workboot series is a resource with some credibility in schools. When CA was approached by Kondinin to update these, the cost was prohibitive and the decision was made not to proceed. PIEF is currently in discussions with Kondinin to negotiate rights – either leasing them or buying them outright, to the Workboot series with a view to digitising it. A benefit of this would be that inevitable updates would not incur the significant printing costs. It is envisaged that the revised series will be pitched to secondary schools.

Whilst PIEF have been approaching resource development strategically, the national curriculum has been gradually developing. It is yet to be finalised in some Learning Areas (subjects). PIEF have been working with ACARA to identify the gaps in resources that support the Australian curriculum and gaps within the resources that are currently provided by the primary industries.

A combination of learning from past experience and not wanting to commit to pre-emptive resource development, has led PIEF to advise CA to hold off on resource development. They have advised us that there is a likely shortage of quality resources for history and the sustainability syllabuses (which have yet to be finalised). They will be facilitating engagement between Education Services Australia (ESA) and Members so that ESA can advise what is needed from industry in this area. ESA is a national, not-for-profit company owned by all Australian education ministers who create, publish, disseminate and market curriculum and assessment materials, products and services to support learning, teaching and to support the national curriculum.

There are a number of KPIs in the 2012/2013 membership agreements relating to supporting members to develop resources. This includes providing members with facilitated access to ACARA (writes the national curriculum) and ESA (creates resources to implement the Australian Curriculum) to guide resource development and increase member's confidence and capacity to develop their own resources. They are also committed to leveraging funding from members and private organisations such as Kellogs and Coles for specific projects.

3. To work more collaboratively and cost-effectively with other rural industries to showcase agriculture as a sustainable sector with excellent career opportunities.

PIEF have helped to prioritise some of our activity in regards to career promotion. CA sought advice as to how to best tackle the large volume of career related information on the web – much of which is out-dated, not representative of the diversity of career options or sending the wrong messages. PIEF were able to advise that the myFutures website has 10million hits a month and suggested connecting with Career Industry Council of Australia – the peak body for careers advisors with whom PIEF have a good

relationship. PIEF also had good suggestions for working more collaboratively and cost-effectively with other rural industries to showcase agriculture as a sustainable sector with excellent career opportunities.

4. Show that the work of PIEF is having an impact on students as measured by an improved knowledge of primary industries in general and the cotton industry in particular.

PIEF initiated the Australian Council for Education Research (ACER) Benchmarking Survey which has provided data about student knowledge and perceptions of the primary industries. This will provide a benchmark of the impact of primary Industry activities in schools and a way to track improvement every three years. It provides a body of knowledge for both student and teacher understanding. Going forward it can help prioritise, justify and measure both PIEFs impact and the impact the initiatives we support (e.g. PICSE and Art4Agriculture).

A brief snapshot of the type of data generated by the survey is below:

- Both Grade 6 and grade 10 students appeared to have difficulty in identifying cotton socks as being a plant product, with only one quarter of Grade 6 students and close to 60% of Grade 10 students getting this item correct.
- In terms of understanding the process of farming, most students associate farming with harvesting for example but only about 50% associate it with science and innovation.
- More than twice as many Grade 10 students, compared to Grade 6 students, believe that farming damages the environment (40% and 17% respectively).
- One third of students believe that wildlife are unable to survive in farming areas.

Other benefits from the survey was the provision of data that was used effectively to highlight the importance of including food and fibre at an important time in the national curriculum debate. The results of the survey gained wide scale coverage in the media.

The regular survey they will be undertaking is valuable beyond education knowledge measurement and a good tool for keeping a finger on community perception.

5. Provide evidence that interest in and entries into the VET and tertiary courses which support agriculture is increasing over time.

THE ACER survey measured the number of students currently studying a primary industries related school or TAFE subject (20%) and whether they had considered a career in agriculture (16%). As it is undertaken every three years, it will help us track entries into traineeships and students intentions to work in agriculture over time. Although PIEF have committed to report on this in their KPIs for 2012/13, as the survey is conducted on a sample of high school students, it is not necessarily the best tool to provide evidence of actual increased entry into VET and tertiary course. Data to more accurately provide this evidence may be gained from AgriFood Skills Australia, Rural Skills Australia and the State based training authorities who record enrolments in VET subjects.

6. Understand the kinds of resources that other industries have developed through their membership with PIEF and how they are being used.

PIEF are helping us understand the kinds of resources initiated by current members through the member forums and the PIEF newsletter. In 2012/13 PIEF will provide a report to members about the type of primary industry resources that are successful based on existing members experiences and corporate

undertakings. An audit of existing resources and activities has already occurred to inform this process. Going forward (2013/12) we would be expecting the cotton industry to be able to attribute some of our resources to guidance from PIEF.

7. Demonstrate that PIEF will provide value for money compared to other options the industry has for investment in the education sector or in other words how the cotton industry can innovatively build upon the access PIEF provides to the National Curriculum?

PIEF has spent considerable time establishing itself as the spokesperson for the Primary Industries. Through its growing network of contacts, PIEF is influencing channels that we can't. They have very strong ties to key influencers in the education sector and are actively lobbying on our part. Through PIEF's impressive policy and advocacy work, they have a good handle on where things are at nationally, and what's emerging. PIEF has demonstrated that it is connected and keeping abreast of community, education and political trends, concepts and new projects.

An example of how PIEF is doing this is their participation in the NFF's roundtable of education and labour shortages and membership of the NFF's National Agribusiness Education, Skills and Labour Taskforce . Given the importance of coordination, CA sees it as critical that PIEF works together with other cotton industry sponsored organisations and other bodies working towards the common goals of increasing awareness of where their food and fibre comes from, building good will and attracting people to work in agriculture. The NFF taskforce is one example of PIEF working with our partners e.g. Art4Agriculture, the Primary Industry Centre for Science Education. And also other key players including DAFF, DEWR, The National Association of Agricultural Educators, Royal Agricultural Society of NSW, RIRDC, Rural Skills Australia, SkillsOne Television, The Australian Workforce and Productivity Agency, TAFE and the University of Queensland.

Although the Cotton Industry is continuously linking with these players, it would be difficult for us to do so on the level that PIEF is doing. The fact that PIEF and these parties are all talking to each other gives us confidence. We are also hoping that this more collaborative approach will start to generate more outcomes in the future in terms of the impact of our education activities.

PIEF are doing a good job of actively promoting themselves - building their profile to gain greater impact and credibility in the right circles. Over the course of the year they supplied submissions to Senate, Victorian Parliament, National Food Plan, ACARA, Lead Footing on NSW Inquiry and presented to the Senate Inquiry into Higher Education and Skills Shortage in the Agribusiness Sector.

They are working hard to source further funding and partnerships with others (e.g. private funders) on specific project ideas. The 100k given to PIEF by DAFF to coordinate the Primary Industries Partnerships in Schools project is a good example of this. This brings further opportunity for inclusion of cotton in programs not entirely funded by the industry. It brings further opportunities for robust programs and greater promotion and exposure (e.g. promotion in media, RAS, Totally Wild).

This provides the right avenues for us to channel out information and R&D as an industry, especially given their focus on promoting the sustainability and innovation in modern day agriculture.

PIEF represents a key link for the R&D and education work we do as an industry, and an opportunity to highlight to students, teachers and the broader community, the value of R&D, the achievements that this

has delivered the industry, the responsible nature of the industry, cotton's place in Australian agriculture and regional communities etc.

What's becoming evident is that the sort of extension and promotion that the PIEF membership offers (i.e. funding an independent, credible, not-for-profit organisation) is important not just for industry bodies but also for the industry research organisations. 'Trust' in agriculture is becoming an issue with the community (current members of PIEF are all industries for which maintaining social license is very important). The community trust the education sector/education based messages, not necessarily corporate agriculture, the industry bodies (or even industry research, unfortunately!).

Given their focus on promoting the sustainability and innovation in modern day agriculture with the broader community, via education, PIEF are helping to further promote the value and outcomes of the cotton industry as well as the sophisticated, responsible R&D that underpins it. To an extent, this aligns with some of the priorities and recommendations of the recent Environmental Assessment (e.g. Rec 6). The focus of PIEF, the way that they operate and also the information that they deliver (e.g. benchmarking surveys) will help contribute to how we address these.

One of the benefits identified as desirable from PIEF membership was access to the National Curriculum.

PIEF is active in the national curriculum development space, providing us with some means to influence this and with much needed expertise and liaison with syllabus writers and resource developers. Although there is opportunity to influence the curriculum, to some extent on an ongoing basis, this initial input into the major structural component is a one-off, important exercise. Agriculture should be having a say, and through cross industry, collaborative approach – do it well so that we present an organised, positive image of agriculture. Doing this alone would be highly expensive and a big job. The curriculum is a contested domain. With the chance of influence being small, it has been important over the past year to have PIEF speaking on behalf of a 'unified' primary industries.

PIEF has achieved success in petitioning ACARA for greater food and fibre content. It was influential in having sustainability included as a cross-curricular priority and to have agriculture recognised with the K-10 Technology Syllabus. They have brokered an agreement with ACARA whereby the primary industries can submit content elaborations and descriptors outside the normal timeframes for revisions. They have informed CA when ESA will be asking for resources.

PIEF Business model

PIEF operate on member funding. Members are made up of Government, Industry and Education. They include DAFF, Meat and Livestock Australia, Forest and Wood Products Australia, Fisheries Research Development Corporation, Australian Egg Corporation, Australian Pork Limited, NFF, CB Alexander Foundation, National Association of Agricultural Educators, Australian Council of Deans Agriculture. The current annual operating budget is \$320K including the CEOs salary. PIEF do not have a large staff base and use project funding (e.g. Woolworth's co-funding the ACER survey) for projects such as resource development and events. PIEF contract experts as needed.

To achieve the goals desired by the cotton industry, PIEF and members more funding needs to be secured. Ben Stockwin informed CA that at a Council of RDCs meeting with the human capacity group last year it was agreed by the chairs that they should be supporting PIEF as a means of working more collaboratively. This decision was linked to the productivity commission review and the National Primary Industries R&D Framework expressing

similar intent. Unfortunately this was non-binding, so PIEF has had to work to push others to follow up on this commitment.

PIEF going forward

Going forward, PIEF's vision and mission are complimentary to the outcomes documented in CA's Education Coordinator's workplan. PIEF's vision of "An Australian Community that understands and values its primary industries sector" is comparable to the plan's objectives to "create a community acceptance and respect for the cotton industry". PIEF's mission "To inform students, teachers and the broader community about the primary industries and the career opportunities which they offer." is complimentary to the plan's objective to "raise the profile of careers in cotton as important, highly skilled, well-remunerated with a community of young, enthusiastic and passionate people and a range of lifestyle options".

Broadly going forward some of the benefits offered by PIEF membership are built into CA's Education Plan as activities to meet some of these objectives. They include:

- Working with PIEF to identify opportunities for collaboration with other primary industries
- Working with PIEF to engage with Careers Advisors and teachers networks
- Scoping resource development (in collaboration with PIEF and through facilitated dialogue with ACAR A and ESA)
- Develop a cost effective model for participating in large careers events with other primary industries and PIEF
- Collaborate to develop exhibition material and engagement activities in career events through PIEF
- Develop a sustainable model that can be used by CGAs to create ongoing partnerships with their local schools

Going forward there is potential to leverage the work of CA's Education Coordinator, CRDC's Education Officer and the PICSE Cotton Science Education Officer when appointed through PIEF membership and greater coordination and communication.

Recommendation

In our view, PIEF are adding value to our work, and that of the industry (education and also the RD&E). We can confidently recommend continuing support of PIEF. We can also recommend lobbying other RDCs to contribute towards PIEF. In short:

- PIEF are filling an important gap in the market and something that we can't individually (as RDCs or Industry Bodies) as they are independent and well connected.
- PIEF are supporting coordination between the cotton industries existing investments.
- PIEF provide advice and networks in respect to resources development.
- They are now an established go-to point of contact for those seeking input from primary industries in general on education issues such as ACARA, DAFF and the NFF.
- They are helping to play an important coordination role to ensure the industry are working more collaboratively with others in agriculture. They are actively working to alongside other service providers to ensure coordination, avoid duplication and enhance existing activities.
- As well as their important policy and advocacy work, they are very active in the national curriculum development space, providing us with access to influence this and with much needed expertise and liaison with syllabus writers and resource developers.
- They are very well connected (policy, education, successful concepts, emerging trends...at many scales)